



**Boblo Island  
Community Expansion  
Project:  
Environmental Report**

Final Report

Prepared for:

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September 21, 2023

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## **Executive Summary**

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Boblo Island Community Expansion Project to supply the community of Boblo Island in the Town of Amherstburg, County of Essex, Ontario with affordable natural gas (the “Project”). The Project will involve the construction of approximately 2.9 kilometres (km) of a combination of 2-inch polyethylene and 4-inch steel pipeline. The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg. The 4-inch steel pipeline will cross the Detroit River [approximately 600 metres] to reach Boblo Island. The distribution system on the island will be 2-inch polyethylene pipeline and be approximately 2.3 km in length. It is anticipated the distribution system will be located within existing road allowances.

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study for the Project. The Environmental Study will fulfill the requirements of the Ontario Energy Board’s (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines 2016) and/or the OEB’s *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 8th Edition (2023)* (OEB Environmental Guidelines 2023).<sup>1</sup>

Enbridge Gas is also required to obtain additional permits and approvals from federal, provincial, and municipal agencies that have jurisdiction in the Study Area as required. This Environmental Report (ER) will serve to support these permit and approval applications.

An extensive engagement and consultation program was conducted for the Project with Indigenous communities, federal and provincial agencies, municipal personnel and elected officials, special interest groups, the general public, and residents and businesses. The engagement and consultation program included development and maintenance of various Project Contact Lists which were used to distribute the required notices, newspaper advertisements, Virtual and In-person Information Session information, and provision of feedback to those members of the public who had questions, issues, concerns or positive feedback about the Project. Enbridge is committed to ongoing engagement and consultation with interested and potentially affected parties through detailed design and construction and will respond to stakeholder concerns throughout the life of the Project.

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<sup>1</sup> The OEB Released the 8th Edition of the Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario in March 2023, after the initiation and consultation component of the Boblo Island Community Expansion Project.



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The potential effects and impacts of the Project on physical, biophysical, and socio-economic features have been assessed. In the opinion of Stantec, the recommended program of supplemental studies, mitigation, protective, and contingency measures are considered appropriate to protect the features encountered. Monitoring will assess that mitigation and protective measures have been effective in both the short and long term.

The potential cumulative effects of the Project were assessed by considering development that may begin during construction or that may begin sometime in the future. The Study Area boundary was used to assess potential effects of the Project and other developments on environmental and socio-economic features. As such, the cumulative effects assessment determined that, provided ongoing consultation and, appropriate mitigation and protective measures are implemented, potential cumulative effects will be of low probability and magnitude, short duration, and reversible, and are, therefore, not anticipated to be significant.

With the implementation of the recommendations in the ER, ongoing communication and consultation, and adherence to permit, regulatory, and legislative requirements, potential adverse residual environmental and socio-economic impacts of this Project are not anticipated to be significant.



## **Abbreviations**

AA	Archaeological Assessment
AAFC	Agriculture and Agri-Food Canada
A/C	Air Conditioning
AFN	Aamjiwnaang First Nation
AOC	Area of Concern
BGS	Below Ground Surface
CAO	Chief Administrative Officer
CEA	Cumulative effects assessment
CER	Canada Energy Regulator
CFN	Caldwell First Nation
Checklist	MCM Criteria for Evaluating Potential Build Heritage Resources and Cultural Heritage Landscapes
CHSR	Cultural Heritage Screening Report
CHVI	Cultural heritage value or interest
CKSPFN	Kettle and Stony Point First Nation
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
COTTFN	Chippewas of the Thames First Nation
COVID-19	Coronavirus disease 2019
CHR	Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment
DFO	Fisheries and Oceans Canada



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### Abbreviations

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EASR	Environmental Activity and Sector Registry
ECCC	Environment and Climate Change Canada
EMS	Emergency Medical Services
Enbridge Gas	Enbridge Gas Inc.
END	Endangered
EPP	Environmental Protection Plan
ER	Environmental Report
ERCA	Essex Region Conservation Authority
ESA	<i>Endangered Species Act, 2007</i>
ESC	Erosion and Sediment Control
EWSWA	Essex-Windsor Solid Waste Authority
GIS	Geographic Information Systems
HADD	the harmful alteration, disruption or destruction of fish habitat
HDD	Horizontal Directional Drill
HVA	Highly Vulnerable Aquifer
Hydro One	Hydro One Networks Inc.
IAAC	Impact Assessment Agency of Canada
IBA	Important Bird Area
IO	Infrastructure Ontario
IPZ	Intake Protection Zone
km	Kilometre(s)
km <sup>2</sup>	Kilometres(s) squared
LIO	Land Information Ontario



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LTC	Leave to Construct
m	Metre(s)
MBCA	<i>Migratory Birds Convention Act, 1994</i>
MBR	<i>Migratory Birds Regulation, 2022</i>
MCM	Ministry of Citizenship and Multiculturalism
MECP	Ministry of the Environment, Conservation and Parks
MENDM	Ministry of Energy, Northern Development and Mines
MNR	Ministry of Natural Resources
MNRF	Ministry of Natural Resources and Forestry
MOE	Ministry of Energy
MOECC	Ministry of the Environment and Climate Change
MTCS	Ministry of Tourism, Culture and Sport
MTO	Ministry of Transportation
NAR	Not at Risk
MNRF	Ministry of Natural Resources and Forestry
NHIC	Natural Heritage Information Centre
NPS	Nominal Pipe Size
OBA	Ontario Butterfly Atlas
OBBA	Ontario Breeding Bird Atlas
OCWA	Ontario Clean Water Agency
OEB	Ontario Energy Board
OEB Environmental Guidelines	Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 8th Edition (2023)



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OGS	Ontario Geological Survey
OHA	Ontario Heritage Act
OMOF	Ontario Minister of Finance
OP	Official Plan
OPCC	Ontario Pipeline Coordinating Committee
O. Reg.	Ontario Regulation
ORAA	Ontario Reptile and Amphibian Atlas
OWES	Ontario Wetland Evaluation System
PIF	Project Information Form
PPR	Preliminary Preferred Route
PR	Preferred Route
PTTW	Permit to Take Water
PSW	Provincially Significant Wetland
RSC	Record of Site Condition
ROW	Right-of-Way
SAR	Species at Risk
SARA	<i>Species at Risk Act, 2002</i>
SARO	Species at Risk in Ontario
SGRA	Significant Groundwater Recharge Area
SOCC	Species of Conservation Concern
SPA	Source Protection Area
Stantec	Stantec Consulting Ltd.
SWH	Significant Wildlife Habitat





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SWP	Source water protection
TC	Transport Canada
The Project	Boblo Island Community Expansion Project
THR	Threatened
TSSA	Technical Standards and Safety Authority
WIFN	Walpole Island (Bkejwanong) First Nation
WWR	Water Well Record(s)



# **1 Introduction**

## **1.1 Project Description**

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Boblo Island Community Expansion Project to supply the community of Boblo Island in the Town of Amherstburg, County of Essex, Ontario with affordable natural gas (the “Project”). The Project will involve the construction of approximately 2.9 kilometres (km) of a combination of 2-inch polyethylene and 4-inch steel pipeline. The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg. The 4-inch steel pipeline will cross the Detroit River [approximately 600 metres (m)] to reach Boblo Island. The Detroit River crossing will be completed by Horizontal Directional Drill (HDD). The distribution system on the island will be 2-inch polyethylene pipeline and be approximately 2.3 km in length. It is anticipated that the distribution system will be located in existing road allowances, while temporary workspace on private land may be required.

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study for the Project. The Environmental Study will fulfill the requirements of the Ontario Energy Board’s (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines 2016) and/or the OEB’s *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 8th Edition (2023)* (OEB Environmental Guidelines 2023)<sup>2</sup>.

## **1.2 Environmental Study**

### **1.2.1 Objectives**

A multidisciplinary team of environmental planners and scientists from Stantec conducted the environmental study. Enbridge Gas provided environmental support and engineering expertise throughout the study.

The environmental study was completed in accordance with the OEB *Environmental Guidelines* (2016 and/or 2023), as well as relevant federal and provincial environmental guidelines and regulations.

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<sup>2</sup> The OEB Released the 8th Edition of the Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario in March 2023, after the initiation and consultation component of the Boblo Island Community Expansion Project.



The principal objective of the environmental study was to outline various environmental mitigation and protection measures for the construction and operation of the Project while meeting the intent of the OEB *Environmental Guidelines* (2016 and/or 2023). To meet this objective, the environmental study was prepared to:

- Identify a Preferred Route (PR) that reduces potential environmental impacts.
- Complete a detailed review of environmental and socio-economic features along the PR and assess the potential environmental impacts of the Project on these features.
- Establish mitigation and protective measures that may be used to reduce or eliminate potential environmental and socio-economic impacts of the Project.
- Develop a consultation program to receive input from interested and potentially affected parties.
- Identify any necessary supplemental studies, monitoring and contingency plans.

### **1.2.2 Process**

The environmental study was divided into the following two main phases:

- Phase I: Identification and Consultation on a Preliminary Preferred Route
- Phase II: Confirmation of the Preferred Route and Environmental Report

#### **Phase I: Identification and Consultation on a Preliminary Preferred Route**

The environmental study began by identifying the Preliminary Preferred Route (PPR). The PPR was determined by Enbridge Gas based on their engineering and tie-in location considerations, maximizing potential servicing locations, as well as consideration of environmental and socio-economic constraints as identified by Stantec.

The Study Area for the Project was then delineated, and the following groups were notified of the Project:

- Indigenous communities
- Federal and provincial agencies and authorities
- Municipal personnel and elected officials
- Special interest groups
- Directly affected landowners
- Residents and businesses in proximity to the PPR

Feedback on the PPR was sought from these groups through newspaper notices, social media advertisements, letters, Virtual Information Session that was accessible from February 21 to March 27, 2023, and an In-person Information Session that was held March 20, 2023.



Concurrent with consultation, environmental and socio-economic features in the Study Area were mapped and characterized using relevant published literature, maps, and digital data sources. Geographically based features were incorporated onto a series of digital base maps. Discussions with relevant agencies provided information for compiling the existing conditions inventory and mapping.

The maps produced during the route identification and confirmation process are located in **Appendix A (see Figures A-1 and A-2)** and maps of existing conditions are located in **Appendix C (see Figures C-1 and C-2)**.

## **Phase II: Confirmation of the Preferred Route and Environmental Report**

Based on feedback received during the consultation and engagement, the PPR was confirmed to be the PR. The final phase of the study involved determining potential environmental and socio-economic impacts and cumulative effects that would result from the Project and developing mitigation and protective measures, supplemental studies, monitoring, and contingency plans to reduce or avoid potential impacts.

The environmental study concluded with the preparation of this Environmental Report (ER) as well as Environmental Alignment Sheets to identify site-specific mitigation and protective measures to be implemented during construction (**see Appendix G**).

### **1.2.3 The Environmental Report**

The environmental study has relied on technically sound and consistently applied procedures that are replicable and transparent. The ER, which documents the environmental study, will form the foundation for future environmental management activities related to the Project.

The ER is organized into the following sections:

- **Introduction:** provides a description of the Project and the environmental study
- **Consultation and Engagement Program:** provides a description of consultation and engagement activities that were undertaken during the environmental study
- **Existing Conditions:** describes the existing conditions of the physical, biophysical and socio-economic features in the Study Area
- **Route Identification and Confirmation:** provides an overview of the pipeline route identification and confirmation process
- **Potential Impacts, Mitigation, and Protective Measures:** predicts potential effects and impacts the Project may have upon the existing conditions; describes the mitigation and protective measures to eliminate or reduce the potential effects and impacts of the Project on physical, biophysical, and socio-economic features that have been assessed in the Study Area



- **Cumulative Effects Assessment:** provides an analysis of potential cumulative effects associated with the proposed Project
- **Monitoring and Contingency Plans:** describes monitoring and contingency plans to address potential environmental impacts of the proposed Project
- **Conclusion:** provides a discussion and consideration of the potential environmental impacts associated with the proposed Project

The ER also includes references and appendices for documentation.

#### **1.2.4 The OEB Regulatory Process**

Once complete, the ER is circulated directly to Indigenous communities, agencies, affected municipalities, conservation authorities, and to the Ontario Pipeline Coordinating Committee (OPCC) for their review and comment. The OPCC is an inter-ministerial committee that includes provincial government ministries, boards, and authorities with potential interest in the construction and operation of hydrocarbon transmission and storage facilities. The ER is also circulated directly to interested parties and is made available on the Enbridge Gas Project webpage for the public and landowners to review. The ER will accompany a future Enbridge Gas 'Leave-to-Construct' (LTC) application to the OEB for the proposed Project.

Upon receiving the application, the OEB will hold a public hearing. Communication about the hearing will include notices in local newspapers and letters to directly affected landowners, both of which will outline how the general public and landowners can get involved with the hearing process. If, after the public hearing, the OEB finds the Project is in the public interest, it will approve construction of the Project. The OEB typically attaches conditions to approved projects. Enbridge Gas must comply with these conditions at all stages of the Project, including during construction and site restoration.

#### **1.2.5 Additional Regulatory Processes**

Enbridge Gas will also be required to obtain additional environmental permits, approvals, and notifications from federal, provincial, and municipal agencies as outlined in Table 1.1 below. This ER will serve to support these permit and approval applications and notifications.



**Table 1.1: Summary of Potential Environmental Permit and Approval Requirements**

Type of Approval	Permit/Approval	Administering Agency	Description
<b>Federal Permits and Approvals</b>	Clearing of vegetation in accordance with the <i>Migratory Bird Convention Act, 1994</i> (MBCA) and <i>Migratory Birds Regulation 2022</i> (MBR)	Environment and Climate Change Canada (ECCC)	ECCC does not require a permit to be issued for vegetation clearing, however, precautions need to be taken so that breeding birds or their nests are not harmed or destroyed during the bird nesting season as a result of construction of the Project.  Avoid vegetation clearing during the bird nesting season, (April 1 to August 31) to avoid impacts to bird nests. Nest sweeps may be implemented in simple habitats (e.g., hedgerows, urban parks) during the active season per ECCC (2022). Nest sweeps are recommended a maximum of seven days prior to removal with the risk of incidental take increasing with habitat complexity and time between surveys.
	<i>Species at Risk Act</i> (SARA) (2002) (amended in February 2023)	Fisheries and Oceans Canada (DFO) (aquatic species) ECCC (terrestrial species)	Permits are required by those persons conducting activities that may affect species listed on Schedule 1 of the <i>Species at Risk Act</i> (SARA) as extirpated, endangered, or threatened and which contravene the Act's general or critical habitat prohibitions in watercourses (aquatic species) or on federal lands (terrestrial species).
	Review and/or authorization under the <i>Fisheries Act, 1985</i> (amended in August 2019)	DFO	At detailed design, proposed work at locations that provide fish habitat will be reviewed to determine the potential for the Project to result in the death of fish or the harmful alteration, disruption, or destruction (HADD) of fish habitat. The review process will follow the Watercourse Crossing Review Process in Annex 1 of the 2022 <i>DFO and Enbridge Gas Inc. Agreement Related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario</i> (the Agreement) (see <b>Appendix H</b> ). Activities in fish habitat that do not meet the criteria of the Agreement, may need review by DFO under the <i>Fisheries Act</i> to determine the need for a <i>Fisheries Act</i> authorization.



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Type of Approval	Permit/Approval	Administering Agency	Description
<p><b>Federal Permits and Approvals cont.</b></p>	<p>Review and Authorization under the <i>Navigation Protection Act, 1985</i> (NPA)</p>	<p>Transport Canada (TC)</p>	<p>The Detroit River falls under the <i>NPA</i>. Works taking place on a scheduled waterway may fall under the <i>Minor Works Order</i> (Order). The Order exempts certain minor works from the application and formal authorization process under the NPA. A self-assessment should be completed to determine if the works falls within one of the exempted classes of minor works under the Order.</p> <p>A Notice of Works form should be completed if the works do not meet the criteria set forth in the Order.</p>
	<p>Permit to Take Water (PTTW) or Environmental Activity and Sector Registry (EASR) (surface and groundwater) under the <i>Ontario Water Resources Act</i> (1990) (amended in June 2021)</p>	<p>Ministry of the Environment, Conservation and Parks (MECP)</p>	<p>Under Ontario Regulation (O. Reg.) 64/16 and O. Reg. 63/16, the MECP requires a PTTW for dewatering in excess of 400,000 L/day, and an EASR for dewatering between 50,000 and 400,000 L/day. This can include trench dewatering and taking water for hydrostatic testing for a pond, lake, or other natural source. There are some exceptions for surface water takings where active or passive surface water diversions occur such that all water taken is returned to within another portion of the same surface water feature.</p>
	<p>Permitting or registration (e.g., O.Reg. 242/08, 830/21) under the <i>Endangered Species Act</i> (ESA) (2007) (amended in October 2021)</p>	<p>MECP</p>	<p>An ESA permit or Registration is required for activities that could impact species protected under the ESA. Consultation will occur with the MECP to determine ESA permitting requirements.</p> <p>As indicated in Section 9 (1) a of the ESA (2007), “No person shall kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species.”</p> <p>As indicated in Section 17 (1), “the Minister may issue a permit to a person that, with respect to a species specified in the permit that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species, authorizes the person to engage in an activity specified in the permit that would otherwise be prohibited by Section 9 or 10.”</p>



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Type of Approval	Permit/Approval	Administering Agency	Description
<b>Provincial Permits and Approvals cont.</b>	Wildlife Scientific Collector’s Authorization under the <i>Fish and Wildlife Conservation Act</i> (1997) (amended in June 2021)	Ministry of Natural Resources and Forestry (MNRF)	Permit required to relocate wildlife encountered during construction activities.
	Archaeological acceptance under the <i>Ontario Heritage Act</i> (OHA) (amended in January 2023)	Ministry of Citizenship and Multiculturalism (MCM)	Archaeological assessment(s) are required for areas of archaeological potential. Archaeological concerns have not been addressed until MCM’s letter has been received indicating that all reports have been entered into the Ontario Public Register of Archaeological Reports and those reports recommend that: <ul style="list-style-type: none"> <li>• The archaeological assessment of the project area is complete.</li> <li>• and all archaeological sites identified by the assessment are either of no further cultural heritage value or interest (as per Section 48 (3) of the Ontario Heritage Act) or that mitigation of impacts has been accomplished through an excavation or avoidance and protection strategy.</li> </ul>
	Review of Built Heritage and Cultural Heritage Landscapes under the OHA	MCM	A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the preferred route and submitted for review and comment to the MCM and other interested parties prior to construction of the Project and after detailed design for the Project has been completed.





**Boblo Island Community Expansion Project: Environmental Report**

**1 Introduction**

September 21, 2023

Type of Approval	Permit/Approval	Administering Agency	Description
<b>Provincial Permits and Approvals cont.</b>	Development Permit under <i>Ontario Regulation 158/06</i> for Development, Interference with Wetlands and Alteration to Shoreline and Watercourses, as per Section 28 - <i>Conservation Authorities Act (1990)</i> (amended in November 2022)	Essex Region Conservation Authority (ERCA)	Required for works within an ERCA Regulated Area.
<b>Municipal Permits/Approvals</b>	Right of Way Permit	Town of Amherstburg	Required for all works (e.g., utility construction, curb cut, road closure) being performed on the Town’s Highway, Road Allowances, and Right of Ways (ROWs).
	Public Tree By-Law 2018-106	Town of Amherstburg	May be required to remove trees during construction.
	Noise By-Law 2001-43 Exemption Permit	Town of Amherstburg	Required if construction activities will occur during the prohibited times as outlined in the Town of Amherstburg By-Law No. 2001-43.
	Project Permit - Moving Permit	Essex County	Required for the frequent moving or transport of vehicles, loads and/or non-conforming vehicle configurations (which may or may not be overweight and/or oversized) on County of Essex roadways pertaining to a specific project and/or to a specific site. A project permit is required to ensure the safe transportation of these vehicles while protecting the interests and safety of the public as well as the County’s roadways and infrastructure.



## **2 Engagement and Consultation Program**

### **2.1 Objectives**

Consultation is an important component of the OEB *Environmental Guidelines* (2016 and 2023). As noted by the OEB (2016 and 2023), consultation is the process of identifying interested and potentially affected parties and informing them about the Project, soliciting information about their values and local environmental and socio-economic circumstances, and receiving input into key Project decisions before those decisions are finalized.

Stantec believes that community involvement and consultation is a critical and fundamental component of this environmental study, and that Indigenous community participation is essential to the Project. We also recognize that each potentially affected Indigenous community has unique conditions and needs and that the process followed may not satisfy the “duty to consult” component from an Indigenous community’s perspective. To demonstrate that we respect this view, we will use the term “engagement” throughout the remainder of this Report when we refer to seeking input from Indigenous communities.

The engagement and consultation program for the Project included the following objectives:

- Identify interested, and potentially affected parties early in the process
- Inform and educate interested parties about the nature of the Project, potential impacts, proposed mitigation measures, and how to participate in the engagement and consultation program
- Provide a forum for the identification of issues
- Identify how input will be used in the planning stages of the Project
- Summarize issues for resolution, and resolve as many issues as feasible
- Revise the program to meet the needs of those being consulted, as feasible
- Develop a framework for ongoing communication and engagement during the construction and operation phases of the Project

An extensive consultation program was undertaken for the Project and is described in Sections 2.2 – 2.4 below.



## **2.2 Identifying Interested and Potentially Affected Parties**

As part of the engagement and consultation process, Indigenous and stakeholder Contact Lists (including Agency, Municipal, and Interest Groups, Third-Party Utility Owners/Operators, and directly impacted and surrounding landowners), were developed.

### **2.2.1 Identifying Indigenous Communities**

Engagement with Indigenous communities was guided by the OEB *Environmental Guidelines* (2016 and 2023), as noted above, but also by the Enbridge Inc. Indigenous Peoples Policy.

Indigenous engagement commenced with the submission of a Project description to the Ministry of Energy (MOE), formerly the Ministry of Energy, Northern Development and Mines (MENDM).<sup>3</sup> This submission to the MOE provided details on the Project location and sought to determine the requirements of the duty to consult. In **Appendix B.1**, potentially impacted Indigenous communities were identified by the MOE in a Letter of Delegation dated December 8, 2022.

The Letter of Delegation confirmed that the MOE would be delegating the procedural aspects of consultation in respect to the Project and that, based on the Crown's assessment, the following Indigenous communities should be consulted:

- Aamjiwnaang First Nation
- Bkejwanong (Walpole Island First Nation)
- Caldwell First Nation
- Chippewas of Kettle and Stony Point First Nation
- Chippewas of the Thames First Nation
- Oneida Nation of the Thames

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<sup>3</sup> On June 18, 2021, the Ontario government implemented changes to several ministries. The Ministry of Energy will continue to handle matters pertaining to delegation of Duty to Consult, while the rest of the MENDM has been combined with the former Ministry of Natural Resources and Forestry to become the Ministry of Northern Development, Mines, Natural Resources and Forestry.



## **2.2.2 Identifying Interested and Potentially Affected Parties**

Identification of interested and potentially affected parties was undertaken using a variety of sources, including the OEB's OPCC Members List, the MECP's Environmental Assessment Government Review Team Master Distribution List, and the experience of Enbridge Gas and Stantec.

The parties listed below were among those considered when developing the initial stakeholder Contact List:

- Federal and provincial agencies and authorities
- Municipal personnel and elected officials
- Special interest groups and third-party utility owners/operators

As the environmental study progressed, the initial stakeholder Contact List evolved, and updates were made in response to changes in personnel, correspondence, and feedback gathered from the Notice of Study Commencement and Information Sessions. Updates to the Contact List also included adding directly impacted or surrounding landowners who had received the Notice of Study Commencement and Information Sessions and who had contacted the Project Team. The Project's Contact Lists are provided in **Appendix B.2**.

## **2.3 Communication Methods**

### **2.3.1 Newspaper Notices**

A Notice of Study Commencement, In-Person and Virtual Information Sessions were published in the Amherstburg River Town Times on February 8, February 15, March 8, and March 15, 2023.

The Notice introduced and described the Project, provided a map of the Study Area, including the proposed pipeline route, noted the format and dates of the In-Person and Virtual Information Sessions, and listed Project contact information.

Copies of tear sheets from the newspaper notices are provided in **Appendix B.3**.



## **2.3.2 Letters and Emails**

### **2.3.2.1 Notice of Study Commencement, In-Person and Virtual Information Sessions**

Letters were sent via email to all parties identified on the Indigenous Contact List on February 3, 2023, February 9, 2023, and March 7, 2023; to parties identified on OPCC and Agency Contact List on February 8, 2023, February 9, 2023 and March 3, 2023; to parties on the Municipal Contact List on February 6, 2023, February 9, 2023 and March 3, 2023; and to parties identified on the Stakeholder Contact list on February 8, 2023, February 9, 2023, and March 3, 2023. A project description was provided as well as the In-Person and Virtual Information Session dates.

Letters were mailed out to landowners located within a minimum of 1 km of the proposed pipeline route via Canada Post on February 9, 2023 and March 7, 2023. Appended to these letters and emails was a map of the Study Area, including the proposed pipeline route.

An updated letter was sent out on February 9, 2023 to all parties as there was an error in the hyperlink for the Virtual Information Session webpage. Another update letter with a rescheduled In-Person Information Session date was sent out on March 3, 2023 to all parties as the original In-Person Information Session scheduled for February 22, 2023 was cancelled due to inclement weather.

Generic copies of the letters noted above are included in **Appendix B.4**.

The Project was initiated in 2022 prior to release of the 2023 OEB Environmental Guidelines and therefore an initial Notice of Upcoming Project was not circulated.

## **2.3.3 Social Media Advertisements**

Facebook advertisements for the In-person and the Virtual Information Sessions ran from February 16, 2023 to February 22, 2023, and from February 21, 2023 to March 7, 2023, respectively.

An updated Facebook advertisement was posted on February 22, 2023 detailing that the In-person Information Session was cancelled due to inclement weather and would be rescheduled.

Copies of the advertisements are included in **Appendix B.4**.



### **2.3.4 In-Person and Virtual Information Sessions – Display Boards, Presentation Slides, Interactive Map and Exit Questionnaire**

Display boards and presentation slides were developed for the In-Person and Virtual Information Sessions, respectively. These provided information on the Project, the OEB regulatory process, environmental study process, the proposed pipeline route, anticipated environmental and socio-economic impacts and mitigation, and next steps. A voiceover recording was paired with the presentation slides for the Virtual Information Session.

Following the Virtual Information Session slideshow presentation, a link to an exit questionnaire and an interactive map were provided. A downloadable version of the presentation slides, script, and the exit questionnaire was provided in the “Resources” tab on the Virtual Information Session Project webpage (as described below). The exit questionnaire requested feedback on potential impacts, important features along the proposed pipeline route, and the content of the Virtual Information Session. The interactive map allowed attendees to view the proposed pipeline route and Study Area on a web-based map. A search function was made available on the interactive map to locate a specific address, and to review natural environment map layers such as waterbodies and wooded areas.

Copies of the questionnaire and display boards that were used for the Information Sessions are provided in **Appendix B.5**.

### **2.3.5 Project Webpage**

Information on the Project, the OEB regulatory process, environmental study process, and Enbridge Gas’ commitment to the environment was provided on the two webpages created for the Project:

The first webpage, referred to in this ER as the Virtual Information Session webpage, was developed using the ArcGIS StoryMaps platform (<https://www.solutions.ca/Enbridge-BoblolIsland/>) to host the Virtual Information Session presentation. This webpage contained a “Resources” tab with a link to a downloadable version of the presentation slides, the exit questionnaire, and the presentation voiceover script.

A second webpage was developed on the Enbridge Gas website (<https://www.enbridgegas.com/BoblolIsland>) and was designed to provide information on the Project and a link to the Virtual Information Session. Once the In-person and Virtual Information Sessions were complete, copies of the display boards, presentation slides, the exit questionnaire and the presentation voiceover script were made available. Upon completion of this ER, it will be posted on the Enbridge Gas website.



The Project webpages were communicated to interested and potentially affected parties in the newspaper notices, letters, emails, and In-Person Information Session.

## **2.4 Consultation Events**

### **2.4.1 Meetings**

Meetings regarding the Project have or may occur, if required or requested, between Enbridge Gas and Indigenous communities, agencies, the municipality, key stakeholders, third-party utilities owners and operators, and directly impacted and surrounding landowners, and will continue as the Project progresses towards detailed design and construction.

#### **Indigenous Communities**

##### Walpole Island First Nation

Enbridge Gas met in person with Walpole Island First Nation (WIFN) on December 9, 2022. A summary of the meeting is provided below:

- Enbridge Gas informed WIFN that the Project was moving ahead sooner than expected and a notification letter would be sent in early 2023.
- WIFN expressed that Boblo Island was a part of the ongoing land claim that sits before the courts and therefore the Project itself is of significant interest to the WIFN community.

Enbridge Gas met virtually with WIFN on March 24, 2023. A summary of the meeting is provided below:

- Enbridge Gas discussed the Project with WIFN, and WIFN expressed that the Project was very important to their Nation.

Enbridge Gas met virtually with WIFN on May 5, 2023. A summary of the meeting is provided below:

- The Project itself was not discussed, but WIFN provided further information on the importance of Boblo Island to their community members.
- WIFN provided a history of the land claim that sits before the courts regarding Boblo Island.
- WIFN expressed that the community members of WIFN have significant land and subsurface interests relating to Boblo Island due to their land claim and that the HDD of the Detroit River would be the subsurface aspect.



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- WIFN advised that this Project would likely need to be approved by Chief and Council once they have reviewed the environmental report.
- WIFN asked when the environmental report would be sent out which they were advised likely in June 2023.

### Chippewas of the Thames First Nation

Enbridge Gas met with the Chippewas of the Thames First Nation (COTTFN) on March 14, 2023. A summary of the meeting is provided below:

- Enbridge Gas reviewed the scope and need of the Project with COTTFN.
- Enbridge Gas recognized the need to upload the Project documents into the NationsConnect site and would ask their project team to find and upload a new KMZ file into the NationsConnect website for COTTFN review.

### Aamjiwnaang First Nation

Enbridge Gas met in person with the Aamjiwnaang First Nation (AFN) on March 21, 2023. A summary of the meeting is provided below:

- Enbridge Gas reviewed the route and status of the proposed Project with AFN.
- As part of a question asked by AFN, Enbridge Gas informed AFN that they have reached out to the applicable Indigenous Nations that could be interested in the Project through the MOE's Duty to Consult list. The MOE's Duty to Consult list includes the Treaty holding Nations in the Project area.

### Caldwell First Nation and Kettle and Stony Point First Nation

Enbridge Gas and Stantec met with Caldwell First Nation (CFN) and Kettle and Stony Point First Nation (CKSPFN) on April 11, 2023. The meeting had attendees both in person and virtually. A summary of the meeting is provided below:

- Enbridge introduced and provided a high-level review of the Project (e.g., Project need, pipeline size and distance, ER components and mitigation that Enbridge Gas implements).
- CFN noted that the meeting was for information gathering purposes only and not consultation and referenced the consultation protocol that CFN has in place. Advised that consultation involves a council presentation and community meeting.
- CFN has been following the Project since first informed by Enbridge in 2022. An initial assessment deemed it was a priority project.
- CFN advised they have developed a Species of Interest list, as many species of concern to CFN are not considered Species at Risk (SAR).





- CFN advised they would like to be involved in every step of archaeology including the Stage 1 Assessment.
- CKSPFN asked when the ER would be available and were advised likely in June 2023.

#### **2.4.2 In-Person and Virtual Information Sessions**

Both In-Person and Virtual Information Sessions were hosted for the Project as described above. The In-Person Information Session took place on March 20, 2023, from 5pm to 8pm at the Libro Credit Union Centre in Amherstburg. The In-Person Information Session was originally scheduled on February 22, 2023, however, due to inclement weather on that day, the session was cancelled.

The Virtual Information Session was accessible from February 21, 2023 to March 27, 2023. The Virtual Information Session was originally scheduled for a two-week period, however, was extended to four weeks to align with the rescheduling of the In-Person Information Session.

A Project email address and phone number were provided in the In-Person and Virtual Information Sessions for attendees to ask questions and leave comments. There were 19 attendees at the In-Person Information Session. Eight (8) questionnaires were received at the In-Person Information Session. The Virtual Information Session received 130 visits to the ArcGIS StoryMaps webpage, with 23 visits to the visual/audio presentation. Following the Virtual Information Session, zero (0) questionnaires were submitted via either the Project email address or through the questionnaire link in the presentation.

### **2.5 Input Received**

The engagement and consultation program allowed interested or potentially affected parties to provide input into the Project. Input was evaluated and where applicable, integrated into the ER and Project. Comment-response summary tables are provided in **Appendix B.6**.

As per the OEB Regulatory process, the draft ER was circulated to the OPCC, Indigenous communities, and representatives from selected Agency and Municipal contacts for their review and comment – the comment-response summary tables and copies of all written comments and responses in provided in **Appendix B.7**.



### **2.5.1 Indigenous Input**

Enbridge Gas is committed to creating processes that support meaningful engagement with potentially affected Indigenous groups. Enbridge Gas works to build an understanding of project related interests, ensure regulatory requirements are met, mitigate, or avoid project-related impacts on Aboriginal interests including rights, and provide mutually beneficial opportunities where possible.

Meetings that have occurred with Indigenous Communities to date can be found in Section 2.4.1 of the ER.

Enbridge Gas will continue to meaningfully engage with affected Indigenous communities through phone calls, virtual and in-person meetings, and email communications. During these engagement activities, Enbridge Gas representatives will provide an overview of the Project, respond to questions and concerns, and address any interests or concerns expressed by Indigenous communities to appropriately mitigate any Project-related impacts. Enbridge Gas will continue to work with Indigenous groups following the distribution of the ER.

To accurately document Indigenous engagement activities and ensure follow-up, applicable supporting documents are tracked. The Indigenous Consultation Report, which includes the comment-response summary table and corresponding comment records will be submitted to the OEB upon the filing of the Project application.

### **2.5.2 Public Input**

Nine (9) comments were received, as of May 17, 2023, that included eight (8) completed questionnaires and one (1) email. The main areas of comment on the Project include:

- Landowners expressed interest in the Project and how long construction would take
- Landowners inquired about the cost to connect and convert to natural gas and meter locations
- Amenable to affordable natural gas and how cost effective it would be for individuals and businesses
- Concerns about noise, dust, and traffic during construction
- Property impacts and potential damage to property during construction
- Identification and consideration of natural features during the ER (aquifers, Detroit River)



### **2.5.3 Agency Input**

#### **Federal Agencies and Authorities**

Three (3) comments have been received as of May 17, 2023 from Federal Agencies and Authorities and were considered in the preparation of this ER. A summary of the comments received is provided below:

- Transport Canada (TC) indicated the proponent self assess the Project using links they provided, what to do if lands are on federal property, and a list of common Acts that apply to projects in an EA context.
- Impact Assessment Agency of Canada (IAAC) indicated that the proposed project does not appear to include physical activities as described in *The Physical Regulations* (the Regulations).

#### **Provincial Agencies and Authorities**

Sixteen (16) comments have been received as of September 1, 2023 from Provincial Agencies and Authorities and were considered in the preparation of this ER. A summary of the comments received is provided below:

- MOE provided a Letter of Delegation detailing the Indigenous communities whose Aboriginal and treaty rights may be impacted by the Project.
- Technical Standards and Safety Authority informed that an application for review of the pipeline Project needs to be completed and submitted for review.
- Ministry of Natural Resources and Forestry (MNRF) noted that no screening of natural heritage or other resource values has been completed for the Project at this time. Guidance was provided on how to identify natural heritage and other resources.
- MECP indicated that natural gas pipelines are not identified as a threat to drinking water sources under the Clean Water Act, 2006. MECP also provided information to guide identification and assessment of impacts to drinking water, aquifers, and Intake-Protection Zones.
- Ministry of Transportation (MTO) noted that the proposed Project and Study Area are outside of MTO's permit control area and therefore MTO has no further comment.
- Hydro One Networks Inc. (Hydro One) indicated through their preliminary assessment that there are no existing Hydro One Transmission assets in the subject area.
- MCM provided initial advice for the type of reports that need to be included as part of the ER which included any applicable AA reports and a Cultural Heritage Report (CHR): Existing Conditions and Preliminary Impact Assessment.



- MCM indicated that a marine archaeological assessment would be required if any in-water construction activities were taking place in the Detroit River.
- ERCA confirmed the types of Source Water Protection datasets that can be provided for the Study Area.
- Infrastructure Ontario (IO) noted there are no properties owned by the Minister of Government and Consumer Services within the Project's Study Area. However, IO did note that it is the proponent's responsibility to verify if any provincial government property is within the Study Area.
- MCM provided comments/edits in relation to Section 1.2.5 of the draft ER regarding the description of permits/approvals needed for Archaeology and Cultural Heritage work for the Project, Section 3.5.10 to include additional wording for archaeological assessments in the Existing Conditions section, and mitigation measures to use in the Archaeology section of the Potential Impacts and Recommended Mitigation and Protective Measures (Table 5.2).
- ERCA provided comments/edits on updating the content within Section 3.3.3 of the draft ER which mainly focused on the IPZ-2 located in the Project's Study Area, adding content (eg. including Event Based Area as a potential impact), and mitigation measures in the Groundwater section of the Potential Impacts and Recommended Mitigation and Protective Measures (Table 5.2) (eg. refuelling equipment and developing a Risk Management Plan within the Event Based Area). ERCA suggested to update the text that any or all spills must be reported to the MECP Spills Action Centre.
- MECP provided comments on the Project's draft ER and asked if an analysis will be completed by Stantec and Enbridge Gas to determine the risks the Project poses as it is within Intake Protection Zone (IPZ)-2 related to the Amherstburg Water Treatment Plant and a Source Water Protection area.

#### **2.5.4 Municipal Input**

Five (5) comments were received as of May 17, 2023. The main comments are as follows:

- The Chief Administrative Officer of the Town of Amherstburg requested that an In-Person Information Session be hosted for the Project at the Libro Credit Union Centre.
- The Town of Amherstburg inquired if the Notice of Study Commencement and Information Sessions dates will be shared by Enbridge Gas on their social media platforms.
- The Town of Amherstburg asked if the rescheduled In-Person Information Session date was public knowledge.



- The County of Essex asked if the rescheduled In-Person Information Session date would be shared in a letter as they would like to present it to council at the next meeting.

### **2.5.5 Interest Group Input and Third-Party Utility Owners/Operators**

No comments were received from Interest Groups and Third-Party Utility Owners/Operators as of May 17, 2023.

## **2.6 Issues Resolution**

Through the engagement and consultation program, no input was received that remains unresolved. Should feedback occur that cannot immediately be resolved, Enbridge Gas will endeavor to reach a resolution through meetings and discussions as appropriate and will inform the OEB where there are issues that have not been resolved.

## **2.7 Refinements Based on Input**

At each stage of the engagement and consultation program, input received was compiled, reviewed, and incorporated into the environmental study process. Responses were provided, as applicable, to questions and comments received. Responses to comments received can be found in **Appendix B.6** No comments or concerns were received to cause a change in the Project and the PPR was confirmed as the PR.

Enbridge Gas has committed to on-going engagement and consultation with directly affected and interested parties through detailed design and construction and will continue to respond to concerns through the life of the Project. Input was reviewed and considered during the identification of potential impacts and determination of mitigation and protective measures.



## 3 Existing Conditions

### 3.1 Study Area

A Study Area is the area in which direct or indirect interactions with the socio-economic and natural environment could occur. For the purposes of the environmental study, the extents of the Study Area were determined by applying an approximate buffer of 120 m from the centre line of the PR, (**see Appendix A, Figure A-1**).

### 3.2 Data Sources

Information requests were made to agencies and municipalities. Information collected assisted in identifying environmental and socio-economic features located in the Study Area.

The existing conditions figures (**Appendix C**) have been generated from data obtained from Ontario GeoHub, formerly known as Land Information Ontario (LIO) and Conservation Authority regulated area data obtained from the ERCA. Stantec has digitally reproduced features added to the base maps. Additional mapping sources are identified on the respective figures and in the references section. Other background documents and information sources that were reviewed to identify the physical, biophysical, and socio-economic features present in the Study Area will be discussed in Sections 3.3 to 3.5.

For the socio-economic elements of the assessment, the most recent economy and employment statistics were extracted from the 2016 and 2021 Census of Population (Statistics Canada 2017, 2023). The selected census divisions included Ontario and Essex County and the Town of Amherstburg (Statistics Canada 2017, 2023.).

A roadside survey was conducted of the route in December 2022, to confirm, where possible, results of the background review and document existing natural features and conditions within the Study Area. Weather conditions were cloudy, with a temperature of 1° Celsius and no snow cover on the ground.

### 3.3 Physical Features

#### 3.3.1 Bedrock Geology and Drift Thickness

The bedrock geology in the Study Area is comprised of a range of types which include variably cherty, fossiliferous, or argillaceous limestones caused by the Onondaga Formation; and limestones, dolostones and minor sandstones caused by the Detroit River Group (Armstrong and Dodge 2007).



To determine the drift thickness in the Study Area, general depth from the soil surface to the bedrock was reviewed. In the Study Area, drift thickness ranges from 0 to 65.5 m (Ministry of Mines 2022). A review of available Water Well Records (WWRs) identified 7 WWRs within the Study Area which had bedrock depths that ranged from 3.96 to 13.71 m (MECP 2021).

### **3.3.2 Physiography and Surficial Geology**

The Study Area is within Clay Plains physiographic region of southern Ontario, more specifically the Essex Clay Plains (Chapman and Putnam 1984; Ministry of Mines 2022). The Essex Clay Plains consists of till plains that have over time been smoothed over by shallow deposits of lacustrine clay (Chapman and Putnam 1984; Ministry of Mines 2022).

The surficial geology of the Study Area consists of fine-textured glaciolacustrine deposits which are comprised of silt and clay, minor sand and gravel that are massive to well laminated (Ministry of Mines 2022). The fine-textured glaciolacustrine deposits are located in both the Town of Amherstburg and Boblo Island portions of the Study Area. The man-made deposits are only found in the Boblo Island portion of the Study Area just north of the Island.

### **3.3.3 Groundwater**

For the purposes of this section, Source Water Protection Vulnerable Areas and significant drinking water threats will be discussed. Based on provincial mapping, the Study Area is located within the Essex Source Protection Area (SPA) (Ontario GeoHub 2023e). The proposed project is within IPZ-2 (**see Appendix C, Figure C-2**) for the Amherstburg Water Treatment Plant. The IPZ-2 has a vulnerability score of 7.2 and is a surface water intake zone. The proposed project is also within the Event Based Area where the handling and storage of large volumes of liquid fuel are a significant drinking water threat.

An activity (e.g., involving pathogens, chemicals, dense non-aqueous phase liquids, etc.) is based on the vulnerability score and hazard score of the activity. Using the Table of drinking water threats look up tool (MECP and Upper Thames River Conservation Authority n.d.), reviewing the Essex Regional Source Protection Plan and consultation with Essex Regional SPA staff, confirmed that there are no significant drinking water threat activities specific to the Amherstburg IPZ-2. However, a modelling exercise conducted by Essex Regional SPA staff determined that if large volumes of liquid fuel are stored or handled in the Event Based Area where the Project is located, it would be considered a significant drinking water threat.



There are no Highly Vulnerable Aquifers (HVAs), or Significant Groundwater Recharge Areas (SGRAs) in the Study Area (Ontario GeoHub 2023e).

In the Study Area there are 7 water well records (WWRs). The following is a breakdown of each well designation:

- 2 are designated for Cooling and Air Conditioning (A/C)
- 3 are designated as Monitoring
- 2 are designated as Test Hole

Given the breakdown presented above, the majority of wells in the Study Area are mainly used for monitoring purposes.

Water mainly drains southwards from the Study Area into the Detroit River and Lake Erie.

### **3.3.4 Aggregates and Petroleum Resources**

The County of Essex OP (2014) indicates that the Study Area is in a zone designated as Salt Deposits. No other aggregate or petroleum resources were identified in the OP.

In reference to Ontario GeoHub (2021) (2022a) (2023a) and (2023b), the nearest active aggregate site is located approximately 2 km east of the Study Area and the nearest petroleum well is located approximately 1 km southeast of the Study Area.

### **3.3.5 Soil and Soil Capability**

The soil type in the Boblo Island portion of the Study Area is classified as not being mapped. Soils in this classification are native in condition and not disturbed by any agriculture (Agriculture and Agri-Food Canada 2019). The soil type in the Town of Amherstburg portion of the Study Area is classified as built-up area. Built-up areas are described as man-made land cover features, ranging from small hamlets at rural crossroads to large cities (Government of Ontario 2023c).

Soil capability for agriculture is mapped by Agriculture and Agri-Food Canada (AAFC) (2013). Lands classified as Class 1 are the most agriculturally productive, while those classified as Class 7 have the lowest capability for agriculture. Class 1 to 5 agricultural lands are generally arable, while classes 1 through 3 are defined by the Ontario Ministry of Agriculture, Food and Rural Affairs to be prime agricultural soils for common field crop production. The soil in the Study Area is identified as not belonging to a capability class.



### **3.3.6 Agricultural Tile Drainage**

Agricultural tile drains are perforated tubing inserted into the ground below the topsoil with the intentions of improving drainage in the upper root zone and, ultimately, agricultural productivity. In the Study Area, there are no occurrences of mapped random or systematic tile drainage.

### **3.3.7 Regulated Area and Natural Hazards**

Natural hazards are elements of the physical environment that have the potential to affect a project in an adverse manner. Potential natural hazards in the Study Area may include flooding, seismic hazard, and tornados. Portions of the Study Area are located in ERCA regulated areas (**see Appendix C, Figure C-2**).

The Study Area lies in the Southern Great Lakes Seismic Zone (Natural Resources Canada 2021). This zone has a low to moderate level of seismicity when compared to the more active seismic zones to the east, such as the Western Quebec Seismic Zone which captures the area along the Ottawa River and in Quebec. (Natural Resources Canada 2021). According to data from Natural Resources Canada (2021), over the last 30 years, on average, 2 to 3 magnitude 2.5 or larger earthquakes have been recorded in the Southern Great Lakes region. By comparison, over the same period, the smaller region of Western Quebec experienced 15 magnitude 2.5 or greater earthquakes per year (Natural Resources Canada 2021). Three moderately sized (magnitude 5) events have occurred in the 250 years of European settlement of this region, all of them in the United States – 1929, Attica, New York, 1986, near Cleveland, Ohio, and 1998, near the Pennsylvania/Ohio border. All three earthquakes were widely felt but caused no damage in Ontario (Natural Resources Canada 2021).

While the likelihood of seismic activity occurring in the Study Area is low, flooding is more prevalent a risk as it is the most frequent natural hazard experienced in the Town of Amherstburg. Schedule 'C' of the Town of Amherstburg Consolidated OP Schedules (2017) indicates that the Town is in the "Lake Erie/Detroit River Floodprone Area". Flooding can occur throughout the year because of heavy rainfall but often occurs in the spring and is the result of rapid snow melt or ice melt.

There is potential for tornados to form in the Study Area. In September 2018, Environment Canada confirmed at least two tornados occurred throughout Essex County where trees were knocked over and small buildings destroyed (Wilhelm 2018).



## 3.4 Biophysical Features

### 3.4.1 Aquatic Resources

#### 3.4.1.1 Fish and Fish Habitat

As part of the assessment of potential environmental impacts, an aquatic resource review was undertaken to document and characterize aquatic features in the Study Area. The review was undertaken to identify potential impacts and provide recommendations for mitigation measures.

A review of satellite imagery within the Study Area identified the Detroit River, and five unnamed, offline, dug ponds, two of which are located west of Gold Coast Drive, and three of which are located east of Gold Coast Drive (**see Appendix C, Figure C-1**). While the five ponds may be permanent features (based on historical aerial imagery) and may provide fish habitat, no fisheries information for these ponds was available from background data sources. Since the ponds are offline and not connected to Ontario Waters, and they are outside of the proposed work areas for the Project, no specific permitting or mitigations are required to protect fish and fish habitat that may be present in the five unnamed, offline ponds.

The Detroit River HDD crossing will pass beneath the Amherstburg Channel of the Detroit River, which is a dredged channel of the Great Lakes St. Lawrence Seaway System. Water depths at the crossing range from 6 m to 11 m and quickly shallow to 1 m to 2 m deep along east and west shorelines. The western third of the channel is deepest, and averages 11 m (Navionics 2023). Substrates within the channel are primarily sand overlying clay.

The mainland (east) shoreline at the proposed crossing location has been stabilized with rip rap to reduce erosion due to wave action from commercial freighters and other boat traffic. North of this was an area of construction where sheet piling was being used to offer temporary protection and isolation of the construction site.

A site reconnaissance that took place on December 14, 2022, found that the shoreline of Boblo Island, north of the ferry crossing (at the west side of the proposed HDD crossing), is stabilized with granular material to reduce erosion and sediment migration due to boat traffic and commercial freighters. Further north, the shoreline is more natural, with small bays and inlets.

**Table 3.1** summarizes aquatic features, thermal regime, and MNRF records (MNRF 2023a) for fish species that have been recorded, if available.



**Table 3.1: Aquatic Features – Summary of Background Data**

Feature ID	Watercourse Name	Thermal Regime (MNRF 2023a)	Fish Species Present (MNRF 2023a)
Detroit River	Detroit River	Warm	Banded Killifish ( <i>Fundulus diaphanus</i> ), Bigmouth Buffalo ( <i>Ictiobus cyprinellus</i> ), Bluegill ( <i>Lepomis macrochirus</i> ), Bluntnose Minnow ( <i>Pimephales notatus</i> ), Brook Silverside ( <i>Labidesthes sicculus</i> ), Brown Bullhead ( <i>Ameiurus nebulosus</i> ), Channel Darter ( <i>percina copelandi</i> ), Common Carp ( <i>Cyprinus carpio</i> ), Common Shiner ( <i>Luxilus cornutus</i> ), Emerald Shiner ( <i>Notropis atherinoides</i> ), Freshwater Drum ( <i>Aplodinotus grunniens</i> ), Gizzard Shad ( <i>Dorsoma cepedianum</i> ), Golden Redhorse ( <i>Moxostoma erythrurum</i> ), Goldfish ( <i>Carassius auratus</i> ), Largemouth Bass ( <i>Micropterus salmoides</i> ), Longnose Gar ( <i>Lepisosteus osseus</i> ), Muskellunge ( <i>Esox masquinongy</i> ), Northern Pike ( <i>Esox lucius</i> ), Northern Sunfish ( <i>Lepomis peltastes</i> ), Pugnose Minnow ( <i>Opsopoeodus emiliae</i> ), Pumpkinseed ( <i>Lepomis gibbosus</i> ), Rainbow Smelt ( <i>Osmerus mordax</i> ), Rainbow Trout ( <i>Onchorhynchus mykiss</i> ), Rock Bass ( <i>Ambloplites rupestris</i> ), Round Goby ( <i>Noegobius melanostomus</i> ), Shorthead Redhorse ( <i>Moxostoma macrolepidotum</i> ), Smallmouth Bass ( <i>Micropterus dolomieu</i> ), Spotted Sucker ( <i>Minytrema melanops</i> ), Spottail Shiner ( <i>Notropis hudsonius</i> ), White Perch ( <i>Morone americana</i> ), White Sucker ( <i>Catostomus commersonii</i> ), Yellow Perch ( <i>Perca flavescens</i> )
Unnamed Ponds	Not Applicable	Unknown	No Data



### 3.4.1.2 Aquatic Species at Risk

The SARA prohibits the killing, harming, harassing, capturing, or taking of an individual of a species that is listed as an extirpated, endangered or threatened species in Schedule 1 of the Act. It also prohibits the damage or destruction of the habitat of a species that is listed as endangered or threatened; or extirpated species provided that a recovery strategy has recommended the reintroduction of the extirpated species into the wild in Canada. DFO is responsible for federal aquatic SAR other than those in, or on, federal lands.

The provincial ESA protects species that are threatened, endangered, or extirpated in Ontario by prohibiting anyone from killing, harming, harassing, or possessing protected species, and by prohibiting any damage or destruction to the habitat of the listed species. All protected species are provided with general habitat protection under the ESA, with the goal of protecting areas that species depend on to carry out their life processes (e.g., reproduction, rearing, hibernation, migration or feeding). Some species have detailed habitat regulations that define the extent and characteristics of protected habitats.

Activities that may impact a protected species or its habitat require the prior issuance of a permit from the MECP, unless the activities are exempted under Regulation. The current Ontario Regulation 242/08 identifies activities involving aquatic SAR which are exempt from the permitting requirements of the ESA, subject to rigorous controls outside the permit process, including registration of the activity and preparation of a mitigation plan. Activities that are not exempt under O. Reg. 242.08 require an Overall Benefit Permit under 17(2) (c) (e.g., if a watercourse crossing is open cut).

Based on DFO Aquatic SAR mapping (DFO 2023), the Study Area does not provide critical habitat for federally designated aquatic SAR. It does, however, have the potential to support the following federally designated aquatic SAR:

- Channel Darter (*Percina copelandi* Lake Erie populations - Endangered)
- Pugnose Minnow (*Opsopoeodus emiliae* - Threatened)
- Spotted Sucker (*Minytrema melanops* - Special Concern)
- Northern Sunfish (*Lepomis peltastes* - Special Concern)

A review of the provincial NHIC database determined that there are records of the following provincially designated aquatic SAR in the Study Area:

- Lake Sturgeon (*Acipenser fulvescens* Great Lakes -Upper St. Lawrence populations - Endangered)
- Rayed Bean (*Villosa fabalis* - Endangered)
- Hickorynut (*Obovaria olivaria* - Endangered)



- Salamander Mussel (*Simpsonaias ambigua* - Endangered)
- Kidneyshell (*Ptychobranchnus faciolaris* - Endangered)
- Round Pigtoe (*Pleurobema sintoxia* - Endangered)
- Channel Darter (Special Concern)
- Silver Lamprey (*Ichthyomyzon unicuspis* Great Lakes – Upper St. Lawrence populations – Special Concern)
- Eastern Pondmussel (*Sagittunio nasutus*- Special Concern)

Provided mitigations outlined in **Table 5.1** are followed, no federal or provincial species at risk permitting or monitoring for aquatic SAR is required for proposed HDD activities.

### **3.4.2 Terrestrial Resources**

#### **3.4.2.1 Designated Natural Features**

Results of the background review identified the following features in the Study Area:

- Natural Heritage System - Natural Environment Overlay as identified in the Essex County OP (2014)
- Lower Detroit River Important Bird Area (IBA) (BirdLife International no date), identified for a breeding gull and tern colony on Fighting Island (outside the Study Area) as well as concentration of waterfowl in the Detroit River during fall migration.
- Waterbodies (MNRF 2023a)
- Woodlands (MNRF 2023a)

#### **3.4.2.2 Forest and Vegetation Cover**

The Study Area falls within the Ecoregion 7E-1, the Essex Ecodistrict. The flora and fauna in Ecoregion 7E-1 are the most diverse in Canada and include several provincially significant plants, animals, and vegetation communities. Sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), and eastern white pine (*Pinus strobus*) are widespread. Carolinian tree species such as tulip tree (*Liriodendron tulipifera*), sassafras (*Sassafras albidum*), and Kentucky coffeetree (*Gymnocladus dioicus*) also occur. Plant species associated with alvar and grassland communities may also be located in this Ecoregion (Wester et al., 2018).



#### 3.4.2.2.1 Vegetation Communities

The Study Area is a mix of residential properties found on the northern half of Boblo Island and a mix of residential / commercial properties on the mainland within the Town of Amherstburg. The woodlands identified in the background review do not match the existing conditions map (**see Appendix C, Figure C-1**). A woodland occurs north of Boblo Island Boulevard but remnant woodland pockets south of this road have been reduced due to recent construction activities.

#### 3.4.2.2.2 Significant Woodlands

The County of Essex OP (2014) defines significant woodlands as:

*All woodlands 2 hectares in size or larger using the size criteria recommended in the Natural Heritage Reference Manual (MNR, 2010) and as per the Essex Region Natural Heritage System Strategy. Smaller woodlands may be considered significant if they exhibit composition, age or quality that is uncommon in the municipality or the region.*

Similarly, the Town of Amherstburg uses the same definition, those that are 2 ha or greater in area or meet the requirement of significance based on provincial Natural Heritage guidelines.

No significant terrestrial features (a category including significant woodlands) were identified in the County of Essex's OP (2014) Schedule 'B1' nor were woodlots identified in the Town of Amherstburg Consolidated OP Schedules (2017) on Schedule 'C'.

One woodlot in the Study Area may meet the size and/or specified criteria outlined in the Natural Heritage References Manual (MNR 2010).

#### 3.4.2.3 Wetlands

The Ontario Wetland Evaluation System (OWES) is used to identify Provincially Significant Wetlands (PSWs). An evaluated wetland may be one contiguous unit or may be a series of smaller wetlands functioning as a whole. Evaluated wetlands that do not qualify as provincially significant may be designated locally significant and may be protected through local planning and policy measures. There may also be unevaluated wetlands in an area.

A review of LIO (MNRF 2023b) natural heritage mapping did not identify mapped wetlands, including PSWs, within the Study Area. Unevaluated wetlands may occur in the Study Area and a vegetation survey is recommended.



#### **3.4.2.4 Significant 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 that are important to migratory and non-migratory species (MNR 2010). Wildlife habitat is considered significant if it is ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or Natural Heritage System (MNR 2010).

SWH are grouped into four categories:

- Seasonal concentration areas
- Rare vegetation communities or specialized habitat for wildlife
- Habitats of species of conservation concern
- Animal movement corridor

The presence of SWH in the Study Area was determined in two ways. First, publicly available NHIC data was reviewed for SWH (MNR 2023a) as were the County of Essex OP (2014) and Town of Amherstburg Consolidated OP Schedules (2017). Second, potential SWH was identified comparing the Significant Wildlife Habitat Criteria Schedules for Ecoregions 7E (MNR 2015) with the results of the field visit completed in December 2022 and air photo interpretation, where required. The presence of SWH categories are discussed in **Table D-1 (Appendix D)**. Summaries of the significant wildlife assessments are detailed below.

##### **3.4.2.4.1 Seasonal Concentration Areas**

Seasonal Concentration Areas are sites where large numbers of a species gather at one time of the year, or where several species congregate. Only the best examples of these concentration areas are typically designated as SWH.

As detailed in **Appendix D**, SWH for waterfowl stopover and staging (aquatic) was documented in the Study Area as part of the Lower Detroit River IBA. Candidate SWH was also documented for shorebird migratory stopover, bat maternity colonies, turtle wintering area, reptile hibernacula, and landbird migratory stopover.

##### **3.4.2.4.2 Rare Vegetation Communities or Specialized Habitat for Wildlife**

Rare vegetation communities or specialized habitats are defined as separate components of SWH. Rare vegetation communities are habitats that are considered rare or uncommon in the ecoregion, as defined in the SWH Criteria Schedule (MNR 2015). These habitats may support wildlife species that are considered significant. Specialized habitats are microhabitats that are critical to some wildlife species. Review of the NHIC (MNR 2023a) database did not identify any rare vegetation communities or specialized habitats within the Study Area.



As detailed in **Appendix D** candidate SWH may occur for Bald Eagle and Osprey nesting, Foraging and Perching Habitat, Turtle Nesting Areas, Amphibian Breeding Habitat (Woodland).

#### **3.4.2.4.3 Habitat for Species of Conservation Concern**

There are four types of SOCC: those which are rare, those whose populations are significantly declining, those which have been identified as being at risk from certain common activities and those with relatively large populations in Ontario compared to the remainder of the globe. The Significant Wildlife Habitat Criteria Schedule for Ecoregions 7E identifies marsh, open country and shrub/early successional bird breeding habitat, terrestrial crayfish, and special concern and rare wildlife species (MNRF 2015) in this category.

Rare species are considered at five levels: globally rare, federally rare with designations by the COSEWIC, provincially rare with designations by COSSARO, regionally rare (at the Site Region level), and locally rare (in the municipality or Site District). This is also the order of priority that should be assigned to maintaining species.

Species designated as special concern provincially or federally are included as species of conservation concern. S-Ranks are status rankings (see list below) assigned for the province by the MNRF and available in the NHIC database. Provincially rare species are those with S-Ranks of S1, S2, or S3 (MNRF 2022c):

- S1 – Critically Imperiled
- S2 – Imperiled
- S3 – Vulnerable
- S4 – Apparently Secure
- S5 - Secure

Twenty-four wildlife species of conservation concern have ranges that overlap the Study Area, including 4 species of reptiles, 16 species of breeding birds, and 9 species of invertebrates.

Exact locations of species occurrences are not available from databases or atlases, and the potential for species to be present is limited by habitat suitability and availability. Therefore, the identified species recorded from these databases may not occur in the Study Area.

**Table 3.2** below provides a summary of the SOCC that have been identified during the background review, and whether potential habitat for these species is present in the Study Area.





**Table 3.2: Terrestrial Species of Conservation Concern Potential Occurring in the Study Area**

Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area?
<b>Reptiles</b>	Midland Painted Turtle	<i>Chrysemys picta marginata</i>	S4	Not Listed	SC	ORAA, NHIC	Yes – Detroit River, anthropogenic ponds
	Northern Map Turtle	<i>Graptemys geographica</i>	S3	SC	SC	ORAA, NHIC	Yes – Detroit River, anthropogenic ponds
	Snapping Turtle	<i>Chelydra serpentina</i>	S3	SC	SC	ORAA, iNaturalist	Yes – Detroit River, anthropogenic ponds
	Eastern Milksnake	<i>Lampropeltis triangulum</i>	S4	NAR	SC	ORAA,	Yes – edge habitat present
<b>Birds</b>	Bald Eagle	<i>Haliaeetus leucocephalus</i>	S4	SC	NAR	OBBA, eBird	Yes – stick nest present, potential breeding in the Study Area.
	Barn Swallow	<i>Hirundo rustica</i>	S4B	SC	THR	OBBA, iNaturalist	Yes- anthropogenic features
	Black Tern	<i>Chlidonias niger</i>	S3B, S4M	SC	NAR	OBBA	No – migrating habitat only
	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	S3B, S2N, S4M			ebird	Yes – Detroit River
	Blue-winged Teal	<i>Spatula discors</i>	S3B, S4M			OBBA, ebird	No – migrating habitat only (Lower Detroit River IBA)
	Common Gallinule	<i>Gallinula chloropus</i>	S3B			OBBA	No – migrating habitat only (Lower Detroit River IBA)
	Common Nighthawk	<i>Chordeiles minor</i>	S4B	SC	THR	OBBA, eBird	Yes- graveled shoreline, unvegetated ground



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area?
<b>Birds cont.</b>	Eastern Wood-Pewee	<i>Contopus virens</i>	S4B	SC	SC	OBBA, eBird	Yes – deciduous forest present
	Evening Grosbeak	<i>Coccothraustes vespertinus</i>	S4	SC	SC	ebird	No – migrating habitat only
	Great Black-backed Gull	<i>Larus marinus</i>	S1B, S4N			ebird	No – Lower Detroit River IBA (Fighting Island)
	Great Egret	<i>Ardea alba</i>	S2B, S3M			ebird	Yes – Lower Detroit River IBA
	Olive-sided Flycatcher	<i>Contopus borealis</i>	S4B	SC	THR	OBBA, eBird	No – migrating habitat only
	Peregrine Falcon	<i>Falco peregrinus</i>	S4	SC	NAR-SC	OBBA, ECCC, eBird	No – Cliffs and tall buildings absent
	Purple Martin	<i>Progne subis</i>	S3B			OBBA, ebird	Yes- anthropogenic features
	Redhead Woodpecker	<i>Aythya americana</i>	S2B, S4N			OBBA, iNaturalist, ebird	Yes - forest present
	Ruddy Duck	<i>Oxyura jamaicensis</i>	S3B, S4N, S5M			OBBA, ebird	No – migrating habitat only (Lower Detroit River IBA)
	Rusty Blackbird	<i>Euphagus carolinus</i>	S4B, S3N	SC	SC	ebird	No – migrating habitat only
	Tufted Titmouse	<i>Baeolophus bicolor</i>	S3			ebird	Yes - forest present
	Wood Thrush	<i>Hylocichla mustelina</i>	S4B	SC	THR	OBBA	No – forest structure is not suitable



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area?
<b>Insects</b>	Four-toothed Mason Wasp	<i>Monobia quadridens</i>	S2?				Yes- anthropogenic features and parkland
	Golden Northern Bumble Bee	<i>Bombus fervidus</i>	S3S4				Yes- anthropogenic features and gardens
	Hackberry Emperor	<i>Asterocampa celtis</i>	S3				Yes - if Hackberry is present
	Horned Passalus	<i>Odontotaenius disjunctus</i>	S1S2				Yes - forest edges present
	Monarch	<i>Danaus plexippus</i>	S4B, S2N	SC			Yes - anthropogenic features and gardens
	Rabid Wolf Spider	<i>Rabidosa rabida</i>	S3?				Yes - forest edges present, anthropogenic features
	Tawny Emperor	<i>Asterocampa clyton</i>	S3				Yes- forest and open areas present
<b>Odonata</b>	River Bluet	<i>Enallagma anna</i>	S3			NHIC, OOAD	Yes – Detroit River, anthropogenic ponds
	Elusive Clubtail	<i>Stylurus notatus</i>	S3			NHIC, OOAD	Yes – Detroit River, anthropogenic ponds

Notes:

END: Endangered - a species facing imminent extinction or extirpation

**Statuses**

THR: Threatened - a species that is at risk of becoming endangered

SC: Special Concern - a species with characteristics that make it sensitive to human activities or natural events

S1: Critically Imperiled - Critically imperiled in the province (often 5 or fewer occurrences)

S2: Imperiled - Imperiled in the province, few populations (often 20 or fewer)



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S3: Vulnerable - Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure - Uncommon but not rare

S?: Rank Uncertain

S#B: Breeding status rank

S#M: Migration status rank

#### **Resources**

COSSARO: Committee on the Status of Species at Risk in Ontario

COSEWIC: Committee on the Status of Endangered Wildlife in Canada

ECCC: Environment and Climate Change Canada

eBird: eBird Canada

iNaturalist: iNaturalist Canada

NHIC: Natural Heritage Information Centre

OOAD: Ontario Odonata Atlas Database

OBA: Ontario Butterfly Atlas

OBBA: Ontario Breeding Bird Atlas

ORAA: Ontario Reptile and Amphibian Atlas

SARO: Species at Risk in Ontario List

TEA: Toronto Entomologists Association



Twenty-two (22) SOCC plants were also identified in the background review. A botanical inventory was not completed for the Study Area and as such SOCC plants may occur on Boblo Island, with potentially suitable habitat for species such as Schumard Oak (*Quercus shumardii*), Honey Locust (*Gleditsia triacanthos*), and Eastern Stiff Goldenrod (*Solidago rigida*).

#### 3.4.2.4.4 Animal Movement Corridors

Animal movement corridors are elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another (MNR 2000). Rivers, creeks, and drains may be used as amphibian movement corridors to/from breeding habitat. In Ecoregion 7E (where the Project is located) there is one type of SWH for animal corridors, which is amphibian.

As detailed in **Table D.1 (Appendix D)**, amphibian movement corridors do not occur in the Study Area.

#### 3.4.2.5 Species at Risk

SAR are those species given status rankings, by COSEWIC and/or COSSARO, as threatened or endangered according to federal or provincial legislation. Endangered and threatened species receive general habitat protection under the ESA 2007. Special concern species are not afforded habitat protection and have been summarized as species of conservation concern above.

Based on the desktop resource review, 20 threatened and endangered species have ranges that overlap the Study Area, including 5 species of reptile, 6 species of breeding birds, 4 species of mammal, and 5 species of plants as shown in **Table 3.3**.

Exact locations of species occurrences are not available from background resources, and the potential for species to be present is limited by habitat suitability and availability. Therefore, the identified species recorded from may not occur in the Study Area.

**Table 3.3: Terrestrial Species at Risk Potentially Occurring in the Study Area**

Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area?
<b>Reptiles</b>	Blanding's Turtle	<i>Emydoidea blandingi</i>	S3	THR	END	ORAA, NHIC, iNaturalist	Yes – Detroit River, anthropogenic ponds
	Butler's Gartersnake	<i>Thamnophis butleri</i>	S2	END	END	NHIC, ORAA	Yes – edge habitat, anthropogenic ponds
	Eastern Foxsnake (Carolinian)	<i>Pantherophis gloydi</i>	S2	END	THR	ORAA	Yes – edge habitat, anthropogenic ponds
	Eastern Spiny Softshell	<i>Apalone spinifera spinifera</i>	S2	END	END	NHIC, ORRA, iNaturalist, ECCC	Yes – Detroit River
	Queen Snake	<i>Regina septemvittata</i>	S2	END	END	ORAA	No – suitable habitat absent
<b>Birds</b>	Bank Swallow	<i>Riparia riparia</i>	S4B	THR	THR	OBBA, eBird	No - banks absent
	Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR	OBBA, eBird,	No – breeding habitat absent
	Chimney Swift	<i>Chaetura pelagica</i>	S3B	THR	THR	OBBA, NHIC, eBird	Yes – anthropogenic structures
	Eastern Meadowlark	<i>Sturnella magna</i>	S4B, S3N	THR	THR	OBBA, NHIC,	No – breeding habitat absent
	Golden Eagle	<i>Aquila chrysaetos</i>	S1B	END	NAR	eBird	No – migrating habitat only



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area?
<b>Birds cont.</b>	Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	S3	END	END	NHIC, eBird, INat, OBBA,	Yes – forest present
<b>Mammals</b>	Eastern Small-footed Myotis	<i>Myotis leibii</i>	S2S3	END	NS	SARO	Yes - forest and snags present
	Little Brown Myotis	<i>Myotis lucifugus</i>	S3	END	END	SARO	Yes - forest and snags present
	Northern Myotis	<i>Myotis septentrionalis</i>	S3	END	END	SARO	Yes - forest and snags present
	Tri-colored Bat	<i>Perimyotis subflavus</i>	S3?	END	END	AMO COSEWIC SARO	Yes - forest and snags present
<b>Plants</b>	Black Ash	<i>Fraxinus nigra</i>	S4	END	END	Tree Atlas, SARO	No - wetlands absent, but vegetation survey recommended
	Drooping Trillium	<i>Trillium flexipes</i>	S1	END	END	NHIC	Yes - forest present, vegetation survey recommended
	Eastern Camas	<i>Camassia scilloides</i>	S1	THR	THR	NHIC	Yes - forest present, vegetation survey recommended
	Eastern Flowering Dogwood	<i>Cornus florida</i>	S2	END	END	Tree Atlas, SARO	Yes - forest present, vegetation survey recommended



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area?
Plants cont.	Heart-Leaved Plantain	<i>Plantago cordata</i>	S1	END	END	NHIC	No – Suitable habitat absent.
	Red Mulberry	<i>Morus rubra</i>	S2	END	END	NHIC	Yes - forest present, vegetation survey recommended

Notes:

END: Endangered - a species facing imminent extinction or extirpation

**Statuses**

THR: Threatened - a species that is at risk of becoming endangered

SC: Special Concern - a species with characteristics that make it sensitive to human activities or natural events

S1: Critically Imperiled - Critically imperiled in the province (often 5 or fewer occurrences)

S2: Imperiled - Imperiled in the province, few populations (often 20 or fewer)

S3: Vulnerable - Vulnerable in the province, relatively few populations (often 80 or fewer)

S4: Apparently Secure - Uncommon but not rare

S?: Rank Uncertain

S#B: Breeding status rank

S#M: Migration status rank

**Resources**

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OBA: Ontario Butterfly Atlas

OBBA: Ontario Breeding Bird Atlas

ORAA: Ontario Reptile and Amphibian Atlas

SARO: Species at Risk in Ontario List

TEA: Toronto Entomologists Association





Potential habitat for SAR is present in the Study Area and the proposed pipeline routes are located within an existing road allowance that is periodically disturbed for maintenance work. Potential impacts and mitigation measures for areas where construction of the pipeline may interact with wildlife and wildlife habitat, including Species at Risk, are noted in **Table 5.1**.

### 3.5 Socio-Economic Environment

#### 3.5.1 Demographics

Boblo Island is located on the Detroit River and is a part of The Town of Amherstburg. Boblo Island itself is approximately a 500 m ferry ride west of the Town of Amherstburg. The Town of Amherstburg is located in the County of Essex. The Project Study Area spans from the northern part of Boblo Island into a section of the Town of Amherstburg.

The population breakdown of Essex County and the Town of Amherstburg, in comparison to the Province of Ontario is presented in **Table 3.4** below.

**Table 3.4: Population, 2021**

Location	Total Population	Land Area (km <sup>2</sup> )	Population Density per (km <sup>2</sup> )
Ontario	14,223,942	892,411.8	15.9
Essex County	422,860	1,844.2	229.3
Town of Amherstburg	23,524	183.8	128.0

Source: Statistics Canada, 2023

As shown in **Table 3.5**, Essex County’s population increased from 398,953 to 422,860 from 2016 to 2021 (6.0% increase) (Statistics Canada 2023). This is greater than the population percentage change for Ontario during the same period (5.8%) (Statistics Canada 2023).

**Table 3.5: Population Growth from 2016-2021**

Location	Total Population 2016	Total Population 2021	Population percentage change (%)
Ontario	13,448,494	14,223,942	5.8
Essex County	398,953	422,860	6.0
Town of Amherstburg	21,936	23,524	7.2

Source: Statistics Canada, 2023



Between 2016 and 2021, the Town of Amherstburg saw an increase in its population (7.2%) (Statistics Canada 2023). The Town of Amherstburg population growth exceeded the provincial and Essex County's population percentage change during the timeframe from 2016 to 2021 (Statistics Canada 2023).

According to population projections (OMOF 2022), the population for Ontario is projected to increase by 35.8% (approximately 5.3 million) over the next 26 years. The Town of Amherstburg Consolidated OP (2023) conservatively estimates that the population is projected to increase to 30,569 in the Town of Amherstburg by 2025. During the COVID-19 pandemic, there has been a mass exodus from big centres into smaller communities throughout Essex County. Some of the main reasons people are starting to move from places like Toronto into smaller communities such as the Town of Amherstburg are because of the freedom to be able to work from home, people find it as a nice retirement area, being able to access the same level of services which they are used to in the big city (e.g. health, recreational, educational), and are still near big metropolitan cities (e.g. Detroit and Windsor) for more resources (Thomson 2022).

### **3.5.2 Economy and Employment**

The most recent economic and employment statistics are provided in the 2021 Census of Population (Statistics Canada 2023). **Table 3.6** summarizes the unemployment and employment rate, participation rate, and the median income of persons over the age of 15 captured at the time of census in Ontario, Essex County, and the Town of Amherstburg.

**Table 3.6: Labour Characteristics for Persons > 15 years, 2021<sup>4</sup>**

Location	Total Population 15 years and Over	Labour Force	Employed	Participation Rate (%)	Employment Rate (%)	Unemployment Rate (%)
Ontario	11,782,820	7,399,200	6,492,895	62.8	55.1	12.2
Essex County	346,975	203,695	171,710	58.7	49.5	15.7
Town of Amherstburg	19,570	12,020	10,575	61.4	54.0	12.0

Source: Statistics Canada (2023)

<sup>4</sup> Table 4.6 data for Total – Population aged 15 years and over by labour force status was 25% sampled data. The data also refers to whether a person aged 15 years and over was employed, unemployed or not in the labour force during the week of Sunday, May 2 to Saturday, May 8, 2021. For information on the comparability of the 2021 Census labour force status data with those of the Labour Force Survey, see Appendix 2.11 of the Dictionary, Census of Population, 2021.



As shown in **Table 3.6**, in 2021, the Town of Amherstburg had a higher employment rate (54%) than the County of Essex (49.5%) but a lower employment rate than the Province of Ontario (55.1%). The Town of Amherstburg had a lower unemployment rate (12%) than The County of Essex (15.7%) and the Province of Ontario (12.2%) (Statistics Canada 2023).

Median income for households and individuals is presented in **Table 3.7**.

**Table 3.7: Median Income of households and individuals, 2020**

<b>Location</b>	<b>Median Total Income of Households</b>	<b>Median Total Income of Individuals</b>
Ontario	\$91,000	\$41,200
Essex County	\$82,000	\$40,000
Town of Amherstburg	\$98,000	\$46,000

Source: Statistics Canada (2023)

As shown in **Table 3.7**, the 2021 Census Profile for these census divisions referred to the 2020 calendar year for Median Total Income of Households and Individuals. In 2020, the median income of households in Essex County overall was less than the provincial median by \$9,000 and less than the provincial median income of individuals by \$1,200 (Statistics Canada 2023). For the Town of Amherstburg, the median total income of households was \$7,000 and \$16,000 more than the Province of Ontario and Essex County, respectively. The median total income of individuals in the Town of Amherstburg was \$4,800 and \$6,000 more than the Province of Ontario and Essex County, respectively (Statistics Canada 2023).

The top three occupation classifications in Essex County in 2021 were sales and service occupations (23.9%), trades, transport and equipment operators and related occupations (18.3%), and business, finance and administration occupations (12.9%) (Statistics Canada 2023). Similar to Essex County, the top three occupation classifications in the Town of Amherstburg in 2021 were sales and service occupations (22.6%), trades, transport and equipment operators and related occupations (19.4%), and business, finance and administration occupations (13.4%) (Statistics Canada 2023). Both of the top three service occupations for the County of Essex and Town of Amherstburg are consistent with the top three occupations in the Province of Ontario as a whole.



### **3.5.3 Community Services & Municipal Infrastructure**

#### **Permanent and Temporary Accommodations**

In 2021, there were 9,190 occupied private dwellings in the Town of Amherstburg. Most houses were single-detached (7,630) and the average household size was 2.5 persons (Statistics Canada 2023). Most occupants were owners (85.4%), followed by renters (14.6%) (Statistics Canada 2023).

To accommodate the predicted population increase outlined in Section 3.5.1, a greater land base is required to build more dwelling units (Town of Amherstburg 2023). Areas that have been selected for new growth in the Town of Amherstburg include areas that are currently or have the potential to be serviced with municipal sanitary sewer service and water supplies (Town of Amherstburg 2023). The County of Essex Official Plan (2014) reports that from 2011 to 2031, housing growth will largely focus on building low density units, with a modest increase in medium density units.

The Town of Amherstburg is in the Provincial Tourism Region 1 (Southwest Ontario) (MTCS 2022). The commercial accommodations in this region are mostly dominated by Recreational Hotels, Vehicle (RV) Parks and Campgrounds, and Motels. In 2021, the occupancy rate at Hotels in Region 1 was 47.8% which was a decrease from 62.0% occupancy rate in 2019. However, the occupancy rate for short-term rentals in Region 1 was 57.8% in 2021 which was an increase from 53.7% in 2019 (pre-pandemic) (MTCS 2022).

The Study Area falls within a tourist area that is identified as a “War of 1812” community (Visit Amherstburg 2022). Temporary accommodations were identified outside the Study Area such as the Bondy House Bed and Breakfast, That Place by the Lake (at the Lake Erie Country Club), and Sun Retreats Amherstburg (Visit Amherstburg 2022). According to the Town of Amherstburg Community Improvement Plan (2020), overnight accommodation is identified as a “key need” and one that is “holding back” the economic growth of the Town itself. Due to its lack of overnight accommodation, visitors are encouraged to stay at other nearby municipalities such as Windsor, Leamington and Kingsville. To overcome this problem, one of the key areas that the Community Plan has suggested is for the Town of Amherstburg Consolidated OP (2023) and Zoning by-law to be reviewed particularly in the Core residential district so progress can be made to permit the construction of Bed and Breakfast establishments in the Town. In creating more temporary accommodations such as Bed and Breakfast establishments, it could provide a source of accommodation and create positive economic opportunities for visiting local wineries, having more people from out of town come and visit local festivals, and be seen as a tourist area for families that come out of town and play sport tournaments at the nearby Libro Credit Union Centre (Town of Amherstburg 2020).



## **Municipal Services and Infrastructure**

The Essex-Windsor Solid Waste Authority (EWSWA) is the governmental agency that provides solid waste management services for the Town of Amherstburg and Boblo Island (EWSWA 2023).

In the Town of Amherstburg, garbage collection services occur on a weekly basis (The Town of Amherstburg 2020). Items such as Large Items and Furniture (e.g. box springs, mattresses, couches) are accepted on garbage collection day but not electronics, household chemical waste, and construction materials (e.g. lumber, drywall, tile). The items that cannot be accepted, need to be disposed of at one of the three Public Drop Off Depots located within Windsor and Essex County which are at 3560 North Service Road, 2021 Albuna Townline (County Road. 31), and 7700 County Road 18 (The Town of Amherstburg 2020).

Other solid waste services in the Town of Amherstburg such as yard waste curbside collection happens every other Monday from the beginning of April to the end of November, recycling collection happens every other Friday, and white goods collection (eg. stoves, fridges, freezers, microwaves washers, dryers) are collected on the 4<sup>th</sup> Thursday of every month (The Town of Amherstburg 2020). The Town of Amherstburg also offers two collections for Christmas trees in January of each year (The Town of Amherstburg 2020).

As of September 6, 2022, Amherstburg launched the “Amherstburg Connection Route 605” initiative in partnership with Transit Windsor (The Town of Amherstburg 2020). Council approved the initiative as a pilot project where the initiative’s main intention is to provide safe, reliable and affordable public transit for the Town (The Town of Amherstburg 2020).

A private ferry service is available from the Town of Amherstburg to Boblo Island. The ferry ride across the Detroit River leaves from Park Street in the Town of Amherstburg and arrives at Boblo Island Boulevard at Boblo Island and vice versa. The ferry service runs every 20 minutes, 24 hours/365 days year for current residents of the Island and is only a 4-minute ride across the Detroit River (Bois Blanc Canada n.d.).

Hydro services in the Town of Amherstburg are provided by Hydro One and the Essex Powerlines Corporation, while natural gas is supplied to the Town through Enbridge Gas (The Town of Amherstburg 2020). Through the Amherstburg Water Treatment Plant, the Engineering and Public Works Department’s Water Division provides clean and safe drinking water to residents and businesses within the Town. In collaboration with the Ontario Clean Water Agency (OCWA), the Town of Amherstburg’s Engineering and Public Works Department is also responsible for maintaining collection systems. Six (6) sewage treatment facilities within the Town limits include the Amherstburg Wastewater Treatment Plant, Big Creek Treatment Plant, McLeod Sewage Treatment Plant, Boblo Sewage Treatment Plant, Edgewater Lagoons, and McGregor Lagoons.



The Boblo Sewage Treatment Plant is the only sewage treatment facility located in the Study Area.

### **Health and Education Services and Infrastructure**

The Town of Amherstburg has many walk-in clinics located outside of the Study Area. These include the Amherstburg Health Care Centre (located at 433 Sandwich Street South), the Amherstburg Medical Associates and Walk-In Clinic – Dr. Lan’s Office (located at 721 Front Road South, Unit 3), Essex County Nurse Practitioner-Led Clinic (located at 320 Richmond Street), Good Doctors Virtual walk-In Clinic (located 80 Richmond Street), and MD Connect Walk-In Clinic (located at 71 Sandwich Street South inside Rexall) (The Town of Amherstburg 2020). The nearest hospitals for people in the Town of Amherstburg are the Windsor Regional Hospital – Metropolitan Campus (located at 1995 Lens Avenue in Windsor), Windsor Regional Hospital – Ouellette Campus (located at 1030 Ouellette Avenue in Windsor), Windsor Regional Hospital – Tayfour Campus (located at 1453 Prince Road in Windsor), and Erie Shores Health Care Hospital (194 Talbot Street West in Leamington).

Three schools are located outside the Study Area in the Town of Amherstburg. These include North Star High School (a part of the Greater Essex County District School board) located approximately 1 km northeast of the Study Area, Amherstburg Public School (a part of the Greater Essex County District School board) approximately 1 km northeast of the Study Area, and Catholic Elementary School Saint-Jean-Baptiste (part of Conseil Scolaire Catholique Providence French Catholic School Board) approximately 1 km east of the Study Area.

### **Roads, Highways and Culverts**

The County of Essex Infrastructure Services Department is responsible for 1,503 kilometres of road network that spans across its seven municipalities (County of Essex 2019). The County of Essex owns and maintains most of the arterial roads, local municipalities maintain local roads, and the province owns and maintains Highway 3, Highway 77 and Highway 401 (County of Essex 2019). In reference to Schedule ‘D2’ in the County of Essex OP (2014) and Schedule ‘D’ in the Town of Amherstburg Consolidated OP Schedules (2017), the Boblo Island portion of the Study Area consists of local roads while the Amherstburg portion of the Study Area consists of local, and collector roads.

### **Policing, Fire and Emergency Response Services**

Each municipality in the County of Essex is responsible for their own policing and fire services (County of Essex 2019). The Windsor Police Service is the main policing service in the Town of Amherstburg with their detachment located at 532 Sandwich Street South and is outside of the Study Area (County of Essex 2019; Windsor Police Service 2023).



The Amherstburg Fire Department is the main fire service in the Town of Amherstburg. Three fire stations are within the Town of Amherstburg and are located at 271 Sandwich Street South, 3400 Middle Side Road, and 6744 Concession 6 South (Amherstburg Fire Department 2022). All these fire departments are outside the Study Area.

Essex-Windsor Emergency Medical Services (EMS) provides ambulance services and pre-hospital emergency medical care in Essex County, Windsor and Pelee Island for close to 400,000 residents. Twelve ambulance bases which the Essex-Windsor EMS operates out of throughout the County includes the following (County of Essex 2019):

- Mercer Street (Windsor)
- Dougall Avenue (Windsor)
- Jefferson Boulevard (Windsor)
- Malden Road (LaSalle)
- Leamington
- Woodslee
- Essex
- Amherstburg
- Lakeshore
- Tecumseh
- Kingsville
- Harrow
- Pelee Island

#### **3.5.4 Infrastructure**

Infrastructure identified for the purpose of this Project includes roads, railways, and electrical transmission corridors.

There are no major provincial highways operated by the MTO located in the Study Area. Local roads are located in the Study Area. Located adjacent to Town of Amherstburg portion of the Study Area are Essex County Road 20 and Essex County Road 18.

No rail lines are located in the Study Area (Ontario GeoHub 2017).

In reviewing the Ontario GeoHub's Utility Line Interactive Map (2022c), there are no major utility lines (e.g., hydro line, unknown transmission line, unknown pipeline, submerged hydro line, natural gas pipeline, submerged communication line) identified in the Study Area. A variety of buried and overhead utilities (e.g., telephone, low-voltage hydroelectric) are expected to be found in the road allowances throughout the Study Area.

#### **3.5.5 Culture, Tourism and Recreational Facilities**

On Boblo Island, visitors can tour the Marina area at the western part of the Island; hike at the White Sands Conservation Area; do other activities around the Island such as bike in the spring, summer, and fall seasons, and cross-country skiing during the winter season; and dine at the Boblo Island Beach House Restaurant (Bois Blanc Canada n.d.).





In the Town of Amherstburg, tourist attractions to visit which are located outside of the Study Area include the Fort Malden National Historic Site, Park House Museum, Gibson Gallery, the Amherstburg Navy Yard National Historic Site of Canada, and the Amherstburg Freedom Museum (Bois Blanc Canada n.d.; Visit Amherstburg 2022). Christ Church is located just northeast of the Study Area. The Town of Amherstburg also has festivals and events throughout the year such as the River Lights Festival, True Festival, and the Amherstburg Farmers Market (Visit Amherstburg 2022).

For recreational activities close to the Town of Amherstburg, there is Willow Beach located south of the Study Area, Essex Golf and Country Club located northeast of the Study Area, and Viewpointe Estate Winery located southeast of the Study Area (Bois Blanc Canada n.d.). Libro Credit Unit Centre located east of the Study Area provides two NHL-sized ice pads, a recreation zone, indoor turf soccer/football field, walking track, as well as outdoor baseball diamonds and soccer fields (The Town of Amherstburg 2020).

### **3.5.6 Air Quality and Noise**

According to the Environmental Noise Guideline (MOECC 2021), the Study Area comprises both urban and rural areas, which would most likely be categorized as Class 2 area and Class 3 area, respectively. The Town of Amherstburg portion of the Study Area would be classified as a Class 2 area which is considered as “an area with an acoustical environment typical of a major population centre during daytime, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as “urban hum”, and low evening and night background sound level defined by natural environment and infrequent human activity as early as 19:00 hours”. The Boblo Island portion of the Study Area would be classified as a Class 3 area which is considered as “a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as a small community; agricultural area; a rural recreational area such as a cottage or a resort area; or a wilderness area” (MOECC 2021).

The Study Area is expected to experience a low traffic volume that represents a minimal source of noise. Minor noise sources in the Study Area may result from occasional sounds due to anthropogenic domestic activities such as property maintenance, recreational (e.g., boating, ferry service), and day-to-day usage of cars.

### **3.5.7 Indigenous Interests, Land Use and Traditional Knowledge**

There are no Indigenous communities located in the Study Area. The Study Area is in Treat Territory # 2 and Treaty Territory # 35. Ontario, as the Crown, has a legal duty to consult with Indigenous peoples regarding projects or decisions that may adversely impact constitutionally protected Indigenous or treaty rights. Indigenous communities who were identified through provision of a Project Summary to the MOE on November 9, 2022 (**see Appendix B.1**) are as follows:

- Aamjiwnaang First Nation
- Bkejwanong (Walpole Island First Nation)
- Caldwell First Nation
- Chippewas of Kettle and Stony Point First Nation
- Chippewas of the Thames First Nation
- Oneida Nation of the Thames

Enbridge Gas and Stantec respectfully acknowledge the value of traditional knowledge and oral history that is shared among Indigenous communities is acknowledged and welcomed and provides context and background to the findings of archaeological studies. We recognize that Indigenous communities have strong ties to their lands and that the use of these lands, from a development, ecosystems, and sustainability perspective, is of vital importance to communities.

We also recognize that the worldviews shared by Indigenous communities contain a rich knowledge of rare plants and animals. An Indigenous worldview is one that is developed through a mutually beneficial relationship, where one sees themselves as deeply connected to the natural world. This ER and the studies and databases that influence the findings within, are the product of Western knowledge and a Western worldview. In this vein, we acknowledge that the discussions in this Report on Provincially and Federally protected species, for instance, do not capture the full breadth of the value these species have to Indigenous communities.

WIFN has indicated that Boblo Island is part of the ongoing land claim that sits before the courts and therefore the Project is of significant interest to their community.

CFN has indicated that the Project was deemed a high priority and they have developed a Species of Interest list, with species that are important to their community.

We welcome the opportunity for Indigenous communities to share context and background to the findings of both the archaeological studies as well as the natural heritage studies completed for the Project so that we may gain a sense of the full value of the species and ecosystems (and subsequent impacts) discussed in this Report.



### **3.5.8 Land Use**

Municipal land uses, policies and practices in the Study Area are governed by the County of Essex OP (2014) and implemented by local municipal OPs and Zoning By-Laws (County of Essex 2014; Town of Amherstburg 2017).

As per Schedule A1 and A2 of the County of Essex OP (2014) and Schedule B2 of the Town of Amherstburg Consolidated OP Schedules (2017), several land use designations occur in the Study Area. These land use designations include Primary Settlement Areas, Recreational Development, General Commercial, Heritage Residential, and Low Density Residential (County of Essex 2014; Town of Amherstburg 2017; Town of Amherstburg 2023). The County of Essex OP (2014) and The Town of Amherstburg Consolidated OP (2023) describes these land uses in the follow ways (to maintain the intent of the policies which apply to these designations, the following text has been copied almost directly from the OPs):

*Primary Settlement Areas are focal areas of public investment as well as a concentration of commercial, recreational, cultural and entertainment uses that accommodate a significant share of population and employment growth.*

*Predominant use of land in areas designated as Recreational Development shall be recreational facilities including parks, marinas, golf courses, residences and offices associated with the recreational uses, and other public or private commercial recreational facilities including restaurants, snack bars, parking areas and auxiliary buildings and uses. Uses permitted on Bois Blanc Island, known locally as Boblo Island and designated Recreational Development, shall be for a combination of residential, commercial recreational and entertainment establishments such as, but not limited to, restaurants, hotels, motels, taverns and marinas. Residential development on the island shall be at a range of densities and dwelling types in accordance with the policies of this Plan and the standards, regulations, policies and guidelines of the Ministry of Environment. Marina development and shoreline work will be subject to the standards, regulations, policies and guidelines of the federal government.*

*The uses permitted in the General Commercial designation shall include those commercial establishments offering goods and services which primarily serve the whole of the municipality's market area and shall include such uses as retail commercial establishments, places of entertainment, assembly halls, eating establishments, hotels, motels, community facilities, public uses, recreational uses, convenience stores whether in the form of individual stores or in a shopping centre form of construction and/or ownership, and residential uses above the first floor.*



*The uses permitted within the Heritage Residential area shall include single detached, semi-detached, duplex, and converted dwellings as well as rooming and boarding houses, bed and breakfast establishments, existing churches, and public uses. Several of the structures within the Heritage Residential area have been designated as “Heritage” buildings under the Ontario Heritage Act. Every effort should be made by both the owner and the Corporation to ensure the continued existence of that structure in its historically significant form.*

*Low Density Residential shall be limited to single detached, semi-detached, duplex, or converted dwelling units, home occupation uses and public uses.*

The Primary Settlement Area designation consists of both the Boblo Island and Town of Amherstburg portions of the Study Area. The Recreational Development designation is only within the Boblo Island portion of the Study Area, and the General Commercial, Heritage Residential and Low Density Residential designations are found in the Town of Amherstburg portion of the Study Area.

In Schedule B2 of the County of Essex OP (2014) a Natural Environment Overlay feature is identified in the Boblo Island portion of the Study Area. The Natural Environment Overlay lands on the Boblo Island portion of the Study Area are lands that are adjacent (within 120 m) to lands that may contain fish habitat, significant woodlands, areas of natural and scientific interests, significant wildlife habitat, and significant woodlands (County of Essex 2014). Policies associated with Natural Environment Overlay include the following according to the County of Essex OP (2014) (to maintain the intent of the policies which apply to these designations, the following text has been copied almost directly from the OP):

*Development and site alteration is not permitted on lands within the “Natural Environment Overlay” unless it has been demonstrated to the satisfaction of the approval authority and/or the local municipality, in consultation with the relevant Conservation Authority, that there will be no negative impacts on the natural features or their ecological functions.*

*Permitted uses on lands within the “Natural Environment Overlay” shall be in accordance with the underlying land use designation.*

*The County encourages activities that preserve and enhance the features contained within the “Natural Environment Overlay”. Examples include tree preservation, tree planting, establishing and improving linkages.*

There are no policies in the County of Essex OP (2014) indicating the development of natural gas pipelines is not permitted in the Study Area. The County of Essex OP (2014) cites that utility corridors (where transmission of natural gas is classified under) are to be designed in a manner that minimizes potentially negative impacts as much as possible.



The Town of Amherstburg Consolidated OP (2023) indicates that all existing facilities and the development of any new facilities associated with a gas distribution company, shall be permitted in any land use designation, except within the PSW designation.

### **3.5.9 Landfills and Contaminated Sites**

#### **Landfills**

In accordance with the Ministry of Environment, Conservation and Parks (MECP's) Guideline D-4 Land Use on or Near Landfills and Dumps (1994), active and closed landfills within 500 m of the Study Area were reviewed. The potential location of these sites in the Study Area was determined by cross-referencing OP mapping for the County of Essex and the Town of Amherstburg as well as the MECP's Small and Large Landfill Sites listed on the MECP website (MECP 2022a; MECP 2022b). The MECP Small and Large Landfill Sites website did not identify any landfills in the Study Area. The Town of Amherstburg Consolidated OP Schedules (2017) Schedule 'B2' identified an Open Landfill Site which is located approximately 4 km northeast of the Study Area.

#### **Contaminated Sites**

Contaminated sites in and near the Study Area were determined by reviewing the County of Essex's OP (2014) Schedule 'E1', the Town of Amherstburg Consolidated OP Schedules (2017), Schedule 'B2', the MECP Record of Site Condition Registry (2018), and the Treasury Board (2011). The Town of Amherstburg Consolidated OP Schedules (2017) Schedule 'B2' identifies a sewage treatment facility within the Study Area as well on the east part of Boblo Island.

A review of the Federal Contaminated Site Inventory (2011) indicated there are two (2) "Closed" Federal Contaminated Sites within the Study Area. The sites were identified as: Site ID #: 00013887 (Light D61- No Contamination Identified) on Boblo Island; and Site ID #: 00013831 (Hackett Reach Range Rear- No Contamination Identified) in the Town of Amherstburg. There is one "Suspected" Federally Contaminated Site (Site ID #: 00013893 called Light DL 15, LL 694- Contamination Identified) located approximately 2 km southwest of the Study Area and an "Active" Federally Contaminated Site (Site ID #: 10703001 called Fort Malden Front Range L.L 667 (soil surrounding structure)) located approximately 2 km northeast of the Study Area (Treasury Board 2011).

The MECP Record of Site Condition Registry (2018) noted that there are no registered properties within the Study Area. Approximately 1 km northeast of the Study Area at 209 Victoria Street South, a site has been registered as a Phase 1 and 2 Record of Site Condition (RSC), and there is another site located approximately 4 km north of the Study Area which is registered as a Phase 1 and 2 RSC as well (1603941 Ontario Inc 2022; MECP 2018).



The Detroit River was designated as an Area of Concern (AOC) in 1986 as available data indicated water quality and environmental health were severely degraded (ECCC 2017). Additional monitoring showed that the history of industrialization, urbanization, and agricultural land use activities along the shores and within the tributaries of the Detroit River had resulted in 12 of the 14 Great Lakes Quality Agreement's beneficial use indicators (BUI) of environmental quality being deemed as impaired. Programs towards restoring the Canadian section of the Detroit River AOC has resulted in five BUIs being restored and re-designated as not impaired (ECCC 2017).

### **3.5.10 Archaeological Resources**

A Stage 1 AA (**Appendix E**) was undertaken for the Project's Study Area (under Project Information Form [PIF] number P422-0033-2023). Stage 1 AAs are conducted in compliance with the provincial standards and guidelines set out by the Ministry of Citizenship and Multiculturalism (MCM) in the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). A Stage 1 AA provides information about a study area's geography, history, previous AAs, and includes a property inspection by a licensed archaeologist to assist in the evaluation of a study area's archaeological potential. Its purpose is to identify areas of archaeological potential and recommend further AAs necessary (i.e., Stage 2). A property inspection was completed by a licensed Stantec archaeologist on April 14, 2023.

Stantec applied archaeological potential criteria commonly used by the MCM to determine areas of archaeological potential within the Project's Study Area. These variables include proximity to previously identified archaeological sites, historical transportation routes or structures, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential.

Initial background research compiled information concerning potential archaeological resources and features in the Study Area for the Stage 1 AA. The Project's Study Area has a significant and diverse history ranging from pre-Contact Indigenous occupation, early Jesuit missionaries, post-Contact Indigenous occupation, early Euro-Canadian settlement, military structures, the underground railroad, and use related to the War of 1812 and Fort Malden, to more modern recreational and commercial developments. The Project Study Area overlaps, and is adjacent to, the Detroit River, which is a significant historical waterway and designated Canadian Heritage River System. The Detroit River was utilized for early transportation and resource extraction (both Indigenous and Euro-Canadian), and industrial development.



The Boblo Island portion of the Project's Study Area has been subject to a complex series of previous AAs since the early 1990's. A query of the *Ontario Public Register of Archaeological Reports* (Government of Ontario 2023b) indicates that there are at least eight previous AAs within, or adjacent to (within 50 m) the Project's Study Area. Most of the Project's Study Area on Boblo Island has been subject to previous AA.

An examination of the *Ontario Archaeological Sites Database* (Government of Ontario 2023a) has shown that 49 registered archaeological sites within approximately one kilometre of the Project's Study Area. Of these, there are four previously registered archaeological sites within the Project's Study Area; the 1839 Blockhouse site (AaHs-32), the Saugeen Cluster site (AaHs-33), the Duffy site (AaHs-35), the Boblo Watermain Site (AaHs-57), and one previously registered archaeological site within 50 m the Project's Study Area; the F. Bacon site (AaHs-36).

The four previously registered archaeological sites within the Project's Study Area have been subject to a series of partial archaeological investigations and construction disturbances since the early 1990's. Therefore, further archaeological work is recommended should the Project work area extend within 70 m of these locations to assist in determining the remaining integrity of the archaeological sites registered within the Project's Study Area

The Stage 1 background research complemented by the property inspection determined that a large part of the Project's Study Area, not subject to previous AA, has been subject to extensive land disturbance. These portions of the Project's Study Area retain low to no potential for archaeological resources. These areas were identified through examination of historical aerial photography and mapping as well as through visual examination during the property inspection. These portions of the Project's Study Area include areas of modern disturbance and much of the municipal road ROWs, including existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads and ditching, gravel and paved driveways/laneways, buried utilities and municipal infrastructure (e.g., sewers, pipelines, telecommunication cables, etc.), disturbance from existing commercial and residential/ subdivision development and frontages, a former sewage lagoon, as well as additional disturbance from existing construction activities and grading.

The remaining portions of the Project's Study Area were identified as retaining archaeological potential. These areas are generally portions of the Project's Study Area outside the municipal ROWs and include manicured lawns and areas not previously identified as being previously assessed or subject to extensive disturbance. These areas are considered to retain archaeological potential based on their proximity to previously registered archaeological sites, proximity to the Detroit River, and proximity to historical military infrastructure, historical transportation routes, and historical structures.



It should also be noted that in Ontario, projects that have components which may impact below the high-water mark of significant and navigable waterways should determine the marine archaeological potential of the project limits prior to any in-water disturbance. Portions of the Project's Study Area overlap with the Detroit River, which is a designated Canadian Heritage River System. If there are any proposed in-water impacts to the portion of the Detroit River within the Project's Study Area, a marine AA is recommended; Marine AAs must be conducted by a qualified marine/underwater archaeologist under a Marine Licence acquired from the MCM. Note, horizontal directional drilling approximately five metres below a waterway or deeper, is not considered an impact and a marine AA may not be required after discussion with the MCM.

In summary, the Stage 1 AA involving background research and a property inspection, determined that portions of the Project's Study Area retain potential for archaeological resources and a Stage 2 AA is recommended. A Stage 2 AA is not recommended for portions of the Project's Study Area that were identified as low to no archaeological potential. In addition, there are four registered archaeological sites that retain cultural heritage value and interest within the Project's Study Area; the 1839 Blockhouse site (AaHs-32), the Saugeen Cluster site (AaHs-33), the Duffy site (AaHs-35), the Boblo Watermain Site (AaHs-57). Further archaeological work is required for these locations should the Project work area extend within 70 m of these locations.

Any further recommended archaeological assessment (e.g., Stage 2, 3 and 4) will be undertaken as early as possible during detailed design and prior to project related construction activities.

### **3.5.11 Built Heritage Resources and Cultural Heritage Landscapes**

As part of this Environmental Study, a Cultural Heritage Screening Report (CHSR) was prepared for the Study Area using the MCM *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (2022; the Checklist). The CHSR and Checklist are used to identify protected and potential cultural heritage resources in the Study Area and make recommendations for future work, as appropriate. Results of the CHSR and Checklist are included in **Table 3.8** and the completed CHSR is included in **Appendix F**.



**Table 3.8: Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes**

Indicators of Cultural Heritage Value or Interest	Identified within the Study Area
Property identified, designated, or otherwise protected under the OHA as being of cultural heritage value	Not Identified
A National Historic Site (or part of)	Not Identified
Designated under the <i>Heritage Railway Stations Protection Act</i>	Not Identified
Designated under the <i>Heritage Lighthouse Protection Act</i>	Not Identified
Identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office	Not Identified
Located within a United Nations Educational, Scientific and Cultural Organization World Heritage Site	Not Identified
Is subject of a municipal, provincial, or federal commemorative or interpretative plaque	Not Identified
Has or is adjacent to a known burial site and/or cemetery	Not Identified
Is in a Canadian Heritage River watershed	Not Identified
Contains buildings or structures that are 40 or more years old	Identified
Is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area	Not Identified
Has a special association with a community, person, or historical event	Not Identified
Contains or is part of a cultural heritage landscape	Not Identified

Based on the results of the CHSR, one indicator of Cultural Heritage Value or Interest (CHVI) was identified: structures that are 40 or more years old. Three properties with structures over 40 years of age were identified and two were determined to retain potential CHVI. While the property parcel for 355 Dalhousie Street is located within the Study Area, the structure associated with this property is located outside the buffer. Therefore, no direct impacts or indirect vibration impacts are anticipated, and no further cultural heritage studies or mitigation measures are required for this property.

The structure at 356 Dalhousie Street is a vernacular residence with Queen Ann design influences, an architectural style popular during the second half of the 19<sup>th</sup> century. This structure retains potential CHVI. Because the residence is located within the buffer there is potential for indirect vibration impacts to this property.

No further cultural heritage studies are recommended at this time.



## 4 Route Identification and Confirmation

### 4.1 The Process

The route identification and confirmation process was undertaken as per the *OEB Environmental Guidelines* (2016 and/or 2023), which identify the environmental and socio-economic features to take into consideration and the routing principles to be considered. Enbridge Gas identified a PPR. No alternate routes were proposed due to the location of existing infrastructure and the tie-in point, and the purpose of the project being to service the predetermined location and the residents with natural gas.

### 4.2 Study Area

The Study Area is considered the area within which direct interactions with the socio-economic and natural environment could occur. As such, the Study Area was established as the area within 120 m on either side of the PPR (**see Appendix A, Figure A-1**). It is in this area that desktop information on socio-economic and environmental features has been collected to assess the potential impacts of the Project.

### 4.3 Confirmation of the Preferred Route

Input on the PPR was sought through consultation (see Section 2). Comments received were generally positive and no feedback was received that resulted in a revision to the PPR. As such the PPR was confirmed as the PR. The PR is currently illustrated within a general location and does not represent the final Project scope and/or design that will provide access to natural gas to end-use customers. Enbridge Gas will undertake detailed design to determine the exact location of the running line, watercourse crossing entry and exit locations, and temporary land use requirements. Stantec reviewed comments from the consultation program, aerial mapping along the PR, and provided advice on environmental and socio-economic constraints. It is understood that Enbridge Gas will consider the above advice during detailed design as well as the other recommendations made in the ER. Detailed design will also be influenced by supplemental studies (including environmental studies) and site-specific requests from landowners and agencies. This information will be used to locate the pipeline to further reduce environmental and socio-economic impacts. Additional information on the detailed design will be provided in the LTC application to the OEB.



## **5 Potential Impacts, Mitigation and Protective Measures and Net Impacts**

### **5.1 Methodology**

The potential effects and impacts of the Project on physical, biophysical, and socio-economic features have been assessed in the Study Area upon review of the existing conditions outlined in Sections 3.3-3.5. With an understanding of pipeline construction and operation activities (see Sections 5.1.1 and 5.1.2, respectively) the assessment:

- Describes the environmental and socio-economic components
- Predicts the effects and associated impacts of construction and operation activities
- Recommends supplemental studies, mitigation and protective measures (including construction methods and timing, site-specific mitigation, environmental protection measures, and compensation measures)
- Outlines the net impacts that are likely to remain

The determination of effects, impacts, and mitigation and protective measures considered:

- Comments expressed during the consultation program
- Information available from published and unpublished literature
- Maps and digital data
- Mitigation guidance documents
- The pipeline development experience of Enbridge Gas and Stantec

By necessity, the analysis, integration, and synthesis of the data is an iterative process since information becomes available at various stages of the study and at different mapping scales. The level of detail of data and mapping increases as the study moves from analysis of the Study Area to a site-specific survey of features in the Project footprint. The data available at the current stage of the environmental study is appropriate for predicting effects and potential impacts and recommending mitigation and protective measures.

Specific information requests were made to several agencies throughout the Project. The information collected assisted in identifying environmental features and constraints located on and adjacent to the PR, the potential presence of SAR and their habitat, predicting effects and potential impacts, and developing mitigation and protective measures. Where agencies requested that information be kept confidential, such as the precise location of rare, threatened, vulnerable or endangered species and



archaeological sites, such information has been withheld from the report or mapped in such a way that specific site locations cannot be determined.

The existing conditions maps in **Appendix C** have been generated from data obtained from Ontario GeoHub/LIO, ERCA, and other sources as indicated on the maps and in the references. Scales have been adjusted from the original source to better represent the features mapped. Stantec has digitally reproduced features added to the base maps.

There are instances where field investigations are recommended before construction. Given the location of the Project components and experience of Stantec in providing environmental services for natural gas pipelines, these supplemental studies are not expected to change the conclusions regarding potential adverse residual impacts. The environmental and socio-economic information presented in the ER is based on sources cited throughout.

**Table 5.1** below notes the potential impacts, mitigation, and protective measures, including recommended supplemental studies, and net impacts for the existing conditions as described in Sections 3.3 – 3.5.

### **5.1.1 Construction**

The pipeline construction process includes various activities as described below:

- **Site Preparation and Clearing:** The first activity is typically the survey and staking, which delineate the boundaries of the ROW and temporary work areas. Next, the ROW and temporary work areas are cleared of brush and trees, if necessary. Safety fence is installed at the edge of the construction ROW where public safety considerations are required, and aspects of the Traffic Management Plan are implemented (i.e., signs, vehicle access). Silt fence is installed at required locations.
- **Pipeline Installation:** Following site preparation and clearing, the pipeline may be installed by any one of three methods:
  - **Horizontal Directional Drilling (HDD):** This trenchless pipeline installation method involves creating entry and exist pits on either side of a feature (such as watercourses), drilling a pilot hole with the aid of drilling fluid, and then pulling the pipeline back through the hole. This is the method that will be used to cross the Detroit River.
  - **Trenching:** This pipeline installation method involves excavation of a trench, lowering the pipeline into place, and then backfilling the trench. During backfilling the originally excavated subsoil is placed over the pipe in the trench. In stony areas, the pipe may be sand padded to protect the coating. In shallow water table areas, the pipeline may be weighted to provide negative buoyancy.



- **Ploughing:** This pipeline installation method involves the use of a machine that creates a furrow in the ground, places the pipe in the newly created opening, and then closes back up the opening.
- **Pressure Testing:** The pipeline will be pressure tested by filling the pipe with nitrogen. The pipeline will be held at a high pressure for a set period of time, per the requirements of CSA Z662-19 Clause 8 and applicable Enbridge Gas specifications for pressure testing.
- **Clean-Up and Restoration:** Clean-up is the restoration of the ROW and other work areas. In natural areas, clean-up will include restoring disturbed areas (road embankment) and re-seeding of the ROW. Erosion and sediment controls (ESC) installed during construction may be removed if necessary. Clean-up will also include landscaping, and/or laneways and driveway rehabilitation.

### **5.1.2 Operation and Maintenance**

Pipeline operation consists of pressurized natural gas flowing through the pipeline. Mainline valves located at the valve sites will serve to shut off and isolate the pipeline for maintenance and security purposes. Additional above-ground facilities along the pipeline include post-mounted signs identifying the pipeline, aerial patrol signs for aircraft patrols, fence stiles, foot bridges for ditch crossings (if applicable).

Once the Project is operational, the following maintenance activities will be undertaken as required:

- Completing a 'line walk' of the entire pipeline by Enbridge Gas personnel per the maintenance program to check for exposed pipelines, evidence of damage to aboveground equipment and piping, evidence of damage to underground piping and gas leaks, and identify any unassociated construction activity near the pipeline RoW.
- Checking cathodic corrosion protection – a low voltage electric circuit that runs along the length of the pipeline to prevent the development of external corrosion is completed on an annual basis (steel section only).
- Completing regular checks and maintenance at pipeline facilities such as valve sites.
- Completing depth of cover surveys, so that the amount of soil cover over the pipeline is maintained.
- Performing periodic inspection by running electronic tools through the interior of the pipeline to assess for the presence of corrosion or dents and the need for repairs.
- Completing class location surveys.



## 5.2 Summary Table

Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
Physical Features	Bedrock Geology and Drift Thickness <i>Section 3.3.1</i>	The planned excavation depth for the Project is approximately 1.2 m Below Ground Surface (BGS) with the potential to exceed this depth for watercourse, road crossings and other sensitive features. Based on the depth of excavations and the shallowest depth to bedrock in the Study Area which is 3.96 m BGS; and according to MECP WWR's, bedrock is not likely to be encountered.  However, should bedrock be encountered during HDD, there is a potential to encounter cobbles and boulders in the overburden soils along the entire alignment.	<ul style="list-style-type: none"> <li>For HDD, pressure relief pits can be considered for implementation in the design on either side of the watercourse crossing to dissipate high fluid pressures that may develop during drilling.</li> <li>Potential presence of weathered zones, soil seams and/or shale interbeds within the bedrock should be considered in the design to address impacts to bedrock.</li> <li>The over-drill typically used for HDD installation should be sufficient to address any rock squeeze that may occur.</li> <li>The HDD crossings will be designed and approved by a professional engineer and carried out by a specialty crew. The installation procedures must conform to all relevant Ontario Provincial Standard Specifications.</li> </ul> <p>Other mitigation measures specifically related to HDD are outlined under the row "Aquatic Species and Habitat Section 3.4.1".</p>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts as a result of bedrock removal are anticipated.
	Physiography and Surficial Geology <i>Section 3.3.2</i>	In areas of shallow drift thickness, disturbance to the overburden in the Study Area may cause surface soil erosion and trench slumping during construction.	<p>Erosion and sediment control mitigation measures that should be followed include:</p> <ul style="list-style-type: none"> <li>Surface soil erosion can occur in the absence of vegetative cover. Where there is potential for soil erosion, the need for and location of ESC measures should be determined by an inspector with appropriate qualifications and installed prior to the commencement of work in the area.</li> <li>When land is exposed, the exposure should be kept to the shortest practical period. Natural features should be preserved to the extent practical. Temporary vegetation and mulching should be used to protect areas as appropriate. Where required, natural vegetation should be re-established as soon as practical.</li> <li>The contractor must obtain adequate quantities of materials to control erosion. Additional supplies should be maintained in a readily accessible location for maintenance and contingency purposes. ESC structures should be monitored to maintain their effectiveness throughout the life of construction and post-construction rehabilitation.</li> <li>Even with ESC measures, extreme precipitation events could result in collapse of silt fencing, overflow or bypass of barriers, and other situations which could lead to erosion. When site conditions permit, permanent protection measures should be installed on erosion susceptible surfaces. If the erosion is resulting from a construction-related activity, the activity should be halted immediately until the situation is rectified.</li> </ul> <p><b>Note:</b> Permits obtained under O. Reg. 158/06 from ERCA may contain conditions pertaining to ESC.</p>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts are anticipated.
	Groundwater <i>Section 3.3.3</i>	<b>Dewatering</b>  Where trenches encounter shallow groundwater conditions or following a large precipitation event, removing water from the trench (known as dewatering) may be necessary. During trench dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination. Other potential effects of uncontrolled discharge may include introduction of hazardous materials or pollutants to soils or bodies of water.	<b>Dewatering</b>  <ul style="list-style-type: none"> <li>For groundwater dewatering, the MECP allows registration under the EASR for construction dewatering projects where groundwater takings will be greater than 50,000 L/day and less than 400,000 L/day; however, should groundwater takings exceed 400,000 L/day, a PTTW may be required from the MECP. A dewatering report will be prepared for the Project as part of the EASR which will provide a more in-depth analysis to determine the risks associated with the Project being constructed as it relates to the IPZ-2 and Source Water Protection.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on groundwater are anticipated.

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p><b><u>Private Water Wells</u></b>            The MECP WWR's indicate 7 water wells in the Study Area. Most of the wells in the Study Area are used for either test hole or monitoring purposes. However, there are 2 private wells used for Air Conditioning and Cooling. Depending on the proximity to wells, the depth of the well installation and the groundwater levels encountered during excavation, trench dewatering may impact water well quality or quantity at some of the overburden supply wells.</p> <p><b><u>Source Water Protection</u></b>            There is an IPZ-2 (surface water intake zone) in the Study Area. However, there are no HVAs, and SGRAs.</p> <p>The handling and storage of large volumes of liquid fuel pose a significant drinking water threat in the Event Based Area where this project is located.</p>	<ul style="list-style-type: none"> <li>• To reduce the potential for erosion and scouring at discharge locations during construction dewatering, energy dissipation techniques should be used. Discharge piping should be free of leaks and should be properly anchored to prevent bouncing or snaking during surging. Protective measures may include dewatering at low velocities, dissipating water energy by discharging into a filter bag or diffuser and utilizing protective riprap or equivalent. If energy dissipation measures are found to be inadequate, the rate of dewatering should be reduced or dewatering discontinued until satisfactory mitigation measures are in place. Discharge should be monitored to make sure that no erosion or flooding occurs.</li> </ul> <p><b><u>Private Water Wells</u></b></p> <ul style="list-style-type: none"> <li>• Given some dependence on private water wells for air conditioning and cooling, a private well survey should be conducted to assess air conditioning and cooling groundwater use in the Boblo Island portion of the Study Area near the Project and a private well monitoring program may be recommended for residents who rely on overburden groundwater supply for air conditioning and cooling use. This monitoring program may include pre-construction water quality monitoring as well as water level monitoring, if available. Should a private water well be affected by Project construction, a potable (if required) water supply should be provided, and the water well should be repaired or restored as required.</li> </ul> <p><b><u>Source Water Protection</u></b></p> <p>The primary concern to surface water quality is the potential for a contaminant spill during a large storm event. To address this concern, the following mitigation measures are proposed:</p> <ul style="list-style-type: none"> <li>• Refueling of equipment should be undertaken outside of the Event Based Area (typically 100 m from wetlands and watercourses) to reduce potential impacts to surface water and groundwater quality if an accidental spill occurs. If a 100 m refueling distance is not possible, under approval from on-site environmental personnel, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose. Spill containment devices and absorbent material shall be on hand and readily available.</li> <li>• To reduce the impact of potential contaminant spills, the contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan.</li> <li>• Work should be limited or stopped during and immediately following significant precipitation events (i.e., 100-year storm event), at the discretion of on-site environmental personnel.</li> <li>• Bulk fuel trucks, service vehicles and pick-up trucks equipped with box mounted fuel tanks shall carry spill prevention, containment and clean up materials that are suitable for the volume of fuels or oils carried. Spill contingency material carried on bulk fuel and service vehicles shall be suitable for use on land and water.</li> <li>• Employ the following measures to reduce the risk of fuel spills:               <ul style="list-style-type: none"> <li>- all containers, hoses, nozzles are free of leaks;</li> <li>- all fuel nozzles are equipped with automatic shut-offs; and</li> <li>- always have operators stationed at both ends of the hose during fueling.</li> </ul> </li> <li>• Inspect hydraulic, fuel and lubrication systems of equipment so that systems are in good working condition and free of leaks. Equipment to be used in or adjacent to a watercourse or waterbody during emergency response during an HDD will be clean or otherwise free of external grease, oil or other fluids, mud, soil, and vegetation.</li> <li>• An impervious tarp shall be in place underneath equipment/vehicles when servicing equipment/vehicles with the potential for accidental spills (e.g., oil changes, servicing of hydraulic systems, etc.) in accordance with regulatory conditions.</li> <li>• The contractor shall prepare a Spill Response Plan prior to construction.</li> </ul>	



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> <li>If fuel is handled or stored above the volume limit to be a significant drinking water threat within the Event Based Area, a Risk Management Plan will be required, which will be established with the Risk Management Official at the Essex Region SPA. The Risk Management Plan will outline any measures that need to be taken by Enbridge Gas to help reduce the risk the Project could have on contaminating municipal drinking water (ERCA 2021).</li> </ul>	
	Aggregates and Petroleum Resources <i>Section 3.3.4</i>	As there are no aggregates areas or petroleum resources within the Study Area, potential impacts are not anticipated.	As no impacts are anticipated, no mitigation or protective measures are recommended.	As no impacts are anticipated, no net impacts will occur.
	Soil and Soil Capability <i>Section 3.3.5</i>	<p>The detailed design of the pipe is planned to include construction mostly in road allowances. Previously disturbed soils, as found in many road allowances, can be found in a range of conditions. Some areas in the road allowances are anticipated to have been stripped and regraded with a graveled or paved surface or rehabilitated to a vegetated surface. As well, it is anticipated that some areas of the PR will have natural undisturbed soils.</p> <p>During construction, soils with no vegetative cover are more prone to erode. This can result in soil erosion from water and wind. Soil susceptibility to water erosion depends on many variables, including: intensity and duration of rainfall events, antecedent soil moisture, surface soil cover, slope, soil texture, soil structure and organic matter content. Similarly, the susceptibility of soils to wind erosion depends on wind speed, surface soil cover, soil texture, soil structure and organic matter levels. Water and wind erosion both can result in a significant loss of topsoil.</p> <p>Excess soil may be generated on site from construction activities that will require off-site management. Construction activities have the potential to affect soil quality.</p>	<p>The following soil erosion mitigation measures are recommended:</p> <ul style="list-style-type: none"> <li>As an initial stage of construction, standard ESC measures should be implemented on all active areas. ESC features should be regularly inspected and maintained. Additionally, ESC features should be improved or added to in areas requiring more protection.</li> <li>To the extent feasible, construction activities should occur during drier times of the year. Lands affected by heavy rainfall events and wet soil conditions should be monitored, to avoid the potential for topsoil and subsoil mixing. Construction activities should be temporarily halted on lands where excessively wet soil conditions are encountered. Enbridge Gas's on-site inspection team should determine when construction activities may be resumed.</li> <li>If a situation develops that necessitates construction during wet soil conditions, soil protection measures should be implemented, such as: confining construction activity to the narrowest area practical, installing surface protection measures, and using wide tracked or low ground pressure vehicles.</li> <li>During construction activities, weather should be monitored to identify the potential onset of high wind conditions which can cause wind erosion. In the event that high winds occur, dust suppressants should be applied.</li> <li>In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use as required.</li> <li>If clean-up is not practical during the construction year, it should be undertaken in the year following construction, starting in May or June once the soils have sufficiently dried. Interim soil protection measures should be undertaken in sensitive areas to stabilize the ROW for over-wintering.</li> <li>The MECP has regulations for the movement of excess soils in the province of Ontario. Enbridge Gas should retain or consult with a qualified person who is knowledgeable in the current excess soils guidelines, in order to make recommendations for the management of excess soils.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on soil or soil capability are anticipated.
	Agricultural Tile Drainage <i>Section 3.3.6</i>	As there are no agricultural tile drainage systems in the Study Area, potential impacts are not anticipated.	As no impacts are anticipated, no mitigation or protective measures are recommended.	As no impacts are anticipated, no net impacts will occur.



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	Regulated Area and Natural Hazards <i>Section 3.3.7</i>	<p>The probability of significant seismic activity in the Study Area is low; therefore, no potential impacts are anticipated from seismic activity.</p> <p>The likelihood of a flooding event interfering with Project construction is reduced by construction occurring outside of the spring freshet. A flooding or tornado event during construction could result in construction delays, soil erosion, sedimentation of a watercourse, trench slumping, and damage or loss of construction equipment and contamination of a watercourse as a result of equipment entering a watercourse. The nature of these impacts would depend on the spatial extent, duration, and magnitude of the event.</p>	<ul style="list-style-type: none"> <li>• If flooding necessitates a change in the construction schedule, affected landowners and regulatory agencies should be notified and construction should continue at non-affected locations.</li> <li>• Temporary workspaces should be located above the floodplain to the extent practical, unless necessary for the watercourse crossing.</li> <li>• All work in the floodplain will be subject to a permit under O. Reg. 158/06 from ERCA.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from natural hazards are anticipated.
<b>Biophysical Features</b>	Aquatic Resources <i>Section 3.4.1</i>	<p>The proposed watercourse crossing method for the Detroit River is HDD. Potential impacts on fish and fish habitat during construction include changes in water quality (erosion, sedimentation, and accidental spills), disruption and harassment (due to vibration and noise).</p> <p>Excessive sediment introduced into a watercourse can adversely impact fish through clogging of fish gills and promoting avoidance behavior and can impact habitat through sedimentation of spawning beds and alteration of habitat structure.</p> <p>Five unnamed ponds within the Study Area are outside the area of potential impact from HDD activities and other construction activities; therefore, mitigation measures for the ponds are not proposed.</p>	<p>It is Stantec's understanding that the Detroit River crossing will be completed using HDD techniques as per the DFO-Enbridge Agreement (<b>see Appendix H</b>). The agreement states that "If the Project requires Horizontal Directional Drilling in areas with aquatic SAR AND you can meet all of the conditions outlined in the DFO-Enbridge Standard for Horizontal Directional Drill [...] submission to DFO is not required."</p> <p>General mitigation measures apply to the Detroit River HDD crossing. Additionally, activity-specific measures related to the crossing method are provided following the general mitigation measures. The measures presented are consistent with DFO's Measures to Protect Fish and Fish Habitat (DFO 2019), which should be consulted immediately prior to construction to reconfirm that the construction plan is consistent with the most up-to-date list of DFO avoidance measures.</p> <p><b>General Mitigation Measures</b></p> <ul style="list-style-type: none"> <li>• ESC measures (i.e., sediment fence or Silt Sox<sup>TM</sup>) must be established around entrance and exits pits for construction within 100 m of watercourses/waterbodies.</li> <li>• Limits of the temporary workspace should be clearly marked to reduce the potential for encroachment into adjacent wetlands and watercourses and avoid unnecessary encroachment.</li> <li>• In-water work for warm-water habitats is permitted from July 16 to March 14 (no work from March 15 to July 15) (MNR 2013).</li> <li>• The Detroit River should not be obstructed in a way that impedes the free movement of water and fish.</li> <li>• Prior to removal of the vegetation cover, effective ESC measures should be in place to protect water quality. Disturbance to the area during construction should be limited and grubbing activities should be delayed until immediately prior to grading operations.</li> <li>• Soil exposure should be reduced prior to commencing construction, and the period that soil remains exposed for grading should be limited.</li> <li>• Temporary ESC measures should be maintained and kept in place until work within or near a watercourse has been completed and stabilized.</li> <li>• Temporary sediment control measures should be removed at the completion of the work but not until permanent erosion control measures have been established.</li> <li>• Additional supplies should be maintained on-site, in a readily accessible location, for maintenance and contingency purposes. Prior to construction, adequate quantities of the materials listed below, or comparable substitutions, should be on site to control erosion and sediment deposition:</li> </ul>	With the implementation of the HDD construction method and the mitigation and protective measures, no adverse residual impacts on aquatic features are anticipated.



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> <li>- Spill kit</li> <li>- Sediment control fencing</li> <li>- Sediment control logs (i.e., SiltSoxx™)</li> <li>- Straw bales</li> <li>- Wooden stakes</li> </ul> <ul style="list-style-type: none"> <li>• Construction material, excess material, construction debris and empty containers should be stored a minimum of 30 m from watercourses and watercourse banks, where feasible.</li> <li>• Refueling of equipment should be undertaken 100m from wetland areas and watercourses identified during field surveys to reduce potential impacts to surface water in the event that an accidental spill occurs. If a 100 m refueling distance is not possible, under approval from on-site environmental personnel and if approved by permit conditions, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose and secondary containment, as needed.</li> <li>• Deleterious substances (fuel, oil, spoil) should be stored &gt;30 m from a watercourse or wetland. Any such material that inadvertently enters a watercourse should be removed in a manner satisfactory to the environmental inspector. If a 30 m distance is not possible, conditions noted under relevant permits should be followed so that a minimum required distance is implemented.</li> <li>• In the unlikely event of a spill, spills containment and clean-up procedures should be implemented immediately. Enbridge Gas will contact the MECP Spills Action Centre, local and/or regional municipality and/or local Conservation Authority (if required). The MECP Spills Action Centre is the first point of contact for spills at the provincial and federal level.</li> </ul> <p><b><u>Horizontal Directional Drill Mitigation Measures</u></b></p> <p>HDD construction methods for pipeline water crossings will not require DFO review or Authorization under the <i>Fisheries Act</i> provided measures to avoid causing a harmful alteration, disruption or destruction of fish habitat are followed during construction. These measures include locating drill entry and exit points at sufficient distance to avoid disturbance to the bed and banks, locating the drill path at an appropriate depth below the channel and installation of appropriate sediment and erosion control measures (i.e., silt fencing around disturbed areas, development of a contingency plan, etc.). If these measures are followed, a project of this nature is low risk to fish and can proceed without DFO review.</p> <p>Turbidity monitoring is recommended along transects upstream and downstream of the HDD crossing of the Detroit River for the duration of the drilling, to monitor for inadvertent returns of drilling fluid.</p> <p>Mitigation measures as they relate to employing the HDD method can include:</p> <ul style="list-style-type: none"> <li>• Standard ESC measures should be implemented around drill and pipe staging areas.</li> <li>• Drilling equipment should be set up a minimum of 30 m from the edge of watercourses and wetlands, if possible.</li> <li>• Clearing of vegetation or grading of watercourse banks should not occur within 30 m from the edge of watercourses, if possible.</li> <li>• A drilling mud release contingency plan should be prepared and kept on-site.</li> <li>• Bentonite-based drilling mud should be used without the use of additives (except with approval from appropriate regulatory authorities).</li> <li>• Suitable drilling mud tanks or sumps should be installed to prevent contamination of watercourses.</li> <li>• The excavation of relief pits may be required to prevent a drilling mud release into sensitive features. Relief pits should be set back 10 m from sensitive features where possible and be contained using appropriate ESC measures (i.e., wire-backed sediment fence).</li> </ul>	

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> <li>• Berms or check dams should be installed downslope from drill entry and anticipated exit points to contain the release of any drilling mud.</li> <li>• Drilling mud should be disposed in accordance with the appropriate regulatory authority requirements.</li> </ul> <p><b><u>Bore Path Collapse Mitigation Measures</u></b></p> <p>The following mitigation measures should be applied to prevent HDD borehole collapse from occurring in susceptible soils:</p> <ul style="list-style-type: none"> <li>• Fluid volumes, annular pressure and cutting returns should be strictly monitored to ensure bore hole plugging and fluid losses are detected and addressed immediately.</li> <li>• If challenging soil materials are anticipated, alternative drill paths should be evaluated to limit exposure to these types of materials.</li> <li>• Drilling mud should be maintained in the borehole until the pipeline is installed. This can be facilitated by positioning the entry and exit points in areas with cohesion-less soils (e.g., silt-sand zones).</li> </ul> <p><b><u>Drilling Mud Release (Inadvertent Returns) Mitigation Measures</u></b></p> <p>The following mitigation measures should be employed to reduce the risk of lost drilling mud circulation:</p> <ul style="list-style-type: none"> <li>• Install appropriate berms, silt fencing and secondary containment measures (i.e., plastic tarp) around drilling and drilling mud management equipment at both bore entry and bore exit locations to contain operational spills.</li> <li>• Clean up operational releases daily to prevent mobilization of drilling mud off site during rain events.</li> <li>• Design the directional drill so that drilling slurry pressure is reduced, and the drilling rate is lowered in porous materials to reduce the chance of loss of circulation of the drilling slurry.</li> <li>• Maintain smooth operation of the drilling string and slurry pumping systems to avoid pressure surges.</li> <li>• Reduce slurry viscosity through appropriate filtering of drilled material to reduce the pressure gradient along the drill path due to frictional effects.</li> <li>• Continually monitor slurry volumes to enable a quick response to any indications of lost circulation.</li> <li>• Immediately contain any drilling mud that escapes onto land and transfer it into an on-site containment system.</li> <li>• In addition to the items mentioned in the General Mitigation Measures above, the following materials should be on hand during drilling operations and prepared to employ them in the event of a drilling mud spill or inadvertent return:             <ul style="list-style-type: none"> <li>- Sandbags</li> <li>- Straw bales</li> <li>- Silt fencing</li> <li>- Hydrovac truck</li> <li>- Turbidity curtains</li> <li>- T-bar posts and post pounders</li> <li>- 5-gallon pails</li> <li>- Floating sediment boom</li> <li>- Squeegees</li> <li>- Shovels</li> <li>- Polyethylene sheeting</li> <li>- Culvert</li> </ul> </li> </ul>	



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	<p>Forest and Vegetation Cover  Section 3.4.2.2</p>	<p>Vegetative cover in the road allowance generally consists of common, hardy plant species that are adaptable to disturbed environments. The Study Area is a mix of residential properties found on the northern half of Boblo Island and a mix of residential / commercial properties on the mainland within the Town of Amherstburg. A woodlot occurs within the Study Area.</p> <p>Without appropriate mitigation measures, construction activities can adversely impact trees and other vegetation through soil compaction, removal of topsoil and equipment encroachment, causing irreversible damage to roots or trunks and destroying the structural integrity of vegetation or soils. Any filling, excavation, grading or trenching (if required) in the root area of a tree has the potential to cause irreversible damage.</p> <p>Where there is natural vegetation within or adjacent to the Project components, potential impacts include the removal of native vegetation, introduction or spread of invasive species, and indirect effects such as dust, erosion, and accidental spills.</p>	<p>The following mitigation measures, or equivalent, should be implemented to reduce impacts on designated natural areas and vegetation cover:</p> <ul style="list-style-type: none"> <li>• Construction traffic should be restricted to the existing road allowance where possible to avoid potential compression damage to the root zones of trees located adjacent to the road allowance.</li> <li>• Limits of the temporary workspace should be clearly marked to reduce encroachment into adjacent wooded areas and avoid unnecessary tree removal. Erosion-prone areas of the road allowance should be revegetated with suitable protective cover during and post-construction.</li> <li>• Clearing should be reduced to the extent possible in sensitive areas such as woodlands.</li> <li>• Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain and to reduce erosion.</li> <li>• HDD installation method to be considered when construction occurs adjacent to woodlands.</li> <li>• Construction traffic should be restricted to the existing road allowance where possible to avoid potential compression damage to the root zones of trees located adjacent to the road allowance.</li> <li>• Native topsoil should be preserved through topsoil salvage and separation (see row Section 3.3.5 'Soil and Soil Capability').</li> <li>• High-traffic or erosion-prone areas of the road allowance should be revegetated with suitable protective cover during and post-construction.</li> <li>• Construction activities, including equipment maintenance and refueling, should be controlled to prevent entry of petroleum products or other deleterious substances, including any debris, waste, rubble or concrete material, into natural vegetated features.</li> <li>• A re-vegetation program should be developed and implemented for vegetated temporary work areas. Enbridge Gas should consult with landowners and municipalities to confirm replanting plans.</li> <li>• Seeding of the disturbed temporary work areas and the permanent easement should be done with a native seed mix. Replaced soils should contain native seed bank, facilitating successful revegetation.</li> <li>• Reclamation in residential/commercial land areas traversed by the road allowance should involve seeding (or sodding) the disturbed areas and replacement of ornamental trees and shrubs.</li> <li>• One year following construction, planted vegetation should be inspected for survival; in areas of severe dieback, dead and diseased planted vegetation should be replaced.</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on designated natural areas and vegetation are anticipated.</p>
	<p>Wetlands  Section 3.4.2.3</p>	<p>Wetlands are absent from the Study Area based on the background review. However, unevaluated wetlands may be present in the Study Area, a vegetation survey is recommended.</p>	<p>The following mitigation measures are recommended if wetlands are identified within the Study Area:</p> <ul style="list-style-type: none"> <li>• Work adjacent to or within a wetland may require permitting discussions with ERCA.</li> <li>• Construction material, excess material, construction debris and empty containers should be stored away from adjacent wetlands.</li> <li>• Temporary workspace width should be reduced when working within 30 m of wetlands, where practical.</li> <li>• Staging areas should be located at least 30 m away from the edge of wetlands.</li> <li>• Construction activities, including equipment maintenance and refueling, should be controlled to prevent entry of petroleum products or other deleterious substances, including any debris, waste, rubble or concrete material, into a wetland, unless otherwise specified in the contract.</li> <li>• Implement habitat protection measures for SAR turtles, discussed in row Section 3.4.2.4-3.4.2.5 'Wildlife, Wildlife Habitat and Species at Risk'.</li> <li>• If topsoil stripping is required, topsoil and subsurface soil should be stockpiled in separate piles with adequate spacing between piles.</li> <li>• Topsoil stripped during construction (if required) should be replaced following construction activities as the native seedbed would aid in revegetation of native species.</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on wetlands are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> <li>• <i>Phragmites australis</i> stands may occur in the Study Area, particularly in areas associated with the anthropogenic ponds. A <i>Phragmites australis</i> management plan should be developed.</li> <li>• Equipment should be free and clear of debris prior to moving between locations to prevent the spread of non-native species through the use of pneumatic devices, equipment washing, washing stations, etc.</li> <li>• Construction dewatering should be discharged to a low-lying, well-vegetated dry area or if not feasible, should utilize sediment removal basins and/or bags. The sediment removal basin should be located to maximize the distance to the nearest surface water feature and reduce the slope of the surrounding buffer area. The basin should consist of a temporary enclosure constructed with hay bales, silt fence or both.</li> <li>• Recommended erosion control measures to avoid impacts to wetlands should include the following: <ul style="list-style-type: none"> <li>- surface runoff should be directed as overland flow with sufficient drainage structures to dissipate hydraulic energy</li> <li>- soil transport should be prevented by diversion of site runoff through shallow vegetated channels, placement of straw bales or sediment control fencing</li> <li>- sediment barriers should be installed along the edge of the road allowance to contain spoil within the road allowance, where required</li> <li>- natural drainage spacing should be provided around spoil piles</li> <li>- topsoil and subsurface soil should be stockpiled in separate piles with adequate spacing between the piles</li> <li>- temporary erosion/silt control structures (i.e., straw bales, sediment fencing should be used down gradient of spoil stockpiles, as necessary</li> <li>- vegetation clearing should not be conducted within 30 m of a wetland unless required for site construction activity (i.e., within the road allowance)</li> <li>- if vegetation regeneration is unlikely immediately following construction (i.e., outside the growing season), all slopes adjacent to wetlands should be stabilized using geogrids or weed-free mulch for a minimum of 30 m from the wetland</li> <li>- erosion control measures in both active and non-active construction areas should be regularly inspected until the site has been adequately stabilized to prevent erosion.</li> </ul> </li> </ul>	
	Wildlife Habitat, Wildlife, and Species at Risk Section 3.4.2.4 – 3.4.2.5	New pipeline construction impacts on wildlife populations are associated with vibration and compaction of the shoulder as well as direct mortality from animal-vehicle collisions as a result of increased construction traffic, temporary avoidance behavior due to the presence of humans and equipment and direct loss of habitat (e.g., destruction of nests or alteration of nesting habitat). No new lands or natural areas are anticipated to be assumed for this Project. Because the Project will be working within a road allowance, mitigation will be primarily targeted at SOCC and ESA 2007 protected species that are known to occur in the area such as turtles, bats, snakes, and birds. The preferred habitat for SOCC and ESA 2007 protected species is generally not present in the road allowance; however, this may not be the case for all species (e.g., snakes).	<p><b>General Mitigation</b></p> <ul style="list-style-type: none"> <li>• Mitigation measures with regulatory requirements (if any) for SAR to be determined by the MECP.</li> <li>• Food waste and other debris should be properly contained and should be collected and removed from the site on a daily basis to an approved disposal facility.</li> <li>• Detailed design of the Project components, including location of temporary workspaces, should be reviewed to avoid and reduce the likelihood of impact upon wildlife habitat to the extent possible, and in particular habitats of endangered, rare, special concern, and threatened species.</li> <li>• Prior to construction activities, a worker awareness program should be implemented that includes SAR identification and habitat or nesting characteristics as well as reporting protocols.</li> <li>• SAR sightings should be reported immediately to the Environmental Inspector followed by MECP, as required.</li> <li>• On-site construction personnel should be informed of the potential presence of the SAR identified in the Study Area, obligations under the ESA (Government of Ontario 2007), and recommended actions in the event of an encounter.</li> <li>• Trench operations should be followed as closely as practical with backfill operations, to facilitate the movement of wildlife across the trench.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on wildlife habitat, wildlife, SAR or SWH are anticipated.

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> <li>• Fencing should be erected around deep excavations (e.g., HDD entry/exit pits) to prevent wildlife entrapment.</li> <li>• Equipment and vehicles should yield to wildlife.</li> <li>• The contractor should inform their personnel to not threaten, harass or injure wildlife.</li> <li>• If wildlife is encountered during construction, personnel are required to move away from the animal and wait for the animal to move off the construction site.</li> <li>• ESA 2007 protected species cannot be handled unless authorized by MECP and MNRF.</li> <li>• A Wildlife Scientific Collector's Permit (MNRF authorization) will be required to handle wildlife.</li> <li>• SAR are known to occur in the Study Area, Enbridge Gas will undertake consultation with the MECP to identify species specific mitigation and/or permitting requirements under the ESA.</li> <li>• SAR individuals that are incidentally encountered in the Study Area must be allowed to leave of its own accord.</li> <li>• Should on-site personnel be unable to allow an incidentally encountered SAR individual to disperse from the active construction area under its own ability, measures developed in consultation with MECP will be implemented.</li> <li>• SAR individuals that are encountered in the work zone should be reported to the MECP staff in 48 hours of the observation or the next working day, whichever comes first.</li> <li>• If an injured or deceased SAR is found, the specimen must be placed in a non-airtight container that is maintained at an appropriate temperature and MECP must be contacted immediately for additional guidance.</li> </ul> <p><b><u>Bats</u></b></p> <ul style="list-style-type: none"> <li>• Follow encounter protocol outlined above under General Mitigation Measures.</li> <li>• Tree removal in potential bat maternity roosting habitat areas should be limited to the extent possible and will be avoided during the active season for bats (March 15 to October 1).</li> <li>• If tree removal is required, mitigation recommendations for SAR bats will be prepared in consultation with MECP.</li> </ul> <p><b><u>Birds</u></b></p> <ul style="list-style-type: none"> <li>• Follow encounter protocol outlined above under General Mitigation Measures.</li> <li>• Construction activities with the potential to remove migratory bird habitat, such as vegetation clearing, should be avoided during the breeding season, which is generally from April 1- August 31 in southern Ontario (Environment Canada 2020). Should vegetation clearing activities be unavoidable during this window, a mitigation program should be developed, which includes measures to reduce and avoid impacts to migratory birds and their nests. This program should include preventative and mitigation measures but may also include avoidance of clearing during key sensitive periods and in key locations.</li> <li>• If clearing is to be completed during the bird nesting season, nest sweeps should be completed no later than seven days prior to clearing activities.</li> <li>• As the identified Bald Eagle nest is active (April, 2023), avoid construction where possible during the nesting period for Bald Eagle, particularly during the early and most sensitive stages of nesting (e.g., courtship/nest building, egg laying, young nestlings) which is approximately from mid-February until the end of May).</li> <li>• Limit construction to daytime hours to avoid continuous disturbance effects while the nest is active as much as possible. Avoid HDD of the Detroit River from mid-February until the end of May.</li> </ul>	



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> <li>• Monitoring of the Bald Eagle nest is recommended during construction activities to document activity of the nest for potential disturbance effects.</li> </ul> <p><b>Snakes</b></p> <ul style="list-style-type: none"> <li>• Follow encounter protocol outlined above under General Mitigation.</li> <li>• A daily survey of the work area prior to construction commencement each day will occur to determine if snakes have entered the area. Open trenches and stored materials will be thoroughly searched.</li> <li>• Equipment and machinery that is left idle for over one hour, or overnight, on the property must be visually examined. Prior to (re)ignition to ensure snakes are not present within the machinery. This visual examination should include all lower components of the machinery, including operational extensions and running gear.</li> <li>• If erosion control blankets are required, only wildlife friendly products should be used.</li> <li>• Exclusion fencing is recommended to be installed where the Project footprint intercepts naturally vegetated areas and locations that may provide suitable snake habitat where feasible. Fencing is not recommended along areas where multiple driveways occur to avoid ineffective fencing.</li> <li>• Exclusion fencing to meet standards outlined in Ministry of Natural Resources <i>Reptile and Amphibian Exclusion Fencing</i> Technical Note (2013).</li> <li>• Post snake (or wildlife) crossing signage where vegetated areas or suitable habitat meet roadways to bring awareness of potential snake crossings.</li> <li>• Post speed limits of 30 km/hour to reduce potential impacts to basking snakes on roads.</li> </ul> <p><b>Turtles</b></p> <ul style="list-style-type: none"> <li>• Follow encounter protocol outlined above under General Mitigation.</li> <li>• Ponds and the Detroit River identified within the Study Area may have the potential to provide habitat for SOCC and SAR turtles, as outlined in <b>Table 3.2 and Table 3.3</b></li> <li>• Regulatory requirements for Blanding’s Turtle and Spiny Softshell are at the discretion of the MECP, with recommended mitigation measures outlined below.</li> <li>• Implement erosion and sediment control measures as outlined in row 3.4.1 ‘Aquatic Resources’ to protect turtle habitat.</li> <li>• Nesting typically occurs in June and may be undertaken in gravel or sandy areas in the Study Area. Exclusion fencing should be installed to exclude turtles from the HDD entry/exit pit. Exclusion fencing may not be appropriate elsewhere based on the developed nature of the Study Area, however, where appropriate, install fencing prior to the sensitive nesting season (May 1 and July 15) if activities are anticipated to occur throughout this period to prevent turtles from entering and/or nesting.</li> <li>• Limit heavy machinery on road shoulders or other suitable nesting habitat prevent compaction and prevent destruction of nests and habitat.</li> <li>• If a turtle nest is observed, stop construction within 30 m of the nesting site. If the nest belongs to a Blanding’s Turtle or Spiny Softshell, contact MECP for further guidance.</li> </ul> <p><b>Amphibians</b></p> <ul style="list-style-type: none"> <li>• Where practical, avoid construction in the vicinity of areas that may provide habitat for amphibians during the amphibian breeding season (March 1 – June 30).</li> </ul> <p><b>Plants</b></p> <ul style="list-style-type: none"> <li>• Confirm plant SAR/SOCC presence/absence through a targeted vegetation survey pre-construction of the Project footprint.</li> </ul>	



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<b>Socio-Economic Environment</b>	Demographics <i>Section 3.5.1</i>	No impacts to community demographics are anticipated as a result of the proposed Project. The Project will not result in a large influx of workforce	<ul style="list-style-type: none"> <li>As no impacts to community demographics are anticipated, no mitigation or protective measures are recommended.</li> </ul>	As no impacts are anticipated, no net impacts will occur.
	Economy and Employment <i>Section 3.5.2</i>	<p>Project demands for labour and goods and services can result in both beneficial and adverse effects. Positive effects may not be evenly distributed among populations, with some residents in a better position to receive economic benefits than others. Similarly, adverse effects may affect some residents more than others. Residual effects on employment are related to the Project's labour demand compared to the labour supply. Three types of employment are considered:</p> <ul style="list-style-type: none"> <li>Direct employment: labour that is hired directly for the Project</li> <li>Indirect employment: labour hired by companies in order to produce and provide goods and services needed for the Project</li> <li>Induced employment: labour hired by industries that produce and provide consumer items and services purchased by people who are directly or indirectly employed by the Project</li> </ul> <p>Labour conditions will be affected by direct, indirect, and induced employment during all project phases.</p> <p>The Project could affect business through purchases of labour, goods, and services from local businesses, including businesses owned by Indigenous peoples, and will result in increased local employment income and municipal government revenue. Local businesses will likely benefit from supplying the Project with goods and services.</p>	<ul style="list-style-type: none"> <li>It is expected that the Project will generally result in positive effects on employment by employing local and Indigenous people, and by reducing the unemployment rate in the region. These positive effects do not require mitigation, but Enbridge Gas should identify and implement various mechanisms to enhance project benefits.</li> <li>The potential effects of the Project as a result of purchasing labour, goods, and services is expected to be positive during construction and operation, so no mitigation will be required. However, Enbridge Gas has and will continue to work with local and Indigenous businesses to enhance their potential for successfully bidding on project contracts regarding the supply of goods and services, particularly for the operation phase. One initiative to help encourage further local and Indigenous content on the Project is to post project purchasing requirements in advance, so that businesses can position themselves to effectively bid to supply goods and services needed for construction and operation. Increased participation of local and Indigenous businesses will enhance positive local economic effects.</li> </ul> <p>With respect to potential adverse effects on local businesses, the following mitigation and protective measures should be followed:</p> <ul style="list-style-type: none"> <li>Enbridge Gas should engage with landowners, businesses, and the Municipality to address access to the Study Area and any portion of land that will be altered as part of site preparation, and long-term changes.</li> </ul>	<p>With the aforementioned initiatives to encourage local and Indigenous participation on the Project, it is anticipated that the effects from the Project on employment and business will be positive, including creating positive economic activity through new direct, indirect, and induced employment. Project expenditures on local businesses and suppliers also have the potential to positively affect the local economies.</p> <p>Consultation with residents and businesses will address any concerns to operation of the Project.</p> <p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on employment and business are anticipated.</p>
	Community Services and Municipal Infrastructure <i>Section 3.5.3</i>	<p>The presence of temporary workers during the construction period has the potential to cause social stressors such as an increase in the demand for housing and local community services and infrastructure. Non-local Project workers are expected to stay in temporary accommodations. Non-local Project workers may also choose to rent apartments. The vacancy rate for temporary rentals will likely be able to accommodate the temporary increase.</p> <p>The transportation of Project goods, services, and workers has the potential to lead to increased use of existing transportation infrastructure. Also, increased traffic volumes along local road networks and the</p>	<ul style="list-style-type: none"> <li>Project employees might require medical attention while staying in the area. The contractor and Enbridge Gas should have emergency response equipment and trained personnel on-site during construction. In addition, an Emergency Response Plan will be developed and implemented, which will address field health services, ensuring access to ferry in the event of an emergency, emergency call-out procedures and fire response plans. Safety fencing will be used where necessary to separate the work area.</li> <li>Environmental mitigation will be in place to reduce the likelihood of emergency events and to prepare for the management of emergency events on site. If an emergency incident were to occur, it is anticipated that the comprehensive mitigation, contingency plans, and safety strategies will result in a localized and low-intensity response.</li> <li>A Traffic Management Plan will be in place for all roads affected by construction, which at a minimum outlines measures to: <ol style="list-style-type: none"> <li>Control the movement of materials and personnel to and from the construction site</li> <li>Post signs to warn oncoming motorists of construction activity</li> <li>Control traffic at road crossings</li> <li>Reduce on-road disturbance and land closures</li> </ol> </li> </ul>	<p>Community services and infrastructure appear to have additional capacity to absorb potential increased temporary demands that may result from the Project. If not in the Town of Amherstburg, then in neighbouring municipalities throughout Essex County.</p> <p>Adverse effects on traffic during construction will be increased in Boblo Island, across the Detroit River for</p>





Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>local private ferry service across the Detroit River could increase travel times and reduce road safety, which might lead to increased use of local emergency services due to potential vehicle accidents and workplace accidents. In addition, the production of Project-related waste could place additional stress on the capacity of local landfills.</p> <p>During operation, the workforce will remain the same as current operations with no planned changes.</p>	<p>e. Store equipment as far from the edge of the road as practical  f. Install construction barricades at road crossings</p> <ul style="list-style-type: none"> <li>• Traffic disruptions during construction will be reduced by adherence to the Traffic Management Plan. Guidelines will be developed for vehicular use on the RoW and associated access roads to avoid traffic congestion and accidents. Access to existing transportation infrastructure will be addressed through standard mitigation and will be reversible once the construction phase ends.</li> <li>• The capacity of waste disposal sites will be considered and if Project needs are not easily accommodated, alternative disposal locations will be considered.</li> <li>• Enbridge Gas should provide Project information to local communities and service providers so that they are prepared for any possible demand on community services and infrastructure related to a temporary population increase. Additional correspondence with residents and businesses adjacent to the PPR will be held in advance of construction commencement to discuss potential specific impacts to the property or business. Contact information for a designated Enbridge Gas representative should be available to address questions and concerns during construction. Consultation has been initiated and should continue with municipal personnel.</li> <li>• Approvals should be obtained from the municipalities for all road crossings.</li> </ul>	<p>boats, and a portion of the Town of Amherstburg due to size of the roadways, alternative routes, and nature of where the work is occurring in the Study Area. Compared to the construction phase, in the operation phase of the Project, traffic will be reduced for Boblo Island, boats along the Detroit River, and the Town of Amherstburg.</p> <p>Given the available capacity of the local and nearby community services and infrastructure, along with the implementation of the mitigation and protective measures, no significant adverse residual impacts on community services and municipal infrastructure are anticipated.</p>
	<p>Infrastructure  Section 3.5.4</p>	<p>Potential to damage infrastructure, compromise the safety of workers and surrounding residents, and cause service disruptions may result from interactions with roads and buried and overhead utilities.</p>	<ul style="list-style-type: none"> <li>• Approval should be sought from the Town of Amherstburg and Essex County for the pipeline crossing of Town and County roads.</li> <li>• The contractor should adhere to requirements for the road crossings by HDD or open cut .</li> <li>• Prior to the commencement of construction Enbridge Gas should continue to consult with other third-party utility owners/operators in the Study Area.</li> <li>• Prior to the commencement of construction Enbridge Gas should obtain subsurface utility engineering data for the proposed pipeline route. The contractor should be responsible for locating existing pipelines and utilities on lands which will be affected by trench excavation.</li> <li>• Machine operators will be informed where electrical transmission lines are present overhead. Lines that may interfere with the operation of construction equipment will be identified with warning poles strung together with rope and suspended red flags.</li> <li>• Measures to mitigate induced voltage effects should be followed.</li> <li>• All necessary third-party utility permits and conditions should be met.</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on infrastructure are anticipated.</p>
	<p>Culture, Tourism and Recreational Facilities  Section 3.5.5</p>	<p>Construction of the Project may temporarily interfere with the use of cultural and recreational facilities particularly on the Boblo Island portion of the Study Area. Potential impacts include noise, dust and equipment exhaust associated with construction activity. Construction activities will temporarily affect the aesthetic landscape of the construction area.</p>	<ul style="list-style-type: none"> <li>• Construction barricades should be erected at all areas of construction activity where recreational users may be present.</li> <li>• It is recommended that additional consultation with residents and businesses adjacent to the PR occur in advance of construction commencement. Contact information for a designated Enbridge Gas representative should be available prior to and during construction to address questions and concerns.</li> </ul>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual effects on culture, tourism, or recreational facilities are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		Potential safety concerns exist due to the proximity of construction activities to the facilities and their users.	<ul style="list-style-type: none"> <li>While pipeline construction activities and machinery have the potential to temporarily affect street aesthetics, restoration of the construction area will leave little evidence that a pipeline exists. Construction should be conducted as expeditiously as possible, to reduce duration of activities.</li> <li>Access to businesses and residential properties should be maintained always. If required, signs should be used to direct people to correct access.</li> <li>Safety fence should be installed at the edge of the construction area where public safety considerations are required.</li> </ul>	
	Air Quality and Noise <i>Section 3.5.6</i>	Residential and business properties may experience noise, dust and equipment exhaust associated with construction activity. During operation, no substantial air or noise emissions are anticipated to occur.	<ul style="list-style-type: none"> <li>During construction, motorized construction equipment should be equipped with appropriate mufflers and silencers as available. Company and construction personnel should avoid excessive idling of vehicles; vehicles and equipment should be turned off when not in use unless required for operation. To the greatest extent practical, activities that could create noise should be restricted to daylight hours and adhere to local noise by-laws. Sources of continuous noise, such as portable generators, should be shielded or located so as to reduce disturbance to residents and businesses.</li> <li>The contractor should implement site practices during construction that are in line with the Environment Canada document 'Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities' (ChemInfo Services Inc. 2005), which may include: <ul style="list-style-type: none"> <li>Maintaining equipment in compliance with regulatory requirements</li> <li>Covering loads of friable materials during transport</li> <li>Dust suppression of source areas</li> <li>Watering for dust control must not result in the formation of puddles, rutting by equipment or vehicles, the tracking of mud onto roads or the siltation of watercourses.</li> </ul> </li> <li>There is potential for the HDD of the Detroit River to proceed outside of noise by-law hours. Consultation with the municipality will occur to seek an exemption to the noise by-law.</li> </ul>	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from air quality and noise are anticipated.
	Indigenous Interests, Land Use and Traditional Knowledge <i>Section 3.5.7</i>	Impacts on Indigenous Land Use, Traditional Knowledge, and Indigenous interests are still being determined. The ER will be provided to Indigenous communities for their review and comment. Upon their review, Enbridge Gas will work with Indigenous communities to better understand potential impacts and associated mitigation measures.		
	Land Use Designations <i>Section 3.5.8</i>	Natural gas pipelines and their associated facilities/structures are permitted land uses, and there are no proposed changes to land use. Therefore, no impacts are anticipated.	<ul style="list-style-type: none"> <li>The Project does not propose to change or alter the designated land use. As no change in the proposed land use will occur, and thus, no impacts to land use will occur, no mitigation or protective measures are recommended.</li> </ul>	As no impacts are anticipated, no net impacts will occur.
	Landfills and Contaminated Sites <i>Section 3.5.9</i>	<p>Improper disposal of waste material generated during construction may result in contamination to soil, groundwater, and/or surface water resources on and off the construction site. Litter generated during construction may also become a nuisance to adjacent properties if not contained.</p> <p>A sewage disposal site is located in the Boblo Island portion of the Study.</p> <p>Assumptions on the potential for landfill gas to impact the Project, as outlined in the D-4 Guideline, are</p>	<ul style="list-style-type: none"> <li>All construction wastes should be disposed of. Additionally, Enbridge Gas should undertake responsible management of excess fill. When details on excess fill volumes are known, disposal locations should be determined, and appropriate permitting obtained.</li> <li>A site-specific waste collection and disposal management plan should be implemented, which may include: <ul style="list-style-type: none"> <li>Waste materials, sanitary waste, and recycling transported off-site by private waste contractors licensed by the MECP.</li> <li>Contractors required to remove their excess materials from the site.</li> <li>Labelling and storage of hazardous and liquid wastes in a secure area that would contain material in the event of a spill.</li> <li>Implementation of a waste management program consisting of reduction, reuse, and recycling of materials.</li> </ul> </li> </ul>	With these mitigations in place to properly test, treat, and dispose of contaminated water/soils, Stantec is of the opinion that impacts of the Open Landfill on the Project are unexpected, and if they do occur can be managed through the contingency measures listed below.



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>made by assessing available information including proven soil-gas concentrations.</p> <p>Inadvertent release during HDD crossing of the Detroit River has the potential to transport suspended contaminated sediment downstream.</p>	<ul style="list-style-type: none"> <li>- Should contaminated soils be encountered during construction, a Suspect Soils Program should be implemented.</li> <li>- Soils that cannot be reused on site may be reused off-site in accordance with O. Reg. 406/19.</li> <li>- During construction, if evidence of potential contamination is found (such as buried tanks, drums, oil residue or gaseous odour), construction will cease and the Enbridge Suspect Soil Program will be implemented.</li> <li>- Should excess soil be generated on-site during construction activities that will require off-site management, or if contaminated soils are suspected (e.g., if observed material contains anthropogenic substances, petroleum hydrocarbons odours/staining, and debris/waste), representative soil samples should be collected in accordance with O. Reg. 406 /19 and submitted for chemical analysis to determine management options and appropriate handling and health and safety guidelines.</li> <li>- The potential for leachate or landfill gas to interact with the hydrogeologic and geologic settings of the Project is outlined in the D-4 Guideline. Similar to the assumption made on contaminated soils, Enbridge Gas will assume and treat any water that is dewatered as suspect, either through testing or proper disposal.</li> <li>• Should an inadvertent release during HDD operations of the Detroit River occur, Enbridge Gas will notify the municipality and will implement a containment plan. A plume analysis could be undertaken prior to HDD activities to determine the path of suspended sediment and develop further mitigation and protective measures.</li> </ul>	
	<p>Archaeological Resources  <i>Section 3.5.10</i></p>	<p>The Stage 1 AA has determined that a small portion of the Study Area retains potential for the recovery of archaeological resources while the majority of the Study Area has either been previously assessed, previously disturbed, or does not retain archaeological potential.</p>	<p>Follow the recommendations of the Stage 1 archaeological assessment, and any recommended archaeological assessment (e.g., Stage 2,3 and 4).</p> <p>Should previously undocumented archaeological resources be discovered within the Project's Study Area, it may be considered a new archaeological site which is subjected 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 an archaeological assessment, in compliance with Section 48(1) of the Ontario Heritage Act.</p> <p>The Funeral, Burial and Cremation Services Act, 2022, S.O. 2022, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with Ontario Regulation 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of the Act related to burial sites. In situations where human remains are associated with archaeological resources, the Ministry of Citizenship and Multiculturalism should also be notified (at <a href="mailto:archaeology@ontario.ca">archaeology@ontario.ca</a>) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act.</p>	<p>With the implementation of the AA(s) and mitigation measures, including avoidance and protection/preservation (where feasible) and excavation, no significant adverse residual impacts on archaeological resources are anticipated.</p>

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	Built Heritage Resources and Cultural Heritage Landscapes <i>Section 3.5.11</i>	The completion of the CHSR and Checklist identified one indicator of CHVI: properties with structures over 40 years of age. Potential indirect vibration impacts were identified for 356 Dalhousie Street.	<p>The preferred option is to avoid the structure at 356 Dalhousie Street by establishing a buffer zone around the resource to avoid construction activity within 50 metres. This would include the use of appropriate preventive measures such as identifying the structure on construction maps and temporary fencing. Where avoidance is not feasible, the alternative option below should be applied.</p> <p>A building condition specialist or engineer familiar with vibration effects should review construction activities that are to occur within 50 metres of 356 Dalhousie Street to determine if vibration monitoring or other mitigation measures for indirect vibration impacts are required.</p> <p>The alternative option to mitigate this risk is for a qualified building condition specialist or engineer to develop a strategy to carry out condition surveys and vibration monitoring, where required. The pre-condition survey may consist of screening activities to identify critical properties and determine appropriate vibration levels based on building type, age, and condition. Vibration monitoring may consist of random confirmatory vibration monitoring during pipeline installation at the most critical properties. A post-condition survey should be carried out on an as-needed basis to be determined by the qualified building condition specialist or engineer.</p> <p>If planned project activities or anticipated construction impacts are altered, this recommendation should be re-examined prior to construction and a <i>Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment</i> should be completed after detailed design and prior to construction related activities for the potential heritage resources identified along the preferred route and submitted to the MCM for their review and comment.</p>	With the implementation of mitigation measures for indirect vibration impacts, if deemed necessary by a building condition specialist or engineer, no net impacts will occur.

## **6 Cumulative Effects Assessment**

The recognition of cumulative effects assessment (CEA) as a best practice is reflected in many regulatory and guidance documents. Regarding the development of hydrocarbon pipelines in Ontario, the *OEB Environmental Guidelines* (2016 and 2023) notes that cumulative effects should be identified and discussed in the ER.

Building upon the intent of the *OEB Environmental Guidelines* (2016 and 2023), the OEB has specified that only those effects that are additive or interact with the effects that have already been identified as resulting from the Project are to be considered under cumulative effects. In such cases, it will be necessary to determine whether these effects warrant mitigation measures. The CEA has been prepared with consideration of this direction from the OEB.

### **6.1 Methodology**

The CEA describes the potential cumulative effects resulting from the interaction of residual effects of constructing and operating the proposed pipeline with the effects of other unrelated projects. The other projects assessed are those that are either existing or approved and that have a high likelihood of proceeding.

Cumulative effects include the temporal and spatial accumulations of change that occur within an area or system due to past, present, and future activities. Change can accumulate in systems by either an additive (i.e., cumulative) or interactive (i.e., synergistic) manner. Positive residual effects have not been assessed in the CEA.

By applying the principles of avoidance, minimization, and compensation to limit project-specific effects, potential adverse residual effects on environmental and socio-economic features have been greatly limited before accounting for the effects of other unrelated projects.

The CEA methodology is designed to evaluate and manage the additive and interactive effects from the following sources:

- Existing infrastructure, facilities, and activities as determined from available data sets
- The proposed Project
- Future activities where the undertaking will proceed, or has a high probability of proceeding

Although rare in occurrence, it is plausible that accidents or emergency events may arise due to an unforeseen chain of events during the Project's construction or operational life. Due to the rarity and magnitude of such events, they have not been



assessed here, as they are extreme in nature when compared to the effects of normal construction and operation activities and require separate response plans.

## **6.2 Study Boundaries**

### **Spatial**

To make assumptions about the magnitude and probability of effects, an approximate 100 m boundary around the PR was used for the cumulative effects assessment. The 100 m boundary has been found, through previous experience with pipeline construction, to be appropriate for the most commonly encountered net effects.

### **Temporal**

The temporal boundaries for the cumulative effects assessment reflect the nature and timing of project activities, and the availability of information surrounding future projects with a high probability of proceeding. The Project schedule identifies three key milestone activities:

- ER and technical design – 2023
- Construction - 2024
- Operation and Maintenance – 2024 to 2074\*

*\*Fifty years of operation is used as an assumption, although the pipeline may be operational beyond fifty years.*

Based upon these milestone activities, two time periods were selected for evaluation: 2024 and 2029. The year 2024 was selected to represent the construction period, and the year 2029 was selected to represent the operation and maintenance period. Forecasting beyond 2029 increases the uncertainty in predicting whether projects will proceed, and the effects associated with these projects.

## **6.3 Project Inclusion List**

As part of the study of cumulative effects, projects that are either currently existing, and those that have been approved and are scheduled (or are likely to be scheduled) during the construction period and early operation and maintenance of the Project, were reviewed and added to the project inclusion list. The project inclusion list was developed by reviewing publicly available information for projects and activities with the potential for effects to interact with the identified effects of the proposed pipeline within the spatial and temporal study boundaries. The following resources were reviewed:

- Impact Assessment Agency of Canada, Canadian Impact Assessment Registry (IAAC 2023)



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- Government of Ontario, Environmental Assessment Projects by Category (Government of Ontario 2023d)
- MTO, Ontario’s Highways Program Interactive Map (2022 to 2025) (MTO 2023)
- Canadian Energy Regulator, Major Facilities Applications (CER 2023)
- County of Essex, Major Projects and Construction and Closures (County of Essex, 2023)
- Town of Amherstburg, Notices of Construction (Town of Amherstburg, 2023)
- OEB Applications Currently Before the Board (facilities applications only) (OEB 2023b)
- Information solicited through public consultation

Based on the review of publicly available resources, three projects are proposed in the Study Area. The project inclusion list in **Table 6.1** outlines these projects for consideration or cumulative effects:

**Table 6.1: Project Inclusion List for Cumulative Effects**

<b>Project Name</b>	<b>Project Location</b>	<b>Proponent</b>	<b>Schedule</b>	<b>Project Description</b>	<b>Interaction with the Proposed Pipeline</b>
Alma Street Parkette Shoreline Protections*	Town of Amherstburg, ON	Town of Amherstburg	Start date: August 11, 2021  Last update: September 10, 2021 (public comment period closed, IO is considering comments)	Construction of a breakwall to protect the shoreline and support fish habitat improvements in the Detroit River at the end of Alma Street.	Potential for traffic management issues and congestion due to construction vehicles.
River’s Edge*	Town of Amherstburg, ON	Pirola Group Developments	Anticipated construction completion: October 2023	Construction of two six-story apartment buildings that contain 115 units in each building.	Potential for traffic management issues and congestion due to construction vehicles.



<b>Project Name</b>	<b>Project Location</b>	<b>Proponent</b>	<b>Schedule</b>	<b>Project Description</b>	<b>Interaction with the Proposed Pipeline</b>
Infrastructure upgrades and construction of new homes	Boblo Island	Amico properties	Spring/Summer 2023	Amico Properties is undertaking several infrastructure upgrades and construction projects on Boblo Island, including new sanitary lines from the mainland, hydro lines, a new ferry landing, 220 new homes, and a new restaurant on the west side of the island.	<p>Potential for traffic management issues and congestion due to construction vehicles.</p> <p>The build-out of the preferred route may overlap with the infrastructure upgrades and planned built-out of the new ferry landing, new homes and restaurant.</p>

\*The projects referenced are more than 100 m away however are large in magnitude and therefore have been included in this assessment to be conservative.

At the time of writing this ER, no MTO projects occurring in or near the Study Area were identified; however, it is assumed that on-going improvements, upgrades and maintenance to local and regional roads may overlap with the construction of the preferred pipeline. It is also assumed that on-going improvements, upgrades, and maintenance to private properties such as residences and businesses may occur within the spatial and temporal boundaries.

## **6.4 Analysis of Cumulative Effects**

The ER considers the potential impacts of the Project on specific features and conditions and proposes mitigation and protective measures to eliminate or reduce the potential impacts. The CEA evaluates the significance of residual impacts (after mitigation) of the Project along with the effects of other unrelated projects.

### **6.4.1 Construction – 2024**

Residual project impacts which may occur during project construction outlined in **Table 6.1** to consider the additive and interactive effects at their maximum intensity, the CEA assumes that construction of other unrelated projects and the proposed pipeline construction may also occur concurrently.





Potential cumulative effects resulting from the proposed pipeline construction and the concurrent projects are additive effects on vegetation, wildlife and wildlife habitat, air quality and the acoustic environment, and traffic.

However, Enbridge Gas will continue consultations with County of Essex and Town of Amherstburg municipal staff to reduce the potential for construction activities that may lead to cumulative effects and coordinate plans to reduce resultant effects during construction. Provided that construction activities implement similar mitigation and protective measures as those recommended for pipeline construction, adverse cumulative effects up either biophysical features or the socio-economic environment are predicted to be of low to moderate probability and magnitude, short duration (2-3 months), and reversible. Therefore, adverse residual cumulative effects during construction are not anticipated to be significant.

### **Vegetation**

Where there is natural vegetation within or adjacent to the PR, potential impacts include the removal of native vegetation, and indirect effects such as dust, erosion, and accidental spills. However, with the implementation of the mitigation and protective measures outlined in this report, and provided that concurrent projects follow mitigation measures similar to those outlined in this report, adverse cumulative residual effects on vegetation are not anticipated to be significant.

### **Wildlife and Wildlife Habitat**

Potential residual effects on wildlife and wildlife habitat associated with construction of the Project are accidental direct mortality, habitat removal and degradation and sensory disturbance. Mitigation and protective measures for wildlife and wildlife habitat are outlined in **Table 5.1**. In the event of project-related wildlife mortality, the MNRF or MECP should be contacted. If mortality occurs between concurrent projects for similar species, the Ministry will be able to note the occurrences and coordinate with Enbridge Gas to adjust construction activities and/or mitigation. Potential cumulative effects resulting from sensory disturbance may result from construction noise, traffic, air pollution, and dust, which are generally discussed below.

Provided that the mitigation and protective measures are undertaken, and provided that concurrent projects follow mitigation measures similar to those outlined in this report, adverse cumulative residual effects on wildlife and wildlife habitat should be of low probability and will be mitigated as coordinated through the MECP. Therefore, adverse cumulative residual effects on wildlife and wildlife habitat are not anticipated to be significant.



## **Air Quality and Acoustic Environment**

Potential residual effects on air quality associated with construction of the Project and concurrent projects are an increase in noise and air pollutants from operation of vehicles and equipment, and an increase in dust from construction activities. Mitigation and protective measures for air quality and the acoustic environment are outlined in Table 5.1. Provided that the concurrent projects follow mitigation measures similar to those outlined in this report, cumulative effects should be of low magnitude and reversible. Therefore, adverse residual cumulative effects on air quality and the acoustic environment are not anticipated to be significant.

### **Traffic**

An increase in traffic is anticipated during the potential concurrent construction of the distribution pipeline and concurrent projects. A Traffic Management Plan will be employed during installation of the pipeline, as the install will occur within the road allowance. Provided that concurrent projects follow mitigation measures similar to those outlined in this report, cumulative effects should be of low magnitude and reversible. Therefore, adverse residual cumulative effects on traffic are not anticipated to be significant.

#### **6.4.2 Operation and Maintenance – 2029**

Development and maintenance activities which have a probability of proceeding during operation and maintenance of the Project include:

- Road works: Future road rehabilitation and resurfacing.
- Water works: Future installation of water and wastewater pipelines
- Pipeline construction and maintenance: Future pipeline construction and maintenance of existing hydrocarbon pipelines
- Completing integrity digs, as needed, to confirm and field verify findings from in-line inspections and to complete maintenance work.

Operation and maintenance of the proposed pipeline will have relatively little impact on the environment. On a day-to-day basis there is no operational noise that is anticipated to occur following Project construction. Should an integrity dig necessary, this will be the only anticipated instance when the Project would have potential temporary impacts during its operation.

Consultation will continue with municipal staff, developers and other utilities that intersect with the proposed pipeline to identify new projects that may occur concurrently with the proposed pipeline operation. These could include County of Essex road and infrastructure upgrades and maintenance programs including other utility operation and maintenance activities. There is the potential that cumulative effects may occur for



residual impacts as outlined in the ER related to accidental spills, erosion and sediment control and residents.

Operation and maintenance activities undertaken by Enbridge Gas will be completed in co-ordination with the Lands, Permitting and Environment Team and will consider any potential impacts on natural heritage and socio-economic environment. Appropriate mitigation measures will be developed and implemented based on the proposed maintenance work and all necessary agency permits and approvals will be secured, as required. Given the limited scale of impact of any potential operation and maintenance activities, it is anticipated that residual impacts will be minimal and that should any interaction occur with other projects, adverse residual effects are not anticipated to be significant.

## **6.5 Summary of Cumulative Effects**

The potential cumulative effects of the Project were assessed by considering development that has a high probability of proceeding just prior to or concurrent with construction of the Project. A 100 m boundary around the preferred route was used to assess the potential for additive and interactive effects of the Project and other developments on environmental and socio-economic features.

The cumulative effects assessment determined that, provided the mitigation and protective measures outlined in this report are implemented and that concurrent projects implement similar mitigation and protective measures, potential cumulative effects are not anticipated to occur, or if they do occur are not anticipated to be significant.

## 7 Monitoring and Contingency Plans

### 7.1 Monitoring

The primary objective of compliance and effects monitoring is to check that mitigation and protective measures are effectively implemented and to measure the impacts of activities associated with construction on environmental and socio-economic features. Ultimately, the knowledge gained from monitoring is used to avoid or reduce issues which may arise during construction of subsequent pipeline projects.

Previous pipeline construction experience, and a review of post-construction monitoring reports from other projects, indicates that impacts from pipeline construction are for the most part temporary. The mitigation and protective measures to eliminate or reduce impacts are well known and have been shown to be effective. Enbridge Gas should adhere to the following general monitoring practices:

- Trained personnel should be on-site to monitor construction and should be responsible for checking that the mitigation and protective measures and monitoring requirements in the ER are executed. Enbridge Gas should implement an orientation program for inspectors and contractor personnel to provide information regarding Enbridge Gas' environmental program and commitments, as well as safety measures.
- Construction techniques, procedures and contract provisions that will be applied by the contractor during construction to mitigate negative impacts should be included in the ER. Agency notification requirements, permits required during the construction phase, and monitoring program descriptions- including sampling- should be discussed in the ER. Section 6.0 in the OEB *Environmental Guidelines* (2016 and 2023) outlines specific mitigation that can be implemented for different environmental and social concerns.
- A walking inspection of the entire PR should be completed three (3) months and 15 months after the in-service date to determine whether areas require further rehabilitation or as required by OEB conditions of approval.

The following sections list specific environmental monitoring activities recommended for the Project.

#### 7.1.1 Exposed Soils

Where soils are exposed for construction activities, potential effects may include surface soil erosion and sedimentation of watercourses. Improper water discharge can lead to erosion and sedimentation. Monitoring of potential effects on exposed soils should occur by Enbridge Gas's on-site inspection team and the Environmental Inspector.



### **7.1.2 Water Wells**

Wells within a minimum of 10 m of the trench, or as recommended by future hydrogeological studies, will qualify for participation in the monitoring program prior to construction to determine preconstruction quality and quantity conditions. The water quality and quantity, and levels of participating resident water wells should be monitored in the event a complaint or concern is brought forward.

The proposed monitoring program should include delivery of notification letters to all potential groundwater users within a certain distance of the PR. Due to well access limitations and resident's willingness to participate in the Water Well Monitoring Program, it may not be possible to monitor every well within the selected distance. Typically, response rates for this type of request ranges between 10 and 20 percent. The notification letter will detail the proposed pipeline construction and the potential risk of well interference, as well as include appropriate contact information for Enbridge Gas.

Landowner complaints regarding well interference received during or after the construction period, whether the landowner is a participant in the Water Well Monitoring Program or not, should be investigated individually as described in Section 7.2.1.

### **7.1.3 Watercourse Crossing**

An Environmental Inspector should be on-site during the Detroit River crossing to monitor adherence to specifications and site plans. In particular, the Environmental Inspector should monitor that pre-construction preparation is complete prior to commencement of any work and that the floodplain conditions are restored to as close to preconstruction conditions as possible. The Environmental Inspector should be responsible for monitoring weather forecasts prior to the crossing to ensure conditions are appropriate for the crossing technique.

Visual observations and turbidity measurements along transects upstream and downstream of the HDD crossing of the Detroit River should be performed for the duration of the drilling to monitor for inadvertent returns of drilling fluid.

### **7.1.4 Vegetation**

During pre-construction clearing and construction, the Environmental Inspector should monitor the limits of clearing so as not to damage adjacent vegetation. The Environmental Inspector should identify any trees that pose a potential hazard and may require removal, however; these trees may provide SAR bat habitat. If clearing is to be completed during the bird nesting season, nest sweeps should be completed no later than seven days prior to clearing activities. In addition, prior to construction a vegetation survey for plant SAR and SOCC is recommended to confirm the presence or absence of these species within the work area.



Establishment of vegetative cover should be monitored. Sediment control fencing and other protective measures should be retained in place until cover is fully established.

#### **7.1.5 Wildlife**

SAR and SOCC are known to occur within the Study Area and construction monitoring will be required. For the Bald Eagle nest, monitoring is recommended during construction if the nest is active to inform contingency management in the event of documented disturbance effects.

The exact nature of SAR monitoring, including for snakes and turtles, will be determined in consultation with the MECP but at a minimum will include daily inspections of the workspace and reporting requirements.

#### **7.1.6 Residents, Recreational Facilities and Businesses**

Construction activities may impact directly affected landowners and surrounding residents and businesses. During construction, a designated Enbridge Gas representative should be available to monitor and respond to requests and concerns voiced by residents and business owners. Landowners affected by construction should be notified in advance of construction activities in their area, as feasible. The notification should provide the contact information for a designated Enbridge Gas representative.

Enbridge Gas's on-site inspection team should also monitor the contractors' implementation of the Traffic Management Plan to see that site access to residences and businesses has been maintained and that traffic is not being unnecessarily interrupted.

While efforts will be undertaken to reduce impacts, a comment tracking system should also be implemented. An Enbridge Gas representative should record the time and date of calls, the nature of the concern, the corrective action taken, and the time and date of follow-up contact.

Following completion of construction, Enbridge Gas should contact residents and businesses along the easement to continue ongoing communications where necessary. During the first 15 months particular attention should be paid to monitoring and documenting impacts associated with construction of the proposed pipeline.



### **7.1.7 Municipal Roads**

Roads affected by pipeline construction should be restored to their pre-construction conditions to the satisfaction of the appropriate authorities' engineers. Road Superintendents should be given an opportunity to inspect any repairs or modifications. Once re-established, the crossing location of roads should be monitored following heavy rain events, and a year after construction following spring runoff, to ensure no road subsidence or major rutting has occurred and that the drainage system is functioning properly.

### **7.1.8 Cultural Heritage Resources**

Based on the results of the CHSR and Checklist, no further cultural heritage technical studies are required at this time. However, a building condition specialist or engineer familiar with vibration effects should review construction activities that are to occur within 50 metres of 356 Dalhousie Street to determine if vibration monitoring or other mitigation strategies should be recommended to mitigate the potential for indirect vibration impacts. Should the anticipated construction activities or impacts change, the recommendations of the CHSR should be re-examined prior to construction.

## **7.2 Contingency**

Contingency planning is necessary to prevent a delayed or ineffective response to unexpected events or conditions that may occur during construction of the proposed pipeline. An essential element of contingency planning is the preparation of plans and procedures that can be activated if unexpected events occur. The absence of contingency plans may result in short- or long-term environmental impacts and possibly threaten public safety.

The following unexpected events require contingency planning during construction: private water well complaint, contaminated sites, watercourse sedimentation, inadvertent returns during HDD, accidental spills, and unexpected finds. Although unexpected problems are not anticipated to occur during construction, Enbridge Gas and the pipeline contractor should be prepared to act. Construction personnel should be made aware of and know how to implement contingency measures prior to starting any activities in the field.



### **7.2.1 Private Water Well Complaint**

Enbridge Gas's Private Water Well Complaint contingency plan should be implemented in the unlikely event that residential well complaints arise during or after construction. The depth and existing condition of a given well is a significant factor in whether the well may be adversely impacted by nearby construction activities. The objective of any investigation related to interference of private water supply is to respond to the resident expediently and courteously and ultimately arrive at a resolution that is agreeable to both Enbridge Gas and the well owner.

In the event a resident registers a complaint with Enbridge Gas regarding a reduction of well water quality and/or quantity, Enbridge Gas will offer to arrange immediate provision of temporary potable or non-potable water, depending on the resident's needs, until the matter is resolved. Enbridge Gas will also offer to have a qualified hydrogeologist complete a well inspection, subject to the well owner granting permission. The hydrogeologist will visit the site to discuss the complaint with the resident and inspect the well and related complaint to the extent possible. The hydrogeologist will then provide advice to Enbridge Gas on further assessment if required, or advice on possible remedial options should they determine that the complaint may be related to the construction works.

### **7.2.2 Contaminated Sites (Suspect Soils Program)**

Efforts have been made to identify potentially contaminated sites in the vicinity of PR through a review of readily available information. Through circulation of the ER, the MECP will have an opportunity to review the PR if other unknown areas of potential contamination may exist.

Regardless, the potential exists for unknown material to be encountered during construction. If evidence of potential contamination is found, such as buried tanks, drums, oil residue or gaseous odour, construction should cease, and Enbridge's Suspect Soil Program should be implemented.

If potentially contaminated sites are encountered, the on-site contractor supervisor and owner representative should be notified immediately, as well as the following contact:

- Enbridge's Environment Department.
- Enbridge's designated Environmental Inspector

### **7.2.3 Watercourse Sedimentation**

Properly installed ESC measures are designed to reduce the risk of sediment laden runoff being transported towards watercourses and other natural heritage features. Extreme runoff events could result in collapse of silt fencing, overflow or bypass of barriers, and other problems which could lead to sedimentation of watercourses.





If sedimentation occurs, immediate action should be taken to repair dysfunctional ESC features or install temporary measures that will contain the erosion as quickly as practical. When site conditions permit, permanent protection measures should be installed on erosion-susceptible surfaces. The source of sedimentation and degree of impact should be examined when conditions permit. If erosion and sedimentation results from a construction-related activity, the activity should be halted immediately until the situation is rectified.

#### **7.2.4 Inadvertent Returns During HDD**

The best way to avoid inadvertent returns is to monitor drilling operations continuously with experienced personnel trained in all aspects of the HDD process. Drilling fluid is used during the advancement of the drill string to erode the formation, aid in stabilizing the bore hole and carry drill cuttings to the bore entry or exit. The viscosity and pressure of the drilling fluid is adjusted throughout the procedure to manage the HDD process. Jetting pressures will be limited to avoid a drilling fluid release (i.e., inadvertent return) during drilling. However, should a release of drilling fluid occur in the Project area an inadvertent return contingency plan should be implemented. Specifics of the contingency plan will be detailed in the Project specific Environmental Protection Plan (EPP).

Visual observations and turbidity measurements along transects upstream and downstream of the HDD crossing of the Detroit River should be performed for the duration of the drilling, to monitor for inadvertent returns of drilling fluid.

#### **7.2.5 Accidental Spills**

During construction, there is the potential for an accidental spill may occur. The impact of the spill will depend upon the magnitude and extent of the spill, and the environmental and socio-economic conditions in which it takes place. Upon release of a hydrocarbon-based construction fluid, Enbridge Gas should immediately determine the magnitude and extent of the spill and rapidly take measures to contain it. Release of sediment should also be treated as a potential spill depending on the magnitude and extent. Spills should be immediately reported to Enbridge Gas's on-site inspection team and Environment Department. The MECP Spills Action Center should be notified at 1-800-268-6060, the local/regional municipality and/or the ERCA (if required) for any or all spills. If requested through consultation, Indigenous communities identified on the Project Contact List should be notified of reportable spills.

A Spills Response Plan should be developed, reviewed with personnel, and posted in site trailers. Spill containment equipment should be readily available, especially near watercourses. Personnel should be trained in the use of spill containment equipment.

Should a spill occur in the Project area the spill response contingency plan should be implemented. Specifics of the contingency plan will be detailed in the EPP.



### **7.2.6 Unexpected Finds: Archaeological or Heritage Resources**

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the Ontario Heritage Act (Government of Ontario 1990c). The proponent or person discovering the archaeological resources must cease alteration of the site immediately and contact a licensed archaeologist to carry out archaeological field work. A site-specific response plan should then be employed following further investigation of the specific find. The response plan would indicate under which conditions the ground disturbance activity in the find location may resume.

The *Funeral, Burial and Cremation Services Act, 2002*, S.O. 2002, c.33 (Government of Ontario 2002) requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services (1-800-889-9768).

Enbridge Gas is committed to keeping interested Indigenous communities engaged on any unearthed artifacts and/or human remains discovered in relation to their projects.



## **8 Conclusion**

The environmental study investigated data on the physical, biophysical, and socio-economic environment along the PR. In the opinion of Stantec, the mitigation and protective measures and contingency measures are considered appropriate to protect the features encountered. Monitoring will assess whether mitigation and protective measures were effective in both the short and long term.

With the implementation of the recommendations in this Report, on-going communication and consultation, and adherence to permit, regulatory and legislative requirements, potential adverse residual environmental and socio-economic impacts of the Project are not anticipated to be significant.



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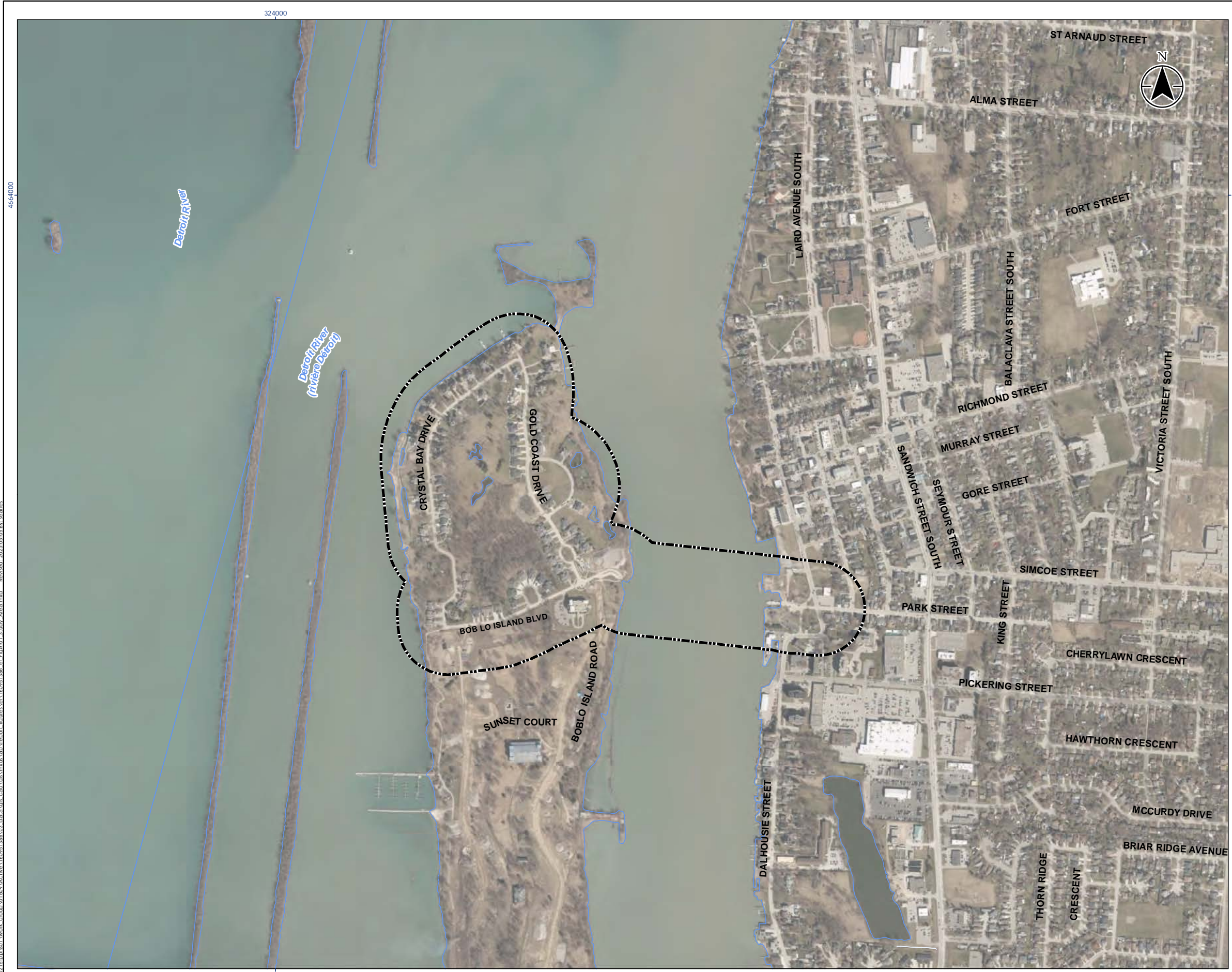
# Appendices



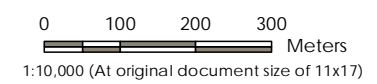
## **Appendix A      Figures**



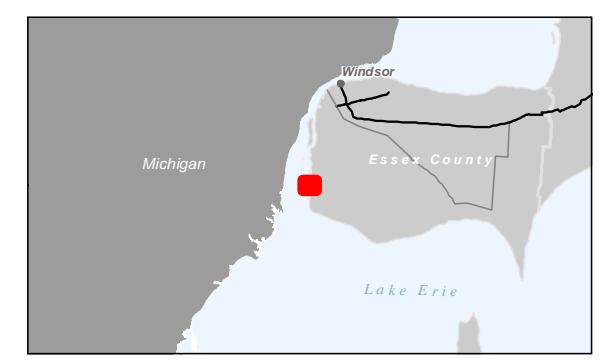




- Legend
- Study Area (120m)
  - Watercourse (Permanent)
  - Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
  3. Orthoimagery © First Base Solutions, 2023. Imagery Date, 2022.



Project Location: TOWN OF AMHERSTBURG  
 Prepared by SPE on 2023-05-05  
 Technical Review by BC on 2023-04-21

Client/Project: ENBRIDGE GAS INC., BOBLO ISLAND COMMUNITY EXPANSION




Figure No.: A-1  
 Title: Study Area

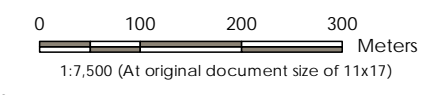
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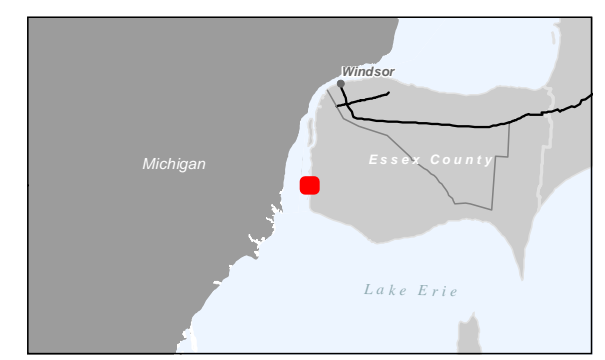


Legend

-  Preliminary Preferred Route
-  Study Area (120m)
-  Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
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Project Location: TOWN OF AMHERSTBURG  
 160951386 REVA  
 Prepared by SPE on 2023-05-05  
 Technical Review by BC on 2023-04-21

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION

Figure No.: A-2  
 Title: Preliminary Preferred Route

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 Revised: 2023-05-05 By: seades



## **Appendix B      Consultation**



## **Appendix B.1 Letter of Delegation**



Ministry of Energy

Energy Networks and Indigenous Policy  
Branch

Indigenous Energy Policy

77 Grenville Street, 6<sup>th</sup> Floor  
Toronto, ON M7A 67C  
Tel: (416) 315-8641

Ministère de l'Énergie

Direction Générale des Réseaux Énergétiques  
et des Politiques Autochtones

Politique Énergétique Autochtones

77 Rue Grenville, 6<sup>e</sup> Étage  
Toronto, ON M7A 67C  
Tel: (416) 315-8641



December 8, 2022

VIA EMAIL

Evan Tomek  
Advisor, Regulatory Applications  
Enbridge Gas Inc.  
PO Box 2001  
50 Kiel Drive N  
Chatham, ON N7M 5M1

**Re: Boblo Island Community Expansion Project**

Dear Evan:

Thank you for your email dated November 9, 2022, notifying the Ministry of Energy (Energy) of Enbridge Gas Inc. (Enbridge)'s proposed Boblo Island Community Expansion Project (the Project) and requesting information on any related Crown duty to consult requirements.

Enbridge will be applying to the Ontario Energy Board (OEB) for Leave to Construct for the Project. I understand that Enbridge is planning to construct approximately 2.9 km of natural gas distribution pipeline, consisting of 2.3 km of Nominal Pipe Size ("NPS") 2-inch Polyethylene ("PE") natural gas pipeline, and approximately 650 m of NPS 4-inch steel ("ST") natural gas pipeline to serve 92 forecasted customers on Boblo Island in Amherstburg, ON. Enbridge has indicated that the project will be built entirely within existing right of ways, except for the where the Project will cross the Detroit River.

On behalf of the Government of Ontario (the Crown), Energy has reviewed the information provided by Enbridge with respect to the Project and assessed it against the Crown's current understanding of the interests and rights of Aboriginal communities who hold or claim Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act 1982* in the area. In doing so, Energy has determined that the Project may have the potential to affect such Indigenous communities.

The Crown has a constitutional duty to consult and, where appropriate, accommodate Indigenous communities when the Crown contemplates conduct that might adversely impact established or asserted Aboriginal or Treaty rights. These consultations are in addition to consultation imposed by statute.

While the legal responsibility to meet the duty to consult lies with the Crown, the Crown may delegate the day-to-day, procedural aspects of consultation to project proponents. Such a delegation by the Crown to Proponents is routine practice for Energy.

I am writing to advise you that on behalf of the Crown, Energy is delegating the procedural aspects of consultation in respect of the Project to Enbridge (Proponent) through this letter. Energy expects that the Proponent will undertake the procedural aspects of consultation with respect to any regulated requirements for the proposed Project. The Crown will fulfill the substantive aspects of consultation and retain oversight over all aspects of the process for fulfilling the Crown's duty.

Please see the appendix for information on the roles and responsibilities of both the Crown and the Proponent.

Based on the Crown's assessment of First Nation and Métis community rights and potential project impacts, the following Indigenous communities should be consulted on the basis that they have or may have constitutionally protected Aboriginal or Treaty rights that may be adversely affected by the Project.

Community	Mailing Address
Aamjiwnaang First Nation	978 Tashmoo Ave Sarnia, ON N7T 7H5
Bkejwanong (Walpole Island First Nation)	117 Tahgahoning Rd Wallaceburg, ON N8A 4K9
Caldwell First Nation	14 Orange St Leamington, ON N8H 1P5
Chippewas of Kettle and Stony Point First Nation	6247 Indian Lane Lambton Shores, ON N0N 1J1
Chippewas of the Thames First Nation	320 Chippewa Rd Muncey, ON N0L 1Y0
Oneida Nation of the Thames	2212 Elm Ave Southwold, ON N0L 2G0

Based on currently available information about the project's anticipated impacts, Energy's preliminary assessment has determined that for Aamjiwnaang, Chippewas of Kettle and Stony Point, Chippewas of the Thames and Oneida Nation of the Thames, consultation is owed at the low end of the consultation spectrum. As such, Energy requires Enbridge to, at a minimum, notify the community of the Project; share information about the Project and provide an opportunity for the community to comment. Any issues raised by the community should be discussed and considered in light of the potential to impact rights, with mitigation or other forms of accommodation identified where appropriate. Enbridge's initial notice of the Project to the community could include a request to confirm whether the community believes the Project will impact their rights and accordingly whether they are interested in being consulted. Should no response be received, Enbridge should continue to provide high-level notifications in accordance with project stage milestones.

For Bkejwanong (Walpole Island) and Caldwell, Energy requires the proponent to undertake a deeper level of consultation, i.e. in the moderate range. In addition to the requirements listed above, Enbridge should provide opportunities for the communities to share evidence or

submissions about potential impacts should the communities so choose; and offer capacity funding to support meaningful participation by the communities in the consultation process, as appropriate. Enbridge should also be able to demonstrate how any concerns were considered and responded to, and what impact they had on project decisions moving forward. More detailed information on the roles and responsibilities delegated to Enbridge is available in the appendix.

Should any of the communities indicate they are not interested in being consulted, please inform Energy so that we can consider revisions to the consultation list. Should information become available throughout the consultation process to suggest that project impacts will be significant enough to warrant a deeper level of consultation, Enbridge must inform Energy so that updated guidance can be provided. Should no response be received, the proponent should continue to provide high-level notifications in accordance with project stage milestones

This rights-based consultation list is based on information that is subject to change. Consultation is ongoing throughout the duration of the project, including project development and design, consultation, approvals, construction, operation and decommissioning. Indigenous communities may make new rights assertions at any time, and further project related developments can occur that may require additional First Nation and/or Métis communities to be notified and/or consulted.

If you become aware of potential rights impacts on Indigenous communities that are not listed above at any stage of project, please bring this to the attention of Energy with any supporting information regarding the claim at your earliest convenience.

### **Acknowledgement**

By accepting this letter, the Proponent acknowledges this Crown delegation and the procedural consultation responsibilities enumerated in the appendix. If you have any questions, please contact Shannon McCabe, Senior Advisor, Indigenous Energy Policy ([shannon.mccabe@ontario.ca](mailto:shannon.mccabe@ontario.ca)).

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Enbridge. If you have any questions about this letter or require any additional information, please contact me directly.

Sincerely,



Amy Gibson, Manager  
Indigenous Energy Policy

c: Ontario Pipeline Coordinating Committee (OPCC)

## **APPENDIX: PROCEDURAL CONSULTATION**

### **Roles and Responsibilities Delegated to the Proponent**

On behalf of the Crown, please be advised that your responsibilities as Project Proponent for this Project include:

- providing notice and information about the Project to Indigenous communities, with sufficient detail and at a stage in the process that allows the communities to prepare their views on the Project and, if appropriate, for changes to be made to the Project. This can include:
  - accurate, complete and plain language information including a detailed description of the nature and scope of the Project and translations into Aboriginal languages where appropriate;
    - maps of the Project location and any other affected area(s);
    - information about the potential negative effects of the Project on the environment, including their severity, geographic scope and likely duration. This can include, but is not limited to, effects on ecologically sensitive areas, water bodies, wetlands, forests or the habitat of species at risk and habitat corridors;
    - a description of other provincial or federal approvals that may be required for the Project to proceed;
    - whether the Project is on privately owned or Crown controlled land;
    - any information the Proponent may have on the potential effects of the Project, including particularly any likely adverse impacts on established or asserted Aboriginal or treaty rights;
  - a written request asking the Indigenous community to provide in writing or through a face-to-face meeting:
    - any information available to them that should be considered when preparing the Project documentation;
    - any information the community may have about any potential adverse impacts on their Aboriginal or treaty rights; and
    - any suggested measures for avoiding, minimizing or mitigating potential adverse impacts;
    - information about how information provided by the Indigenous community as part of the consultation process will be collected, stored, used, and shared for their approval;
  - identification of any mechanisms that will be applied to avoid, minimize or mitigate potential adverse impacts;
  - identification of a requested timeline for response from the community and the anticipated timeline for meeting Project milestones following each notification;
  - an indication of the Proponent's availability to discuss the process and provide further information about the Project;
  - the Proponent's contact information; and
  - any additional information that might be helpful to the community;

- following up, as necessary, with Indigenous communities to ensure they received Project notices and information and are aware of the opportunity to comment, raise questions or concerns and identify potential adverse impacts on their established or asserted rights;
- gathering information about how the Project may adversely affect Aboriginal or treaty rights;
- bearing the reasonable costs associated with the procedural aspects of consultation (paying for meeting costs, making technical support available, etc.) and considering reasonable requests by communities for capacity funding to assist in participating in the consultation process;
- considering and responding to comments and concerns raised by Indigenous communities and answering questions about the Project and its potential impacts on Aboriginal or treaty rights;
- as appropriate, discussing and implementing changes to the Project in response to concerns raised by Indigenous communities. This could include modifying the Project to avoid or minimize an impact on an Aboriginal or treaty right (e.g. altering the season when construction will occur to avoid interference with mating or migratory patterns of wildlife); and
- informing Indigenous communities about how their concerns were taken into consideration and whether the Project proposal was altered in response. It is considered a best practice to provide the Indigenous community with a copy of the consultation record as part of this step for verification.

If you are unclear about the nature of a concern raised by an Indigenous community, you should seek clarification and further details from the community, provide opportunities to listen to community concerns and discuss options, and clarify any issues that fall outside the scope of the consultation process. These steps should be taken to ensure that the consultation process is meaningful and that concerns are heard and, where possible, addressed.

You can also seek guidance from the Crown at any time. It is recommended that you contact the Crown if you are unsure about how to deal with a concern raised by an Indigenous community, particularly if the concern relates to a potential adverse impact on established or asserted Aboriginal or treaty rights.

The consultation process must maintain sufficient flexibility to respond to new information, and we request that you make all reasonable efforts to build positive relationships with all Indigenous communities potentially affected by the Project. If a community is unresponsive to efforts to notify and consult, you should nonetheless make attempts to update the community on the progress of the Project, the environmental assessment (if applicable) and other regulatory approvals.

If you reach a business arrangement with an Indigenous community that may affect or relate to the Crown's duty to consult, we ask that that Crown be advised of those aspects of such an arrangement that may relate to or affect the Crown's consultation obligations, and that the community itself be apprised of the Proponent's intent to so-apprise the Crown. Whether or not any such business arrangements may be reached with any community, the Crown

expects the Proponent to fulfill all of its delegated procedural consultation responsibilities to the satisfaction of the Crown.

If the Crown considers that there are outstanding issues related to consultation, the Crown may directly undertake additional consultation with Indigenous communities, which could result in delays to the Project. The Crown reserves the right to provide further instructions or add communities throughout the consultation process.

### **Roles and responsibilities assumed directly by the Crown**

The role of the Crown in fulfilling any duty to consult and accommodate in relation to this Project includes:

- identifying for the Proponent, and updating as appropriate, the Indigenous communities to consult for the purposes of fulfillment of the Crown duty;
- carrying out, from time to time, any necessary assessment of the extent of consultation or, where appropriate, accommodation, required for the project to proceed;
- supervising the aspects of the consultation process delegated to the Proponent;
- determining in the course of Project approvals whether the consultation of Indigenous communities was sufficient;
- determining in the course of Project approvals whether accommodation of Indigenous communities, if required, is appropriate and sufficient.

### **Consultation Record**

It is important to ensure that all consultation activities undertaken with Indigenous communities are fully documented. This includes all attempts to notify or consult the community, all interactions with and feedback from the community, and all efforts to respond to community concerns. Crown regulators require a complete consultation record in order to assess whether Aboriginal consultation and any necessary accommodation is sufficient for the Project to receive Ontario government approvals. The consultation record should include, but not be limited to, the following:

- a list of the identified Indigenous communities that were contacted;
- evidence that notices and Project information were distributed to, and received by, the Indigenous communities (via courier slips, follow up phone calls, etc.). Where a community has been non-responsive to multiple efforts to contact the community, a record of such multiple attempts and the responses or lack thereof.
- a written summary of consultations with Indigenous communities and appended documentation such as copies of notices, any meeting summaries or notes including where the meeting took place and who attended, and any other correspondence (e.g., letters and electronic communications sent and received, dates and records of all phone calls);
- responses and information provided by Indigenous communities during the consultation process. This includes information on Aboriginal or treaty rights, traditional lands, claims, or cultural heritage features and information on potential adverse impacts on such



Aboriginal or treaty rights and measures for avoiding, minimizing or mitigating potential adverse impacts to those rights; and

- a summary of the rights/concerns, and potential adverse impacts on Aboriginal or treaty rights or on sites of cultural significance (e.g. burial grounds, archaeological sites), identified by Indigenous communities; how comments or concerns were considered or addressed; and any changes to the Project as a result of consultation, such as:
  - changing the Project scope or design;
  - changing the timing of proposed activities;
  - minimizing or altering the site footprint or location of the proposed activity;
  - avoiding impacts to the Aboriginal interest;
  - environmental monitoring; and
  - other mitigation strategies.

As part of its oversight role, the Crown may, at any time during the consultation and approvals stage of the Project, request records from the Proponent relating to consultations with Indigenous communities. Any records provided to the Crown will be subject to the *Freedom of Information and Protection of Privacy Act*, however, may be exempted from disclosure under section 15.1 (Relations with Aboriginal communities) of the Act. Additionally, please note that the information provided to the Crown may also be subject to disclosure where required under any other applicable laws.

The contents of what will make up the consultation record should be shared at the onset with the Indigenous communities consulted with and their permission should be obtained. It is considered a best practice to share the record with the Indigenous community prior to finalizing it to ensure it is a robust and accurate record of the consultation process.

## **Appendix B.2 Project Contact List**



## Appendix B2 – Project Contact List

### Agencies Contacts

#### Elected Officials

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Chris	Lewis	Elected Officials	Government of Canada	Essex	Member of Parliament (MP)	35 Victoria Avenue Unit 7B	Essex	ON	N8M 1M4	519-776-4700	chris.lewis@parl.gc.ca
Anthony	Leardi	Elected Officials	Government of Ontario	Essex	Member of Provincial Parliament (MPP)	310 Thomas Road	Amherstburg	ON	N9V 2Y9	519-736-1550	anthony.leardi@pc.ola.org

#### Federal Agencies

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Wesley	Plant	Federal Agencies	Environment and Climate Change Canada	Environmental Protection Operations - Ontario	Manager, Environmental Assessment Section	4905 Dufferin Street, 2nd Floor	Toronto	ON	M3H 5T4	416-739-4272	wesley.plant@ec.gc.ca
To whom it may concern			Transport Canada								EnviroOnt@tc.gc.ca
To whom it may concern		Federal Agencies	Fisheries and Oceans Canada	Amherstburg Base	General Inquiries	370 Dalhousie Street	Amherstburg	ON	N9V 1X3	519-736-5449	info@dfo-mpo.gc.ca
To whom it may concern			Fisheries and Oceans Canada	Fish and Fish Habitat Protection Program			Burlington	ON	L7S 1A1	1-855-852-8320	FisheriesProtection@dfo-mpo.gc.ca
Stephanie	Barbeau	Federal Agencies	Crown-Indigenous Relations and Northern Affairs Canada	Treaties and Aboriginal Government	Correspondence and Briefing Coordination Officer	10 Wellington Street	Gatineau	QC	K1A 0H4	819-664-3798	stephanie.barbeau@rcaanc-cirnac.gc.ca
Caroline	Ladanowski	Federal Agencies	Environment and Climate Change Canada	Wildlife Management and Regulatory Affairs	Director, Wildlife Management and Regulatory Affairs	351 Saint-Joseph Boul.	Gatineau	QC	K1A 0H3	613-297-1458	caroline.ladanowski@ec.gc.ca
To whom it may concern			Fisheries and Oceans Canada	Canadian Coast Guard, Central Region Headquarters		105 rue McGill Street, 5th Floor	Montreal	QC	H2Y 2E7		xca-montrealops@dfo-mpo.gc.ca



## Ontario Pipeline Coordination Committee

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Zora	Crnojacki	Ontario Pipeline Coordinating Committee	Ontario Energy Board	Ontario Energy Board	OPCC Chair	2300 Young Street, 26th Floor, PO Box 2319	Toronto	ON	M4P 1E4	416-440-8104	zora.crnjacki@oeb.ca
Helma	Geerts	Ontario Pipeline Coordinating Committee	Ministry of Agriculture, Food and Rural Affairs	Policy	Policy Advisor	1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	519-546-7423	helma.geerts@ontario.ca
Karla	Barboza	Ontario Pipeline Coordinating Committee	Ministry of Citizenship and Multiculturalism	Heritage Planning Unit	Team Lead-Heritage	400 University Ave, 5th Floor	Toronto	ON	M7A 2R9	416-660-1027	Karla.Barboza@ontario.ca
Amy	Gibson	Ontario Pipeline Coordinating Committee	Ministry of Energy	Indigenous Energy Policy	Manager						amy.gibson@ontario.ca
Shannon	McCabe	Ontario Pipeline Coordinating Committee	Ministry of Energy	Indigenous Energy Policy	Senior Advisor	77 Grenville Street, 6th Floor	Toronto	ON	M7A 2C1		shannon.mccabe@ontario.ca
Nick	Colella	Ontario Pipeline Coordinating Committee	Ministry of Environment, Conservation and Parks	Environmental Assessment Program Support	Manager	135 St. Clair Avenue West, 1st Floor	Toronto	ON	M4V 1P5	416-358-9934	nick.colella@ontario.ca
Andrew	Evers	Ontario Pipeline Coordinating Committee	Ministry of Environment, Conservation and Parks	Environment Assessment Services	Manager (Acting)	135 St Clair Ave W	Toronto	ON	M4V 1P5	647-961-4850	andrew.evers@ontario.ca
Cory	Ostrowka	Ontario Pipeline Coordinating Committee	Infrastructure Ontario		Environmental Specialist	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 2L5	641-264-3331	cory.ostrowka@infrastructureontario.ca
Gary	Highfield	Ontario Pipeline Coordinating Committee	Technical Standards and Safety Authority	Fuels Safety Program	Engineering Manager	345 Carlingview Drive	Toronto	ON	M9W 6N9	416-734-3539	ghighfield@tssa.org
Erick	Boyd	Ontario Pipeline Coordinating Committee	Ministry of Municipal Affairs and Housing	Community Planning and Development (Western)	Manager	659 Exeter Road, 2nd Floor	London	ON	N6E 1L3	519-873-4025	erick.boyd@ontario.ca
Keith	Johnston	Ontario Pipeline Coordinating Committee	Ministry of Natural Resources and Forestry	Environmental Planning	Team Lead	300 Water Street, 3rd Floor South	Peterborough	ON	K9J 3C7	705-313-6960	keith.johnston@ontario.ca
Tony	Difabio	Ontario Pipeline Coordinating Committee	Ministry of Transportation	Highway Corridor Management	Team Lead	301 St. Paul Street, 2nd Floor	St. Catharines	ON	L2R 7R4	905-704-2656	tony.difabio@ontario.ca
		Ontario Pipeline Coordinating Committee	Ontario Energy Board								OPCC.Chair@OEB.ca



## Provincial Agencies

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
To whom it may concern		Provincial Agencies	Ministry of Environment, Conservation and Parks	Species at Risk Branch		40 St. Clair Ave. W., 14th Floor	Toronto, ON	ON	M4V 1M2		SAROntario@ontario.ca
To whom it may concern		Provincial Agencies	Ministry of Environment, Conservation and Parks	Southwest Region							eanotification.swregion@ontario.ca
Mark	Badali	Provincial Agencies	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch	Environmental Resource Planner & EA Coordinator	135 St. Clair Ave W	Toronto	ON	M4V 1P5	416-457-2155	mark.badali1@ontario.ca
To whom it may concern		Provincial Agencies	Ministry of Environment, Conservation and Parks	Conservation and Source Protection Branch							sourceprotectionscreening@ontario.ca
Kathryn	Markham	Provincial Agencies	Ministry of Environment, Conservation and Parks	Permission Section, Species at Risk Branch	Management Biologist	615 John St N	Aylmer	ON	N5H 2S8	519-200-3927	kathryn.markham@ontario.ca
Joseph	Harvey	Provincial Agencies	Ministry of Citizenship and Multiculturalism	Heritage Planning Unit	Heritage Planner	400 University Ave, 5th Floor	Toronto	ON	M7A 2R9	613-242-3743	joseph.harvey@ontario.ca
Ainsley	Davidson	Provincial Agencies	Ministry of Infrastructure	Developmental Planning	Director, Land Use Planning (Acting)	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 1Z3	647-264-3605	ainsley.davidson@infrastructureontario.ca
To whom it may concern		Provincial Agencies	Ministry of Agriculture, Food and Rural Affairs								omafra.eanotices@ontario.ca
Nancy	Rutherford	Provincial Agencies	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship, Greater-Toronto Area and Central Southwest Ontario	Rural Planner (Acting)	1 Stone Road West	Guelph	ON	N1G 4Y2	226-962-2139	nancy.rutherford@ontario.ca
Gabriel	Kim	Provincial Agencies	Ministry of Municipal Affairs and Housing	Western Municipal Services Office	Planner	Exeter Road Complex 2nd Flr, 659 Exeter Rd	London	ON	N6E 1L3	519-860-1456	Gabriel.Kim@ontario.ca
Ken	Mott	Provincial Agencies	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy and Stewardship	Rural Planner (Acting)	Provincial Government Bldg 1st Flr, 59 Ministry Rd, PO Box 2004	Kemptville	ON	K0G 1J0	613-290-9112	Ken.Mott@ontario.ca



First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Geddes	Mahabir	Provincial Agencies	Ministry of Transportation	Design and Engineering Branch	Manager Highway Operations	659 Exeter Road, 2nd Floor	London	ON	N6E 1L3	519-873-4222	geddes.mahabir@ontario.ca
Sarah	Conway	Provincial Agencies	Ministry of Transportation	Policy, Planning and Agency Relations	Manager (Acting)	777 Bay Street, College Park 30th Floor, Suite 3000	Toronto	ON	M7A 2J8		sarah.conway@ontario.ca
Amanda	Rodek	Provincial Agencies	Ministry of Transportation	Corridor Management Office	Program Analyst	301 St. Paul Street	St. Catharines	ON	L2R 7R4	905-704-2916	Amanda.Rodek@ontario.ca
David	Marriott	Provincial Agencies	Ministry of Natural Resources and Forestry		Regional Planner	300 Water St., 4th Flr S	Peterborough	ON	K9J 3C8	705-313-0735	david.marriott@ontario.ca
Isabella	Guy	Provincial Agencies	Infrastructure Ontario		Co-op student						Isabella.Guy@infrastructureontario.ca
To whom it may concern		Provincial Agencies	Hydro One Networks Inc.								SecondaryLandUse@HydroOne.com
Meaghan	Klassen	Provincial Agencies	Ontario Provincial Police	Research and Program Evaluation Unit	Administrator	777 Memorial Avenue, 1st Floor	Orillia	ON	L3V 7V3	705-329-6256	meaghan.klassen@opp.ca
Lise	Chabot	Provincial Agencies	Ontario Ministry of Indigenous Affairs	Ministry Partnerships Unit	Manager	160 Bloor Street East, Suite 400	Toronto	ON	M7A 2E6	416-325-4044	lise.chabot@ontario.ca

## Conservation Authority

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Kim	Darroch	Conservation Authority	Essex Region Conservation Authority	Watershed Management Services	Team Lead, Planning Services	360 Fairview Avenue West, Suite 311	Essex	ON	N8M 1Y6	519-776-5209 ext. 347	kdarroch@erca.org
To whom it may concern		Conservation Authority	Essex Region Conservation Authority								planning@erca.org
Tian	Martin	Conservation Authority	Essex Region Conservation Authority	Watershed Management Services	Water Resources Engineer	360 Fairview Avenue West, Suite 311	Essex	ON	N8M 1Y6	519-776-5209 ext. 304	tmartin@erca.org
Dan	Jenner	Conservation Authority	Essex Region Conservation Authority	Watershed Management Services	Regulations Coordinator	360 Fairview Avenue West, Suite 311	Essex	ON	N8M 1Y6	519-776-5209 ext. 359	djenner@erca.org
Alicia	Good	Conservation Authority	Essex Region Conservation Authority		Watershed Planner	360 Fairview Avenue West, Suite 311	Essex	ON	N8M 1Y6	519-776-5209 ext. 3794	agood@erca.org
Katie	Stammler	Conservation Authority	Essex Region Conservation Authority		Source Water Protection Manager	360 Fairview Avenue West, Suite 311	Essex	ON	N8M 1Y6	519-776-5209 ext. 8688	kstammler@erca.org



## Municipal Contacts

Municipality/Organization	Name	Title	Phone 1	Phone 2	Address	City/Town	Province	Postal Code	Email
Town of Amherstburg	Michael Prue	Mayor	(519) 736-0012 Ext. 2244	(519) 992-5075	271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	mprue@amherstburg.ca
Town of Amherstburg	Chris Gibb	Deputy Mayor	(519) 981-7559		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	cgibb@amherstburg.ca
Town of Amherstburg	Molly Allaire	Councillor	(519) 796-9155		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	mallaire@amherstburg.ca
Town of Amherstburg	Peter Courtney	Councillor	(226) 348-6521		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	pcourtney@amherstburg.ca
Town of Amherstburg	Linden Crain	Councillor	(519) 560-1254		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	lcrain@amherstburg.ca
Town of Amherstburg	Donald McArthur	Councillor	(519) 981-4875		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	dmcarthur@amherstburg.ca
Town of Amherstburg	Diane Pouget	Councillor	(519) 736-2431		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	dpouget@amherstburg.ca
Town of Amherstburg	Valerie Critchley	CAO/Clerk	(519) 736-0012 Ext. 2228		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	vcritchley@amherstburg.ca
Town of Amherstburg	Kevin Fox	Municipal Clerk	(519) 736-0012 Ext. 2272		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	kfox@amherstburg.ca
Town of Amherstburg	Antonietta Giofu	Director of Infrastructure and Engineering Services	(519) 736-0012 Ext. 2320		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	agiofu@amherstburg.ca
Town of Amherstburg	Bruce Montone	Fire Chief	(519) 736-0012 Ext. 2241		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	bmontone@amherstburg.ca
Town of Amherstburg	Melissa Osborne	Deputy CAO / Director of Development Services	(519) 736-0012 Ext. 2137		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	mosborne@amherstburg.ca
Town of Amherstburg	Viktorya Paller	Executive Assistant to the Mayor and CAO	(226) 788-9827		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	vpaller@amherstburg.ca
Town of Amherstburg	Jennifer Ibrahim	Tourism Coordinator	(519) 730-1309		271 Sandwich Street South	Amherstburg	Ontario	N9V 2A5	jibrahim@amherstburg.ca
County of Essex	Hilda MacDonald	Warden	(519) 326-5761 Ext. 1102		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	macdonald@leamington.ca
County of Essex	Joe Bachetti	Deputy Warden	(519) 979-3339	(519) 990-2981	360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	jbachetti@tecumseh.ca
County of Essex	Gary McNamara	County Councillor	(519) 735-2184 Ext. 115	(519) 735-6654	360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	gmcnamara@tecumseh.ca
County of Essex	Larry Verbeke	County Councillor	(519) 326-5963	(519) 322-8775	360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	lverbeke@leamington.ca
County of Essex	Crystal Meloche	County Councillor	(519) 969-7770 Ext. 1391	(519) 818-6666	360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	cmeloche@lasalle.ca
County of Essex	Mike Akpata	County Councillor	(519) 969-7770 Ext. 1395	(519) 796-3472	360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	makpata@lasalle.ca





Municipality/Organization	Name	Title	Phone 1	Phone 2	Address	City/Town	Province	Postal Code	Email
County of Essex	Tracey Bailey	County Councillor	(519) 990-2472		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	Tbailey@Lakeshore.ca
County of Essex	Kirk Walstedt	County Councillor	(519) 723-2261		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	Kwalstedt@Lakeshore.ca
County of Essex	Dennis Rogers	County Councillor	(519) 990-8079		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	DRogers@kingsville.ca
County of Essex	Kimberly DeYong	County Councillor	(519) 817-6328		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	KDeYong@kingsville.ca
County of Essex	Sherry Bondy	County Councillor	(226) 724-2994		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	sbondy@essex.ca
County of Essex	Rob Shepley	County Councillor	(519) 791-1999		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	rshepley@essex.ca
County of Essex	Michael Prue	County Councillor	(519) 736-0012 Ext. 2244	(519) 992-5075	360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	mprue@amherstburg.ca
County of Essex	Chris Gibb	County Councillor	(519) 981-7559		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	cgibb@amherstburg.ca
County of Essex	Allan Botham	Director of Infrastructure and Planning	(519) 776-6441 Ext. 1397		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	ABotham@countyofessex.ca
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County of Essex	Mary Birch	Director of Council Services & Community Services/Clerk	(519) 776-6441 Ext. 1335		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	mbirch@countyofessex.ca
County of Essex	Sumaiya Habiba	Environmental Coordinator	(519) 776-6441 Ext. 1385		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	SHabiba@countyofessex.ca
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County of Essex	Katherine Herbert	Manager, Records and Accessibility- Deputy Clerk	(519) 776 6441 ext. 1353		360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	Khebert@countyofessex.ca
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County of Essex	Dee Blais				360 Fairview Avenue West	Essex	Ontario	N8M 1Y6	dblais@countyofessex.ca
County of Essex	Nithen Samuel	Environmental Coordinator	(519) 776 6441 ext. 1385		360 Fairview Avenue West, Suite 315	Essex	Ontario	N8M 1Y6	NSamuel@countyofessex.ca
Invest WindsorEssex	Marion Fantetti	Business Ombudsman	(226) 345-1785		119 Chatham Street West, Unit #100	Windsor	Ontario	N9A 5M7	mfantetti@investwindsor.essex.com
Windsor-Essex Regional Chamber of Commerce	Rakesh Naidu	President & CEO	(519) 966-3696 Ext. 222		2575 Ouellette Place	Windsor	Ontario	N8X 1L9	rnaidu@windsor.essexchamber.org
Amherstburg Chamber of Commerce	Ann Creery	General Manager	(519) 736-2001		61 Richmond Street	Amherstburg	Ontario	N9V 1G1	amherstburgchamber@gmail.com



## Indigenous Contacts

Title	First Name	Surname	First Nation	Position	Phone	Address	City	Province	Postal Code	E-Mail	Cc Email
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	Courtney	Jackson	Aamjiwnaang First Nation	Consultation Worker		978 Tashmoo Avenue	Sarnia	ON	N7T 7H5	cjackson@aamjiwnaang.ca	
	Janet	Macbeth	Bkejwanong (Walpole Island First Nation)	Consultation Manager		117 Tahgahoning Road	Wallaceburg	ON	N8A 4K9	Janet.Macbeth@wifn.org	larissa.wrightman@wifn.org
	Zack	Hamm	Caldwell First Nation	Consultation Coordinator		14 Orange Street	Leamington	ON	N8H 1P5	ecd.manager@caldwellfirstnation.ca	ecc@caldwellfirstnation.ca; cec@caldwellfirstnation.ca
	Consultation		Chippewas of Kettle and Stony Point First Nation			6427 Indian Lane	Lambton Shores	ON	N0N 1J1	consultation@kettlepoint.org	Verna.George@kettlepoint.org
	Jordan	George	Chippewas of Kettle and Stony Point First Nation	Communications Specialist		6247 Indian Lane	Chippewas of Kettle and Stony Point	ON	N0N 1J1	Jordan.George@kettlepoint.org	Verna.George@kettlepoint.org
	Jennifer	Mills	Chippewas of the Thames First Nation			320 Chippewa Road	Muncey	ON	N0L 1Y0	jmills@cottfn.com	
	Environment		Oneida Nation of the Thames			2212 Elm Avenue	Southwold	ON	N0L 2G0	environment@oneida.on.ca	
	Brandon	Doxtator	Oneida Nation of the Thames			2212 Elm Avenue	Southwold	ON	N0L 2G0	environment@oneida.on.ca	

## Directly Affected Stakeholder Contacts

First Name	Surname	Company	Title	Address	City/Town	Prov	Postal Code	Telephone	E-Mail
Carol	Verstraete	Ontario Federation of Agriculture	Member Service Representative - Essex, Kent			ON		518-809-3040	carol.verstraete@ofa.on.ca
Paul	Nairn	Ontario Federation of Agriculture	Manager - Western Region			ON		519-272-5533	paul.nairn@ofa.on.ca
To whom it may concern		Amherstburg Community Foundation		PO Box 86	Amherstburg	ON	N9V 2Z2	519-890-1932	info@amherstburgfoundation.org
Stephanie	Pouget	Amherstburg Historical Site Association	Curator	214 Dalhousie Street	Amherstburg	ON	N9V 1W4	519-736-2511	parkhousemuseum@bellnet.ca
To whom it may concern		Wings Wildlife Rehabilitation Centre		5281 Middleside Road, County Road 10	Amherstburg	ON	N9V 2Y9	519-736-8172	wingsrehabcentre@gmail.com
Rodney	Ferriss	AMA Sportsman Association	President	468 Lowes Side Road	Amherstburg	ON	N9V 2Y8	519-736-5706	info@amasportsmen.com
						ON			@gmail.com
					Amherstburg	ON	N9V 4B2		



First Name	Surname	Company	Title	Address	City/Town	Prov	Postal Code	Telephone	E-Mail
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███	██████			██████████	Amherstburg	ON	N9V 4C4	██████████	██████████@gmail.com
██████████	██████			██████████	Amherstburg	ON	N9V 4C4	██████████	██████████@yahoo.com
███	██████			██████████	Amherstburg	ON	N9V 1N3	██████████	██████████@bell.net



## **Appendix B.3 Newspaper Notice Tear Sheets**



# Essex County council gets update on asset management plan

By Ron Giofu

Essex County council has received an update on its asset management plan.

The update came before county council at the Feb. 1 meeting with director of financial services/treasurer Sandra Zwiers noting it took a wide range of county administration to compile the report. She said many municipalities across Ontario use consultants to create the update but they did it in-house. She added "it affords us a greater depth of understanding" by doing it in such a fashion.

Manager of accounting-administration/deputy treasurer Heidi McLeod went over the update with elected officials during the meeting.

"We're admittedly late in delivering this report but we felt it was important to improve the quality of our data so that the report provides a more accurate representation of the status of our asset collection and our future funding requirements," said McLeod.

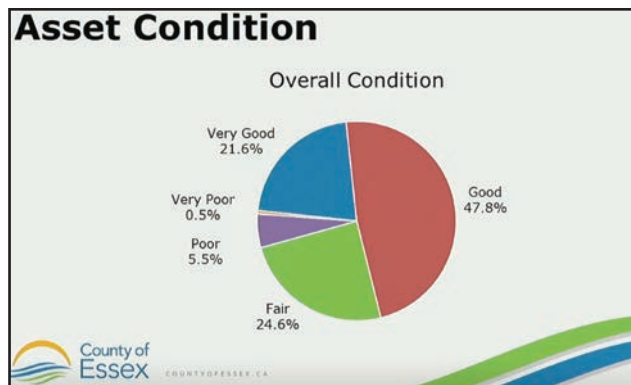
The county's total infrastructure value is over \$300 million, she indicated, with the report only including core infrastructure assets including roads, bridges, culverts and stormwater mains. Overall asset condition sees 47.8 per cent of it in good condition, 24.6 per cent in fair condition and 21.6 in very good condition, according to the report. Six per cent is in poor or very poor condition.

"We should be proud of the fact the majority of our assets are in good to very good condition," she said.

McLeod said overall asset health had a grade of C+ in 2017 while the 2022 grade saw it go to A. Broken down into segments, the road network went from a C+ to an A, bridges and culverts went from a B to an A while storm sewers went from B+ to A+.

"I'm not suggesting the roads were horrible before, but recognizing that our data quality has improved, it is a credit to our road maintenance operations," she said, adding very poor or poor roads are scheduled to be upgraded within the next five years.

The county's annual requirement for its infrastructure in its core assets is just over \$27 million, with an



County council received an update to its asset management plan during its meeting last Wednesday night. Screenshot

annual expenditure of \$13.4 million. The annual deficit is just under \$13.7 million, she added. The current investment rate is at 49.5 per cent, added McLeod.

"The funding gap of almost \$14 million each year means we aren't spending enough to maintain the current level of service which may put our future asset health and performance at risk," said McLeod, adding "slow and calculated steps" are necessary to close the gap.

Tecumseh Mayor Gary McNamara stated while they will likely not get to 100 per cent investment needed into roads, they need to do better than 49.5 per cent.

Understanding future replacement costs is a better planning tool as it looks at current pricing trends, inflation and regional supply chain issues, McLeod continued.

The county road network consists of 1,356 kilometres of varying surfaces, and does not account for future expansion, McLeod added. Tar and chip roads will be eliminated as they will have asphalt surfaces within five years, she said, noting there are 32 kilometres of tar and chip roads in Essex County's road network. There are also 254.2 kilometres of CWATS surfaces, she stated.

Of the 84 bridges and 126 culverts with a span of three-metres or more, there are 14 bridges and two culverts shared with lower tier municipalities. Approximately 73 per cent of bridges were in good condition, 22 per

cent in fair condition and four per cent in very good condition but when it comes to culverts, 34 per cent are in fair condition, 25 per cent in very good condition, 22 per cent in poor condition and 16 per cent in good condition.

Sixty-one culverts have not been replaced since being downloaded from the province. Expected useful life of culverts have been prolonged due to higher quality construction materials, she said.

Storm water mains are usually a local municipality issue, McLeod stated, but there is a 4.8-kilometre county network that has an average condition of very good.

LaSalle Deputy Mayor Michael Akpata asked about the anticipated strategy due to inflation. He wanted to hear about a long-term fiscal strategy about inflationary pressures. Zwiers said the report details with replacement values from 2021 so "admittedly, we already have a lag." The plan contains estimates to "give us a ballpark" and Zwiers said the figures are expected to change annually, with those changes being reflected in annual budgets.

Akpata also asked if the infrastructure shortfall is acceptable with Zwiers saying "band aid" solutions aren't reflected in the report but while the \$14 million is "ominous," there is a contribution to the maintenance of assets.

"The goal of 100 per cent funding is not a goal that I personally have and I don't think any treasurer across the province is going to suggest the municipal property tax is going to get us to 100 per cent funding," she said.

Zwiers hoped to "move the needle" over time but the asset quality has to be monitored and the dollars spent over the last five years in the maintenance of the assets are showing success.

"We do have to keep an eye on that deficit and work towards reducing it," she said.

The province has capital grant programs, Zwiers added, and she said the county wants to equally access those dollars. A road rationalization study is anticipated in late 2024, director of infrastructure services Allan Botham.

## Enbridge's donation to Amherstburg Fire Department allows for purchase of new piece of equipment

Continued from Page 1

"The options are endless with this," said D'Amore.

In the past, local firefighters would have to travel elsewhere for training or use a doorway that was in a home that was given to the fire department for training before the home was demolished.

When the doorway was used, it couldn't be used again but D'Amore said the new equipment means only a 2"x2" piece of wood needs replacement.

"It's in-house," said deputy chief Ron Meloche. "We don't have to travel."

Montone stated it allows the fire department to achieve additional efficiencies as the forcible entry door simulator comes at no cost to the taxpayers while it gives firefighters more opportunities to stay close to home to get the training required.

Firefighters from surrounding departments could also come to Amherstburg to train, he indicated.

"It's more flexible for us," added Meloche, adding it would cost \$2,000 per person for one week of school to send them out-of-town.

The deputy chief called it "a great partnership" between the Amherstburg Fire Department and Enbridge.

"The more we bring in-house, the more partnerships we create, the more beneficial it is for us," said Meloche.

Ian Robertson, a supervisor with Enbridge's solar properties that includes the Amherstburg Solar Farm, said they know safety is key and Enbridge wants to ensure local fire departments have the equipment they require.

"That's important for us," said Robertson. "Safety is always a top priority for us."

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**Enbridge Gas Inc.**  
**Notice of Study Commencement and Information Sessions**

**Boblo Island Community Expansion Project**

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Boblo Island Community Expansion Project (the "Project") to supply the community of Boblo Island with affordable natural gas. The Project is located in the Town of Amherstburg, Essex County, Ontario.

The Project will involve the construction of approximately 2.9 kilometres (km) of a combination of 2-inch plastic and 4-inch steel pipeline. The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg. The pipeline will cross the Detroit River (approximately 600m) to reach Boblo Island. The distribution system on the island will be approximately 2.3 km in length. The Project is planned to be within the existing municipal road Right-of-Way (RoW) with the potential for Temporary Working Space (TWS). The proposed pipeline route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers. For further details, please refer to the map.



Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, two Information Session options will be held:

**In-person Information Session**  
 Wednesday, February 22, 2023  
 5:00 PM - 8:00 PM  
 Libro Credit Union Centre  
 3295 Meloche Road, Amherstburg, ON

**Virtual Information Session**  
 Tuesday, February 21, 2023, to Tuesday, March 7, 2023  
<https://www.solutions.ca/Enbridge-BobloIsland>


A copy of the Information Session story boards will be available for viewing on the Enbridge Gas project website provided below. A questionnaire will be available as part of the Information Sessions, and you will have the opportunity to provide comments and/or questions about the proposed Project. Input received during the Information Sessions will be used to develop site-specific environmental protection and mitigation measures for the Project. Input and comments for the Project should be provided by **March 23, 2023**.

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For any questions or comments regarding the Environmental Study or the proposed Boblo Island Community Expansion Project, please reach out to:

**Michael Candido**  
 Environmental Scientist  
 Stantec Consulting Ltd.  
**Telephone:** (519) 585-3439  
**Email:** BobloEA@stantec.com

Or visit the project website at: <https://www.enbridgegas.com/BobloIsland>





# Season ends for boys b-ball team

By Ron Giofu

The season is over for the North Star Wolves senior boys basketball team.

The Wolves opened the playoffs Monday afternoon in Kingsville. It was the WECSSAA "AA" preliminary round and the Wolves fell to the Cavaliers 59-43. The loss eliminated North Star.

The Wolves had to hit the road Monday due to a 66-56 loss on home court to the Kingsville Cavaliers last Wednesday evening. That came 24 hours after a 76-53 win at L'Essor where Andrew Chambers scored 19 points.

The winner of last Wednesday's game would host the playoff game the two teams played. It also meant the Wolves finished the 2022-23 WECSSAA Tier 2 regular season with a 5-5 record while Kingsville was able to finish 6-4.

"After Tuesday's game at L'Essor, we came back with a good attitude," said North Star head coach Ben Pelger. "We hoped we were going to come out strong against Kingsville."

Pelger said they are similar teams statistically and expected the regular season finale against Kingsville to "be a really good game." Kingsville's late surge from behind the three-point line led to the Wolves demise in that game.

"We started off strong and led the game until the last quarter," said Pelger. "In the end, (Kingsville) came out strong in the last quarter and started hitting threes. We couldn't adjust in time."

The Wolves have a solid offense but defense has been problematic, he indicated. They score over 50 points in most games but they have to do some adjustments on defense, said Pelger, adding they tried to play man-to-man against

Kingsville the first time and were not expecting the Cavaliers to hit three-pointers like they did last Wednesday evening.

Last Wednesday evening's game was the last regular season game for the senior players on their home court. Pelger said he wanted to thank Colin Hebert, Daniel Morujo, Noah Chammat, Gabriel Van Essen, Amadeus Yousif, DeLuca Jackson and Declan Valdhuis.

The 5-5 regular season record was an improvement over previous seasons, so Pelger said he was pleased with the season.

"For us, it's a good record," he said. "For so many years, we were struggling. For us, making the playoffs is a success. We're hoping to build on this for next year."

The Wolves had ten players this year and Pelger hopes more players come out next season.



North Star's Colin Hebert (1) puts up a shot during his team's game against Kingsville last Wednesday evening.

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Environmental Scientist  
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Telephone: (519) 585-3439  
Email: BobloEA@stantec.com

Or visit the project website at: <https://www.enbridgegas.com/BobloIsland>



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# Canada's first all-Black battalion highlighted at military museum

By Mark Ribble

The Kingsville Military Museum was the host of a recent talk by vice president of the Amherstburg Freedom Museum, Barbara Porter.

Porter came to talk about the No. 2 Construction Battalion of the Canadian Expeditionary Force (CEF), Canada's only all-black battalion during the First World War and the largest all-black battalion in Canadian history.

As part of Black History Month, volunteers at the Kingsville Military Museum had made the effort to research local Black residents who served in WWI, WWII, Korea and more recent conflicts and had many articles and photos on display in the museum.

The contribution to the war effort by Windsor and Essex County Black soldiers had gone unrecognized for many years, but Barbara Porter was able to attend a ceremony last summer in Nova Scotia that honoured the No. 2 Construction Battalion, where a formal apology was given by Prime Minister Trudeau.

In August 1914, thousands of Canadian men attended recruiting offices across the nation to volunteer for the war effort as things ramped up in Europe.

According to the Canadian Encyclopedia website, "many Black men tried to enlist as well but were rejected. Some were told that this was a white man's war, while others were told that their services were not required."



Barbara Porter answers a question during a recent presentation. Southpoint Sun photo

In fact, many white soldiers told recruiting officers and battalion commanders that they refused to serve with Black men."

In Windsor in 1916, several local Black men had tried to enlist and when that didn't happen, they decided to start a recruitment drive.

Barbara Porter's great grandfather — Alfred Augustus Tudor — had been born in Kentucky and moved to the Windsor area. He joined the ranks of the battalion after having spent three years with the American Cavalry.

Barbara Porter's great uncles — James and Jerome Lockman — were instrumental in the recruitment and about 1000 people lined the streets of Windsor to bid farewell to the 54 men from this area who joined the newly formed No. 2 Construction Battalion.

The battalion was responsible for digging trenches, laying barbed wire and building roads and bridges — among other duties.

"Nowadays, these soldiers would be called engineers," said Barbara.

The No. 2 Battalion set the groundwork for white Canadian soldiers to fight the war in Europe, but Porter says it was never mentioned in the history books.

"As a child watching TV, I wondered why Black soldiers were not in any of the war movies," she said. "I knew that stories from my family said otherwise."

Porter said the battalion was known as Canada's greatest secret and she set out to get them properly recognized.

Her trip to Truro last summer gave her some hope that the battalion would soon become part of school curriculum.

"The men of the No. 2 Construction Battalion need to be recognized," she said. "The Prime Minister said he would make sure of that."

Porter received a \$20 silver commemorative coin along with that promise and she holds it near and dear to her heart on behalf of those family members who served their nation.

About two dozen people showed up to hear Porter's presentation, including Kingsville Mayor Dennis Rogers, who thanked her for such an informative morning on behalf of the town.

## More WSO concerts planned for Amherstburg as the year goes on

Continued from Page 6

The "Family Concert Series" is sponsored by the Dan Gemus Family with Richard and Colleen Peddie sponsoring Saturday afternoon's concert in Amherstburg.

"It was just beautiful. Kids were dancing, they loved it," said Bunde.

The "Family Concert Series" has been an initiative of the WSO since 2008 and this year, there are four shows planned.

The remaining show is in April 1 at the Capitol Theatre in Windsor and the "Tour Mexico with Francisco" is a nod to Hernandez Bolanos, who is from Mexico.

"That will be a whole lot of fun," said Bunde.

Bunde added there will be more WSO events in Amherstburg this year, with dates to be announced.

"We love to come out," she said. "Everyone loves Amherstburg."



The WSO performed "Green Eggs and Ham" at Christ Church last Saturday afternoon.

There will also be other concerts in and around Windsor-Essex County during the year. Details are at [www.windsorsymphony.com](http://www.windsorsymphony.com).

community," said Bunde. Bunde praised the work of Armstrong and Wearne.

"It was a whole lot of fun having them with the orchestra," said Bunde.

### Enbridge Gas Inc. Notice of Study Commencement and Information Sessions

#### Boblo Island Community Expansion Project

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Boblo Island Community Expansion Project (the "Project") to supply the community of Boblo Island with affordable natural gas. The Project is located in the Town of Amherstburg, Essex County, Ontario.

The Project will involve the construction of approximately 2.9 kilometres (km) of a combination of 2-inch plastic and 4-inch steel pipeline. The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg. The pipeline will cross the Detroit River (approximately 600m) to reach Boblo Island. The distribution system on the island will be approximately 2.3 km in length. The Project is planned to be within the existing municipal road Right-of-Way (RoW) with the potential for Temporary Working Space (TWS). The proposed pipeline route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers. For further details, please refer to the map below.

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**In-person Information Session**  
Monday, March 20, 2023  
5:00 PM - 8:00 PM  
Libro Credit Union Centre  
3295 Meloche Road, Amherstburg, ON

**Virtual Information Session**  
Tuesday, February 21, 2023, to Tuesday, March 7, 2023  
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A copy of the Information Session story boards will be available for viewing on the Enbridge Gas project website provided below. A questionnaire will be available as part of the Information Sessions, and you will have the opportunity to provide comments and/or questions about the proposed Project. Input received during the Information Sessions will be used to develop site-specific environmental protection and mitigation measures for the Project. Input and comments for the Project should be provided by **April 19, 2023**.

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For any questions or comments regarding the Environmental Study or the proposed Boblo Island Community Expansion Project, please reach out to:

**Michael Candido**  
Environmental Scientist  
Stantec Consulting Ltd.  
Telephone: (519) 585-3439  
Email: [BobloEA@stantec.com](mailto:BobloEA@stantec.com)



Or visit the project website at:  
<https://www.enbridgegas.com/BobloIsland>



## Memories of Yesterday...

Photos courtesy of the Marsh Historical Collection  
80 Richmond Street Amherstburg  
519-736-9191 • [www.marshcollection.org](http://www.marshcollection.org)



Safety Patrols at Amherstburg Public School, circa 1950. The group stands outside of the former school building on Richmond Street, now the location of Richmond Terrace Nursing Home. Patrols have been identified as follows: Standing (left to right - Nancy Bates, Marilyn Bouffard, Joanne Jacobs, Norma Anderson, Anna May Richards, and Joan McCurdy. Front row - unidentified, unidentified, Bill Smith, Gord Zimmerman, and Eddie Ryan.



# PC MPPs tout "Your Health Act," state it will reduce wait times for publicly funded surgeries and diagnostics

By Ron Giofu

Local Progressive Conservative MPPs believe a recently introduced bill will have a dramatic impact in reducing wait times for publicly funded surgeries and diagnostics.

The Ontario government introduced the Your Health Act, 2023 Feb. 21, which outlines the province's next steps in its plan to reduce wait times for surgeries, procedures and diagnostic imaging, while enabling its new "As of Right" rules to automatically recognize the credentials of health care workers registered in other provinces and territories.

"With the Your Health Act, Ontario is boldly breaking with a status quo that has stifled innovation and struggled to respond to growing challenges and changing needs," said Sylvia Jones, Deputy Premier and Minister of Health in a press release. "Instead, our government is being bold, innovative and creative. We're making it easier and faster for people to connect to convenient care closer to home, including and especially the surgeries they need to maintain a high quality of life."

Based on feedback from frontline partners, the Ontario government states the Your Health Act, 2023 will, if passed, enhance guardrails to integrate community surgical and diagnostic centres into the health system, enhance quality standards and oversight while protecting the stability of doctors, nurses and other health-care workers in public hospitals and other health-care settings. The legislation will also, if passed, put into law that people will always access insured services at community surgical and diagnostic centres with their OHIP card and never their credit card, consistent with the Canada Health Act.

Citing cataract procedures as example, Essex MPP Anthony Leardi said prior to the pandemic, people who needed such surgeries would have to have them done in hospitals and face longer wait times. When COVID-19 hit, such procedures were allowed to be done in offices and surgical centres like the Windsor Surgical Centre. Passing the Your Health Act would allow that to continue, said Leardi.

"It worked so well, we want to make it permanent," he said.

Leardi said instead of going to a hospital, a person could go to a clinic like that of Dr. Fouad Tayfour and it would be covered by OHIP.

As the province expands the types of surgeries and procedures being done in the community to include hips and knees and orthopedics, the government stated it will ensure the new community surgical and diagnostic centres have in place the highest quality standards with strong oversight. The Your Health Act, 2023 will, if passed, enable the province to designate one or



RTT PHOTO BY RON GIOFU

Ministry of Health Parliamentary Assistant Dawn Gallagher Murphy was in Windsor visiting the Windsor Surgical Centre talking about "Your Health Act" with Dr. Fouad Tayfour and local PC MPPs. From left: Windsor-Tecumseh MPP Andrew Dowie, Essex MPP Anthony Leardi, Dr. Tayfour, Murphy, Lisa Finaldi-Ingratta, Mila Klomp and George Granada.

more expert organizations as inspecting bodies of the centres. To be completed before hips and knees and orthopedics are expanded to community surgical and diagnostic centres, these expert organizations will work with Ontario Health and the Ministry of Health to establish, maintain and publish quality and safety standards and establish schedules for regular inspections of the centres.

Leardi said a second benefit is if a surgery is done in a clinic, it frees up resources at area hospitals.

"Now that you are not going to a hospital, someone who needs a hospital bed can get a hospital bed," he said.

The Act would benefit areas like Northern Ontario, he said, and allow people to stay closer to home instead of driving "hours and hours" to get services.

"They'll be able to get surgeries closer to home when they need it," said Leardi.

The Your Health Act, 2023 will also, if passed, require centres applying for a licence to provide details of its quality assurance and continuous quality improvement programming, including policies for infection prevention and

control. Also, if an individual believes they did not receive the highest quality care, the Your Health Act, 2023 will, if passed, also mandate that every community surgical and diagnostic centre must have a process for receiving and responding to patient complaints.

The Your Health Act, 2023 will, if passed, enable the recently announced "As of Right" rules that allow health care workers registered in other provinces and territories to immediately start working and caring for people in Ontario

without having to first register with one of Ontario's health regulatory colleges. These changes will help health-care workers overcome bureaucratic delays that have made it difficult to practice in Ontario. Leardi highlighted that portion of the bill and said it will allow medical professionals who trained in other parts of Canada to receive automatic recognition and not need any additional training or certification.

"We are ready to take you in," said Leardi.

The legislation will also, if passed, strengthen protections for personal health information and data as the province puts in place new models to better inform policy and program planning to improve services. These changes will support improvements to the health care system by integrating data while enhancing privacy protection, transparency and accountability for organizations that collect and use data.

Newmarket-Aurora MPP and Minister of Health Parliamentary Assistant Dawn Gallagher Murphy, Windsor-Tecumseh MPP Andrew Dowie and Leardi visited Tayfour's clinic recently. Murphy said hip and knee replacement surgeries have a two-year waiting list in her riding and she believes passage of the bill will lessen that. Tayfour indicated he is in favour of the proposed legislation, adding he has patients coming from as far as London and Sarnia.

"The wait list there is longer than it is here," he said.

## Enbridge Gas Inc.

### Notice of Study Commencement and Information Sessions

#### Boblo Island Community Expansion Project

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Boblo Island Community Expansion Project (the "Project") to supply the community of Boblo Island with affordable natural gas. The Project is located in the Town of Amherstburg, Essex County, Ontario.

The Project will involve the construction of approximately 2.9 kilometres (km) of a combination of 2-inch plastic and 4-inch steel pipeline. The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg. The pipeline will cross the Detroit River (approximately 600m) to reach Boblo Island. The distribution system on the island will be approximately 2.3 km in length. The Project is planned to be within the existing municipal road Right-of-Way (RoW) with the potential for Temporary Working Space (TWS). The proposed pipeline route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers. For further details, please refer to the map below.

Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, two Information Session options will be held. As a result of inclement weather, the planned In-person Information Session on February 22, 2023 was cancelled and has been rescheduled as follows:

#### In-person Information Session

Monday, March 20, 2023  
5:00 PM - 8:00 PM  
Libro Credit Union Centre  
3295 Meloche Road, Amherstburg, ON

#### Virtual Information Session

Tuesday, February 21, 2023, to Tuesday, March 7, 2023

<https://www.solutions.ca/Enbridge-BobloIsland>

A copy of the Information Session story boards will be available for viewing on the Enbridge Gas project website provided below. A questionnaire will be available as part of the Information Sessions, and you will have the opportunity to provide comments and/or questions about the proposed Project. Input received during the Information Sessions will be used to develop site-specific environmental protection and mitigation measures for the Project. Input and comments for the Project should be provided by April 19, 2023.

As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study for the Project. The Environmental Study will fulfill the requirements of the Ontario Energy Board's (OEB) "Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)". It is anticipated that an Environmental Report for the study will be completed in June 2023, after which Enbridge Gas will file an application to request an OEB Leave to Construct (LTC) for the Project. Should the OEB find the Project to be in the public's interest, construction is anticipated to commence as early as Q2 2024.

For any questions or comments regarding the Environmental Study or the proposed Boblo Island Community Expansion Project, please reach out to:

Michael Candido  
Environmental Scientist  
Stantec Consulting Ltd.  
Telephone: (519) 585-3439  
Email: BobloEA@stantec.com



Or visit the project website at:  
<https://www.enbridgegas.com/BobloIsland>

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## **Appendix B.4 Notification Letters**





Stantec Consulting Ltd.  
300W-675 Cochrane Drive, Markham ON L3R 0B8



February 8, 2023

«FIRST\_NAME» «SURNAME», «POSITION»  
«ORGANIZATION»  
«Address»  
«CityTown», «PROVINCE» «Postal\_Code»  
«Email»  
«Cc»

SENT VIA EMAIL

Dear «FIRST\_NAME» «SURNAME»

**Reference: Enbridge Gas Inc. – Boblo Island Community Expansion Project, Notice of Study Commencement and Information Sessions**

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Boblo Island Community Expansion Project (the “Project”) to supply the community of Boblo Island in the Town of Amherstburg, Essex County, Ontario with affordable natural gas. The Project will involve the construction of approximately 2.9 kilometres (km) of a combination of 2-inch plastic and 4-inch steel pipeline. The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg. The pipeline will cross the Detroit River (approximately 600m) to reach Boblo Island. The distribution system on the island will be approximately 2.3 km in length. The Project is planned to be within the existing municipal road Right-of-Way (RoW) with the potential for Temporary Working Space (TWS). The proposed pipeline route has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers. For further details, please refer to the attached Figure 1.

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As an agency with jurisdiction or a potential interest in developments in the Study Area defined on the attached Figure 1, you are invited to provide or coordinate comments regarding the proposed Project. Specifically, Stantec is seeking information regarding planning principles or guidelines implemented by your agency that may affect routing, construction, and/or operation of the proposed Project. Stantec is also seeking collection of primary and secondary data to help compile an environmental and socio-economic inventory in the Study Area.

February 8, 2023

«FIRST\_NAME» «SURNAME»

Page 2 of 2

**Reference: Enbridge Gas Inc. – Boblo Island Community Expansion Project, Notice of Study Commencement and Information Sessions**

To support the assessment process, we also request you share information regarding other proposed developments in the Study Area. This information will be incorporated into the Environmental Study and related report as a component of the cumulative effects assessment. **Please contact us to discuss the most efficient way to obtain this information.**

Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, two Information Session options will be held.

<b>In-person Information Session</b>	<b>Virtual Information Session</b>
Wednesday, February 22, 2023 5:00 PM – 8:00 PM Libro Credit Union Centre 3295 Meloche Road Amherstburg, ON	Tuesday, February 21, 2023 to Tuesday, March 7, 2023 <a href="https://www.solutions.ca/Enbridge-BobloIsland">https://www.solutions.ca/Enbridge-BobloIsland</a>
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We kindly request that input and comments regarding the Project are provided by **March 23, 2023**.

If you have questions or comments regarding the Boblo Island Community Expansion Project, please email the Project team at [BobloEA@stantec.com](mailto:BobloEA@stantec.com) or contact the undersigned.

Regards,

**Michael Candido**  
Stantec Consulting Ltd.  
Environmental Scientist  
Assessment and Permitting  
Direct: 519-585-3439

Attachment: Figure 1 – Study Area  
c. Sarah Kingdon-Benson, Enbridge Gas Inc.





February 7, 2023

«FIRST\_NAME» «SURNAME», «POSITION»  
«ORGANIZATION»  
«Address»  
«CityTown», «PROVINCE» «Postal\_Code»  
«Email»  
«Cc»

SENT VIA EMAIL

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February 9, 2023

«FIRST\_NAME» «SURNAME»

Page 2 of 2

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Stantec Consulting Ltd.  
Environmental Scientist  
Assessment and Permitting  
Direct: 519-585-3439

Attachment: Figure 1 – Study Area  
c. Sarah Kingdon-Benson, Enbridge Gas Inc.

Sample email sent to Agency groups for made up in-person Information Session.

**From:**  
**To:**  
**Cc:**  
**Subject:** \*\*In-person Public Information Session Rescheduled – Enbridge Gas Inc. – Boblo Island Community Expansion Project\*\*  
**Date:** Friday, March 3, 2023 10:53:44 AM

---

Good morning,

As a result of inclement weather, the planned In-person Information Session on February 22, 2023 was cancelled and has been rescheduled for **March 20, 2023, from 5 – 8 PM** at the same location - Libro Credit Union Centre, 3295 Meloche Road, Amherstburg, ON.

The Virtual Information Session remains unchanged and available from **February 21, 2023 to March 7, 2023**.

We kindly request input and comments regarding the Project are provided by **April 19, 2023**.

Thank you,

**Matthew Gasser** BES  
Environmental Consultant

[Matthew.Gasser@stantec.com](mailto:Matthew.Gasser@stantec.com)

Stantec  
300W-675 Cochrane Drive  
Markham ON L3R 0B8



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**Please consider the environment before printing this email.**



February 6, 2023

**Attention:** «TITLE» «FIRST\_NAME» «SURNAME», «POSITION»  
«ORGANIZATION»  
«ADDRESS»  
«CITYTOWN» «POSTAL\_CODE»  
«EMAIL»

Dear «FIRST\_NAME» «SURNAME»,

**Reference: Enbridge Gas Inc. – Boblo Island Community Expansion Project, Notice of Study Commencement and Information Sessions**

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Stantec is presently compiling an environmental, socio-economic, and archaeological / cultural heritage inventory of the Study Area, defined on the attached Figure 1. As an Indigenous community with a potential interest in Study Area, we are inviting «ORGANIZATION» to provide comments and feedback regarding the proposed Project. Specifically, we are seeking information about areas that may be culturally significant to your community in the established Study Area and information about potential impacts that the Project may have on asserted or established Indigenous and treaty rights, and any measures for mitigating those adverse impacts.

As part of the Environmental Study, Enbridge Gas is also in the process of contacting the following agencies:

- Indigenous and Northern Affairs Canada; and
- Ministry of Indigenous Affairs.



**Reference: Enbridge Gas Inc. – Boblo Island Community Expansion Project, Notice of Study Commencement and Information Sessions**

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Input received during the Information Sessions will be used to develop site specific environmental protection or mitigation measures for the Project.

Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in meeting with the «ORGANIZATION» to share Project related information, should you wish. If you have any questions, would like to provide feedback, share knowledge, or would be interested in setting up a briefing on this Project please feel free to contact me directly. We look forward to engaging with the «ORGANIZATION» to ensure your interests are being considered and represented.

We kindly request that initial input and comments regarding the Project are provided by your community by **March 23, 2023**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation process for the Project.

If you have questions or concerns regarding the Boblo Island Community Expansion Project, please reach out to me at [lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com) or 519-852-3474.

Yours truly,

**Enbridge Gas Inc.**

**Lauren Whitwham**

Attachment: Figure 1 – Study Area

c. Michael Candido, Stantec Consulting Ltd.  
Sarah Kingdon-Benson, Enbridge





February 6, 2023

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«ORGANIZATION»  
«ADDRESS»  
«CITYTOWN» «POSTAL\_CODE»  
«EMAIL»

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Consultation with Indigenous communities and engagement with landowners, government agencies, the general public, and other interested persons is an integral component of the planning process. As such, two Information Session options will be held. Enbridge Gas is happy to meet with interested Indigenous communities outside of the sessions noted below.

<b>In-person Information Session</b>	<b>Virtual Information Session</b>
Wednesday, February 22, 2023 5:00 PM – 8:00 PM Libro Credit Union Centre 3295 Meloche Road Amherstburg, ON	Tuesday, February 21, 2023, to Tuesday, March 7, 2023 <a href="https://www.solutions.ca/Enbridge-BobloIsland">https://www.solutions.ca/Enbridge-BobloIsland</a>
A questionnaire will be available as part of the Information Sessions and you will have the opportunity to provide comments and/or questions about the proposed Project. In addition, a copy of the Information Session story boards will be available on the Project website at: <a href="https://www.enbridgegas.com/BobloIsland">https://www.enbridgegas.com/BobloIsland</a>	

Input received during the Information Sessions will be used to develop site specific environmental protection or mitigation measures for the Project.

Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in meeting with the «ORGANIZATION» to share Project related information, should you wish. If you have any questions, would like to provide feedback, share knowledge, or would be interested in setting up a briefing on this Project please feel free to contact me directly. We look forward to engaging with the «ORGANIZATION» to ensure your interests are being considered and represented.

We kindly request that initial input and comments regarding the Project are provided by your community by **March 23, 2023**. Please let us know if you are unable to respond by this date but are interested in participating in the consultation process for the Project.

If you have questions or concerns regarding the Boblo Island Community Expansion Project, please reach out to me at [lauren.whitwham@enbridge.com](mailto:lauren.whitwham@enbridge.com) or 519-852-3474.

Yours truly,

**Enbridge Gas Inc.**

**Lauren Whitwham**

Attachment: Figure 1 – Study Area

c. Michael Candido, Stantec Consulting Ltd.  
Sarah Kingdon-Benson, Enbridge

*Sample email sent to Indigenous groups for made up in-person Open House.*

**From:**  
**To:**  
**Cc:**  
**Subject:** Open House Date: Boblo Island Community Expansion  
**Date:** Tuesday, March 7, 2023 2:14:02 PM  
**Attachments:**

---

Hi there,

Hope all is well.

Due to inclement weather, Enbridge Gas had to cancel the in-person Open House for Boblo Island Community Expansion project that was to occur on March 22, 2023. The new session will take place on Monday, March 20, 2023. Please find attached the information on the new date of the session.

The virtual Open house is closes today. I have enclosed the slides for your review if you didn't get a chance to review. Please direct any questions on the information in these slides over to me.

I look forward to our meeting on March 28 to further discuss this Project.

Thanks Zack. Take care,  
Lauren

**Lauren Whitwham**

Senior Advisor, Community & Indigenous Engagement, Eastern Region

**Public Affairs, Communications & Sustainability**

—  
**ENBRIDGE INC.**

TEL: 519-667-4100 x 5153545 | CELL: 519-852-3474 | lauren.whitwham@enbridge.com  
109 Commissioners Road West, London, ON N6J 1X7

**Safety. Integrity. Respect. Inclusion.**

**Caution:** This email originated from outside of Stantec. Please take extra precaution.

**Attention:** Ce courriel provient de l'extérieur de Stantec. Veuillez prendre des précautions supplémentaires.

**Atención:** Este correo electrónico proviene de fuera de Stantec. Por favor, tome precauciones adicionales.



**Enbridge Gas**

Sponsored · 



Join us at our information session, where you can learn more about the Boblo Island Community Expansion project. You will be able to provide feedback and comments on the project, supporting the overall design and execution.



## **Boblo Island Community Expansion Project**

**Virtual Information Session**  
Feb. 21 – March 7

SOLUTIONS.CA

**Virtual Info Session**

[Learn more](#)





**Enbridge Gas**

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Join us at our information sessions, where you can learn more about the Boblo Island Community Expansion project. You will be able to provide feedback and comments on the project, supporting the overall design and execution.

## Boblo Island Community Expansion Project

Information session

**Location**

Libro Credit Union Centre  
3295 Meloche Road  
Amherstburg, ON

**Date**

Wednesday, Feb. 22  
5 – 8 p.m.



[ENBRIDGEGAS.COM](https://enbridgegas.com)

**Information session**

[Learn more](#)

**Facebook timeline post:**



**Enbridge Gas**

6 minutes ago



Please note that due to inclement weather, the Boblo Island Community Expansion project information session scheduled for tonight in Amherstburg at the Libro Centre is postponed and will be rescheduled for a later date. We apologize for any inconvenience.

Town of Amherstburg - Town Hall News  
County of Essex



## **Appendix B.5 Virtual and In-Person Information Session Materials**



Thank you for attending the Boblo Island Community Expansion Project Information Session! Please review the display panels. We hope the session was informative and we would appreciate your comments and feedback. If you require any assistance or clarification while completing this questionnaire, please speak with an Enbridge Gas or Stantec representative.

Completed questionnaires can be returned to an Enbridge Gas or Stantec representative or mailed to Stantec by **April 19, 2023** to be considered as part of the Environmental Report submitted to the Ontario Energy Board (OEB). Postage paid, self-addressed envelopes are available at the registration table. Your feedback is important and will also be considered during the planning and permitting stages of the Project.

**1. What is your interest in this Project (check all that apply)?**

- Directly affected landowner
- Indigenous Community
- Business owner
- Surrounding landowner
- Resident interested in natural gas conversion
- Interested citizen
- Member of interest group
- Government Official
- Other: \_\_\_\_\_

**2. What is your view of the proposed Project?**

**3. Please indicate if the Project will have any potential impacts to you, your property, or your business that you would like addressed (i.e., access, noise, dust, traffic, etc.).**

**4. Please identify and list any features along the pipeline route you feel are important to consider during the environmental study.**

**5. Were you provided with an adequate understanding of the Project and the Environmental Assessment OEB review and approval process?**

Yes

No

**6. Do you require additional information about the Project and/or the OEB Environmental Assessment process? Please note below:**

**7. Did the content provided in the Information Session meet your needs?**

**8. How did you hear about the Information Session? Check all that apply:**

- Newspaper advertisement
- Project notification letter
- Word of mouth
- Social Media Post

**9. Do you have any questions or comments about this Project, not addressed above, you would like to bring to our attention?**

Thank you for completing this questionnaire. If you would like to be informed of Project updates, please provide us with your full contact information below. If you have a question about the Project that has not been addressed or for which you would like more information, please email us at: [BobloEA@stantec.com](mailto:BobloEA@stantec.com)

**Contact Information**

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

Phone: (     ) \_\_\_\_\_

***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.*



# Boblo Island Community Expansion Project Information Session



## Welcome

Please view the display boards, speak to members of Enbridge Gas Inc. (Enbridge Gas) and/or Stantec Consulting Ltd. (Stantec) and complete a questionnaire providing your feedback.

Sign up at the front desk to have your attendance recorded as part of the environmental study and to receive future Project updates.

## Our commitment

- Enbridge Gas is committed to involving Indigenous communities, agencies, interest groups, and community members.
- We will provide up-to-date information in an open, honest, and respectful manner, and will carefully consider your input.
- 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 is committed to environmental stewardship and conducts its operations in an environmentally responsible manner.





# Boblo Island Community Expansion Project Information Session



## Purpose of the Information Session

- Consult with Indigenous communities, and engage with members of the public, and regulatory authorities regarding the proposed pipeline route, potential impacts, and proposed mitigations.
- Provide an opportunity for these individuals and any affected landowners and the general public to review the proposed Project, and to ask any questions and/or provide comments to representatives from Enbridge Gas and Stantec.





# Boblo Island Community Expansion Project

## Information Session



### Indigenous Peoples Policy

Enbridge Inc. recognizes the diversity of Indigenous peoples who live where we work and operate. We understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge Inc. 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 for Indigenous communities. Enbridge Inc. commits to pursue sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge Inc. conducts business. To achieve this, Enbridge Inc. will govern itself by the following principles:

- We recognize the legal and constitutional rights possessed by Indigenous peoples, and the importance of the relationship between Indigenous Peoples and their traditional lands and resources. We 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. We commit to ensuring that our projects and operations are carried out in an environmentally responsible manner.
- We understand the importance of the United Nations Declaration on 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.
- We engage in forthright and sincere consultation with Indigenous Peoples about Enbridge Inc. projects and operations through processes that seek to achieve early and meaningful engagement. Indigenous engagement helps define our projects that may occur on lands traditionally occupied by Indigenous Peoples.
- We commit 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.
- We foster understanding of the history and culture of Indigenous Peoples among Enbridge's employees and contractors, in order to create better relationships between Enbridge Inc. and Indigenous communities.

This commitment is a shared responsibility involving Enbridge Inc. and its affiliates, employees and contractors. We will conduct business in a manner that reflects the above principles. Enbridge Inc. will provide ongoing leadership and resources to effectively implement the above principles, including the development of implementation strategies and specific action plans. Enbridge Inc. commits to periodically review this policy so that it remains relevant and respects Indigenous culture and varied traditions.





# Boblo Island Community Expansion Project Information Session



## Project Overview

- The Project will involve the construction of approximately 2.9 kilometres (km) of a combination of 2-inch plastic and 4-inch steel pipeline.
- The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg.
- The pipeline will cross the Detroit River (approximately 600m) to reach Boblo Island.
- The distribution system on the island will be approximately 2.3 km in length.
- The Project is planned to be within the existing municipal road Right-of-Way (RoW) with the potential for off RoW Temporary Working Space (TWS).



# Boblo Island Community Expansion Project Information Session



## Map of the Preliminary Preferred Route



The proposed pipeline route has been developed for the purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.





# Boblo Island Community Expansion Project Information Session



## Environmental Study Process

As part of the planning process, Enbridge Gas has retained Stantec to undertake an Environmental Study for the Project. The Environmental Study will fulfill the requirements of the Ontario Energy Board's (OEB) "*Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)*".

The Study will:

- Undertake engagement to understand the views of interested and potentially affected parties.
- Consult with Indigenous communities to understand interests and potential impacts.
- Be conducted during the earliest phase of the Project.
- 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.





# Boblo Island Community Expansion Project Information Session



## Ontario Energy Board (OEB) Review and Approval Process

It is anticipated that the Environmental Report for the study will be completed in June 2023, after which Enbridge Gas may file a Leave-to-Construct (LTC) application. The application to the OEB will include the following information on the Project:

- The need for the Project
- Environmental Report and mitigation measures
- Project costs and economics
- Pipeline design and construction
- Land requirements
- Consultation with Indigenous Communities

Additional information about the OEB process can be found at:  
[www.ontarioenergyboard.ca](http://www.ontarioenergyboard.ca)

The OEB will then hold a public hearing to review the Project. If the OEB determines that the Project is in the public interest, it will approve construction of the Project.





# Boblo Island Community Expansion Project Information Session



## Engagement and Consultation

- Engagement and consultation are key components of the Environmental Report.
- 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 will consult with during the entirety of the Project.
- The engagement and consultation program helps identify and address Indigenous community and stakeholder concerns and issues, provides information about the Project to Indigenous communities and stakeholders, and allow for participation in the Project review and development process.
- Input during engagement and consultation will be used to help finalize the pipeline route and mitigation plans for the Project.
- Once the LTC application is filed with the OEB, any party with an interest in the Project, including members of the public, can participate in the process.

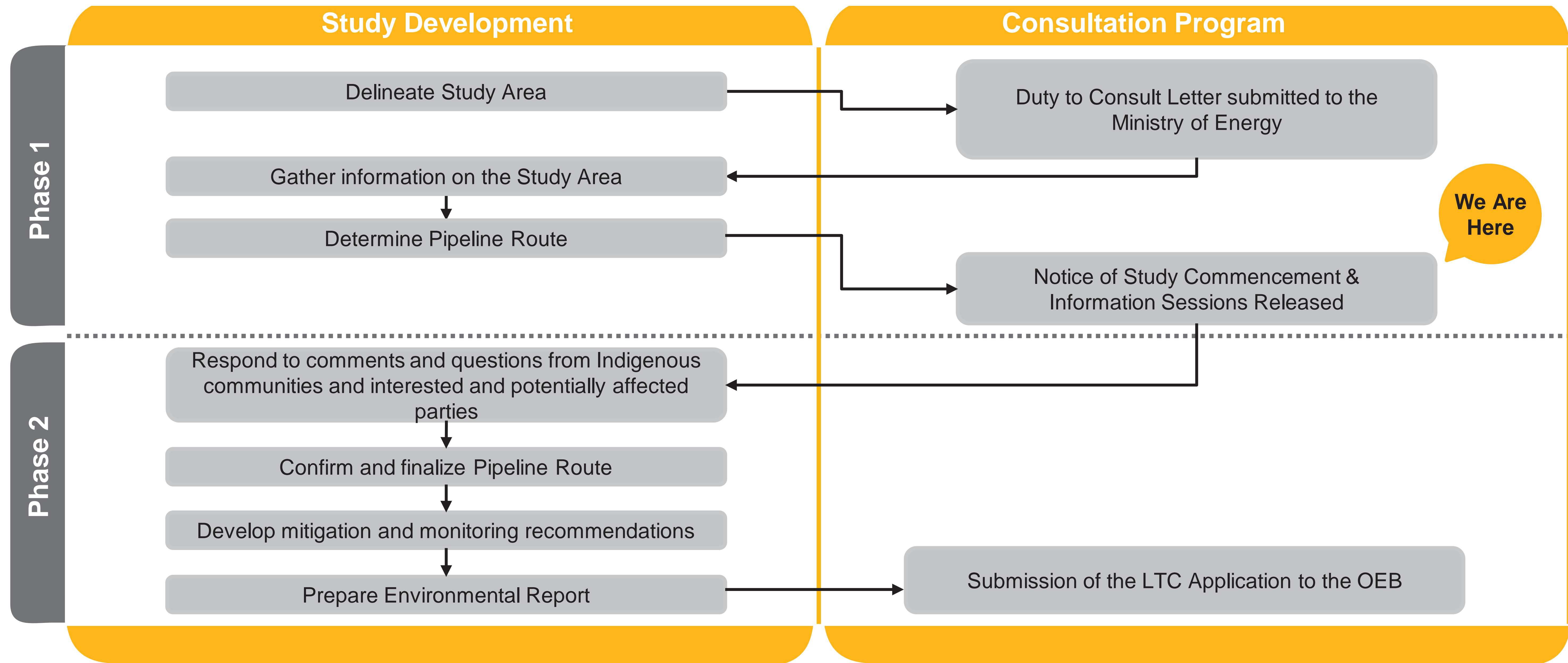




# Boblo Island Community Expansion Project Information Session



## Environmental Study Process



# Boblo Island Community Expansion Project Information Session



## Environment, Health and Safety Policy

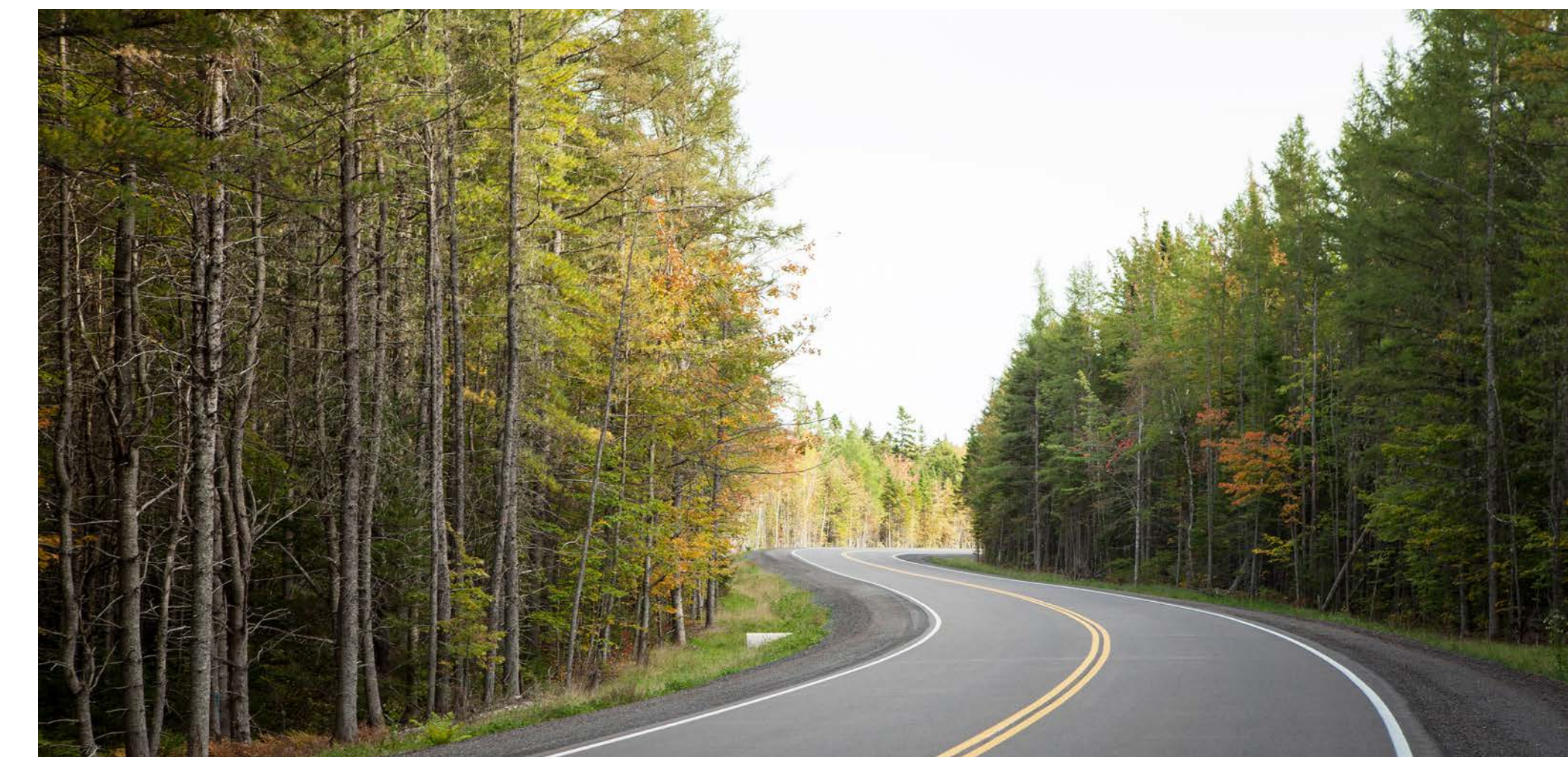
### Our commitment

- 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 incidents and mitigate impacts on the environment by working 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.





# Boblo Island Community Expansion Project Information Session



## Access and Land Requirements

### Our commitment

- While most of the pipeline route will be constructed within municipal road allowances, some circumstances requiring access agreements, permanent easement or temporary working space during construction could result in the need for additional land outside of road allowances.
- Enbridge Gas has a comprehensive Landowner Relations Program that uses a dedicated Lands Advisor who would:
  - Provide direct contact & liaison between landowners and Enbridge Gas.
  - Be available to the landowner during the length of the Project and throughout construction activities.
  - Address the concerns and questions of the landowner.
  - Act as a singular point of contact for all landowners.
  - Address any landowner questions and any legal matters relating to temporary use of property, access agreements, permanent easements, and impacts or remedy to property.

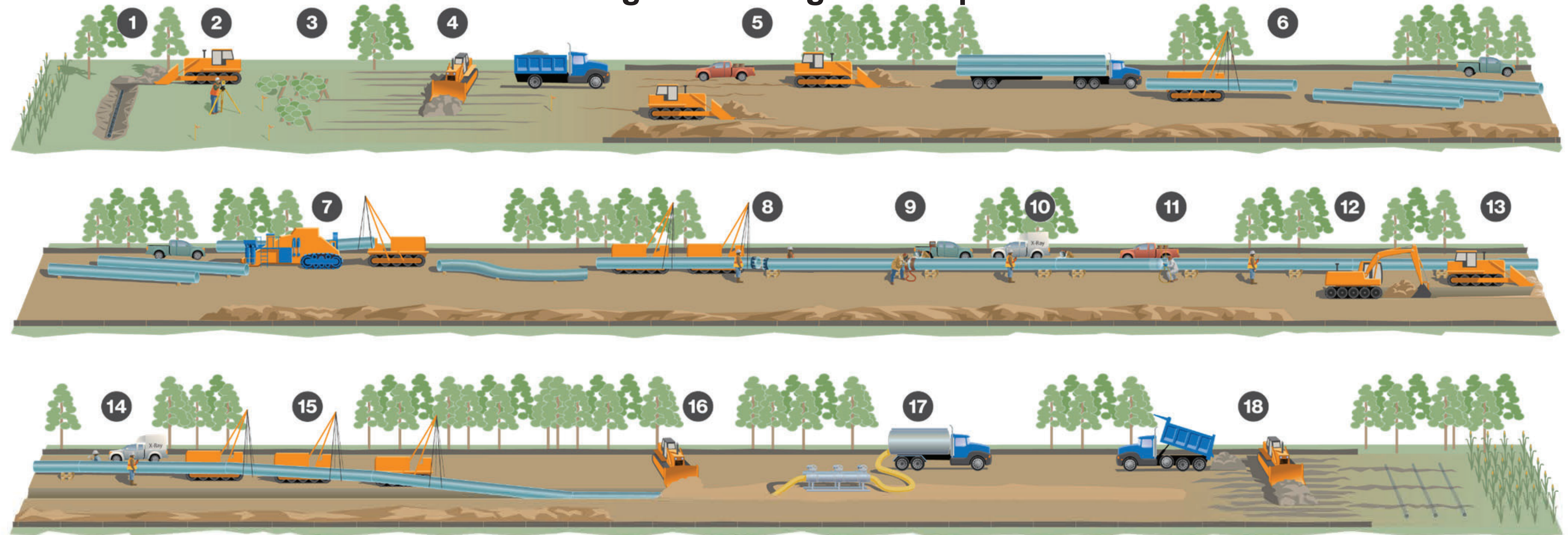




# Boblo Island Community Expansion Project Information Session



## Constructing an Enbridge Gas Pipeline



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

Note: Construction infographic is specifically for open cut steel pipe installation





# Boblo Island Community Expansion Project Information Session



## Constructing an Enbridge Pipeline (Continued)

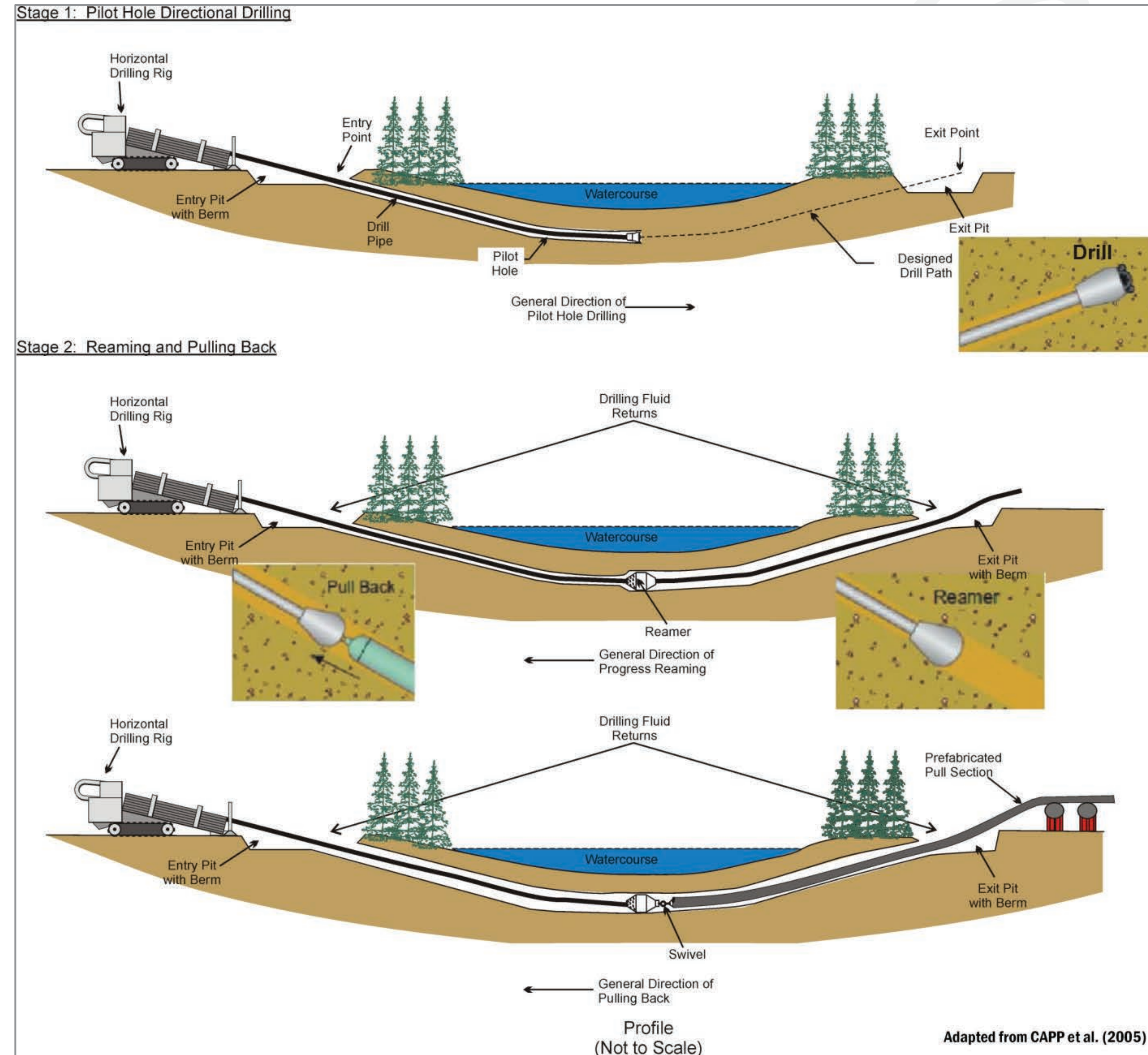
The pipeline construction process includes various procedures, as described in the previous slide.

- **Photo 1:** Shows a typical Enbridge pipeline. The Boblo Island Community Expansion Project will involve the installation of a combination of 2-inch plastic and 4-inch steel pipeline and will be much smaller than the pipeline shown in Photo 1.
- **Photo 2:** Represents a typical trench that is created during the installation process.
- **Photo 3:** Represents the process of backfilling a trench.
- **Photo 4:** Represents final clean-up and restoration. Once the pipeline has been installed, clean-up will involve the restoration of the RoW and other work areas. In natural areas, clean-up will involve restoring the environment (i.e., re-seeding of the RoW), and restoring ditch banks and watercourse crossings.





# Boblo Island Community Expansion Project Information Session



## Horizontal Directional Drilling (HDD) Installation





# Boblo Island Community Expansion Project Information Session



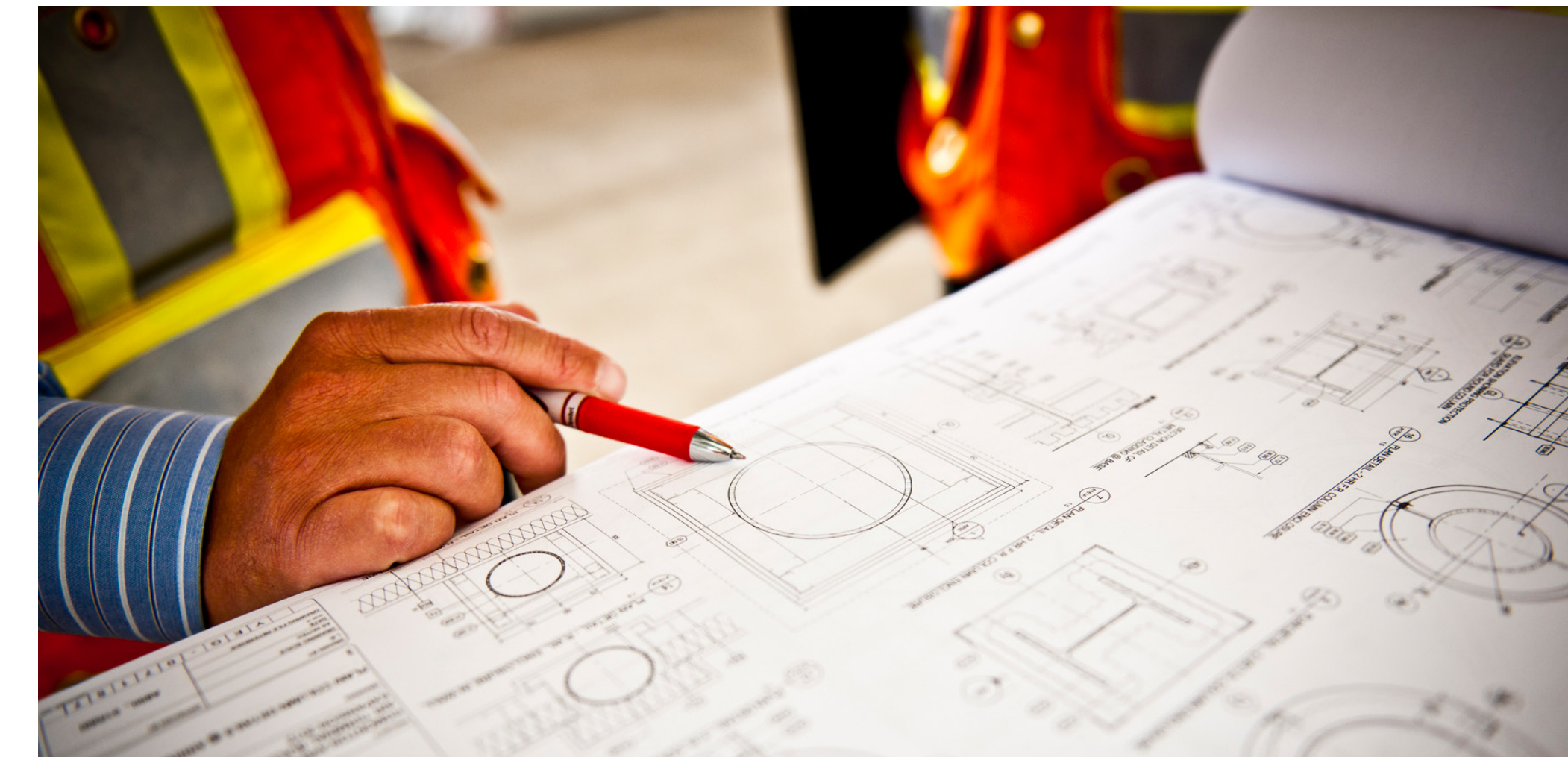
## Horizontal Directional Drill Procedures (HDD)

- HDD is the planned method of construction for the Detroit River crossing
  - A geotechnical assessment and enhanced designs will be completed by a qualified consulting service with expertise in HDD drilling technology and practices. The geotechnical assessment and enhanced designs will mitigate potential disruption to the waterbody by identifying favourable ground conditions and determining an appropriate HDD depth under the watercourse
  - Permits will be obtained from the required regulatory authorities. Required permits will be determined and documented in the Environmental Report for the Project
- Enbridge has completed many significant watercourse crossings by HDD
  - In 2014, Enbridge installed a pipeline crossing under the Trent Severn Waterway for a project in Campbellford
  - In 2016, Enbridge installed a pipeline crossing under the Snye River for the Walpole Island Project
  - In 2018-2019, Enbridge installed a natural gas pipeline under the Fenelon River (i.e., Trent Severn Waterway) during the Fenelon Falls Community Expansion Project
  - For the Bobcaygeon Community Expansion Project, Enbridge Gas is currently planning the design of the Big Bob and Little Bob Channels, which are part of the Trent Severn Waterway and regulated by Parks Canada
- Mitigation measures for watercourse crossings typically include:
  - Obtaining and abiding by all required permits and approvals and their associated conditions
  - Limiting in-water works, where possible, and conforming to fishery timing windows
  - Preparing and following an HDD contingency plan
  - Conducting regular monitoring of the watercourse during drilling activities





# Boblo Island Community Expansion Project Information Session



## Pipeline Design

The high-grade plastic and steel 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 Association (TSSA).

## Pipeline Safety and Integrity

We take many steps to ensure safe, reliable operation of our network of natural gas pipelines, such as:

- Design, construct, and test our pipelines to meet or exceed requirements set by industry standards and regulatory authorities,
- Continuously monitor the entire network, and
- Perform regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.





# Boblo Island Community Expansion Project Information Session



## Socio-Economic Features

The Project will mainly be constructed in existing municipal road allowances. As a result of construction, private businesses, agricultural operations, and residential land as well as Essex Region Conservation Authority land along the pipeline may be impacted.

### Potential Effects

- Temporary increases in noise, dust, and air emissions.
- Increased construction traffic volumes.
- Temporary impairment of the use and enjoyment of residential and/or cottage property.
- Vegetation clearing along the pipeline route

### Example Mitigation Measures

- Provide access across the construction area.
- Restrict construction to daylight hours and adhere to applicable noise by-laws when possible.
- Develop and implement a Traffic Control Plan.
- Place fencing at appropriate locations for safety.
- Implement a private water well monitoring program.
- Making contact information for a designated Enbridge Gas representative available prior to and throughout construction.
- Dust control measures.
- Re-vegetation of cleared areas (seeding/planting).





# Boblo Island Community Expansion Project Information Session



## Cultural Heritage Resources

During construction, cultural heritage features such as archaeological finds, buildings, fences, and landscapes may be encountered. Detailed field surveys will be conducted by independent, third-party archaeologists and cultural heritage professionals prior to construction, if required.

### Potential Effects

- Damage or destruction of archaeological or historical resources.

### Example Mitigation Measures

- Archaeological assessment of the construction footprint, with review and acceptance from the Ministry of Citizenship and Multiculturalism (MCM).
- Cultural heritage assessment (for built heritage features and cultural heritage landscapes) of the construction right-of-way, with review and comment from MCM.
- Reporting of any previously unknown archaeological or historical resources uncovered, or suspected of being uncovered, during construction.



# Boblo Island Community Expansion Project Information Session



## Aquatic Resources

Enbridge Gas understands the importance of protecting watercourses, wetlands, and associated wildlife during construction and therefore will implement recognized mitigation measures to reduce possible environmental effects.

### Potential Effects

- Disruption and alteration to aquatic species and habitat and/or nuisance effects.
- Increased erosion, sedimentation, and turbidity resulting from removal of vegetation.

### Example Mitigation Measures

- Install erosion and sediment control measures.
- Obtain all agency permits and approvals. Conform to fish timing window guidelines.
- Horizontal Directional Drill and/or trenchless drill within or near environmentally sensitive features (i.e., watercourses, wetlands etc.).
- For in-channel construction, protect aquatic species through methods such as flow diversion/dewatering, fish rescue planning etc., and manage sedimentation and turbidity.
- Restore and seed disturbed areas to establish habitat and reduce erosion; and
- Replant vegetation along waterways.





# Boblo Island Community Expansion Project Information Session



## Terrestrial Resources

During construction, natural environmental features such as wildlife habitat and vegetated/wooded areas may need to be crossed.

### Potential Effects

- Damage or removal of vegetation and wildlife habitat in the construction area.
- Disturbance and/or mortality to local wildlife.

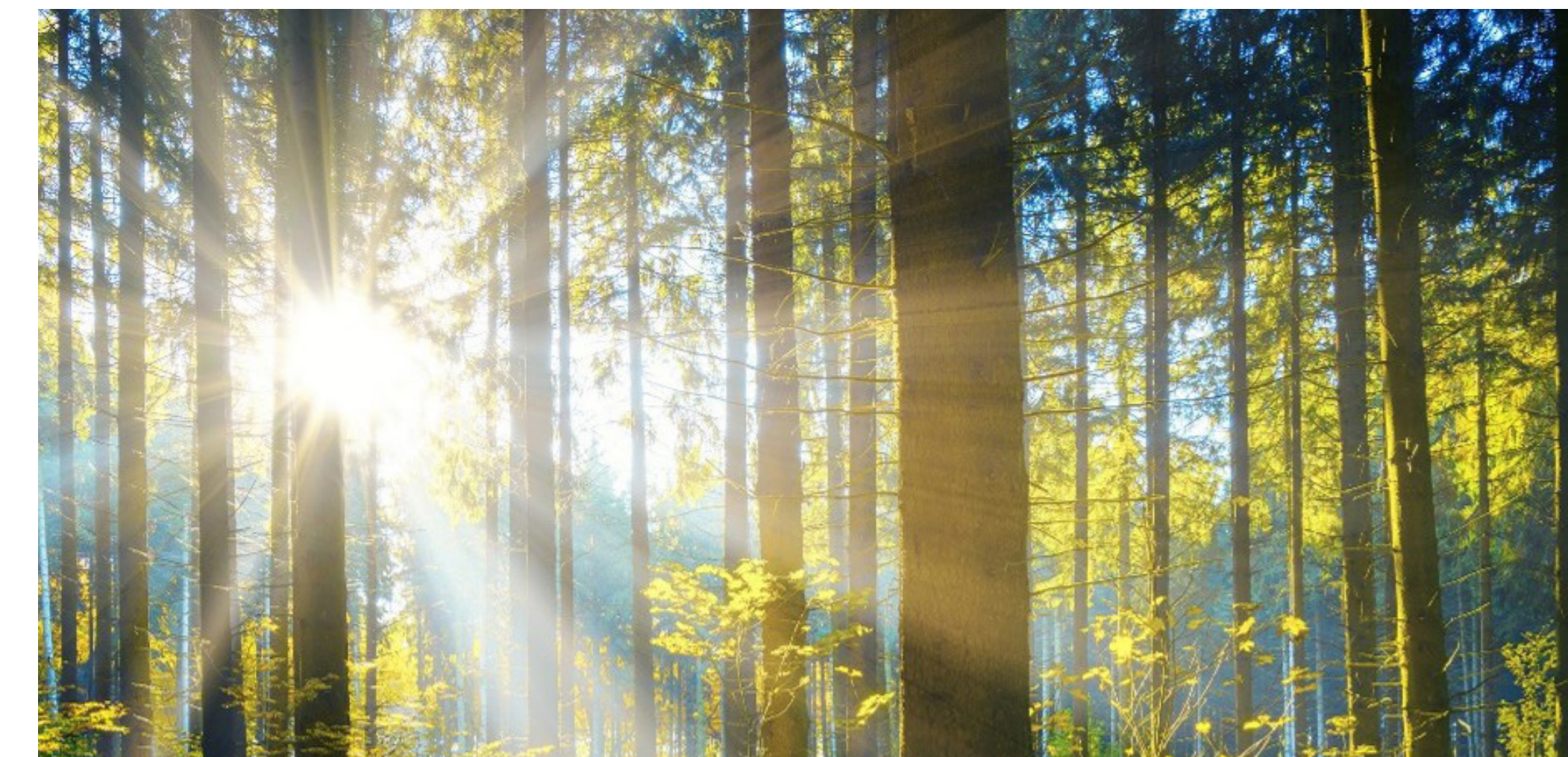
### Example Mitigation Measures

- Conduct surveys (including Species at Risk surveys) in advance of construction to determine opportunities for wildlife habitat to exist.
- Complete tree removal outside of migratory bird windows (typically from April 1 – August 31), to the extent possible.
- Clearly mark the construction area to avoid accidental damage.
- Restore and seed disturbed areas to establish habitat and reduce erosion, if required.
- Secure any necessary permits and follow any conditions of approval.



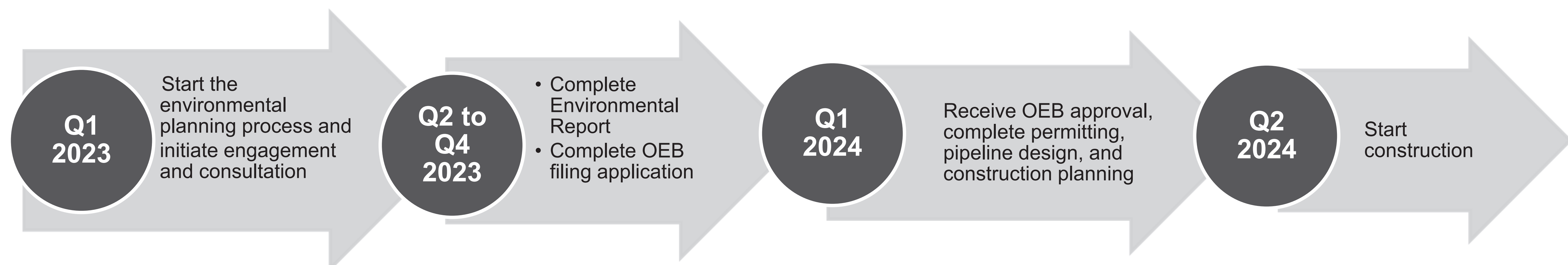


# Boblo Island Community Expansion Project Information Session



## Next Steps

After this Information Session, we intend to pursue the following schedule of activities:





# Boblo Island Community Expansion Project Information Session



Thank-you!

On behalf of the Project team, thank-you for attending the Information Session. Please complete a Questionnaire by **March 23, 2023**, for your comments to be considered as part of the Environmental Report.

**Michael Candido**

Project Coordinator  
Stantec Consulting Ltd.  
100-300 Hagey Blvd.,  
Waterloo ON N2L 0A4  
Phone: (519) 585-3439  
Email: BobloEA@stantec.com

**Sarah Kingdon-Benson**

Senior Advisor, Environment  
Enbridge Gas Inc.  
101 Honda Boulevard  
Markham ON L6C 0M6  
Cell: (416) 301-0762  
Email: BobloEA@stantec.com

For more information about the proposed project, please visit our Project website at:

<https://www.enbridgegas.com/BoblolIsland>



## **Appendix B.6 Project Correspondence**





## Appendix B6 Project Correspondence

### Correspondence Tracking – Agencies

Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
See Appendix B2	Elected Officials	N/A	Email - Outgoing	6-Feb-23	A Letter was sent by Enbridge Gas to Elected Officials on the contact list indicating the following: -Project description for Enbridge Gas's proposed Boblo Island Community Expansion Project (the Project); -In-Person Information Session (February 22, 2023) date; -Virtual Information Session dates from February 21-March 7, 2023; and -The dates for when the Project notice will be published in the Amherstburg Rivertown Times (February 8 and 15).	N/A	N/A
See Appendix B2	All Agencies on the Project's contact list	N/A	Email - Outgoing	8-Feb-23	A Letter was sent by Stantec on behalf of Enbridge Gas and had attached the Notice of Study Commencement, and Information Session dates (In-person on February 22, 2023, and Virtual from February 21, 2023 to March 7, 2023) for the Project.	N/A	N/A
See Appendix B2	All Agencies on the Project's contact list	N/A	Email - Outgoing	9-Feb-23	A Letter was sent by Stantec on behalf of Enbridge Gas and had attached the Notice of Study Commencement, updated hyperlinks, Information Session dates (In-person on February 22, 2023, and Virtual from February 21, 2023 to March 7, 2023) for the Project.	N/A	N/A
See Appendix B2	All Agencies on the Project's contact list	N/A	Email - Outgoing	3-Mar-23	An email was sent by Stantec on behalf of Enbridge Gas which indicated that the new In-Person Information Session date for the Project would be on March 20, 2023. Due to inclement weather, the original In-Person Information Session date of February 22, 2023 was cancelled.	N/A	N/A
1	Elected Officials (MP)	Chris Lewis	Email - Incoming	6-Feb-23	MP Lewis provided a general automatic reply that the Notice of Study Commencement and Information session dates sent on February 6, 2023 were received.	N/A	N/A
2	Elected Officials (MPP)	Anthony Leardi	Email - Incoming	6-Feb-23	MPP Leardi provided a general automatic reply that the Notice of Study Commencement and Information session dates sent on February 6, 2023 were received.	N/A	N/A
3	Fisheries and Oceans Canada (DFO)	N/A	Email - Incoming	8-Feb-23	DFO thanked Stantec for sending the Notice of Study Commencement and Information Session dates for the Project, and confirmed a receipt of Stantec's submission of a Request for Review.	N/A	N/A
4	Ministry of Natural Resources and Forestry (MNR)	Keith Johnston	Email - Incoming	8-Feb-23	MNR thanked Stantec for their Notice of Study Commencement and Information Session dates that were indicated on the letter sent out on February 8, 2023. MNR informed Stantec that they have shared the letter with the appropriate people in their group so they can provide comments.	N/A	N/A
5	Ministry of Energy (MOE)	Farrah Ali-Khan	Email - Incoming	8-Feb-23	MOE thanked Stantec for their Notice of Study Commencement and Information Sessions dates that were indicated on the letter sent out on February 8, 2023. The MOE representative provided the correct contact for the Project.	N/A	N/A



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
6	Ministry of Multiculturalism and Citizenship (MCM)	Karla Barboza	Email - Incoming	8-Feb-23	MCM thanked Stantec for their Notice of Study Commencement and Information Sessions dates that were shared on the letter sent out on February 8, 2023. The MCM representative informed Stantec about who will be reviewing the Project on their end, provided guidance for who to send information to at the MCM in the future, and noted who to discontinue sending information to in the contact list originally listed as part of the MCM.	N/A	N/A
7	Ministry of Environment, Conservation and Parks (MECP)	Rhobi Chacha	Email - Incoming	8-Feb-23	MECP informed Stantec that they are not the correct contact for the Project.	N/A	N/A
8	Technical Standards and Safety Authority (TSSA)	Robin Yu	Email - Incoming	8-Feb-23	TSSA thanked Stantec for their Notice of Study Commencement and Information Sessions dates indicated on the letter sent out on February 8, 2023. TSSA informed Stantec that an application needs to be filled and submitted for the review of this project by TSSA as part of the Ontario Pipeline Coordinating Committee (OPCC).	N/A	N/A
9	Essex Region Conservation Authority (ERCA)	Dan Jenner	Email - Incoming	8-Feb-23	ERCA provided Stantec an email informing them for how the Notice of Study Commencement for the Project, sent out on February 8, 2023, will be reviewed. The ERCA also provided contact information related to inquiries and the process related to new applications.	N/A	N/A
10	Ministry of Environment, Conservation and Parks (MECP)	Jon Orpana	Email - Incoming	9-Feb-23	MECP informed Stantec that they are not the correct contact for this project.	9-Feb-23	Stantec asked the MECP who the appropriate contact would be to connect with in southwestern Ontario for the Project.
			Email - Incoming	10-Feb-23	MECP informed Stantec who the correct southwestern Ontario contact would be for the Project.	N/A	N/A
11	Environment and Climate Change Canada (ECCC)	Caroline Ladanowski	Email - Incoming	9-Feb-23	ECCC thanked Stantec for their Notice of Study Commencement and Information Sessions dates that were indicated on the letter sent out on February 8, 2023. ECCC informed Stantec that they have shared the information to their colleagues as they will not be able to attend the In-Person session.	N/A	N/A
12	Technical Standards and Safety Authority (TSSA)	Robin Yu	Email - Incoming	10-Feb-23	TSSA thanked Stantec for their Notice of Study Commencement and Information Sessions dates that were indicated on the letter sent out on February 9, 2023. TSSA informed Stantec that an application needs to be filled and submitted for the review of this project by TSSA	N/A	N/A
13	Ministry of Natural Resources and Forestry (MNRF)	Karina Cerniavskaja	Email - Incoming	10-Feb-23	MNRF informed Stantec that they received the Notice of Study Commencement and Information Session dates that were indicated on the letter sent out on February 8, 2023. MNRF noted that no screening of natural heritage or other resource values has been completed for the Project at this time. However, a guide is provided in the email to help Stantec identify and assess natural features and resources as required by applicable policies and legislation as well as engaging with the Ministry for advice. The general guidance is related to Natural Heritage (eg. using the Ministry's LIO website), Natural Hazards (eg. technical guides for natural hazards), and referring to the Petroleum Wells & Oil, Gas and Salt Resources Act; Fish and Wildlife Conservation Act; and Public Lands Act & Lakes and Rivers Improvement Act.	N/A	N/A



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
14	Ministry of Environment, Conservation and Parks (MECP)	Conor Gamelin	Email - Incoming	13-Feb-23	<p>MECP attached a letter in an email to Stantec which had attached comments related to the Project.</p> <p>The comments in the letter were focused on:</p> <ol style="list-style-type: none"> <li>1) Natural gas pipelines not being identified as a threat to drinking water sources under the <i>Clean Water Act, 2006</i>;</li> <li>2) Discusses the <i>Clean Water Act, 2006</i> and the importance of Wellhead Protection Areas, surface water Intake Protection Zones, Significant Groundwater Recharge Areas, Highly Vulnerable Aquifers, Event-Based Modelling Areas, and Issues Contributing Areas;</li> <li>3) Providing a GIS application link identifying if the Project is within a drinking water source protection area and whether the Project intersects with a vulnerable area;</li> <li>4) Reference to local source protection plans;</li> <li>5) Address how sensitive hydrologic features including current or future sources of drinking water will be protected during construction and maintenance of the Project; and</li> <li>6) Providing a link for how to identify applicable policies and requirements related to source protection plans</li> </ol> <p>MECP also asked Stantec to confirm who they send their notices too for the MECP/CSPB as it should be sent to one person.</p>	21-Apr-23	Stantec emailed the MECP to confirm that the MECP representative that is a part of the OPCC is always contacted and within that email, the MECP Source Protection general email is always copied as well as other Ontario regional EA emails.
15	Transport Canada (TC)	N/A	Email - Incoming	13-Feb-23	<p>TC provided a general letter to Stantec/Enbridge Gas and requested that the Project proponents should self-assess/consider the following:</p> <ul style="list-style-type: none"> <li>- Provided a link to determine if the Project will interact with a federal property and/or waterway by reviewing the Director of Federal Real Property; and a link to determine if the Project will require approval and/or authorization under any Acts administered by TC</li> <li>- Projects that will occur on federal property prior to exercising a power, performing a function or duty in relation to that project, will be subject to a determination of the likelihood of significant adverse environmental effects, per Section 82 of the Impact Assessment Act, 2019.</li> <li>- If the aforementioned does not apply (to the pointers mentioned above), 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.</li> </ul> <p>TC also provided a list of common Acts that have applied to projects in an Environmental Assessment context and provided a description of each. These Acts included the Canadian Navigable Waters Act (CNWA), Railway Safety Act (RSA), Transportation of Dangerous Goods Act (TDGA), and the Aeronautics Act.</p>	N/A	N/A
16	Ministry of Transportation (MTO)	Amanda Rodek	Email - Incoming	14-Feb-23	<p>MTO thanked Stantec for sending the first Notice of Study Commencement and Information Session dates for the Project.</p> <p>MTO noted that the proposed project and study area are outside of MTO's permit control area and therefore MTO has no comment.</p>	N/A	N/A



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
17	Impact Assessment Agency of Canada (IAAC)	Kim Browning	Email - Incoming	22-Feb-23	IAAC emailed Stantec and attached a letter providing comments for the Project. The letter discussed the following: 1) Based on the information provided, the proposed project does not appear to include physical activities that are described in <i>The Physical Regulations</i> (the Regulations) 2) If detail or design aspects of the Project change such that it includes physical activities described in <i>The Physical Regulations</i> 3) For physical activities not described in <i>The Physical Regulations</i> , the Minister of ECCC may still designate a physical activity 4) Section 82 of the Impact Assessment Act (IAA) would apply if the Project is to be carried out in whole or in part on federal lands 5) Other federal regulatory permits, authorizations and/or licenses may still be required	N/A	N/A
18	Hydro One	Sun Hongxia	Email - Incoming	27-Feb-23	Hydro One thanked Stantec for sending the notification regarding the Project. Hydro One confirmed with Stantec that based on their preliminary assessment, there are no existing Hydro One Transmission assets in the subject area. Hydro One also indicated that if the plans for the undertaking change or the study area expands, Stantec/Enbridge Gas should contact them again.	N/A	N/A
19	Essex Region Conservation Authority (ERCA)	Kimberly Darroch	Email - Incoming	1-Mar-23	ERCA thanked Stantec for sharing the Notice of Study Commencement and Information Session dates for the Project. The ERCA asked if going forward all EA study correspondence can be sent to their planning inbox in the future, along with any future PICs and completions. The ERCA noted that their office can provide further feedback once some additional information is provided and reviewed, and that a fee may be charged for their review and or time spent on this study. ERCA also noted to include two more additional contact on the Project contact list.	1-Mar-23	Stantec added the two contacts that the ERCA discussed to the Project contact list.
20	Ministry of Environment, Conservation and Parks (MECP)	Mark Badali	Email - Incoming	2-Mar-23	MECP thanked Stantec for circulating the updated Notice of Study commencement, Information session dates, and hyperlinks for the Project that were sent out on February 10, 2023.	N/A	N/A
21	Ministry of Transportation (MTO)	Daniel Prelipcean	Email - Incoming	3-Mar-23	MTO thanked Stantec for their email on the Virtual Information Session and revised In-Person Information Session date which is now on March 20, 2023 for the Project. MTO informed Stantec that the Project is outside the Ministry's permit control area and therefore their office will not provide comments.	N/A	N/A

Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
22	Ministry of Environment, Conservation and Parks (MECP)	N/A	Email - Incoming	3-Mar-23	MECP sent a general email to Stantec to inform them of the following: 1) MECP has responsibility to administer the Ontario Endangered Species Act (ESA) 2) Email (regarding Notice of Study Commencement and Information Sessions sent on February 8 and 9, 2023) is being reviewed by branch staff to determine the nature of the inquiry or submission 3) Providing guidance if work for the Project might contravene the ESA, or if the Project may need a permit(s) 4) Providing guidance for reporting a suspected violation of the ESA 5) Providing guidance if you may need an ESA permit or authorization to cut down a Butternut tree 6) Providing guidance if a Butternut Health Assessment is needed for the Project, where to report a recent siting of a Species at Risk, and a resource for learning more about Species at Risk, the ESA and other related policies	N/A	N/A
23	Ministry of Multiculturalism and Citizenship (MCM)	Joseph Harvey	Email - Incoming	22-Mar-23	MCM informed Stantec that they were preparing the initial advice for the Project but inquired for additional information. MCM also indicated that they were concerned with whether the Project has the potential to impact marine archaeological resources and would therefore like to know if any in water works will be taking place.	22-Mar-23	Enbridge Gas responded and informed MCM that the planned construction method for the Detroit River is Horizontal Directional Drilling (HDD). Enbridge Gas also indicated that the process for HDD involves installing the pipeline under the Detroit River, without in-water works.





Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
24	Ministry of Multiculturalism and Citizenship (MCM)	Joseph Harvey	Email - Incoming	23-Mar-23	<p>MCM provided/attached a letter to Stantec for initial advice related to the Project which advises the applicant to:</p> <ol style="list-style-type: none"> <li>1) Describe the rationale for the study area delineation;</li> <li>2) Identify existing baseline environmental conditions;</li> <li>3) Identify potential environmental impacts expected to occur during construction and operation of the Project, including cumulative impacts;</li> <li>4) Describe proposed measures to mitigate potential negative impacts</li> </ol> <p>In the letter, the MCM also discussed the following:</p> <ol style="list-style-type: none"> <li>1) For Archaeological Resources (Land and Marine): As best practice, a combined Stage 1-2 archaeological assessment (AA) should be completed for the entire study area during the planning phase. An AA needs to be undertaken by an licensed archaeologist under the <i>Ontario Heritage Act</i>. At minimum, a Stage 1 AA will be undertaken for the entire study area during the planning phase. If further AAs are recommended, then MCM recommends further AA stages to be completed. The Environmental Report (ER) should also include specific information from the AAs. A marine AA would need to be undertaken in the case of in-water construction activities being carried out.</li> <li>2) For Built Heritage Resources and Cultural Heritage Landscapes: A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the planning phase to inform the Ontario Energy Board (OEB) and will be summarized in the ER. The study will include identifying existing baseline cultural heritage conditions, identifying preliminary potential project-specific impacts, and recommend measures to avoid or mitigate potential negative impacts. A qualified person will need to write the Cultural Heritage Reports.</li> <li>3) The findings from the AA reports and Built Heritage Resources and Cultural Heritage Landscapes reports need to be summarized as part of the ER.</li> <li>4) MCM would like to review and comment upon relevant sections of the draft ER before the final draft is submitted to the OPCC for review.</li> <li>5) The administration of the Ontario Heritage Act has been transferred to the MCM and not the Ministry of Tourism, Culture and Sport (MTCS).</li> </ol>	16-May-23	<p>Stantec responded to the MCM and thanked them for their comments. Stantec informed the MCM that they are in the process of completing the MCM's <i>Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes</i> and will include the findings into the Environmental Report. Stantec also let the MCM know that as the planning of the Project progresses, a Cultural Heritage Evaluation Report will be completed during the permitting phase of the Project once the design drawings are available.</p>



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
			Email - Incoming	23-May-23	MCM thanked Stantec for their response. MCM pointed out that a <i>A Cultural Heritage Report: Existing Conditions</i> and Preliminary Impact Assessment should be undertaken for the entire study area during the planning phase and summarized in the Environmental EA Report (ER). If it is not feasible to complete the preliminary impact assessment prior to the finalization of the ER, then the MCM recommends that, at a minimum, the Cultural Heritage Report be completed to include only the existing conditions. The Ministry's <i>Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes</i> can assist with this exercise. MCM also noted that a commitment in the ER is required to complete the preliminary impact assessment as part of the Cultural Heritage Report once the project design is finalized and prior to construction.	N/A	N/A
25	Essex Region Conservation Authority (ERCA)	Katie Stammler and Tom Dufour	Email - Outgoing	11-Apr-23	Stantec emailed ERCA to request and obtain Source Water Protection (SWP) and Regulated data for the Project's Study Area.	11-Apr-23	ERCA emailed Stantec and suggested that the Limit of Regulated Area and 1: 100 Year Flood Line datasets are the ones they should request regarding SWP for the Project Study Area. ERCA informed Stantec that the SWP datasets are available on their public interactive mapping website, and that there is a fee with the data request and a EULA agreement for data sharing.
			Email - Outgoing	12-Apr-23	Stantec confirmed to ERCA that they would like to request the following datasets along with the ELC/Fisheries data: 1) Limit of Regulated Area 2) Municipal Drains 3) Subwatershed 4) Surface Water Intake 5) Vulnerability Scoring Area for Surface Water (VSA-SW) 6) Significant Groundwater Recharge Area 7) Highly Vulnerable Aquifers 8) Wellhead Protection Areas	14-Apr-23	ERCA emailed Stantec to confirm that all of the SWP data they are looking for can be reviewed online at the Provincial level through Land Information Ontario (LIO) applications and on ERCA's Geocortex. Based on Stantec's data requests, the datasets the ERCA can provide for SWP include: 1) Surface Water Intake protection Zone 2) Vulnerability Scoring Area for Surface Water (VSA-SW) 3) Significant Groundwater Recharge Area 4) Highly Vulnerable Aquifers
			Email - Outgoing	14-Apr-23	Stantec informed the ERCA that based on the disclaimer provided on the Ministry of Environment, Conservation, and Park's (MECP's) website, that they are not allowed to use any of the information for deliverables which is why they requested the data through them. Stantec thanked the ERCA for their help and look forward to reviewing the data agreement that will be shared by an ERCA representative.	N/A	N/A



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
26	Infrastructure Ontario (IO)	Isabella Guy	Email - Incoming	18-Apr-23	IO emailed Stantec thanking them for sending the Notice of Commencement letter for the Project. IO informed Stantec that their initial scan indicates that there are no properties owned by the Minister of Government and Consumer Services within the Project's Study Area. IO did note though that it is the proponent's responsibility to verify if any provincial government property is within the Study Area. The letter itself referred to examples of provincial government property owners. IO also noted that if provincial government property in the Study Area is not required for the Project, IO should be consulted as a directly affected stakeholder; however if government property is required for the Project, then the proponent should contact IO for a more in-depth analysis.	N/A	N/A

Note:

N/A - Not Available



## Correspondence Tracking – Municipalities

Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
See Appendix B2	All municipal staff on the Project's contact list	N/A	Email - Outgoing	2-Feb-23	An email was sent by Enbridge Gas to inform all Municipal stakeholders that Stantec will be sending out a notice on Enbridge Gas's behalf to invite them to participate in the upcoming public consultation process on Enbridge Gas's proposed Boblo Island Community Expansion Project (the Project). Enbridge Gas also informed the Municipal stakeholders that Stantec will provide more details about the public consultation process which include components such as an Open-House.	N/A	N/A
See Appendix B2	All municipal staff on the Project's contact list	N/A	Email - Outgoing	6-Feb-23	A Letter was sent by Stantec on behalf of Enbridge Gas and had attached the Notice of Study Commencement, and Information Session dates (In-person on February 22, 2023, and Virtual from February 21, 2023 to March 7, 2023) for the Project.	N/A	N/A
See Appendix B2	All municipal staff on the Project's contact list	N/A	Email - Outgoing	9-Feb-23	A Letter was sent by Stantec on behalf of Enbridge Gas and had attached the Notice of Study Commencement, updated hyperlinks, Information Session dates (In-person on February 22, 2023, and Virtual from February 21, 2023 to March 7, 2023) for the Project.	N/A	N/A
See Appendix B2	All municipal staff on the Project's contact list	N/A	Email - Outgoing	22-Feb-23	A Letter was sent by Enbridge Gas indicating that the In-Person Information Session scheduled for February 22, 2023 was cancelled due to inclement weather. Enbridge Gas will connect with all municipal stakeholders for the new In-Person Information Session date but encouraged participants to review the project storyboards and Virtual Information Session that is live.	N/A	N/A
See Appendix B2	All municipal staff on the Project's contact list	N/A	Email - Outgoing	2-Mar-23	An email was sent by Enbridge Gas to inform all municipal staff stakeholders involved with the Project, that Stantec (on their behalf) will be sending out a notice shortly with a new In-Person Information Session date of March 20, 2023 that will take place between 5pm to 8pm.	N/A	N/A
See Appendix B2	All municipal staff on the Project's contact list	N/A	Email - Outgoing	3-Mar-23	An email was sent by Stantec on behalf of Enbridge Gas which indicated the new In-Person Information Session date for March 20, 2023. Due to inclement weather, the original PIC date of February 22, 2023 was cancelled.	N/A	N/A



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Town of Amherstburg	Valerie Critchley	Email - Incoming	10-Jan-23	Town of Amherstburg informed Enbridge Gas that the Town would prefer to have an In-Person Information Session for the Project at the Libro Credit Centre in the community room (3295 Meloched Road, Amherstburg, ON N9V 2Y8).	N/A	N/A
2	Town of Amherstburg	Kevin Fox	Email - Incoming	2-Feb-23	Town of Amherstburg asked to be added as the correct point of contact for the Clerk's Division.	2-Feb-23	Enbridge Gas informed the Town of Amherstburg that they will include them as the correct point of contact for the Clerk's Division. Stantec's outreach team was copied on the email by Enbridge Gas so they could forward a Letter to the Town of Amherstburg about the Project.
3	County of Essex	Rebecca Belanger	Email - Incoming	3-Feb-23	County of Essex asked to be added to the circulation list for the Boblo Island natural gas Environmental Assessment.	3-Feb-23	Enbridge Gas informed the County of Essex that they will include them as the correct point of contact. Stantec's outreach team was copied on the email by Enbridge Gas so they could forward a Letter to the County of Essex about the Project.
4	Town of Amherstburg	Melissa Osborne	Email - Incoming	6-Feb-23	Town of Amherstburg emailed Stantec thanking them for the Notice of Study Commencement and Information Session dates that were sent out on February 6, 2023. Town of Amherstburg mentioned they were going to copy their Chief Administrative Officer (CAO) for her awareness, review the information required and identify the key contact for this Project moving forward.	6-Feb-23	Stantec thanked the Town of Amherstburg for their email, and confirmed that the email sent out on February 6, 2023 regarding the Notice of Study Commencement and Information session dates were also sent to the CAO of the Town of Amherstburg.
5	Town of Amherstburg	Jennifer Ibrahim	Email - Incoming	6-Feb-23	Town of Amherstburg emailed Stantec if Enbridge Gas will be sharing the Notice of Study Commencement and Information Session dates for the Project on their social platforms. Town of Amherstburg indicated that if Enbridge is going to share this information, they would like to share their posts/tweets on their homepage.	9-Feb-23	Enbridge Gas thanked the Town of Amherstburg for reaching out and mentioned who the appropriate contact from Enbridge Gas would be in discussing promoting the Project on social media.
6	County of Essex	Crystal Sylvestre	Email - Incoming	6-Feb-23	County of Essex asked Stantec if their contact list could have two more people updated in it that are from the County of Essex.	N/A	N/A





Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
7	Town of Amherstburg	Jennifer Ibrahim	Email - Incoming	9-Feb-23	For the second Notice of Study Commencement and Information Session letter (with updated hyperlinks) regarding the Project, the Town of Amherstburg emailed Stantec if Enbridge Gas will be sharing the Notice of Study Commencement and Information Session dates for the Project on their social media platforms. Town of Amherstburg pointed out further that if Enbridge Gas is going to share this information, they would like to share their posts/tweets on their homepage.	9-Feb-23	Enbridge Gas thanked the Town of Amherstburg for reaching out to Stantec and mentioned when the appropriate person from Stantec would be available to discuss promoting the Project details with the Town of Amherstburg through social media.
8	Town of Amherstburg	Linden Crain	Email - Incoming	9-Feb-23	Town of Amherstburg asked if Enbridge Gas will be posting about the Notice of Study Commencement and Information Session dates for the Project on social media or if the Town of Amherstburg should.	9-Feb-23	Stantec confirmed that another representative from the Town of Amherstburg has inquired about posting the Project details that were sent out on February 6 and 9, 2023 to all stakeholders onto social media. Stantec also mentioned that a representative from Enbridge would get in touch with the representative from the Town of Amherstburg to discuss further details.
9	County of Essex	Jenelle Barrette	Email - Incoming	10-Feb-23	County of Essex asked if Stantec could forward the second Notice of Study Commencement and Information Session letter (with update hyperlinks) regarding the Project to some of their colleagues who may not be on the contact list.	10-Feb-23	Stantec confirmed that the two contacts the County of Essex inquired about are already on the contact list.
10	County of Essex	Katherine Hebert	Email - Incoming	10-Feb-23	County of Essex emailed Stantec and asked them if they could have another look at the hyperlinks in the updated Notice of Study Commencement and Information session letter (with updated hyperlinks) that was sent out on February 9, 2023.	10-Feb-23	Stantec confirmed that the updated hyperlinks are correct and mentioned that the virtual information session has not begun yet because the start date has not yet come.
11	Invest WindsorEssex	Marion Fantetti	Email - Incoming	22-Feb-23	Invest WindsorEssex thanked Enbridge Gas for informing them of the In-Person Information Session scheduled for Febraury 22, 2023 being cancelled due to inclement weather. Invest WindsorEssex informed Enbridge Gas that they look forward for the new In-Person Information Session date.	N/A	N/A
12	County of Essex	Mary Birch	Email - Incoming	22-Feb-23	County of Essex thanked Enbridge Gas for informing them of the In-Person Information Session scheduled for Febraury 22, 2023 being cancelled due to inclement weather.	N/A	N/A



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
13	Town of Amherstburg	Jennifer Ibrahim	Email - Incoming	1-Mar-23	Town of Amherstburg informed Enbridge Gas that they received their notice on February 22, 2023 about the original In-Person Information Session date being cancelled due to inclement weather. The Town of Amherstburg asked Enbridge Gas if the rescheduled In-Person Information Session date of March 20, 2023 is public knowledge at this time.	1-Mar-23	Enbridge Gas thanked the Town of Amherstburg for reaching out and informed them that the new In-Person Information Session date is not public knowledge yet. However, a revised notice will be sent out in the next week or so from this date.
14	Town of Amherstburg	Viktorya Paller	Email - Incoming	3-Mar-23	Town of Amherstburg asked for their CAO, and two directors to be included for the correspondence regarding the Virtual Information Session dates, and new In-Person Information Session date of March 20, 2023 for the Project.	N/A	N/A
15	County of Essex	Crystal Sylvestre	Email - Incoming	6-Mar-23	County of Essex asked Stantec if they will be reissuing the new dates for the In-Person and Virtual Information Sessions in a letter as they would like to share it at a council meeting on March 15, 2023.	6-Mar-23	Enbridge Gas attached a revised notice with the updated dates for the In-Person and Virtual Information Session dates.
16	Invest WindsorEssex	Marion Fantetti	In-Person Information Session Questionnaire	20-Mar-23	Invest WindsorEssex expressed their approval for the Project to Enbridge Gas and Stantec as they indicated it is about time affordable natural gas is distributed to Boblo Island residents, and the Project itself would be beneficial to future development (ie. access to utility and increased capacity). The one piece of feedback that Invest WindsorEssex provided to Enbridge Gas and Stantec was for them to demonstrate in some way the cost effectiveness of the Project to the individual/business owner.	N/A	Comment noted.

Note:

N/A - Not Available



## Correspondence Tracking – Indigenous Communities

Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
See Appendix B1	Former Ministry of Energy (MOE)	Enbridge Gas Inc. (Enbridge)	Email - Outgoing	9-Nov-22	Submission of a Project description to the Ministry of Energy (MOE), formerly the Ministry of Energy, Northern Development and Mines (MENDM) to provide details on the Project location and to determine the requirements of the duty to consult.	N/A	N/A
See Appendix B1	Former Ministry of Energy (MOE)	Evan Tomek	Email - Incoming	8-Dec-22	Delegation Letter sent from the MOE to Enbridge Gas providing the duty to consult requirements, particularly for Indigenous groups to contact.	N/A	N/A
See Appendix B2	All Indigenous communities on the Project's contact list	N/A	Email	3-Feb-23	An email was sent by Enbridge Gas regarding the proposed Boblo Island Community Expansion Project (the Project) and had attached the Enbridge Notification Letter, Letter of Notice of Study Commencement, Information Session dates, Shape file of the Project area, and PDF map of the project. The email also requested community feedback by March 23, 2023.	N/A	N/A
See Appendix B2	All Indigenous communities on the Project's contact list	N/A	Email	9-Feb-23	A Letter was sent by Enbridge Gas and had attached the Notice of Study Commencement, updated hyperlinks, and Information Session dates (In-person on February 22, 2023, and Virtual from February 21, 2023 to March 7, 2023) dates for the Project.	N/A	N/A
See Appendix B2	All Indigenous communities on the Project's contact list	N/A	Email	7-Mar-23	An email was sent by Enbridge Gas which had attached two letters which indicated the new In-Person Information Session for March 20, 2023 and contained the Virtual Information Session slides.	N/A	N/A



Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Caldwell First Nation (CFN)	N/A	Email - Outgoing	2-Feb-22	<p>Enbridge Gas emailed CFN to advise them of a government media event that would be occurring on February 4, 2022 announcing that Boblo Island has received funding for natural gas expansion. Enbridge Gas advised that the Project is not scheduled for a couple of years and will require OEB approval and Indigenous consultation. Enbridge Gas advised that the Project was not close to kicking off and they would be in touch when more information was available.</p> <p>Enbridge Gas emailed CFN back and advised that the government media event would be in person.</p>	2-Feb-22	CFN emailed Enbridge Gas to ask if the event would be in person or virtual.
2	Walpole Island (Bkejwanong) First Nation (WIFN)	N/A	Email - Outgoing	2-Feb-22	<p>Enbridge Gas emailed WIFN to advise them of a government media event that would be occurring on February 4, 2022 announcing that Boblo Island has received funding for natural gas expansion. Enbridge Gas advised that the Project is not scheduled for a couple of years and will require OEB approval and Indigenous consultation. Enbridge Gas advised that the Project was not close to kicking off and they would be in touch when more information was available.</p>	N/A	N/A
3	Caldwell First Nation (CFN)	N/A	Email - Incoming	3-Feb-22	CFN emailed Enbridge Gas to ask for further details on the media event including location, attendees and timing.	3-Feb-22	Enbridge Gas emailed CFN details on the media event including location, attendees and timing.
4	Caldwell First Nation (CFN)	N/A	Email - Incoming	4-Feb-22	CFN emailed Enbridge Gas to acknowledge the information and advise they would be attending the event.	N/A	N/A



Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
5	Aamjiwanaang First Nation (AFN)	N/A	Email - Incoming	3-Feb-23	AFN replied to Enbridge Gas and advised they were unable to open the zipped shape files. AFN requested the zipped files in a different format. AFN emailed Enbridge Gas representative to provide availability for a presentation to the AFN Environment Committee.	3-Feb-23	Enbridge Gas emailed AFN to advise that the zipped file is the same as the PDF map and explained that some Nations request the shape file which is why both are provided. Enbridge Gas and AFN confirmed a presentation date to the environment committee for March 21, 2023.
6	Chippewas of the Thames First Nation (COTTFN)	N/A	Email - Incoming	3-Feb-23	COTTFN emailed Enbridge Gas to advise that COTTFN does not receive Project notification emails and the Project would need to be submitted onto NationsConnect.ca. COTTFN advised they would not review the documents until they are submitted through that site.	3-Feb-23	Enbridge Gas acknowledged the need to upload the submission to NationsConnect.ca.
7	Caldwell First Nation (CFN)	Zack Hamm	Email - Incoming	8-Feb-23	CFN thanked Enbridge Gas for sharing/sending information to them on February 3, 2023 regarding the proposed Project. CFN asked Enbridge Gas for a meeting time to discuss the Project further (eg. discuss technical review agreement) as it is of great interest and concern to CFN's department and leadership.	8-Feb-23	Enbridge Gas emailed CFN to indicate they were not available for the proposed time and advised they would canvas the Enbridge Gas team to check on availability. Enbridge Gas inquired if the CFN representative would be available on February 10, 2023, for a brief phone call to discuss direction from CFN.
8	Caldwell First Nation (CFN)	N/A	Telephone	10-Feb-23	Enbridge Gas called CFN on this day. Enbridge Gas confirmed that CFN would be representing themselves on the Project but would invite Three Fires Group, acting on behalf of CKSPFN, to attend the meetings as well.	N/A	N/A
9	Caldwell First Nation (CFN)	N/A	Email - Incoming	10-Feb-23	CFN emailed Enbridge Gas to follow up on their telephone call to schedule a meeting location to discuss the Project.	21-Feb-23	Enbridge Gas emailed CFN providing their availability for a meeting on March 8, 2023 to discuss the Project. If March 8 was not available, the meeting would need to be delayed until late March. Enbridge Gas also provided alternative dates to meet in late March or early April.





Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
10	Chippewas of Kettle and Stony Point First Nation (CKSPFN)	N/A	Email - Incoming	21-Feb-23	Enbridge Gas emailed CKSPFN and CFN indicating Enbridge Gas was available for a meeting on March 8, 2023.	21-Feb-23	CKSPFN indicated to Enbridge Gas that the first week of April 2023 would be ideal to schedule the meeting.
11	Caldwell First Nation (CFN)	N/A	Email - Incoming	2-Mar-23	CFN sent a meeting invite for March 30, 2023 at the Caldwell First Nation Hall in Leamington.	N/A	N/A
12	Aamjiwanaang First Nation (AFN)	N/A	Email - Outgoing	7-Mar-23	Enbridge Gas stated to AFN they would discuss the Project during the Enbridge environment committee meeting on March 21, 2023.	N/A	N/A
13	Caldwell First Nation (CFN)	Zack Hamm	Email - Incoming	8-Mar-23	CFN acknowledged the receipt of the virtual open house slides. CFN also asked Enbridge Gas if they could schedule a meeting to discuss the Project as they will not be able to attend the In-person Open House date of March 20, 2023.	8-Mar-23	Enbridge Gas provided some dates in early April 2023 to talk to CFN about the Project.
14	Caldwell First Nation (CFN)	Zack Hamm/ Mary-Jo Rusu	Email - Incoming	8-Mar-23	CFN asked Enbridge Gas if they could meet on March 21, 2023.	8-Mar-23	Enbridge Gas noted they will not be available on March 21, 2023 for a meeting time.



Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
15	Chippewas of the Thames First Nation (COTTFN)	N/A	Email - Incoming	13-Mar-23	COTTFN emailed Enbridge Gas noting the need to upload information to NationsConnect in order to enable review and asking when it would be done.	13-Mar-23	Enbridge Gas emailed COTTFN to advise that he tried to upload the Project and KMZ file onto the NationsConnect site and received an error message. Enbridge Gas advised that COTTFN would have until April 17 to review the virtual open house slides.
16	Caldwell First Nation (CFN)	N/A	Email - Incoming	21-Mar-23	CFN emailed Enbridge Gas to request their availability to meet on April 11, 2023.	22-Mar-23	Enbridge Gas confirmed April 11, 2023 would be good to meet with the CFN in person regarding the Project at the Caldwell First Nation hall.
17	Caldwell First Nation (CFN)	N/A	Email - Outgoing	11-Apr-23	Enbridge Gas emailed CFN to provide a copy of the presentation that would be used for the meeting on April 11, 2023.	N/A	N/A
18	Caldwell First Nation (CFN)	N/A	Email - Outgoing	14-Apr-23	Enbridge Gas emailed CFN to thank them for the meeting on April 11, 2023. Enbridge Gas acknowledged the next steps would be for CFN to develop a draft work plan and budget for the Project and advised them to reach out if they required any information. Enbridge Gas also asked about getting the community meeting scheduled.	21-Apr-23	CFN emailed Enbridge Gas to advise that the next available dates for a community meeting will likely be in June. CFN advised it would be best to have the scope of work, budget and agreement in place before the end of May so that engagement can be implemented in June.
19	Chippewas of the Thames First Nation (COTTFN)	N/A	Email - Outgoing	28-Apr-23	Enbridge Gas emailed the COTTFN representative to advise that a new KMZ file was unable to be uploaded to the NationsConnect site and that an error was received. Enbridge Gas advised that they had requested a new KMZ file and apologized for the delay.	N/A	N/A



Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
20	Walpole Island (Bkejwanong) First Nation (WIFN)	N/A	Email - Outgoing	28-Apr-23	Enbridge Gas emailed WIFN to ask for a virtual meeting to discuss the Project. Enbridge Gas provided dates for a meeting.	1-May-23	WIFN responded to Enbridge Gas's email to propose meeting on May 5, 2023. The meeting date of May 5, 2023 was later confirmed.
21	Chippewas of the Thames First Nation (COTTFN)	N/A	Email - Outgoing	4-May-23	Enbridge Gas resolved the issues they were having with the KMZ file and it was successfully uploaded onto the Nationsconnect website.	N/A	N/A
22	Walpole Island (Bkejwanong) First Nation (WIFN)	N/A	Email - Outgoing	5-May-23	Enbridge Gas emailed WIFN to thank them for their meeting and summarized what was discussed.	N/A	N/A

Note:  
N/A - Not Available



## Correspondence Tracking – Directly Affected Stakeholders

Comment Number	Stakeholder Group	Name	Method of Communication	Address	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
See Appendix B2	Directly Affected Stakeholders on the Project's contact list	N/A	Email - Outgoing	N/A	N/A	N/A	8-Feb-23	A Letter was sent by Stantec and had attached the Notice of Study Commencement, and Information Session (In-person on February 22, 2023, and Virtual from February 21, 2023 to March 7, 2023) dates for the Project.	N/A	N/A
See Appendix B2	Directly Affected Stakeholders on the Project's contact list	N/A	Email - Outgoing	N/A	N/A	N/A	9-Feb-23	A Letter was sent by Stantec on behalf of Enbridge Gas and had attached the Notice of Study Commencement, updated hyperlinks, Information Session dates (In-person on February 22, 2023, and Virtual from February 21, 2023 to March 7, 2023) for the Project.	N/A	N/A
See Appendix B2	Directly Affected Stakeholders on the Project's contact list	N/A	Email - Outgoing	N/A	N/A	N/A	3-Mar-23	An email was sent by Stantec on behalf of Enbridge Gas which indicated the new In-Person Information Session date for March 20, 2023. Due to inclement weather, the original In-Person Information Session date of February 22, 2023 was cancelled.	N/A	N/A



Comment Number	Stakeholder Group	Name	Method of Communication	Address	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
1	Public	██████ ██████	Email - Incoming	N/A	██████@gmail.com	N/A	16-Feb-23	A landowner emailed Enbridge Gas to ask if they have any info on what the resident cost to hook up to the Project would be.	16-Feb-23	Enbridge Gas thanked the landowner for reaching out and informed the landowner that the customer connection costs are based on existing connection policies, approved by the Ontario Energy Board (OEB). Enbridge Gas provided these costs in the email and also encouraged the landowner to attend either the In-Person and Virtual Information Sessions, and the webpage for where to find updates on the Project.
2	Public	██████ ██████	In-Person Information Session Questionnaire	██████ ██████ ██████	N/A	N/A	20-Mar-23	Landowner was interested in the Project and found it to be a beneficial alternative source of energy. The landowner also identified that underground aquifers should be considered during the environmental study.	18-May-23	A letter was sent requesting locations of the underground aquifers.
3	Public	██████ ██████	In-Person Information Session Questionnaire	██████ ██████ ██████	██████@hotmail.com	██████ ██████ ██████	20-Mar-23	Landowner was interested in the Project. The landowner originally had concerns on costs related to the Project, but the questions were addressed at the In-Person Information Session.	20-Mar-23	N/A
4	Public	██████ ██████	In-Person Information Session Questionnaire	██████ ██████ ██████	N/A	██████ ██████ ██████	20-Mar-23	Landowner noted the following to Enbridge Gas and Stantec: 1) Their view on the Project was neutral, but found that it would be helpful for resale. 2) Boblo Island is already suffering from noise, dust and traffic due to construction happening at the south end of the Island. The Landowner also indicated that people are becoming quite frustrated and that this project might be impacted by these concerns.	N/A	Comment noted.





Comment Number	Stakeholder Group	Name	Method of Communication	Address	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
5	Public	██████████ ██████████	In-Person Information Session Questionnaire	██████████ ██████████ ██████████	██████████@gmail.com	██████████ ██████████ ██████████	20-Mar-23	Resident interested in natural gas conversion noted and also asked the following: 1) Positive views towards the Project. However, they had concerns with their property being possibly damaged by the Project, and what the costs were to convert (ie. existing underground tanks and lines in existing house). 2) Potential impacts they identified that could be associated with this project is access, noise, dust and traffic. 3) To consider running the natural gas line where construction already has damaged the sides of roads. 4) Do we have any say in meter location? 5) Is there a requirement to remove existing underground tanks? 6) Are there any incentives available?	N/A	Comment noted.
6	Public	██████████ ██████████ ██████████	In-Person Information Session Questionnaire	██████████ ██████████ ██████████	██████████@yahoo.com	██████████ ██████████ ██████████	20-Mar-23	Landowner expressed concerns related to costs for the Project to Enbridge Gas and Stantec.	N/A	Comment noted.
7	Public	██████████ ██████████	In-Person Information Session Questionnaire	██████████ ██████████ ██████████	██████████@bell.net	██████████ ██████████ ██████████	20-Mar-23	The interested citizen was curious about the Project. The interested citizen requested that the part under the Detroit River should be considered during the environmental study; and also asked how long the Project will take to construct and when it will be fully operational.	5-May-23	Enbridge Gas and Stantec thanked the interested citizen for their question. Stantec, on Enbridge Gas's behalf, provided responses via email to the comments, requests, and questions that the interested citizen had via email.  1) The Detroit River crossing will be included with the scope of the environmental assessment and final environmental report prepared for the Project.  2) Pending approval from the Ontario Energy Board, the Project is planned to begin construction in Q2 2024 and finish Q3 2024. (approx. 6 months).  3) The Project should be in service by Q3 2024.



Comment Number	Stakeholder Group	Name	Method of Communication	Address	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
8	Public	N/A	In-Person Information Session Questionnaire		N/A	N/A	20-Mar-23	Landowner expressed concerns to Enbridge Gas and Stantec regarding dust and traffic that will happen during the construction phase and asked how they will be addressed.	N/A	Comment noted.

Note:

N/A - Not Available



## **Appendix B.7 OPCC Review Correspondence**



## Appendix B7 OPCC Review Correspondence

Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
See Appendix B2	All OPCC contacts on the Project's Contact List, Indigenous Communities and representatives from selected Agencies and Municipal contacts	N/A	Email - Outgoing	30-Jun-23	An email was sent by Stantec on behalf of Enbridge Gas indicating that the Environmental Report (ER) summarizing the results of the Environmental Study was available for their review through the link provided in the email. Stantec asked if any comments regarding the ER could be sent to them or the Project team by August 14, 2023 that would be appreciated.	N/A	N/A
See Appendix B2	All OPCC contacts on the Project's Contact List, Indigenous Communities and representatives from selected Agencies and Municipal contacts	N/A	Email - Outgoing	1-Aug-23	An email was sent by Stantec on behalf of Enbridge Gas to provide a reminder that the requested comment period for Enbridge Gas' Boblo Island Community Expansion Project ER concludes in less than 2 weeks on August 14, 2023 and comments can be sent to the Project email address.	N/A	N/A

## OPCC Members

Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Technical Standards and Safety Authority (TSSA)	Robin Yu	Email - Incoming	3-Jul-23	TSSA emailed Stantec and thanked them regarding the email they sent on June 30, 2023. TSSA mentioned they did not have any comments at this stage. TSSA also informed Stantec that along with the submission of the Leave to Construct (LTC) to OEB, for review of the Project by the TSSA, there is a need for submission of the Application for Review of Pipeline Project to TSSA.	N/A	N/A
2	Ontario Energy Board (OEB)	Ritchie Murray	Email - Incoming	17-Jul-23	OEB emailed Stantec to inform them that if notices for projects and ERs are ever being sent to Ontario Pipeline Coordinating Committee (OPCC) members, the OPCC.Chair@OEB.ca email should be cc'ed in it too.	N/A	N/A
3	Ministry of Energy (MOE)	Shannon McCabe	Email - Incoming	24-Jul-23	MOE asked Stantec if they could resend the FTP link that was sent on June 30, 2023 and included the Environmental Study for the Project as they had trouble opening the link.	24-Jul-23	Stantec responded to MOE's email by providing an updated FTP link for the Project's ER which will expire on August 1, 2023.
4	Ministry of Energy (MOE)	Shannon McCabe	Email - Incoming	25-Jul-23	MOE's Indigenous Policy Unit indicated to Stantec that they completed their review of the section(s) that pertain to Indigenous Consultation in the draft ER provided by Enbridge Gas for the Project. MOE noted that they had a few questions about specific interests and concerns raised by Indigenous communities, and will raise these questions to Enbridge Gas directly at a standing monthly meeting series.	N/A	N/A



Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
5	Ministry of Environment, Conservation and Parks (MECP)	Laura Collings	Email - Incoming	27-Jul-23	MECP asked Stantec if they could be supplied with another FTP link (original one sent on June 30, 2023) that has the ER for the Project as they have only been able to review it up until now and the link expired for them.	27-Jul-23	Stantec responded to MECP's email by providing an updated FTP link for the Project's ER which will expire on August 1, 2023.
6	Ministry of Food, Agriculture and Rural Affairs (OMAFRA)	Ken Mott	Email - Incoming	3-Aug-23	OMAFRA emailed Stantec to request a one week extension to provide comments on the Project's proposal. Ken responded on Helma Geert's behalf who is the actual OPCC member for OMAFRA.	3-Aug-23	Stantec emailed OMAFRA and confirmed they can have a one week extension (by August 21st) to review the Project's proposal and provide comments.
7	Ministry of Food, Agriculture and Rural Affairs (OMAFRA)	Ken Mott	Email - Incoming	3-Aug-23	OMAFRA emailed Stantec to request a one week extension to provide comments on the Project's proposal. Ken responded on Helma Geert's behalf who is the actual OPCC member for OMAFRA.	3-Aug-23	Stantec sent an updated FTP link to OMAFRA which consists of the ER for the Project. The new FTP link will expire on August 16, 2023
8	Ministry of Municipal Affairs and Housing (MMAH)	Gabriel Kim	Email - Incoming	4-Aug-23	MMAH thanked Stantec for circulating the Draft ER for the Project on June 30, 2023. MMAH indicated that upon review of the report, they do not have any provincial land use planning concerns at this point. Gabriel responded on Erick Boyd's behalf who is the actual OPCC member for MMAH.	N/A	N/A
9	Ministry of Environment, Conservation and Parks (MECP)	Laura Collings	Email - Incoming	8-Aug-23	<p>MECP thanked Stantec for the opportunity to review the proposed Project. MECP attached their comments in a letter for the Project's ER which mentioned the following:</p> <p>"Section 3.3.3 of the report states that "As there is a vulnerability score of 7.2 (higher than 4), activities should be reviewed in the IPZ-2 to determine the risks they pose to local drinking water resources". This report does not provide this analysis, nor does it indicate when it will occur, and Environmental Reports should include analysis into associated risks. Where an activity related to the construction, operation and/or maintenance phase of the natural gas pipeline is found to pose any level of risk (significant, moderate, or low) to drinking water, the proponent should document and discuss in the Environmental Report how the project addresses applicable policies in the local source protection plan. This section should then be used to inform, and be reflected in, other sections of the report, such as the identification of net positive/ negative effects of alternatives, mitigation measures, evaluation of alternatives, etc. Environmental reports should also demonstrate how these measures protect sources of drinking water to address the intent of the Clean Water Act".</p> <p>MECP also noted that the member that Stantec/Enbridge Gas had from their group who was supposedly a part of the Ontario Pipeline Coordinating Committee (OPCC) is no longer working in that role. MECP indicated that all future emails should be cc'ed to sourceprotectionscreening@ontario.ca as it relates to the MECP's Conservation and Source Protection Branch.</p>	13-Sep-23	<p>Stantec and Enbridge Gas thanked the MECP for their comments on the Project's draft ER. Stantec and Enbridge Gas acknowledged that the operation of natural gas pipelines is not identified as a threat to drinking water sources under the Clean Water Act, 2006. Stantec and Enbridge indicated the mitigation measures that will be implemented as it relates to groundwater. These included but were not limited to the following:</p> <ul style="list-style-type: none"> <li>- A dewatering report will be prepared for the Project as part of the Environmental Activity Sector Registration which will provide a more in-depth analysis to determine the risks associated with the Project being constructed as it relates to IPZ and Source Water Protection.</li> <li>- In accordance with Enbridge's Construction manual, refueling any equipment will be undertaken 100 m from wetlands and watercourses to reduce potential impacts to surface water and groundwater quality.</li> <li>- A Spill Response Plan will be prepared for the construction of the Project, as well as a private well monitoring program. Operation and maintenance of the pipeline does not pose a significant risk to private water wells and the municipal water supply, however, any related activities during this phase will abide by Enbridge's Spill Response Plan.</li> <li>- If fuel is handled or stored above the volume</li> </ul>





Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
							<p>limit to be a significant drinking water threat within the Event Based Area, a Risk Management Plan will be required, which will be established with the Risk Management Official at the Essex Region SPA.</p> <p>Stantec and Enbridge Gas also mentioned that refueling activities will not be conducted outside the Event Based Area, hence there will be no impacts to sources of drinking water.</p>
10	Ministry of Natural Resources and Forestry (MNRF)	David Marriott	Email - Incoming	14-Aug-23	MNRF emailed Stantec to confirm receipt of the Project's draft ER. Based on the Project description that has been provided by Stantec and Enbridge Gas, MNRF noted that their staff do not have any comments at this time. MNRF also noted that an authorization under the Public Lands Act or the Lakes and Rivers Improvement Act will not be required for the Project, if the work is conducted as described in the draft ER. However, if the description of the Project changes (e.g., how the work will be conducted), the MNRF would appreciate being circulated on any updates to the Project for review. David responded on Keith Johnston's behalf who is the actual member of the OPCC for MNRF.	N/A	N/A
11	Ministry of Multiculturalism and Citizenship (MCM)	Joseph Harvey	Email - Incoming	14-Aug-23	MCM sent an email to Stantec with an attachment of their comments based on the Project's ER. The comments focused on providing edits/updates on Archaeology and Cultural Heritage material that was discussed in the Project ER's Introduction, Existing Conditions section, and Potential Impacts and Mitigation Measures section. Joseph responded on Karla Barboza's behalf who is the actual member of the OPCC for MCM.	25-Aug-23	Stantec and Enbridge Gas thanked the MCM for their comments on the Project's draft ER. Stantec and Enbridge Gas indicated that based on the MCM's comments, they would update the appropriate sections for the final ER such as in Sections 1.2.5, 3.5.10, and 5.2 Summary Table. Enbridge Gas and Stantec informed MCM that a Cultural Heritage Impact Assessment would be undertaken and submitted to the MCM for their review and comment. Enbridge Gas and Stantec also indicated to MCM their engagement process with Indigenous communities and interested parties throughout the Project regarding cultural heritage information.
12	Ministry of Food, Agriculture and Rural Affairs (OMAFRA)	Ken Mott	Email - Incoming	17-Aug-23	OMAFRA emailed Stantec to provide technical comments on the Project's draft ER. OMAFRA indicated to Stantec and Enbridge Gas that as the Project will be constructed in the road right-of-way and then via directional drilling under the Detroit River, the Project does not appear to involve any specialty crop area, prime agricultural land or land currently in agricultural production. OMAFRA also provided a link for reference to their Agricultural Systems Portal involving mapping of Agricultural Areas and Specialty Crop Areas. Ken responded on Helma Geert's behalf who is the actual member of the OPCC for OMAFRA.	21-Aug-23	Stantec thanked OMAFRA for their comments.

Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
13	Ministry of Multiculturalism and Citizenship (MCM)	Joseph Harvey	Email - Incoming	1-Sep-23	MCM thanked Stantec and Enbridge Gas for providing their responses to the comments the MCM had on the Project's draft ER. MCM noted they had no additional concerns at this time and look forward to reviewing the Cultural Heritage Report.	N/A	N/A

## Agencies

Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Parks Canada	Amy Micks	Email - Incoming	30-Jun-23	Parks Canada emailed Stantec to ask if they could remove one of their representatives from the distribution list for the Project as they are not situated in the location for where the Project is located.	30-Jun-23	Stantec acknowledged Parks Canada's email and removed the representative from the distribution list.
2	Essex Region Conservation Authority (ERCA)	Alicia Good	Email - Incoming	19-Jul-23	ERCA asked Stantec if they could please resend the ER (in the FTP link) for the Project as they missed the expiry date in the FTP link due to staff transitions.  ERCA thanked Stantec for sending along the updated FTP link which consisted of the ER.	19-Jul-23	Stantec responded to ERCA's email by providing an updated FTP link for the Project's ER which will expire on August 1, 2023.
3	Ministry of Transportation (MTO)	Amanda Rodek	Email - Incoming	2-Aug-23	MTO thanked Stantec for sending the reminder out regarding the comment period ending for the Project's ER on August 14, 2023.	N/A	N/A
4	Essex Region Conservation Authority (ERCA)	Alicia Good	Email - Incoming	2-Aug-23	ERCA emailed Stantec thanking them for circulating the Project's ER. ERCA indicated that they have reviewed the information which Stantec and Enbridge Gas has shared thus far for the Project and noted the following through their preliminary review: - A full review fee of \$1500 per Item 37 on the ERCA's Fee Schedule is required based on the scope and scale of the proposal; - As the Project falls within the ERCA regulated area of the Detroit River, it would be subject to ERCA's Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulations, under the Conservation Authorities Act. A CA permit would be required prior to construction of the Project; and - The proposed pipeline may be located within a Surface Water Intake Protection Zone (SW-IPZ) and may be located wholly or partially within the Event Based Area (EBA) of the Essex Region Conservation Plan, which came into effect October 1, 2015.	3-Aug-23	Stantec thanked the ERCA for their comments. Stantec asked ERCA if they could confirm if the review fee of \$1500 is for the preliminary comments they sent in an email on August 2, 2023 to Stantec or if the \$1500 review fee is required for ERCA to provide additional comments.



Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
5	Essex Region Conservation Authority (ERCA)	Alicia Good	Email - Incoming	4-Aug-23	<p>ERCA informed Stantec that their office would like to provide additional comments which includes comments from their Risk Management official.</p> <p>ERCA let Stantec know that they will try to get their comments in for the Project's ER by the August 14, 2023 deadline. ERCA asked Stantec if in the mean time they can contact their office to provide the fee, to ensure they can provide their comments on time.</p>	4-Aug-23	<p>Stantec asked ERCA if they will be able to provide a timeline as to when the additional comments will be provided for the Project. Stantec indicated to ERCA that the review period to provide comments for the ER ends on August 14 and Enbridge Gas is looking to finalize the ER shortly thereafter in order to submit the application to the Ontario Energy Board to meet their filing deadline.</p>
6	Impact Assessment Agency of Canada (IAAC)	Kim Browning	Email - Incoming	8-Aug-23	<p>IAAC emailed Stantec to inform them that as the Project is not a designated project, the Ontario Region IAAC requests to be taken off the distribution list for further Project updates.</p>	N/A	N/A
7	Ministry of Environment, Conservation and Parks (MECP)	Kathryn Markham	Email - Incoming	11-Aug-23	<p>MECP Species at Risk Branch (SARB) emailed Stantec to remind them that future consultation with the SARB is recommended, following the completion of field assessments and once specific project details (e.g. detailed design, including scope of vegetation removal) are available, to determine if authorization under the ESA will be required for any of the project components. MECP SARB also recommended that an Information Gathering form is to be submitted to SAROntario@ontario.ca for review. MECP SARB pointed out to Stantec that based on the ER, the Project may impact SAR identified under the ESA, 2007 (eg. Eastern Foxsnake and Butler's Gartersnake). It is for this reason that potential impacts to SAR individuals (e.g. exclusion from work areas, etc.) and SAR habitat (e.g. construction within natural areas) needs to be assessed.</p>	N/A	N/A
8	Essex Region Conservation Authority (ERCA)	Katie Stammler; Alicia Good	Email - Incoming	11-Aug-23	<p>ERCA sent an email to Stantec regarding the draft ER which had attached the ERCA's comments, a planning letter and a letter from the ERCA's Risk Management Official.</p> <p>Overall, the ERCA indicated that there are no Source Water related concerns from the ERCA about the Project's draft ER at this time. However, they did encourage Stantec and Enbridge Gas to provide them any updates if any details switched on the Project. Due to the detailed nature of ER, the ERCA did provide several suggestions and edits on sections of the Project's draft ER relating to Significant Drinking Water Threats, Identification of Vulnerable Areas, the Potential Impacts and Recommended Mitigation Table in Section 5.2 as it relates to Source Water Protection, and Accidental Spills.</p> <p>ERCA noted that the Project is within a regulated area of the Detroit River and will be subjected to a <i>Development, Interference with Wetlands and Alteration to Shorelines and Watercourses Regulations</i> permit prior to any construction under the <i>Conservations Authorities Act</i>. ERCA also noted that the Study Area for the Project lies within a Surface Water Intake Protection Zone Type 2 (SW-IPZ-2) and within the Event Based Area of the Essex Region Source Protection Plan. If the Project requires the installation of fuel storage on site, Stantec and Enbridge Gas need to contact the Essex Region Risk Management Official to ensure handling and</p>	25-Aug-23	<p>Stantec and Enbridge Gas thanked ERCA for their comments on the Project's draft ER. Stantec and Enbridge Gas noted that ERCA had no Source Water related concerns, will provide additional information to ERCA if fuel will be installed over 15,000 L during the Project, acknowledged an ERCA CA permit is needed for the Project, and that extreme caution will be exercised in the Amherstburg IPZ-2 area. Furthermore, Stantec and Enbridge Gas informed ERCA that they would update Sections 3.3.3 "Groundwater" regarding the content within it, Table 5.2 for Potential Impacts and Recommended Mitigation Involving Groundwater, and Section 7.2.5 "Accidental Spills" so it can be reflected in the final ER.</p>



Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
					storage of fuel will not pose a significant risk to local sources of municipal drinking water.		
9	Essex Region Conservation Authority (ERCA)	Katie Stammler; Alicia Good	Email - Incoming	28-Aug-23	ERCA thanked Stantec and Enbridge Gas for their attention to detail on the comments they provided for the Project's draft ER.	N/A	N/A

## Indigenous Communities

Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Aamjiwanaang First Nation (AFN)	Courtney Jackson	Email - Incoming	4-Jul-23	AFN thanked Stantec for the information that was sent out in an email on June 30, 2023 regarding the Environmental Study Report. AFN informed Stantec that the information was logged into their consultation files. AFN also asked Stantec if the file link can stay active until after July 18, 2023 due to the frequency of AFN representatives meeting.	20-Jul-23	Stantec noted to AFN that they were not able to extend the FTP link that was sent on June 30, 2023 but they did provide another new link with an expiry date of August 1, 2023 to access the ER for the Project.
2	Caldwell First Nation (CFN)	Zack Hamm	Email - Outgoing	10-Jul-23	Enbridge Gas followed up with CFN to provide the FTP link regarding the Project's ER which summarizes the results of the Environmental Study. Enbridge Gas requested feedback from CFN by August 14, 2023 but noted that their comments and concerns are important to us and will be accepted at any time.	24-Jul-23	CFN informed Enbridge Gas that once they review the ER, they will provide a workplan outlining the steps for their participation in the Project.
3	Chippewas of Kettle and Stony Point First Nation (CKSPFN)	N/A	Email - Outgoing	10-Jul-23	Enbridge Gas followed up with CKSPFN to provide the FTP link regarding the Project's ER which summarizes the results of the Environmental Study. Enbridge Gas requested feedback from CKSPFN by August 14, 2023 but noted that their comments and concerns are important to us and will be accepted at any time.	31-Jul-23	CKSPFN asked if Enbridge Gas could send a new FTP link for the Project.
4	Aamjiwanaang First Nation (AFN)	Courtney Jackson	Email - Incoming	20-Jul-23	AFN thanked Stantec for the new link to access the ER for the Project.	N/A	N/A
5	Caldwell First Nation (CFN)	Zack Hamm	Email - Incoming	21-Jul-23	CFN asked Stantec if they could resend the FTP link that was sent on June 30, 2023 which consisted of the Environmental Study for the Project.	21-Jul-23	Enbridge Gas responded on Stantec's behalf and noted that they would try to upload the Environmental Study for the Project into CFN's portal even though it might not fit due to the file size.
6	Caldwell First Nation (CFN)	Zack Hamm	Email - Outgoing	27-Jul-23	Enbridge Gas sent an updated FTP link to CFN which consisted of the ER for the Project. Enbridge Gas also indicated that they are trying to upload the ER for the Project to the Consult with Caldwell site but is unsure if it can be uploaded due to the file size. Enbridge Gas also provided a forecast to the CFN for what work for the Project will look like throughout the rest of 2023.	N/A	N/A
7	Chippewas of Kettle and Stony Point First Nation (CKSPFN)	N/A	Email - Outgoing	31-Jul-23	Enbridge Gas asked if CKSPFN is able to download the ER by the latest August 1, 2023 or else if not, they would have to ask Stantec to create a new FTP link in sharing the ER.	N/A	N/A



Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
8	Aamjiwanaang First Nation (AFN)	Cathleen O'Brien	Email - Incoming	1-Aug-23	AFN informed Stantec that they will be submitting comments and are in the process of having a technical review completed by the August 14, 2023 deadline for the Project's ER. AFN also informed Stantec that if the deadline of August 14, 2023 could not be met, they will submit their comments and review as soon as they can.	N/A	N/A
9	Caldwell First Nation (CFN)	Zack Hamm	Email - Incoming	2-Aug-23	CFN emailed Enbridge Gas enquiring about how they can participate in the Project.	N/A	N/A
10	Chippewas of Kettle and Stony Point First Nation (CKSPFN)	Jordan George	Email - Incoming	3-Aug-23	CKSPFN asked Stantec if they could schedule a meeting to discuss various topics related to how the Project impacts the waters of the St. Clair, Kettle and Stony Points past involvement with Stantec or Enbridge Gas, and understanding Stantec's perspective on Indigenous consultation with their treaty partners. CKSPFN informed Stantec that if there is any way they can support reviewing and engaging with other First Nations, they are happy to be involved. CKSPFN also requested for a new FTP link which consists of the ER to be sent as the old link expired.	11-Aug-23	Enbridge Gas thanked CKSPFN for the chat they had on Wednesday. Enbridge Gas also provided an updated FTP link which expires on August 16, 2023 and consists of the ER for the Project. A meeting is to be arranged in September 2023 between Enbridge Gas and CKSFPN to further discuss the Project.
11	Caldwell First Nation (CFN)	Zack Hamm	Email - Incoming	11-Aug-23	CFN emailed Stantec and Enbridge Gas to inform them they won't be able to submit comments for the Project's ER for when the comment period closes on August 14, 2023.	11-Aug-23	Enbridge Gas informed CFN that they look forward to meeting them on August 15, 2023 and will accept and respond to CFN's comments, concerns, and questions regardless of the comment window for the Project's ER.
12	Chippewas of the Thames First Nation (COTTFN)	Jennifer Mills	Email - Incoming	18-Aug-23	COTTFN indicated to Stantec and Enbridge Gas that it has been an extremely busy time for their Consultation Unit and they were unable to complete their review of the draft ER by the requested date. However, COTTFN mentioned that they will be submitting their comments for the draft ER during the week of August 21, 2023.	N/A	N/A
13	Chippewas of the Thames First Nation (COTTFN)	Jennifer Mills	Email - Incoming	31-Aug-23	COTTFN provided a letter to Stantec and Enbridge Gas regarding the comments they had on the Project's draft ER. The comments were based on the following: <ul style="list-style-type: none"> <li>- Socio-Economic Conditions</li> <li>- Land Claim</li> <li>- Economics and Alternatives</li> <li>- Monitoring</li> <li>- Conservation Area and Island Access</li> <li>- Environment</li> <li>- Other general comments regarding the draft ER</li> </ul>	N/A	N/A





## Municipalities

Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	County of Essex	Nithen Samuel	Email - Incoming	18-Jul-23	County of Essex emailed Stantec and asked them if they could please resend the FTP link which was sent on June 30, 2023 and included the results of the Environmental Study.	18-Jul-23	Stantec emailed County of Essex a new FTP link with the results of the Environmental Study in it for their review. The link will expire on August 1, 2023.
2	Town of Amherstburg	Jennifer Ibrahim	Email - Incoming	1-Aug-23	Town of Amherstburg asked Stantec if Enbridge Gas has posted the news about the comment period ending on August 14, 2023 for the Project's ER on their social sites, or if the email sent on August 1, 2023 was only intended for Boblo Island residents.	3-Aug-23	<p>Stantec responded to Town of Amherstburg and informed them that the Project website is accessible to everyone and includes Enbridge Gas' information. Stantec also informed Town of Amherstburg that the consultation process for the Project is on-going and includes the following:</p> <ul style="list-style-type: none"> <li>- Landowners, Non-landowners, key stakeholders, and the public will be kept apprised of Project activities via a project webpage, flyer handouts, sales and marketing material as required, and updates as required via media or social media.</li> <li>- The Project includes engagement with municipalities, landowners, government agencies and Indigenous Communities.</li> <li>- Indigenous consultation is an important part of the Project planning and development activity.</li> <li>- Consultation and engagement is a key component of developing the ER, which will be completed and submitted as part of the Leave to Construct Application to the Ontario Energy Board.</li> <li>- Consultation and engagement helps identify and address Indigenous and stakeholder concerns in the early stages of the Project.</li> <li>- A dedicated Indigenous Engagement Advisor supports Indigenous communities during the Project by providing regular Project updates and other information, as requested.</li> <li>- When the ER is finalized it will be available on the Project website</li> </ul>
3	County of Essex	Crystal Sylvestre	Email - Incoming	2-Aug-23	County of Essex responded to Stantec's email sent out on August 1, 2023 and informed them that the login information to access the FTP link which consisted of the Project's ER is not working.	2-Aug-23	Stantec noted to the County of Essex that the original FTP link expired. Stantec sent along a new FTP link for the County of Essex to access the ER. The new FTP link will expire on August 16, 2023.



Comment Number	Stakeholder Group/ Community	Stakeholder Representative Name/ Community Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
4	Town of Amherstburg	Jennifer Ibrahim	Email - Incoming	3-Aug-23	Town of Amherstburg thanked Stantec for the information regarding who can participate in the consultation process for the Project. Town of Amherstburg mentioned that they would like to share the message from Stantec/Enbridge Gas' Facebook if it is available and have them tag the Town of Amherstburg media pages in their posts. Town of Amherstburg also suggested tailoring the message to Boblo residents if necessary.	8-Aug-23	Stantec responded to Town of Amherstburg and informed them that specific Project news is not shared on Enbridge Gas' Corporate social media accounts. Stantec also indicated that Enbridge Gas engaged with all stakeholders through the Virtual and In-person Information sessions which were advertised in the print media and social media and targeted to the Project area. Stantec concluded the email by saying that at this phase of the Environmental Assessment process, review and comments of the draft ER are sought from the Ontario Pipeline Coordinating Committee members, municipal authorities, conservation authorities and Indigenous communities.



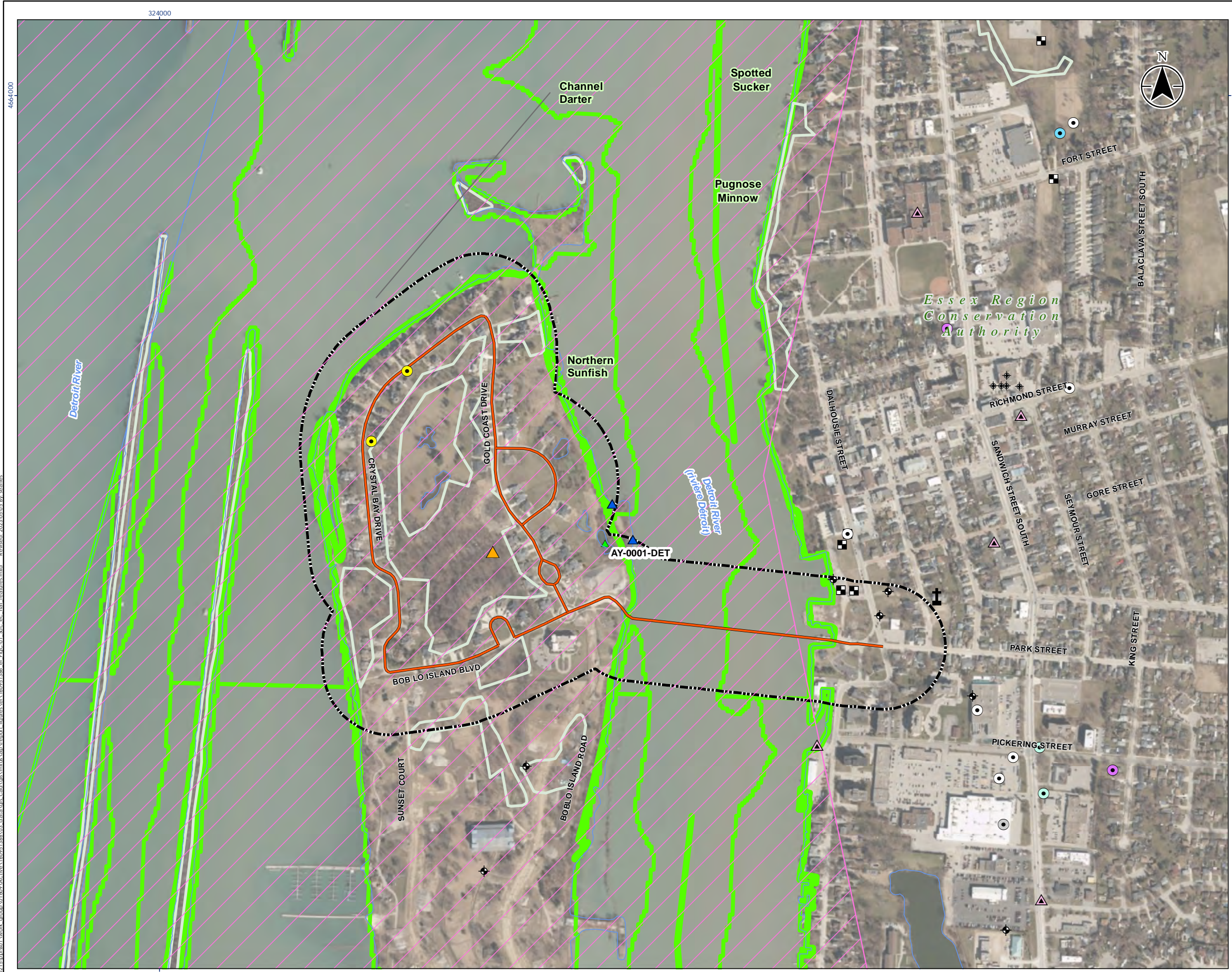
**Boblo Island Community Expansion Project: Environmental Report  
Appendix C Existing Conditions Figures**

September 21, 2023

**Appendix C Existing Conditions Figures**

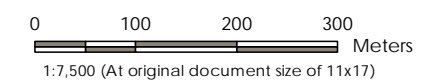






Legend

- Preliminary Preferred Route
- Study Area (120m)
- ▲ Bald Eagle Nest
- ▲ Harardous Waste
- ▲ Dug Inlet
- ✚ Place of Worship
- ▲ Fish Survey Point (LIO - ARA)
- DFO Aquatic Species at Risk - Fish
- Important Bird Area
- Waterbody
- Wooded Area
- MECP Water Well Record
- Cooling And A/C
- Domestic
- Irrigation
- ✚ Monitoring
- ✚ Monitoring and Test Hole
- Not Used
- Other
- Test Hole
- Use Not Identified



Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
3. Orthoimagery © First Base Solutions, 2023. Imagery Date, 2022.
4. MECP water well record locations have been positioned based on published UTM coordinates and their locations should be considered approximate.



Project Location: TOWN OF AMHERSTBURG  
 Prepared by SPE on 2023-05-05  
 Technical Review by BC on 2023-04-21

Client/Project: ENBRIDGE GAS INC., BOBLO ISLAND COMMUNITY EXPANSION

Figure No.: C-1

Title: Socio-Economic and Natural Environment Features

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 Revised: 2023-05-05 By: stantec



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

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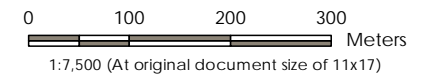


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Legend

-  Preliminary Preferred Route
-  Study Area (120m)
-  Waterbody
-  Limit Of Regulated Area
- IPZ Type
-  2



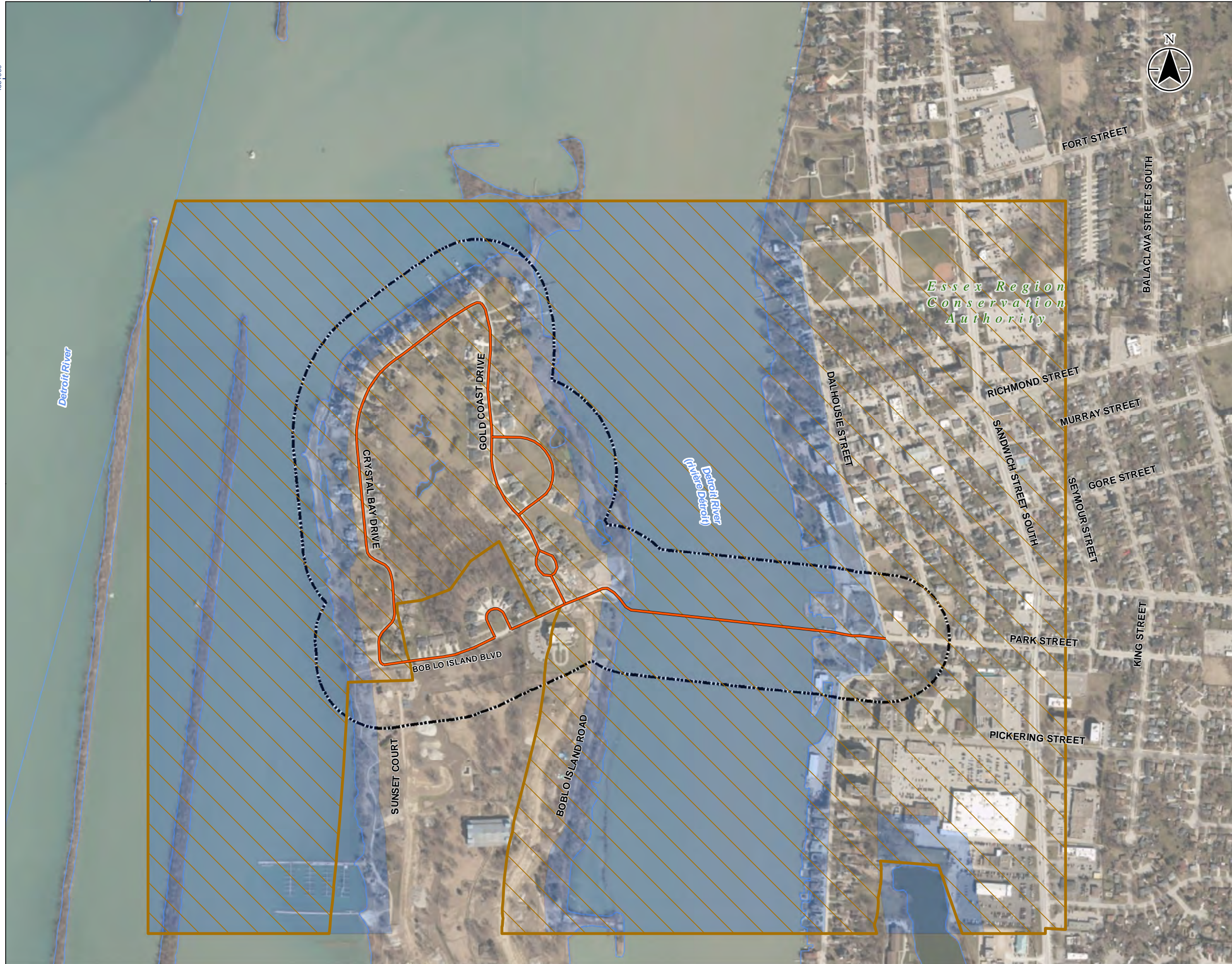
- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
  3. Orthoimagery © First Base Solutions, 2023. Imagery Date, 2022.
  4. Contains information from Essex Region Conservation Authority Under EULA, 2023.



Project Location: TOWN OF AMHERSTBURG  
 Prepared by SPE on 2023-05-05  
 Technical Review by BC on 2023-04-21  
 160951386 REVA

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION

Figure No.: C-2  
 Title: Limit of Regulated Area and Source Water Protection Features



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## **Appendix D      Significant Wildlife Habitat Assessment**





## Appendix D Significant Wildlife Habitat Assessment

**Table D-1: Significant Wildlife Habitat Assessment for Enbridge Boblo Island Project Study Area (Ecoregion 7E)**

### Seasonal Concentrations Areas

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment
Waterfowl Stopover and Staging Area (Terrestrial and Aquatic)	Fields with evidence of annual spring flooding from meltwater or runoff; aquatic habitats such as ponds, marshes, lakes, bays, and watercourses used during migration, including large marshy wetlands.	Flooded fields and terrestrial waterfowl stopover and staging SWH is absent. Lower Detroit River Important Bird Area (IBA) identified in the Detroit River for nesting gulls, terns, and overwintering waterfowl (BirdLife International, no date). <b>SWH present</b> for aquatic waterfowl stopover and staging in the Detroit River.
Shorebird Migratory Stopover Area	Beaches and un-vegetated shorelines of lakes, rivers, and wetlands.	<b>Candidate SWH potentially present</b> along un-vegetated shorelines within the Detroit River. e-Bird identified records of Greater Yellowlegs, American Golden Plover, Spotted Sandpiper, and Semipalmated Sandpiper.
Raptor Wintering Area	Combination of fields that are idle/fallow or lightly grazed (>15 ha) with adjacent woodland (total >20 ha).	Absent. Large woodlands and fallow areas absent from the Study Area.
Bat Hibernacula	Hibernacula may be found in caves, mine shafts, underground foundations and karsts.	Absent. Caves, mine shafts, and karsts absent.
Bat Maternity Colonies	Maternity colonies considered significant wildlife habitat are found in forested ecosites.	<b>Candidate SWH potentially present</b> in existing woodlots. Snags were identified within the Study Area during the 2022 field survey.
Turtle Wintering Areas	Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Water has to be deep enough not to freeze and have soft mud substrate.	<b>Candidate SWH potentially present</b> in the Detroit River.



<b>Wildlife Habitat Type</b>	<b>Criteria</b>	<b>Results of Desktop and Field Habitat Assessment</b>
Reptile Hibernaculum	Rock piles or slopes, stone fences, crumbling foundations.	<b>Candidate SWH potentially present.</b> Rock piles, slopes and basking areas were observed during the 2022 field survey.
Colonial-Nesting Bird Breeding Habitat (Bank and Cliff)	Eroding banks, sandy hills, steep slopes, rock faces or piles.	Absent. No banks or cliffs noted during field surveys.
Colonial-Nesting Bird Breeding Habitat (Tree/Shrubs)	Dead trees in large marshes and lakes, flooded timber, and shrubs, with nests of colonially nesting heron species.	Absent. Colonial-nesting birds (tree/shrub) nests not observed during roadside surveys conducted in 2022.
Colonial-Nesting Bird Breeding Habitat (Ground)	Rock islands and peninsulas in a lake or large river.	Lower Detroit River Important Bird Area (IBA) identified for nesting gulls, terns, and overwintering waterfowl (BirdLife International, no date). Absent. Colonial-nesting birds (ground) known on Fighting Island, but not within the Study Area.
Migratory Butterfly Stopover Areas	Meadows and forests that are a minimum of 10 ha and are located within 5 km of Lake Erie.	Absent. Within proximity to Lake Erie but woodlands and/or meadows are insufficient in size.
Landbird Migratory Stopover Areas	Woodlands > 5 ha in size and located within 5 km of Lake Erie.	<b>Candidate SWH potentially present</b> due to proximity to Lake Erie and presence of woodlands.
Deer Yarding or Winter Congregation Areas	Deer winter congregation's areas are mapped by MNRF and species use surveys are not required.	Absent. Not identified during background review.



## Rare Vegetation Communities

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment
Sand Barren, Alvar, Cliffs and Talus Slopes	Sand barren, Alvar, Cliff and Talus ELC Community Classes, and other areas of exposed bed rock and patchy soil development, near vertical exposed bedrock and slopes of rock rubble.	Absent.
Old-growth Forest	Relatively undisturbed, structurally complex; dominant trees >100 years' old.	Absent.
Tallgrass Prairie and Savannah	Open canopy habitats (tree cover < 60%) dominated by prairie species.	Absent.
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities listed by the NHIC.	Absent.

## Specialized Habitat for Wildlife

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment
Waterfowl Nesting Area	Upland habitats adjacent to wetlands (within 120 m).	Absent. Upland habitat adjacent to wetlands were not observed in the Study Area.
Bald Eagle and Osprey nesting, Foraging, and Perching Habitat	Treed communities adjacent to rivers, lakes, ponds, and other wetlands with stick nests of Bald Eagle or Osprey.	<b>SWH present</b> in Study Area. Bald Eagles documented during the site visit in December 2022 along with a large stick nest. Activity of the nest confirmed April 2023.
Woodland Raptor Nesting Habitat	Forested ELC communities >30 ha with 10 ha of interior habitat.	Absent. Forest tracts smaller than 30 ha in size.
Turtle Nesting Areas	Exposed soil, including sand and gravel in open sunny areas near wetlands.	<b>Candidate SWH potentially present</b> along Detroit River.
Seeps and Springs	Any forested area with groundwater at surface within the headwaters of a stream or river system.	Absent.
Amphibian Breeding Habitat (Woodland and Wetland)	Treed uplands with vernal pools, and wetland ecosites.	<b>Candidate SWH present</b> in woodlands due to the presence of nearby ponds (based on air photo interpretation).



<b>Wildlife Habitat Type</b>	<b>Criteria</b>	<b>Results of Desktop and Field Habitat Assessment</b>
Woodland Area-sensitive Bird Breeding Habitat	Large mature forest stands, woodlots >30 ha and >200 m from the forest edge.	Absent. Forest tracts are not mature and are smaller than 30 ha in size.

### **Habitat for Species of Conservation Concern**

<b>Wildlife Habitat Type</b>	<b>Criteria</b>	<b>Results of Desktop and Field Habitat Assessment</b>
Marsh Bird Breeding Habitat	Wetlands with shallow water and emergent aquatic vegetation.	Absent. Suitable wetlands absent from the Study Area.
Open Country Bird Breeding Habitat	Large grasslands and fields (>30 ha).	Absent. Large grasslands absent from the Study Area.
Shrub/Early Successional Bird Breeding Habitat	Large shrub and thicket habitats (>10 ha).	Absent. Large thickets absent from the Study Area.
Terrestrial Crayfish	Wet meadows and edges of shallow marshes.	Absent. Suitable habitats absent.

### **Species of Conservation Concern<sup>1</sup>**

#### **Animal Movement Corridors**

<b>Wildlife Habitat Type</b>	<b>Criteria</b>	<b>Results of Desktop and Field Habitat Assessment</b>
Amphibian Movement Corridor	Corridors may be found in all ecosites associated with water. Determined based on identifying significant amphibian breeding habitat (wetland).	Absent.

<sup>1</sup> See Table 3.2 in the body of the report for details on candidate SOCC



## **Appendix E      Stage 1 Archaeological Assessment**







## **Stage 1 Archaeological Assessment: Boblo Island Community Expansion**

Part of Lots 2 and 3, Concession 1, and Bois  
Blanc Island, Geographic Township of Malden,  
now Town of Amherstburg, Essex County,  
Ontario

June 28, 2023

Prepared for:  
Enbridge Gas Inc.  
500 Consumers Road  
North York, Ontario M2J 1P8

Prepared by:  
Stantec Consulting Ltd.  
600-171 Queens Avenue  
London, Ontario N6A 5J7

Project Number:  
160951386

Licensee: Darren Kipping, MA, RPA  
License Number: P422  
Project Information Form Number:  
P422-0033-2023

**ORIGINAL REPORT**

## **Executive Summary**

Enbridge Gas Inc. (Enbridge Gas) retained Stantec Consulting Ltd. (Stantec) to complete a Stage 1 archaeological assessment for the Boblo Island Community Expansion Project (the Project). The Project is located on parts of Lots 2 and 3, Concession 1, and Bois Blanc Island (Boblo Island), Geographic Township of Malden, now Town of Amherstburg, County of Essex. Overall, the study area for the Project is approximately 58.88 hectares and consists of residential and commercial properties, manicured lawns, scrubland, undeveloped forested areas, residential and commercial properties, and municipal right of ways (ROW) within the communities of Boblo Island and the Town of Amherstburg.

The Stage 1 archaeological assessment was conducted under Project Information Form number P422-0033-2023, issued to Darren Kipping, MA by the Ministry of Citizenship and Multiculturalism (MCM). A property inspection was conducted on April 27, 2023, by Darren Kipping (P422). The archaeological assessment for the Project was conducted in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7<sup>th</sup> Edition* (OEB 2016).

The Stage 1 archaeological assessment of the study area for the Project determined that portions of the study area, approximately 10.83%, retains potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction activities which impact an area of archaeological potential.**

The Stage 1 archaeological assessment also determined that portions of the study area, approximately 63.89%, retain low to no archaeological potential due to being subject to previous archaeological assessment, and areas subject to deep and extensive modern disturbances such as the existing municipal road ROW, laneways, existing buildings, and buried utilities and other municipal infrastructure. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction activities which impact an area of low to no archaeological potential.**

Full and detailed recommendations are provided in the body of the report.

The Ministry is asked to review the results presented and accept this report into the *Ontario Public Register of Archaeological Reports*.

*The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.*



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## **Acknowledgements**

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# 1 Project Context

## 1.1 Development Context

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Boblo Island Community Expansion Project to supply the community of Boblo Island in the Town of Amherstburg, County of Essex, Ontario, with affordable natural gas (the Project). The Project will involve the construction of approximately 2.9 kilometres of a combination of 2-inch polyethylene and 4-inch steel pipeline. The proposed pipeline will tie-in to an existing Enbridge Gas 4-inch steel pipeline near the intersection of Dalhousie Street and Park Street in Amherstburg. The 4-inch steel pipeline will cross the Detroit River (approximately 600 metres) to reach Boblo Island. The distribution system on the island will be a 2-inch polyethylene pipeline and be approximately 2.3 kilometres in length. It is anticipated that the distribution system will be located within existing road allowances.

To facilitate this Project, Enbridge Gas retained Stantec Consulting Ltd. (Stantec) to undertake a Stage 1 archaeological assessment (Figure 1). The Project is located on parts of Lots 2 and 3, Concession 1, and Bois Blanc Island (Boblo Island), Geographic Township of Malden, now Town of Amherstburg, County of Essex, Ontario (Figure 2). The study area for the Stage 1 archaeological assessment is approximately 58.88 hectares (ha) and consists of residential and commercial properties, parking lots, manicured lawns, scrubland, undeveloped forested areas, municipal right of ways (ROW), and a portion of the Detroit River within the communities of Boblo Island and the Town of Amherstburg.

This Stage 1 archaeological assessment was conducted in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7<sup>th</sup> Edition* (OEB 2016).

### 1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a), the objectives of the Stage 1 Archaeological Assessment are as follows:

- To provide information about the study area's geography, history, previous archaeological fieldwork, and current land conditions.
- To evaluate the study area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property.
- To recommend appropriate strategies for Stage 2 survey.

To meet these objectives, Stantec archaeologists employed the following research strategies:

- A review of relevant archaeological, historical, and environmental literature pertaining to the study area.
- A review of the land use history, including pertinent historical maps.



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- An examination of the MCM's *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- A query of the MCM's *Ontario Public Register of Archaeological Reports* to identify previous archaeological assessments completed within 50 metres of the study area.

In addition to the above, a property inspection was undertaken by a licensed archaeologist as part of the Stage 1 archaeological assessment. Permission to conduct the Stage 1 visual assessment of the study area was provided by the Enbridge Gas. However, access to private lands for the purposes of the archaeological assessment was not obtained. Thus, photo documentation completed during the Stage 1 visual assessment was completed from the municipal road ROW and public lands.

## 1.2 Historical Context

“Contact” is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. The precise moment of contact is a constant matter of discussion. Contact in what is now the province of Ontario is broadly assigned to the 16<sup>th</sup> century (Loewen and Chapdelaine 2016).

### 1.2.1 Pre-Contact Indigenous Resources

It has been demonstrated that Indigenous people began occupying southern Ontario as the Laurentide glacier receded, as early as 11,000 years ago (Ellis and Ferris 1990:13). Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into cultural periods based on observed changes in material culture. These cultural periods are largely based in observed changes in formal lithic tools and separated into the Early Paleo, Late Paleo, Early Archaic, Middle Archaic, and Late Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, cultural periods are separated into the Early Woodland, Middle Woodland, and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these cultural periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time. The current understanding of Indigenous archaeological culture in Essex County is summarized in Table 1, based on Ellis and Ferris (1990). The provided periods are based on the “Before Present” calendar notation system, wherein BP stands for years before the present. The “Present Year” is set in the calendar year 1950.

**Table 1: Cultural Chronology of Essex County**

Period	Characteristics	Time Period	Comments
Early Paleo	Fluted Projectiles	10,950 – 10,350 BP	Spruce parkland/caribou hunters
Late Paleo	Hi-Lo Projectiles	10,350 – 9,950 BP	Smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	9,950 – 7,950 BP	Slow population growth
Middle Archaic	Brewerton-like Points	7,950 – 4,450 BP	Environment similar to present
Late Archaic	Narrow Point	4,450 – 3,750 BP	Increasing site size



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Period	Characteristics	Time Period	Comments
	Broad Point	3,750 – 3,450 BP	Large chipped lithic tools
	Small Point	3,450 – 3,050 BP	Introduction of bow hunting
Terminal Archaic	Hind Points	3,050 – 2,900 BP	Emergence of true cemeteries
Early Woodland	Meadowood Points	2,900 – 2,350 BP	Introduction of pottery
Middle Woodland	Couture Corded Pottery	2,350 – 1,450 BP	Increased sedentism
	Rivière au Vase Phase	1,450 – 1,150 BP	Seasonal hunting and gathering
Late Woodland	Younge Phase	1,150 – 750 BP	Incipient agriculture
	Springwells Phase	750 – 550 BP	Agricultural villages
	Wolf Phase	550 – 400 BP	Earth worked villages, warfare

The local environmental conditions were significantly different from what they are today. Ontario's first peoples would have crossed the landscape in small groups searching for food, particularly migratory game species. Caribou may have been a Paleo diet staple in this area, supplemented by wild plants, small game, birds, and fish. Given the low density of populations on the landscape at this time and their mobile nature, Paleo sites are small and ephemeral. The presence of fluted points sometimes identifies them. Site characteristics are frequently observed to be located adjacent to the shorelines of large glacial lakes (Ellis and Deller 1990).

Archaeological records indicate subsistence changes around 9,950 BP at the start of the Archaic Period in southwestern Ontario. Since the large mammal species that formed the basis of the Paleo-Indian diet became extinct or moved north with the warming of the climate, Archaic populations had a more varied diet, exploiting a range of plants and bird, mammal, and fish species. Reliance on specific food resources like fish, deer, and several nut species became more noticeable through the Archaic Period. The presence of warmer, more hospitable environs led to expanding group and family sizes. In the archaeological record, this is evident in the presence of larger sites. The coniferous forests of earlier times were replaced by stands of mixed coniferous and deciduous trees by about 5,950 BP. The transition to more productive environmental circumstances led to increased population density. As a result, Archaic sites become more abundant over time. Artifacts typical of these occupations include a variety of stemmed and notched projectile points; chipped stone scrapers; ground stone tools (i.e., celts, adzes) and ornaments (i.e., bannerstones, gorgets); bifaces or tool blanks; animal bone; and chert waste flakes, a by-product of the tool making process.

Significant cultural and environmental pattern changes occurred in the Early and Middle Woodland periods (circa 2,900 to 1,150 BP). Occupations became increasingly more permanent in this period, culminating in major semi-permanent villages roughly 1,000 years ago. Archaeologically, the most significant changes by Woodland peoples were the appearance of artifacts manufactured from modelled clay and the emergence of more sedentary villages. The earliest pottery was crudely made by the coiling method, and early house structures were simple oval enclosures. The Early and Middle Woodland periods are also characterized by extensive trade in raw materials, objects, and finished tools, with sites in Ontario containing trade items with origins in the Mississippi and Ohio River valleys.



By the Late Woodland period, southwestern Ontario had a distinctive cultural occupation, including Essex, Kent, and Lambton counties. The primary Late Woodland occupants of the Windsor area were populations described by archaeologists as Western Basin Tradition. Murphy and Ferris (1990:189) indicate that these people had ties with populations in southeastern Michigan and northwestern Ohio and represent an in situ cultural development from the earlier Middle Woodland groups. The Western Basin Tradition seems to have been centred in the territory comprising the eastern drainage basin of Lake Erie, Lake St. Clair, and the southern end of Lake Huron. The Western Basin Tradition is divided into four phases based on differences in settlement, subsistence strategies, and pottery attributes. By the time of increased European interaction in the last half of the 16th century and early 17th century, there were no Western Basin Tradition sites in the Essex County area, having moved west into Michigan (Ferris 2009:32-33).

### **1.2.2 Post-Contact Indigenous Resources**

The post-Contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking communities by the New York State Iroquois and the subsequent arrival of Algonkian-speaking groups from northern Ontario at the end of the 17th century and beginning of the 18th century (Konrad 1981; Schmalz 1991). By 1690, Algonkian speakers from the north appear to have begun to repopulate Bruce County (Rogers 1978:761). This is the period in which the Mississaugas are known to have moved into southern Ontario and the lower Great Lakes watersheds (Konrad 1981). In southwestern Ontario, however, members of the Three Fires Confederacy (Chippewa, Odawa, and Potawatomi) were immigrating from Ohio and Michigan in the late 1700s (Feest and Feest 1978, 778-779).

At the turn of the 16th century, the region of the study area is documented to have been occupied by the “Western Basin Tradition” archaeological culture (see Section 1.2.1). Following the turn of the 17th century, the region of the study area is understood to have been within the territory of the “Fire Nation”, an Algonquian group occupying the western end of Lake Erie. It is argued, however, that the Atawandaron (also called the Neutral by the English, and Neutre by the French) expanded extensively westward, displacing the Fire Nation and occupying the region of modern Chatham-Kent (Lennox and Fitzgerald 1990:418-419). In the winter of 1626-1627, Recollet Father Daillion travelled through the region of the study area along the north shore of Lake Erie and encountered numerous villages occupied by the Neutral, also called Attikadaron, Atiouandaronk, or Attiwondaronk, who cultivated fields of maize, tobacco, and squash, in addition to hunting and fishing (Coyne 1895). In 1641-1642, the Jesuit missionaries Brebeuf and Chaumonot passed through 28 Neutral villages and gave some of them Christian names, which appear on Sanson’s 1656 map of New France (Sanson 1656). Several villages are illustrated north and east of the study area, but the rivers and creeks are not named on the map and their depicted locations are not entirely accurate, and therefore the exact location of the villages identified by Sanson (1656) cannot be determined. Population estimates of the Neutral, compiled by the Jesuits, range from 12,000 to 30,000 people (Coyne 1895:10).

It is debated whether the Fire Nation was descendent from the archaeologically described Western Basin Tradition, or if they migrated into the western part of Lake Erie, displacing a previous Indigenous culture (Murphy and Ferris 1990:193-194). Historians understand that the displaced Fire Nation moved across



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the St. Clair River and Detroit Rivers into what is modern day lower Michigan, and their populations are synonymous with the later Kickapoo, Miami, Potawatomi, Fox, and Sauk (Heidenreich 1990: Figure 15.1). Bkejwanong (Walpole Island) First Nation (WIFN) tradition states that the Three Fires Confederacy have occupied the delta of the St. Clair River and the surrounding region continually for thousands of years (WIFN n.d.). In 1649, the Seneca and the Mohawk led a campaign into southern Ontario and dispersed the resident nations and the Seneca used the lower Great Lakes basin as a prolific hinterland for beaver hunting (Heidenreich 1978; Trigger 1978:345).

In Essex County, and specifically in the Windsor region, a splinter group of Odawa settled in the area (Cultural Resources Management [CRM] Group Limited et al. 2005:2-14 to 2-15). Also, the surviving remnants of the Huron and Petun were settling in the Windsor region as the Wyandot, exhibiting continuities with their 16<sup>th</sup> and 17<sup>th</sup> century predecessors from the Midland and Blue Mountain regions (Garrad 2014; Steckley 2014). Given the amalgamated nature of the Wyandot people, sometimes one of the contributing Indigenous peoples were recognized over another, hence the Wyandot were known as Huron in the Windsor region (Garrad 2014:16-54). Therefore, the Wyandot settlement in the Windsor region is commonly referred to as a “Huron Village” and related place names survive in Windsor today, such as Huron Church Road (but also note Wyandotte Street). A 1749 French map of the Detroit River region depicts one such Huron Village on the shores of the Detroit River south of the study area, having been abandoned by 1748, depicted as number 29 on the map (Chaussegros de Lery 1752) (Figure 3). Identified as number 30 on the map, Bois Blanc Island had been given its name by this time, which referenced the white ash or poplar trees that grew on the island (Figure 3). Bois Blanc Island is now commonly referred to as Boblo Island, an anglicized version of the French name, and will be used throughout the report herein.

The study area falls within the traditional territory of the WIFN, the Aamjiwnaang (Sarnia) First Nation (Aamjiwnaang First Nation), the Wiiwkwedong and Aazhoodena (Kettle Point and Stony Point) First Nation, the Deshkaan Ziibing Anishnaabeg (Chippewas of the Thames First Nation) (COTTFN), and the Zaaga'iganiniwag (Caldwell First Nation). Some populations of Wyandot (a nation of historically amalgamated Tionontati and Huron-Wendat populations) also had moved to the region of Lake St. Clair at the turn of the 18<sup>th</sup> century and resided with the Three Fires Confederacy (Tooker 1978:398).

Despite the dispersal and movement of Indigenous groups throughout southern Ontario during the 17<sup>th</sup> and 18<sup>th</sup> centuries, the archaeology of these groups can still be characterized by continuity with their pre-Contact Indigenous counterparts. These peoples still maintained a Terminal Woodland archaeological culture albeit with some features of European material culture. While there was cultural and social change occurring due to contact with European explorers and immigrants, there was equally a definite persistence of Indigenous socio-cultural practices since these groups were not so profoundly affected by European contact that they left their former lifeways behind (Ferris 2009).

Under British administration in the 19<sup>th</sup> century, various Indigenous groups were divided into separate bands. The Anishinaabe included the western Algonquian peoples, among them the Chippewa and the Odawa. Until the 18<sup>th</sup> century, the central Algonquian-speaking peoples, including the Potawatomi, were located in the Michigan Peninsula. In the middle of the 18<sup>th</sup> century, the Chippewa were located on the south shores of Lake Huron, the east shores of Georgian Bay, and on the west end of Lake Ontario.



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Indigenous peoples and their communities continue to play a large role in the occupation of the study area and its environs. Despite the differentiation among these groups in Euro-Canadian sources, Indigenous groups had a considerably different view concerning their self-identification during the first few centuries of European contact. These peoples relied upon kinship ties that cut across European notions of nation identity (Bohaker 2006:277-283). Many of the British-imposed nation names such as Chippewa, Ottawa, Potawatomi, or Mississauga artificially separated how self-identified Indigenous peoples' classified themselves; these groups were culturally and socially more alike than contemporary European documentation might indicate (Bohaker 2006:1-8).

Since contact with European explorers and immigrants, and, later, with the establishment of provincial and federal governments (the Crown), the lands within Ontario and the Essex County region have been included in various treaties, land claims, and land cessions. In 1790, the Ojibwa and Wyandot groups in the Essex County region ceded most of the land they settled on to the Euro-Canadian inhabitants through Treaty Number 2 (Jacobs 1983:61-68). Following the surrender of these lands, the remainder of the Wyandot groups moved south from the Windsor Region and settled into the tract of land that was excluded from Treaty Number 2, the Huron Reserve (Lajeunesse 1960:cvi) (Figure 4). The tract of land of the Huron Reserve spanned the area of Anderdon Township and Malden Township; now covering the present-day area of where the Towns of LaSalle and Amherstburg are situated (Morris 1943:27).

In 1833, the Wyandot group in the Huron Reserve surrendered the remaining land to the Euro-Canadian inhabitants through Treaty Number 35, within which the study area falls in. Treaty Number 35:

... was an Indenture made on the 13<sup>th</sup> August, 1833, between Indians of the Wyandot or Huron Tribe and His Majesty King William the Fourth whereby the Indians surrender that tract of land known as the Huron Reserve, shown on compiled plan as Letter "U" situated in the Western District of the Province of Upper Canada, butted and bounded as follows:

Commencing at a post or point on the River Detroit being the boundary between the said Huron Reserve and the Military Ground attached to Fort Amherst in the Township of Malden; thence running east seven miles more or less, until you strike the west lined of the Township of Colchester; thence North along the said line until you strike the south line of the Township of Sandwich; thence west along the said line seven miles more or less to the River Detroit; thence following the course of the River Detroit to "the place of beginning," together with all the woods, etc.

(Morris 1943:27)

Though not an exhaustive list, Morris (1943) provides a general outline of some of the treaties within the Province of Ontario from 1783 to 1923. While it is difficult to exactly delineate treaty boundaries today, Figure 5 provides an approximate outline of the area encompassed by Treaty Number 35 (identified by the letter "U"), based on Morris (1943).

Figure 6 reproduces a map from the *History of the Windsor Border Region* (Lajeunesse 1960) which depicts several Indigenous sites and trails documented in Essex County during the late 18<sup>th</sup> century. Trail F extends from south of Amherstburg north towards Window and LaSalle along what is now Highway 18. Location 9 indicates a former village of the Hurons abandoned in 1748 (the same abandoned village





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illustrated as number 29 in the 1749 French map of the Detroit River, see Figure 3), while Location 10 indicates a camping site on Boblo Island that was used by a variety of Indigenous peoples (Figure 6).

The fur trade expansion led to increased interaction between European and Indigenous people, and ultimately intermarriage between European men and Indigenous women. During the 18<sup>th</sup> century the progeny of these marriages began to identify as Métis and no longer identified directly with either their paternal or maternal cultures. The ethnogenesis of the Métis progressed with the establishment of distinct Métis communities along the major waterways in the Great Lakes of Ontario. Métis communities were primarily focused around the upper Great Lakes and along Georgian Bay, however, Métis people have historically lived throughout Ontario (Métis Nation of Ontario 2023; Stone and Chaput 1978, 607-608).

The nature of Indigenous settlement size, population distribution, and material culture shifted as European settlers encroached upon their territory. However, despite this shift, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to...systems of ideology and thought” (Ferris 2009, 114). As a result, Indigenous peoples have left behind archaeological resources throughout southern Ontario which show continuity with past peoples, even if they have not been recorded in Euro-Canadian documentation.

### 1.2.3 Euro-Canadian and Afro-Canadian Resources

In 1791, the Provinces of Upper Canada and Lower Canada were created from the former Province of Quebec by an act of the British Parliament. At this time, Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing the new province, directing its settlement, and establishing a constitutional government modelled after that of Britain (Petryshyn 1985). In 1792, Simcoe divided Upper Canada into 19 counties consisting of previously settled lands, new lands opened for settlement, and lands not yet acquired by the Crown. These new counties stretched from Essex in the west to Glengarry in the east.

Essex County was originally part of the District of Hesse and was renamed the Western District on October 15, 1792 (County of Essex 2019). On January 1, 1800, in the *Act for the Better Division of the Province*, the townships of Rochester, Mersea, Gosfield, Maidstone, Sandwich, and Marden were created as part of the County of Essex. The townships of Essex County were surveyed by Patrick McNiff, Abraham Iredell, and Thomas Smith (Clarke 2001:60; 70).

Essex County is bounded by Lake St. Clair to the north, the Detroit River to the west, Lake Erie to the south, and Kent County (now Municipality of Chatham-Kent) to the east. It was one of the first counties to be settled in Upper Canada (later, Ontario). The first French settlers arrived in the Detroit-Windsor area in 1701 when the Sieur De Lamothe Cadillac and roughly 100 military and civilian personnel established Fort Pontchartrain on the Detroit side of the river (Fuller 1972:6-8). The French settlement remained on the Detroit side until 1748, when the Jesuit mission to the Huron (or Wyandot) was established on the south shore near the foot of the present-day Huron Church Road and the Ambassador Bridge.



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Fort Pontchartrain surrendered to the British in 1760, and after the Seven Years War in 1763, New France was ceded to Great Britain per the Treaty of Paris terms. Fort Pontchartrain remained under British control until 1796, although it was officially a part of the United States from 1783 onwards. The settlement continued to grow during this period but remained predominantly French. The area (now in present-day Windsor) across the river from Fort Pontchartrain (later to become Detroit) was called “Petite côte” and served the agricultural needs of the fort (Archives of Ontario 2014). Following the American Revolutionary War, settlers settled further east of the Detroit River along the north shore of Lake Erie (Corporation of the County of Essex 1992:2).

Road development in the early 19<sup>th</sup> century helped spread European settlers throughout Essex County. In 1811, Colonel Talbot commissioned Mahlon Burwell to survey the Talbot Road along the north shore of Lake Erie. The roadway construction was interrupted by the War of 1812, eventually reaching Essex County in 1818.

Following the American Revolutionary War, settlers loyal to the Crown crossed the Detroit River and were granted lands in Essex County. As most of the land around Amherstburg was taken by military officers, the new settlers moved east, towards Kingsville, burning forests to establish fertile farmlands. Many of these individuals were Hessians, who sided with the British during the American Revolutionary War, and Pennsylvanian Dutch Mennonites, who were branded as British supporters and fled America (County of Essex 2019).

After the *Municipal Corporations Act* of 1850, which provided a means of government for towns and counties, Essex became a united entity with the Counties of Kent and Lambton. In June 1853, Essex once again became an independent county. Roads throughout the township were largely improved by the 1860s, allowing for settlement in the interior portions of the County. By 1866, the Talbot Road was gravelled, and a mail coach operated along the road between Leamington and Windsor (Kingsville Centennial Committee 1952:18). By 1881, the population of Essex County was 36,258, with 25,303 settlers living in rural areas (Belden 1881:8).

#### 1.2.3.1 Malden Township

In the winter of 1640, Jesuit Missionaries Brebeuf and Chaumont travelled from Huronia to the Detroit River region, preaching the Gospel of the Neutral (Lajeunesse 1960). In 1679, Father Hennepin, along with René-Robert Cavelier, Sieur de La Salle, travelled along the Detroit River. However, it was not until 1742 that Armand de la Richardie, a Jesuit, established a Mission for the Wyandot (Huron) on the island and the mainland. Five years later, the Mission had approximately 300 inhabitants living in 33 lodges (Livingston 2008). Shortly after, the Mission was attacked and abandoned, with Jesuits re-establishing themselves in the Town of Sandwich (County of Essex 1992). Accounts vary, with some suggesting that the Bois Blanc Mission was located on the south end of Boblo Island (Livingston 2008:5), while others suggest that it was located on the mainland, across from the south end of Boblo Island (Botsford 1985:71).

On June 7, 1784, the Huron and Odawa signed a treaty, giving a tract of land seven miles square (approximately 18 square kilometres) at the mouth of the Detroit River to Alexander McKee, William Caldwell, Charles McCormack, Robin Eurphleet, Anthony St. Martin, Matthew Elliot, Hendry Bird, Thomas



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McKee, and Simon Girty. Henry Bird was given the northern section, which would become the northern part of the Township of Malden and contain what is now the northern part of the Town of Amherstburg (James 1902).

In 1793, the Township of Malden was formally established, having been surveyed by Patrick McNiff (James 1902). By 1799, multiple streets and lots were laid out, but the township's growth was halted by the War of 1812 (Botsford 1985). It was not until the 1830s that the Township of Malden, beyond the second concession, was opened for settlement (Botsford 1985). In 1862, the route of present-day Highway 18 was graded and used as the main thoroughfare for the township. By the 1880s, the Township of Malden was primarily emigrants from the British Isles, French-Canadians, and descendants of enslaved fugitives who had escaped slavery in the United States (Botsford 1985:74).

#### 1.2.3.2 Town of Amherstburg

British settlement of the future site of the Town of Amherstburg began in 1784, when Captains Bird, Caldwell, McKee, Elliot, Ford, and Lamotte purchased land directly from the local Huron inhabitants (Botsford 1985). The officers then set about clearing the land and planting crops along the waterfront.

In 1794, Great Britain and the United States signed Jay's Treaty to settle outstanding issues from the American Revolutionary War. The treaty stipulated that Britain was to relinquish all American territory it still occupied by 1796, including its fortifications at Detroit (Library of Congress 2017). Royal Engineers selected Colonel Bird's lands as the new fort location due to its strategic positioning, including the deep waters in a narrow channel that forced ships to come close to the mainland and within cannon firing distance (Botsford 1985:14). Colonel Bird's deed from the Huron was not considered valid, and his lands were repossessed by the Crown in 1796 (James 1902). Bird was not compensated by the British for these lands.

The British constructed Fort Malden at Amherstburg beginning in 1796. The British garrison brought prosperity to the area and the population of Amherstburg and the two adjacent townships (i.e., Malden and Anderdon) soon exceeded Sandwich Township (present day Windsor). In 1817, the population of Amherstburg, Anderdon, and Malden townships stood at 675 people (Belden 1881). A survey of the Detroit River in 1824 (Melish 1824) demonstrates the position of Amherstburg, with the study area positioned to the north, along the riverbanks (Figure 7).

In the War of 1812, Amherstburg was a strategic stronghold from which the British conducted the defense of the surrounding area (Botsford 1985:5). Amherstburg's first engagement in the War of 1812, was on July 2, 1812, when soldiers and Indigenous peoples at Amherstburg left the Amherstburg Navy Yard in canoes and small boats and captured the American schooner *Cuyahoga* off Boblo Island. The schooner carried several invalid soldiers, women, and children, as well as written dispatches directed to Governor Hull (Michigan); the event became known as the *Capture of the Cuyahoga Packet* (Botsford 1985). In August 1812, Major-General Isaac Brock, acting Lieutenant-Governor of Upper Canada, and Tecumseh met, and laid plans to recapture Detroit (Botsford 1985). Amherstburg and Fort Malden then served as the stronghold for the Canadian forces within the area for the next year. However, on September 23, 1813, with American forces advancing, General Procter (acting commander of the troops at Fort Malden at Amherstburg), abandoned the fort, ordering that the fort and all public storehouses be burned before



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retreat (James 1902). The fort would remain under control of the United States until 1815, a few months after the end of the war (Botsford 1985). Under control of the United States, Fort Amherstburg was reconstructed, but not along the exact same footprint; this second fort fell in decay by 1826, and the British troops were withdrawn in 1836 (James 1902; Parks Canada 2022).

In 1838, Amherstburg was attacked in the Upper Canada Rebellion of 1837, but the Canadian militia managed to hold the town and fort. Following this, the fort was almost complete rebuilt, with two large barracks to house 400 soldiers, officer's barracks, a guardhouse, jail, among other buildings (Parks Canada 2022). Improved relationships with the United States reduced the need for a fort, and the last regular militia left the fort in 1851 (Parks Canada 2022). At this time, the fort was left to the care of army pensioners. The "Enrolled Pensioners" were veterans of the British and East Indian Armies, who had served out their enlistment (approximately 20 years). From the two groups of pensioners that arrived at Fort Malden, eight were chosen for monthly terms to guard the buildings (Botsford 1985). Several lots were laid out for their use, to occupy with their families (Figure 8).

In 1850, Amherstburg was separated from the Township of Malden and became a village. A visitor to Amherstburg in 1850 described the town as appearing "...old fashioned...most of the houses being built in the old French style" (Anderson 1869:26). By this time, the population of the village of Amherstburg had reached 1,000 inhabitants, including several former slaves, who entered Canada at Amherstburg as fugitives, fleeing slavery in the United States (Botsford 1985:18). According to American abolitionist Levi Coffin, Amherstburg was the principal terminus of the underground railroad (The Canadian Encyclopedia 2020). In 1855, approximately 450 Afro-Canadian people were estimated to live in Amherstburg; this number rose to approximately 2,000 by 1860, making up 40% of the town's population (The Canadian Encyclopedia 2020).

The completion of the Great Western Railway to the north of Amherstburg in 1854 marked the beginning of a period of decline for Amherstburg and Anderdon Township as shipping moved north to Windsor (Amherstburg Bicentennial Book Committee [ABBC] 1996:81). The arrival of the Canada Southern Railway in Amherstburg and Anderdon Township in 1873 improved the economic fortunes of the area. Lumber was the main product exported to the United States through Amherstburg on the Canada Southern Railway. The 1876 *Chart of the Detroit River* (Comstock 1876) indicates the growth of the Town of Amherstburg, located immediately south of Fort Malden (Figure 9). In 1878, the population of Amherstburg increased to 2,000 and the village became incorporated as a town (ABBC 1996:94).

Improvements in transportation and the advent of the motor vehicle strengthened the relationship between Amherstburg and the cities of Windsor and Detroit in the early 20<sup>th</sup> century. An electric railway line connected Amherstburg and Windsor starting in 1903 (Morrison 1954:185). The streetcars would be replaced by busses in 1938 (ABBC 1996:143). In the early 20<sup>th</sup> century, interest in the history of Amherstburg, and in particular Fort Malden, increased, and residents began to realize the historical value of the remaining buildings associated with Fort Malden (Carnochan 1909). Proposals arose to make Fort Malden a national park or historic site as early as 1904 (Globe and Mail 1904). In 1921, Fort Malden was designated a National Historic Site, and the earthworks, buildings, and blockhouse of the fort were restored (Marsh 2012).



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By the middle of the 20<sup>th</sup> century, industries in the area included an auto parts manufacturer, plastics plant, distillery, limestone quarry, and a chemical complex. The completion of the St. Lawrence Seaway and improvements to the shipping channel offshore of Amherstburg once again made the Detroit River an important shipping corridor, with the route offshore Amherstburg increased to 27 feet in depth (Ogdensburg Journal 1959). The postwar housing boom created new housing developments and suburban sprawl into Malden and Anderdon Townships. Efforts to manage the direction of growth were hindered when in the early 1970s when the Ontario Municipal Board and the Municipal Council of Amherstburg failed to agree on a town plan (Kasurak 1972).

#### 1.2.3.3 Boblo Island

Following the surrender of Detroit, the British selected the future site of Amherstburg for the construction of Fort Malden. Boblo Island was also noted for its strategic position. British Indian agent Alexander McKee purchased the island from the Odawa and Chippewa in 1783 and constructed the first blockhouse in 1786 (Livingston 2008:6). In 1790, the United States government disputed ownership of Boblo Island, claiming that the island fell within US waters. Due to this dispute, the British abandoned further fortifications of the island, and began construction of Fort Amherstburg across the river (Livingston 2008, 6).

In 1826, Boblo Island officially became part of Canada, although the territory dispute was not resolved until 1831, following arbitration by the Netherlands (County of Essex 1992; Livingston 2008:8). In the 1830s, the Government of Upper Canada commissioned the construction of several structures, including three wooden blockhouses, and a limestone lighthouse at the south end of the island (Windsor Public Library no date [n.d.]). One surviving blockhouse and the lighthouse were declared National Historic Sites in 1955 for their historical and architectural significance (Parks Canada 2015). The plaque reads:

Following the evacuation of the British military post at Detroit in 1796, a new establishment was commenced opposite here on the site of Amherstburg, and two blockhouses were built on this island to serve as outposts. As a result of armed attacks on Amherstburg by supporters of William Lyon Mackenzie during the Rebellion of 1837-38, the original defense on Bois Blanc were replaced in 1839 by three new blockhouses and a picquet house enclosed by a palisade. The latter housed regular troops from Fort Malden until 1851 and thereafter Enrolled Pensioners until 1859. The two remaining blockhouses are situated at the centre and south end of the island.

(Ontario Plaques n.d.)

In 1851, much of the remaining British garrison was removed from Boblo Island, and the task of maintaining Fort Malden and the island ordinance property (including the blockhouses) was given to army pensioners, in exchange for housing and land for farming (Livingston 2008:11). The 1851 *Plan for the Arrangement for the Settlement of Pensioners* (Vavasour and Pilkington 1851) demonstrates that several acres were leased to various individuals (see Figure 8). Firsthand accounts indicate that about 30 acres of the island was under cultivation, while the rest of the island was principally used as pasture for cattle at this point (Livingston 2008:11).



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In 1855, the Crown granted control of Boblo Island to the Ministry of the Interior, who leased the island (with the exception of the lighthouse) to individuals over the next 50 years. In 1898, the Detroit, Belle Isle and Windsor Ferry Company purchased much of the island, and the “Bob-Lo Excursion Company” was established (Newman 2015). Following this purchase, the island transitioned from a military outpost to recreational parkland (Windsor Public Library n.d.).

In 1949, the island park was faced with bankruptcy, and the island was sold to the Browning family who transformed the island into an amusement park (Newman 2015). After a short ferry ride from the Canadian or American shores, individuals could arrive at Boblo Island (as it was now known), to state-of-the-art amusement rides (e.g., roller coasters, trains, bumper cars, Ferris wheel, etc.) (Windsor Public Library n.d.). The island also contained a fun house, a dance hall, an antique car exhibit, a zoo, and miniature railroad. The Browning family sold the island in 1979, and several corporations subsequently purchased the property (Newman 2015). The amusement park closed in 1993, and in 1994, John Oram from Michigan, purchased the island for \$2.5 million United States Dollars (USD). Since then, developers have built several luxury houses and condominiums on the north end of the island (Windsor Public Library n.d.).

#### 1.2.4 Property History

The study area is in part of Lots 2 and 3, Concession 1, and Bois Blanc Island (Boblo Island), Geographic Township of Malden, now Town of Amherstburg, Essex County, Ontario.

Lot 2, Concession 1, Geographic Township of Malden, was initially settled by Captain Bird, having received rights to the land from the Huron in 1784 (Botsford 1985). In 1796, the Crown rescinded these land rights and began constructing Fort Malden shortly after (James 1902). In 1807, 100 acres of Lot 2 were patented to David Cowan, comprising the eastern portion of the property (ONLand 2023a). In 1811, John Cowan (heir of David Cowan) sold the property to William Bell. When Bell died in 1825, the property was left to John Bell, Esquire, and the property stayed within the Bell family until 1901, during which time it is referred to as “The Bell Farm” (ONLand 2023a).

Lot 3, Concession 1, Geographic Township of Malden, was initially settled by William Caldwell, having received rights to the land from the Huron in 1784 (Botsford 1985). Caldwell was born in Ireland about 1750 and died in Amherstburg in 1822 (Botsford 1985). When the Crown failed to acknowledge rights to these lands, Caldwell petitioned for Lot 3, Concession 1, and was successful. On April 13, 1810, the Crown patented 157 acres of Lot 3 to William Caldwell (ONLand 2023b). In August of the same year, an additional one acre for the water lot at Lot 3 was also patented to William Caldwell (ONLand 2023b). Land records are largely illegible.

The Crown held Boblo Island until 1855, when it granted control to the Ministry of the Interior (Livingston 2008). The entire island, except for the lighthouse, was then leased to Gordon Macleod in 1861. However, when he failed to make payments, the island reverted to the government and was sold to Colonel Arthur Rankin (Livingston 2008:11). Rankin advertised the sale of village lots on the island, but in 1879, he sold the entire island (except the lighthouse) to his son, Arthur McKee Rankin, and his wife, Kitty Blanchard (Livingston 2008). Rankin and Blanchard, established actors of the time, were noted for hosting lavish parties on the island until they separated in 1886. Rankin returned the island property to





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Blanchard as part of the separation settlement. Blanchard, through a trustee, sold the property to Randall and Atkinson in 1888, who attempted to develop the island again. Beginning in 1889, Randall and Atkinson sold portions to Etta Kenna, Owen Wardell, and Darius Avery (ONLand 2023c). However, disputes between the two men prevented much success (Livingston 2008).

The 1877 *Map of Essex County* (Walling 1877) illustrates Lot 2, Concession 1, as part of the Town of Amherstburg, with Bell Farm indicated in the easternmost portion of the lot (Figure 10). Lot 3, Concession 1, was subdivided into two larger parcels under the ownership of Theo Park and Colfage, and several smaller parcels along the waterfront. A coal office and tannery are illustrated on the northwestern edge of Lot 2. On Boblo Island, two blockhouses are indicated at the island's north end, although they are indicated as "Lt Ho," indicating Light House. However, Boblo Island only had one lighthouse at the south end, so these were likely signal beacons.

The 1881 *Map of Malden Township* (Belden 1881) provides less detail about the township, with few names indicated (Figure 11). Lot 2, Concession 1 is still dominated by the Town of Amherstburg, with space for Bell Farm along the eastern edge. Lot 3 does not include any names or distinguishing features. On Boblo Island, the location of the two blockhouses is indicated along the north edge of the island, with one indicated as a "signal beacon."

Historical county atlases and other early 19<sup>th</sup> maps were produced primarily to identify subscribers' factories, offices, residences, and landholdings and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Thus, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). A review of historical mapping also has inherent accuracy difficulties due to potential errors in geo-referencing. Geo-referencing is conducted by assigning spatial coordinates to fixed locations and using these points to reference the remainder of the map spatially. Due to changes in 'fixed' locations over time (e.g., road intersections, road alignments, watercourses, shorelines, etc.), errors/difficulties of scale and the relative idealism of the historical cartography, historical maps may not translate accurately into real space points. This may provide obvious inconsistencies during historical map review.

#### 1.2.5 Aerial Photography

Aerial photography (DTE Aerial Photo Collection at Wayne State University; Essex Region Conservation Authority. Interactive Mapping) demonstrates significant changes to the study area over the 20<sup>th</sup> and 21<sup>st</sup> centuries (Figure 12 and Figure 13). In 1931, Boblo Island is largely undeveloped, with open space, likely used for cultivation, and a dock on the eastern edge. Between 1949 and 1961, little changes are noted in the northern portion of Boblo Island, or in the Town of Amherstburg. By 1981, the island includes a large sewage lagoon in the northeastern portion of the island, while the Town of Amherstburg has continued to grow with the development of a commercial marine terminal on the mainland. By 2000, the sewage lagoon has been filled, and residential buildings line much of the waterfront on the north and northwestern edge of the island. By 2023, additional residences have been constructed, and the eastern edge of the island appears to have been filled in slightly.



## 1.3 Archaeological Context

### 1.3.1 The Natural Environment

The study area is situated within the St. Clair Clay Plain physiographic region. This region is described as:

Adjoining Lake St. Clair in Essex and Kent Counties and the St. Clair River in Lambton County are extensive clay plains covering 2,270 square miles. The region is one of little relief, lying between 575 and 700 feet a.s.l., except for the moraine at Ridgetown and Blenheim which rises 50 to 100 feet higher. ... Glacial Lake Whittlesey, which deeply covered all of these lands, and Lake Warren which subsequently covered nearly the whole area, failed to leave deep stratified beds of sediment on the underlying clay till except around Chatham, between Blenheim and the Rondeau marshes, and in a few other smaller areas. Most of Lambton and Essex Counties, therefore, are essentially till plains smoothed by shallow deposits of lacustrine clay which settled in the depressions while the knolls were being lowered by wave action.

(Chapman and Putnam 1984:147)

Soils in the area are classified primarily as Perth Clay, which is smooth to undulating in topography, with fair to poor natural drainage (Chapman and Putnam 1984). They are adequate for general farming (i.e., cash crops of corn, wheat, and tobacco) and dairying and are improved with artificial drainage and the addition of fertilizers, particularly phosphate (Richards et al. 1949).

The study area is mainly surrounded by and adjacent to the Detroit River. The Detroit River was a potable water source and transportation route for early Indigenous settlers and Euro-Canadian occupants. The Detroit River was designated a Canadian and American Heritage River in 2001 (Canadian Heritage River Systems [CHRS] 2023). Use of the Detroit River has evolved, from being a transportation route used by early Indigenous inhabitants and Euro-Canadian occupants to an industrial power source to support the early mills of the area, to a commercial shipping route, and finally to a watercourse used for recreational purposes throughout the 20<sup>th</sup> and 21<sup>st</sup> centuries.

### 1.3.2 Registered Archaeological Sites and Surveys

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the curvature of the earth. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lower case letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MCM who



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maintain the *Ontario Archaeological Sites Database*. The study under review is within Borden Block AaHs.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990b). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

An examination of the MCM's *Ontario Archaeological Sites Database* demonstrates that there are 49 registered archaeological sites within one kilometre of the study area (Government of Ontario 2023a). Four registered archaeological sites are within the study area, and one is within 50 metres of the study area (see Tile 1 in the Supplementary Documentation). However, as the MCM does not currently maintain an accessible or searchable database of archaeological assessment areas by study area, additional archaeological assessments and studies may have occurred, or are occurring, within or adjacent to the current study area. Table 2 provides a summary of the registered archaeological sites within one kilometre of the study area. The archaeological sites within the study area are **bolded** and the one within 50 metres of the study area is *italicised*.

**Table 2: Registered Archaeological Sites within One Kilometre of the Study Area**

<b>Borden #</b>	<b>Site Name</b>	<b>Cultural Affiliation</b>	<b>Site Type</b>
AaHs-4	King's Shipyard	Euro-Canadian	Military; pier, dock
AaHs-11	Mathew Elliot Estate	Indigenous, Late Archaic and Woodland; Euro-Canadian	Campsite; farmhouse
AaHs-12	Fort Malden	Euro-Canadian	Military fort
AaHs-20	Duff 2	Indigenous, Woodland	Campsite
AaHs-30	Gordon House	Indigenous, Late Woodland; Euro-Canadian	Homestead
AaHs-31	St. Jean Baptiste Cemetery	Euro-Canadian	Cemetery
<b>AaHs-32</b>	<b>92-092:1 (1839 Blockhouse)</b>	<b>Euro-Canadian</b>	<b>Military</b>
<b>AaHs-33</b>	<b>Saugeen Cluster</b>	<b>Indigenous, Middle Woodland</b>	<b>Campsite</b>
AaHs-34	Small Eastern Shore	Indigenous, Late Archaic and Woodland	Campsite
<b>AaHs-35</b>	<b>Duffy (Northwest Cluster)</b>	<b>Indigenous</b>	<b>Scatter</b>
<i>AaHs-36</i>	<i>F. Bacon (Western Shore Historic Site)</i>	<i>Euro-Canadian</i>	<i>Military; other</i>
AaHs-37	M. Teskey	Indigenous	Findspot



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<b>Borden #</b>	<b>Site Name</b>	<b>Cultural Affiliation</b>	<b>Site Type</b>
AaHs-39	-	Indigenous, Early Archaic and Woodland	Scatter
AaHs-40	Marvin "O"	Indigenous, Late Archaic	Scatter
AaHs-41	G. Rumble	Indigenous	Scatter
AaHs-42	Underwood	Indigenous	Scatter
AaHs-43	Arnold	Indigenous, Early Archaic and Middle Archaic	Campsite
AaHs-44	Fogt	Indigenous	Findspot
AaHs-45	Fisher	Indigenous, Late Archaic	Scatter
AaHs-46	Molnar	Euro-Canadian	Homestead
AaHs-47	Lister	Euro-Canadian	Homestead
AaHs-48	Rimmer	Indigenous	Findspot
AaHs-49	Hawthorn	Indigenous	Scatter
<b>AaHs-57</b>	<b>Boblo Watermain</b>	<b>Indigenous</b>	<b>Processing; campsite</b>
AaHs-59	Salmoni	Indigenous; Euro-Canadian	Scatter; hotel
AaHs-60	-	Indigenous	Findspot
AaHs-61	-	Indigenous, Archaic	Findspot
AaHs-91	-	Indigenous	Findspot
AaHs-106	St. Joseph's Academy	Euro-Canadian	Cemetery, school
AaHs-115	-	Euro-Canadian	Residential
AaHs-117	-	Indigenous; Euro-Canadian	Findspot; residential
AaHs-118	-	Euro-Canadian	Residential
AaHs-121	-	Indigenous, Early Archaic	Findspot
AaHs-122	-	Indigenous, Early Archaic	Findspot
AaHs-123	-	Indigenous, Middle Archaic	Findspot
AaHs-124	-	Indigenous, Early Archaic	Findspot
AaHs-127	Front Road 1	Indigenous, Late Woodland	Campsite
AaHs-128	Front Road 2	Indigenous, Early Archaic	Findspot
AaHs-134	Location 6	Indigenous	Campsite
AaHs-135	-	Indigenous, Paleo and Middle Archaic	Scatter
AaHs-137	Molnar 2	Indigenous, Late Archaic and Late Woodland	Campsite
AaHs-138	-	Euro-Canadian	Residential
AaHs-139	H1	Euro-Canadian	Homestead



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Borden #	Site Name	Cultural Affiliation	Site Type
AaHs-140	H2	Afro-Canadian, Euro-Canadian	Homestead
AaHs-141	Gunner Neven	Euro-Canadian	Cabin
AaHs-142	Sergeant-Major Taylor	Euro-Canadian	Cabin
AaHs-143	H2	Afro-Canadian, Euro-Canadian	Homestead
AaHs-144	H3	Euro-Canadian	Homestead
BdGv-29	Boblo Watermain Site	Indigenous, Archaic	Scatter

A query of the *Ontario Public Register of Archaeological Reports* was completed to identify any previous archeological assessment completed within, or adjacent to, the study area. Based on the query, eight previous archaeological assessments have been completed within the study area or within 50 metres of the study area (Government of Ontario 2023b). A summary of the previous assessments in relation to the study area is presented in Table 3 and discussed further below.

**Table 3: Previous Archaeological Assessments Completed near the Study Area**

Year	Report	Author	Project Information Form (PIF) #
1993	<i>Archaeological Resource Assessment and Monitoring Boblo Island Residence, Malden Township, Essex County, Ontario</i>	Mayer Heritage Consultants Inc.	92-013
1994	<i>Northern Capital Bob-Lo Island Partnership Properties, Stage 2 Archaeological Assessment and Limited Stage 3 Testing, Final Report, Addendum</i>	M.M. Dillon Ltd.	94-022
1996a	<i>Bob-Lo Island O/A 1078385 Ontario Limited, Stage 3: Archaeological Testing, Test Area 1: Saugeen Cluster</i>	M.M. Dillon Ltd.	95-066
1996b	<i>Bob-Lo Island O/A 1078385 Ontario Limited, Stage 3: Archaeological Testing, Test Area 2: Eastern Shoreline</i>	M.M. Dillon Ltd.	95-066
1997	<i>Archaeological Assessment (Stage 3), Bob-Lo Island Test Area 2, Town of Amherstburg, Essex County, Ontario</i>	Mayer Heritage Consultants Inc.	96-001
2004	<i>Stage 2 Archaeological Assessment of: Proposed Watermain Corridor and the Stage 3 Investigation of The Boblo Watermain Site: BdGv-29, Boblo Island, Town of Amherstburg, County of Essex, Ontario</i>	Archeoworks Inc.	P029-072; P029-078
2016	<i>Stage 2: Archaeological Assessment Report, Bob-Lo Island Archaeological Assessment, Western Shore Historic Site (AaHs-36), Part of Bois Blanc Island (Bob-Lo Island), Geographic Township of Malden, Town of Amherstburg, County of Essex, Ontario</i>	CRM Group Ltd.	P109-0046-2015
2017	<i>Stage 3: Archaeological Assessment Report, Bob-Lo Island Archaeological Assessment, Western Shore Historic Site (AaHs-36), Part of Bois Blanc Island (Bob-Lo Island), Geographic Township of Malden, Town of Amherstburg, County of Essex, Ontario</i>	CRM Group Ltd.	P109-0055-2016



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Year	Report	Author	Project Information Form (PIF) #
2018	<i>Stage 3: Archaeological Assessment Report, Bob-Lo Island Archaeological Assessment, Small Eastern Shore Locus Eastern Shore Site (AaHs-34), Part of Bois Blanc Island (Bob-Lo Island), Geographic Township of Malden, Town of Amherstburg, County of Essex, Ontario</i>	CRM Group Ltd.	P109-0048-2015

In 1993, Mayer Heritage Consultants Inc. (Mayer Heritage) conducted an archaeological assessment in advance of the construction of a single residence for a portion of land in the northeastern portion of Boblo Island (Mayer Heritage 1993). The archaeological assessment consisted of background research, test pit survey, and archaeological monitoring of mechanical topsoil removal. Background research determined that the study area retained archaeological potential due to the proximity of the Detroit River and the historical evidence documenting a blockhouse from 1839. The test pit survey, conducted largely at a 10-metre interval, consisted of excavating 110 test pits, resulting in the recovery of Euro-Canadian artifacts. The test pit survey did not identify the former blockhouse, but the positive test pits' location corresponded to the 19<sup>th</sup> century plans of the military complex. Following the test pit survey, archaeological monitoring of mechanical topsoil removal was conducted, which resulted in the identification of three post moulds and additional 19<sup>th</sup> and early 20<sup>th</sup> century material (Mayer Heritage 1993). No *in situ* structural features related to the 1839 blockhouse were identified in the study area, but it was noted that there is a possibility of discovering structural remains outside the study area (Mayer Heritage 1993). The cultural material recovered was registered as the 1839 Blockhouse site (AaHs-32), and further archaeological assessment of the site was recommended (Mayer Heritage 1993). The 1839 Blockhouse site (AaHs-32) is located in the northeastern portion of the study area for this Project and retains cultural heritage value or interest (CHVI) (see Tile 1 in the Supplementary Documentation). The *Ontario Archaeological Sites Database* (Government of Ontario 2023a) provides location information for the 1839 Blockhouse site (AaHs-32), placing it south of and beyond the assessment area outlined by Mayer Heritage (1993). This suggests that the location data recorded in the *Ontario Archaeological Sites Database* for AaHs-32 is likely inaccurate. It is worth noting that Mayer Heritage's assessment from 1993 overlaps with the study area for the current project (Figure 14).

In 1994, M.M. Dillon Ltd. (Dillon) conducted a Stage 2 archaeological assessment (Dillon 1994) for most of Boblo Island on behalf of Northern Capital for redevelopment of properties on the island (see Figure 14). Dillon conducted extensive background research to determine the archaeological potential across the island and concluded that there was high archaeological potential across the island, with the exception of marshy areas and areas of land previously disturbed by the former amusement park, sewage lagoon, existing structures, and other areas containing soil mounds. Dillon's (1994) Stage 2 archaeological assessment resulted in the identification of 10 archaeological sites that retained CHVI and recommended Stage 3 investigations, Stage 4 archaeological mitigation and archaeological monitoring during construction if the areas around the sites were scheduled to be developed. Of the 10 archaeological sites identified by Dillon (1994), four are within or adjacent to (within 50 metres) of the study area for this Project: Saugeen Cluster (AaHs-33), the Northwest cluster or Duffy site (AaHs-35), F. Bacon or Western Shore Historic site (AaHs-36), and the Eastern Shore site (AaHs-34) (now the Small Eastern Shore site [AaHs-35], name change discussed further below).





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The Saugeen Cluster (AaHs-33) was identified on the northwestern portion of the island as an Indigenous campsite which included a Saugeen type projectile point. The Northwest cluster or Duffy site (AaHs-35) was also identified on the northwestern portion of the island as a sparse Indigenous artifact scatter. The F. Bacon or Western Shore Historic site (AaHs-36) was identified near the western shore of the island as a Euro-Canadian scatter likely associated with the former central blockhouse on the island. The Eastern Shore site (AaHs-34) was initially identified as two separate Indigenous artifact clusters along the eastern shore of the island, but at the request of the Ministry of Citizenship, Culture and Recreation (now MCM), were combined into one archaeological site (Dillon 1994:14). The addendum to the report details an additional archaeological investigation of the Northwest cluster or Duffy site (AaHs-35) that Dillon conducted at the request of the Ministry of Citizenship, Culture and Recreation (now MCM). The additional investigation of the site consisted of pedestrian survey at 1.5 metre intervals followed by archaeological monitoring of topsoil removal to examine for potential cultural features (Dillon 1994). No additional artifacts or cultural features were observed, and Dillon recommended the Northwest cluster or Duffy site (AaHs-35) be cleared of any further archaeological concern (Dillon 1994). Portions of Dillon's (1994) assessment overlap with the study area for this Project (see Figure 14).

In 1995, Dillon was retained by 1078385 Ontario Limited to conduct limited Stage 3 testing at two archaeological locations on Boblo Island (Dillon 1996a; 1996b). Dillon identified the two archaeological locations as Test Area 1 for the Saugeen Cluster (AaHs-33) and Test Area 2 for the Eastern Shore site (AaHs-34). Stage 3 testing of Test Area 1 consisted of excavating 11 one-metre by one-metre units resulting in the recovery of 13 pieces of chipping detritus. Based on the paucity of archaeological material, Dillon suggested the Saugeen Cluster (AaHs-33) retained no further CHVI and no further archaeological investigation was warranted (Dillon 1996a). Stage 3 testing for Test Area 2 focused on the northern portion of the Eastern Shore site (AaHs-34), which resulted in high artifact counts and evidence of undisturbed stratigraphy (Dillon 1996b). Dillon suggested the site retains further CHVI and recommended that the site be avoided during any construction activities or be subject to Stage 4 archaeological mitigation if avoidance and protection is not possible (Dillon 1996b).

In 1996, Mayer Heritage was retained the Bob-Lo Island Development Corporation to conduct a Stage 3 archaeological assessment of the Eastern Shore site (AaHs-34) in advance of a proposed development (Mayer Heritage 1997). The Stage 3 archaeological assessment was conducted to determine the extent of cultural material and the archaeological site, south of Dillon's (1996b) previous Stage 3 testing of Test Area 2 in the northern portion of the Eastern Shore site (AaHs-34) (Mayer Heritage 1997). According to Mayer Heritage, the Ministry of Citizenship, Culture and Recreation (now the MCM) requested the area to be ploughed and that a pedestrian survey be conducted to delineate the limits of the archaeological material. The Stage 3 pedestrian survey was conducted at 1.5 metre intervals and resulted in the identification of four pieces of chipping detritus. Based on the paucity of archaeological material within the ploughed areas, Mayer Heritage recommended no further archaeological assessment or mitigation for this portion of the Eastern Shore site (AaHs-34) (Mayer Heritage 1997).

In 2004, Archeoworks Inc. (Archeoworks) conducted further Stage 2 archaeological assessment and Stage 3 investigation of the Eastern Shore site (AaHs-34) in advance of a proposed watermain corridor (Archeoworks 2004). Despite the previous survey by Mayer Heritage (1997), the Ministry of Culture (now the MCM) requested the excavation of six to eight Stage 3 test units in the vicinity of the anchor memorial



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prior to any ground disturbance (Archeoworks 2004). Archeoworks conducted a Stage 2 archaeological assessment test pit survey to determine the nature and limits of the archaeological site in this area and identified 24 pieces of chipping detritus. The Indigenous scatter found at the Boblo Watermain site was initially assigned an erroneous Borden number, BdGv-29, which was rectified to AaHs-57. Archeoworks designated this scatter as a distinct archaeological site, registering it under a new Borden number instead of including it within the pre-existing Eastern Shore site (AaHs-34). In addition, the location of AaHs-57 had been incorrectly recorded in the *Ontario Archaeological Sites Database*. The site had been erroneously placed north of the current ferry dock. However, this location error has been addressed and rectified (personal communication, Robert von Bitter, March 29, 2023). Following the Stage 2 archaeological assessment, Archeoworks conducted a Stage 3 archaeological assessment comprising eight one-metre-square test units and recovered 205 Indigenous artifacts and five pieces of faunal material (Archeoworks 2004). Archeoworks recommended Stage 4 archaeological mitigation of the Boblo Watermain site (AaHs-57) in the form of block excavation; however, due to time constraints associated with the proposed watermain corridor, Stage 4 excavation was not conducted (Archeoworks 2004). In lieu of the Stage 4 excavation, a new watermain alignment was proposed that avoided and protected the archaeological site by way of horizontal directional drilling. Archeoworks confirmed that the new alignment would not impact the archaeological site, and no further archaeological assessment for the new alignment was recommended (Archeoworks 2004). The Boblo Watermain (AaHs-57) archaeological site retains CHVI (see Tile 1 in the Supplementary Documentation). Despite the correction regarding the Borden designation of BdGv-29 to AaHs-57, the *Ontario Archaeological Sites Database* still lists and illustrates the former Borden designation (BdGv-29) within the database.

While not within 50 metres of the study area for this Project, it is important for contextual reasons to note that in 2015, CRM Group Ltd. was retained by Amico Properties Inc. (Amico) to conduct a Stage 3 archaeological assessment of the southern portion of the Eastern Shore site (AaHs-34), which CRM Group Ltd. was calling the Small Eastern Shore Locus (CRM Group Ltd. 2018). The Stage 3 archaeological assessment consisted of 37 one-metre by one-metre test units resulting in the recovery of 319 Indigenous artifacts, including four formal lithic tools and one Indigenous ceramic sherd. CRM Group Ltd. interpreted the Small Eastern Shore Locus of the Eastern Shore site (AaHs-34) as a Late Woodland period campsite and recommended Stage 4 archaeological mitigation (CRM Group Ltd. 2018). Despite being combined at the request of the MCM in 1994, and for reasons that are unknown, it appears as though at this time the Eastern Shore site's (AaHs-34) location and name was changed in the *Ontario Archaeological Sites Database* to represent the Small Eastern Shore Locus, rather than the overall and larger site. The Boblo Watermain site (AaHs-57) is now listed in the area of the previous and larger Eastern Shore site (AaHs-34).

To summarize the record of investigations of the Boblo Watermain site (AaHs-57), two pre-Contact Indigenous artifact loci were identified during Stage 2 archaeological assessment along the eastern shore of Boblo Island by Dillon (1994), and at the request of the ministry at the time, were combined to make one site and given the name and Borden designation, the Eastern Shore site (AaHs-34). In 1995, Dillon conducted a Stage 3 archaeological assessment of the northern portion of the Eastern Shore site (AaHs-34), just south of the current ferry terminal, and based on the high artifact counts and potential undisturbed soils, recommended Stage 4 archaeological mitigation (Dillon 1996b). In 1996, Mayer Heritage undertook a Stage 3 pedestrian survey to further refine the limits of the Eastern Shore site



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(AaHs-34), however the pedestrian survey only identified four pieces of chipping detritus and Mayer Heritage recommended no further archaeological work at the location (Mayer Heritage 1997). In 2004, Archeoworks conducted further Stage 2 and Stage 3 archaeological assessments for the Eastern Shore site (AaHs-34) in advance of a watermain corridor at the request of the Ministry of Citizenship, Culture and Recreation (now the MCM), as they did not agree with Mayer Heritage's (1997) previous findings. Archeoworks identified additional artifacts and, curiously, renamed the site the Boblo Watermain site and gave it the Borden designation AaHs-57. Archeoworks recommended Stage 4 archaeological mitigation, but the site was avoided at the time (Archeoworks 2004). In 2015, CRM Group Ltd. conducted a Stage 3 archaeological assessment of the southern portion of the Eastern Shore site (AaHs-34), resulting in significant Indigenous artifact recovery and recommended Stage 4 archaeological mitigation (CRM Group Ltd. 2018). This portion of the site was renamed the Small Eastern Shore site (AaHs-34). In the *Ontario Archaeological Sites Database*, the Boblo Watermain site (AaHs-57) is listed in the location of the original Eastern Shore site (AaHs-34), and the AaHs-34 Borden designation has now been changed to the Small Eastern Shore site (AaHs-34) located further south. A portion of the larger archaeological site, now the Boblo Watermain site (AaHs-57), overlaps with a portion of the study area for this Project.

In 2015, CRM Group Ltd. was retained by Amico to conduct a Stage 2 archaeological assessment of the Western Shore Historic Site (AaHs-36) in advance of proposed construction activities (CRM Group 2016). The Western Shore Historic Site (AaHs-36), previously identified by Dillon (1994), is also named the F. Bacon site in the *Ontario Archaeological Sites Database* and is located approximately 50 metres south of the study area for this Project. The Stage 2 archaeological assessment was conducted to relocate the archaeological site through test pit survey which resulted in the recovery of 381 Euro-Canadian artifacts. Based on the results, CRM Group Ltd. determined they had identified the location of the site and recommended Stage 3 archaeological assessment (CRM Group Ltd. 2016). Subsequently, in 2016, CRM Group Ltd. conducted the Stage 3 archaeological assessment of the Western Shore Historic Site (AaHs-36) consisting of the excavation of 18 one-metre by one-metre test units resulting in the recovery of 4,857 artifacts, including 4,770 historical Euro-Canadian artifacts and 18 pre-Contact Indigenous artifacts (CRM Group Ltd. 2017). The archaeological site was interpreted as being representative of the continued military and residential historical use of the area which originally included an 1840 blockhouse, which was later incorporated into a colonial building which eventually burned down in 1970 (CRM Group Ltd. 2017). CRM Group Ltd. recommended the Western Shore Historic Site (AaHs-36) for Stage 4 archaeological mitigation. However due to identified species at risk in the area, the Stage 4 archaeological mitigation was postponed, and avoidance and protection measures were implemented, which included: no ground disturbance in the area of the site and a 10-metre protective buffer, installation of protective fencing, and no-go instructions issued to construction crews (CRM Group Ltd. 2017). The Western Shore Historic Site (AaHs-36) retains CHVI and is located approximately 50 metres south of the study area for this Project.

### 1.3.3 Existing Conditions

The study area is approximately 58.88 ha and consists of residential and commercial properties, manicured lawns, scrubland, undeveloped forested areas, municipal ROW within Boblo Island and the Town of Amherstburg, and the Detroit River.



## 2 Field Methods

Prior to the start of the Stage 1 archaeological assessment, Enbridge Gas provided preliminary mapping of the Project's proposed impacts which defined the assessment area (i.e., the study area). This mapping was geo-referenced by Stantec's Geographical Information System (GIS) team and a digital file (i.e., a shape file) was created of the study area. The digital file of the study area was uploaded to ArcGIS Online for use with the Field Maps application powered by ESRI, customized by Stantec for archaeological survey and assessment, for digital data recording in the field. Data was recorded in the field on a handheld mobile device paired with a Trimble DA2 Catalyst Global Navigation Satellite System (GNSS) receiver to an accuracy of less than one metre.

Initial background research compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on April 27, 2023, by Darren Kipping (P422) under PIF number P422-0033-2023, issued to Darren Kipping, MA, RPA by the MCM. The property inspection involved spot-checking the entirety of the study area to identify the presence or absence of features of archaeological potential in accordance with Section 1.2 of the MCM's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a). In discussions with the MCM, it was discerned that certain segments of the study area had not been thoroughly evaluated during Dillon's previous assessment (i.e., Dillon 1994). During Dillon's (1994) assessment, specific areas featuring refuse, soil mounding, and former stables and grounds could not be adequately examined. In light of recent guidance from the MCM, these areas are now considered unassessed and necessitate evaluation as part of the Stage 1 archaeological assessment. Additionally, a visual inspection is recommended, as detailed in the MCM correspondence provided in the Supplementary Documentation.

During the property inspection on April 27, 2023, the weather was warm and partly cloudy. At no time were field, lighting, or weather conditions detrimental to the identification of features of archaeological potential. The photography from the property inspection is presented in Section 7.1 and confirms that the requirements for a Stage 1 property inspection were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a). Figure 14 illustrates photo locations from the property inspection of the study area.

Based on the results of the property inspection, approximately 21.43% (12.62 ha) of the study area consists of modern disturbances from the existing municipal road ROW, laneways, road construction, subdivision development, existing buildings, and buried utilities and other municipal infrastructure. Consideration was given to the areas that Dillon (1994) had not been able to previously assess, and these areas were determined to be disturbed from subdivision and infrastructure development. Photo 1 to Photo 8 illustrate typical examples of existing disturbances identified throughout the study area, and specifically Photo 1 to Photo 6 highlight the disturbance within the areas not previously assessed by Dillon (1994).

Approximately 42.53% (25.05 ha) of the study area was previously subject to archaeological assessment (i.e., Mayer Heritage 1993, Dillon 1994, Dillon 1996a). These areas were not subject to photo documentation as part of this Stage 1 archaeological assessment (see Section 1.3.2).



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Approximately 10.76% (6.34 ha), consists of scrubland and manicured lawns, which was identified as retaining archaeological potential. Photo 9 to Photo 12 illustrate typical examples of these areas.

The remaining portions of the study area, approximately 25.28% (14.88 ha) of the study area consists of the Detroit River. These areas were not subject to photo documentation.



## 3 Analysis and Conclusions

### 3.1 Registered Archaeological Sites

There are four registered archaeological sites within the study area and one registered archaeological site within 50 metres of the study area. As described in Section 1.3.2, the five archaeological sites were identified in the early 1990s (Mayer Heritage 1993; Dillon 1994) and the mapping and locational information for each site is likely skewed and tentative at best (see Tile 1 in the Supplementary Documentation). Except for the Western Shore Historic Site (AaHs-36), subsequent archaeological assessments of these sites were conducted several years ago, prior to the current MCM 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a).

The 1839 Blockhouse (92-092:1) site (AaHs-32) was identified as a Euro-Canadian scatter likely associated with the former blockhouse at the north end of the island and retains CHVI (Mayer Heritage 1993). The 1839 Blockhouse site (AaHs-32) is within the study area for the Project. Due to the limited previous archaeological assessment and poor locational information, the CHVI of this site remains unknown and Stantec evaluates the site as requiring further investigation.

The Saugeen Cluster (AaHs-33) was identified as an Indigenous campsite, which included a Saugeen type projectile point (Dillon 1994). The Saugeen Cluster (AaHs-33) was subject to Stage 3 archaeological assessment which recovered additional pieces of chipping detritus; however, no further work was recommended (Dillon 1996a). The Saugeen Cluster (AaHs-33) is within the study area for the Project. Due to the limited previous archaeological assessment and poor locational information, Stantec evaluates the area surrounding the site as retaining archaeological potential and further investigation is recommended.

The Northwest Cluster or Duffy site (AaHs-35) was identified as a sparse Indigenous artifact scatter and subject to additional pedestrian survey and mechanical topsoil removal monitoring (Dillon 1994). No additional work was recommended. The Northwest Cluster or Duffy site (AaHs-35) is within the study area for the Project. Due to the limited previous archaeological assessment and poor locational information, the CHVI of this site remains unknown and Stantec evaluates the site as requiring further investigation.

The Western Shore Historic Site or F. Bacon site (AaHs-36) was identified as a Euro-Canadian scatter likely associated with the former central blockhouse on the island and was recommended for further archaeological assessment (Dillon 1994). In 2015, the site was subject to additional Stage 2 archaeological assessment to relocate the site, followed by a Stage 3 archaeological assessment which resulted high artifact counts representative of the continued military and residential use of the area, and was recommended for Stage 4 archaeological mitigation (CRM Group Ltd. 2017). Due to species at risk, the Stage 4 archaeological mitigation was not carried out and avoidance and protection measures were implemented which includes no ground disturbance in the area of the site and a 10-metre protective buffer, installation of protective fencing, and no-go instructions issued to construction crews (CRM Group Ltd. 2017). The Western Shore Historic Site (AaHs-57) is approximately 50 metres south of the study





area for the Project. Subsequent to the avoidance and protection measures, the areas surrounding the Western Shore Historic Site (AaHs-36) have been subject to extensive construction disturbance.

Despite the previous archaeological assessments and surveys on Boblo Island, exact locational data and mapping of registered archaeological sites AaHs-32, AaHs-33, and AaHs-35, is poor and conflicting. As such, further archaeological assessment is warranted to re-locate and confirm site extents. To aid in re-location and site extent confirmation, an archaeological potential zone has been added around each registered archaeological site. The archaeological potential zone comprises a 70-metre buffer and is based on Section 7.8.5 Standard 1.e.i. which requires a 20-metre protective buffer, following by a 50-metre monitoring zone; in other words, a 70-metre 'buffer'.

The Boblo Watermain site (AaHs-57) (formerly the Eastern Shore site [AaHs-34]) was identified as a large Indigenous scatter and was recommended for further archaeological assessment (Dillon 1994). The Boblo Watermain site (AaHs-57) has been subject to a complex series of subsequent archaeological assessments which are detailed in Section 1.3.2 (i.e., Dillon 1996b; Mayer Heritage 1997; Archeoworks 2004). Despite the previous archaeological assessments, the Boblo Watermain site (AaHs-57) retains CHVI and further archaeological work is recommended.

## **3.2 Land-based Archaeological Potential**

Archaeological potential is established by determining the likelihood that archaeological resources may be present within a study area. Stantec applied archaeological potential criteria commonly used by the MCM (Government of Ontario 2011a) to determine areas of archaeological potential within the study area. These variables include proximity to registered archaeological sites; distance to various types of water sources; soil texture and drainage; glacial geomorphology; elevated topography; and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential.

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to current water is one of the most commonly used variables for predictive modeling of archaeological site location in Ontario. Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential.

As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. The Ministry categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, and creeks.
- Secondary water sources: intermittent streams and creeks, springs, marshes, and swamps.



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- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, and shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, and sandbars stretching into marsh.

The study area is mainly surrounded by, and adjacent to the Detroit River, a designated Canadian Heritage River System. The Detroit River served as a potable water source and transportation system to early Indigenous habitants and Euro-Canadian settlers. Further examination of the study area's natural environment indicates that the Essex County soils in the study area would have been suitable for Indigenous and early agriculture practices, especially in the 19<sup>th</sup> and 20<sup>th</sup> centuries following the implementation of agricultural field tilling and addition of fertilizers. Historical mapping, referring to plans from 1749, suggest the presence of Indigenous villages and camps around the general vicinity of the study area, and use of the area as the Huron Reserve at la Riviere aux Canards beginning in 1786 (Lajeunesse 1960). An examination of the MCM's *Ontario Archaeological Sites Database* has shown that there are 31 Indigenous archaeological sites within one kilometre of the study area (Government of Ontario 2023a). The Eastern Shore site (AaHs-34) now listed as the Boblo Watermain site (AaHs-57) is partially within the study area and retains CHVI. Based on the property inspection, it appears as though the area of the archaeological site has potentially been impacted by recent construction activities in the vicinity (see Photo 9 on Figure 14). From the property inspection, it is hard to determine if these impacts are surficial in nature or deep and extensive.

Archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990a) or property that local histories or informants have identified with possible historical events, activities, or occupations. Historical mapping demonstrates that the study area was occupied in 1784, when Captains Bird, Caldwell, McKee, Elliot, Ford, and Lamotte purchased land from the Huron. Additionally, in 1794, the British military established Fort Malden in present-day Amherstburg, located north of the current study area. Much of the established road and rail networks and agricultural settlement from the 19<sup>th</sup> century is still visible today. No registered properties are located within 300 metres of the study area. An examination of the MCM's *Ontario Archaeological Sites Database* has shown that there are 22 Euro-Canadian and 2 Afro-Canadian archaeological sites within one kilometre of the study area (Government of Ontario 2023a). The 1839 Blockhouse site (AaHs-32) site is within the study area and retains CHVI.

When the above listed criteria are applied, the study area retains potential for the identification of Indigenous and Euro-Canadian archaeological resources. However, as noted above, extensive and deep land alteration can eradicate archaeological. Background research and the Stage 1 property inspection determined that portions of the study area, are located in areas that have been subject to modern disturbances such as the existing municipal road ROW, subdivision development, road construction, laneways, existing buildings, and buried utilities and other municipal infrastructure. As a result, these lands have been subject to extensive and deep land alterations that have severely damaged the integrity of archaeological resources and have removed archaeological potential. The Stage 1 archaeological assessment also determined that large portions of the study area had been subject to previous archaeological assessment (Mayer Heritage 1993; Dillon 1994; 1996a). Cumulatively, approximately



63.96% of the study area retains low to no archaeological potential. The information obtained from the property inspection confirms that portions of the study area, approximately 10.76%, retain archaeological potential.

The final route and construction easement, including any temporary land use, for the Project will be determined at a later date. A refinement of archaeological potential specific to the Project's anticipated impacts will be included as part of the Stage 2 archaeological assessment for the Project.

### **3.3 Marine Archaeological Potential**

In Ontario, projects that have components which may impact below the highwater mark of navigable waterways should determine the marine archaeological potential of the project limits prior to any in-water disturbance. Marine archaeological potential cannot be determined through a land-based Stage 1 archaeological assessment, and normally a proponent can determine if a marine archaeological assessment is necessary based on the *Criteria for Evaluating Marine Archaeological Potential* checklist (Government of Ontario 2016). However, as described previously, the Detroit River is a designated Canadian Heritage River System and therefore the portions of the study area that overlap the Detroit River (approximately 25.28%) retain archaeological potential until a marine archaeological assessment can be conducted.



## 4 Recommendations

The Stage 1 archaeological assessment of the study area for the Project determined that portions of the study area, approximately 10.76%, retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction activities which impacts an area of archaeological potential (Figure 14).**

The objective of the Stage 2 archaeological assessment is to document archaeological resources within the portions of the study area still retaining archaeological potential and to determine whether these archaeological resources require further assessment. The Stage 2 archaeological assessment will include the systematic walking of open ploughed fields as outlined in Section 2.1.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a). The MCM standards require that all agricultural land, both active and inactive, be recently ploughed and sufficiently weathered to improve the visibility of archaeological resources. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than previous ploughing, and must provide at least 80% ground surface visibility. For areas inaccessible for ploughing, the Stage 2 archaeological assessment will include a test pit survey as outlined in Section 2.1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a). The MCM standards require that each test pit be at least 30 centimetres in diameter, excavated to at least five centimetres into subsoil, and have excavated soil screened through six-millimetre hardware cloth to facilitate the recovery of any cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill.

As noted earlier, there are four registered archaeological sites within the study area. Included in the Stage 2 archaeological assessment recommendation is a 70-metre buffer around the 1839 Blockhouse site (AaHs-32), the Saugeen Cluster (AaHs-33), the Northwest Cluster or Duffy site (AaHs-35), and the Boblo Watermain site (AaHs-57) (formerly the Eastern Shore site [AaHs-34]). As discussed in Section 1.3.2 and Section 3.1, these archaeological sites have been subject to a series of partial archaeological investigations, mapping errors, and construction disturbances. To assist in determining the remaining integrity of the archaeological sites registered within the study area, if any portion of the Project's anticipated footprint is an area within a 70-metre buffer of a registered site, then these areas must be subject to Stage 2 archaeological assessment (Figure 14).

It is recommended that Stage 2 archaeological assessment of the study area for the Project include engagement with interested Indigenous communities. Indigenous engagement practices conducted during the Stage 2 archaeological assessment will be completed in accordance with the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a) and the MCM's draft technical bulletin on *Engaging Aboriginal Communities in Archaeology* (Government of Ontario 2011b).



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The Stage 1 archaeological assessment also determined that portions of the study area, approximately 63.96%, retain low to no archaeological potential due to being subject to previous archaeological assessment, and areas subject to deep and extensive modern disturbances such as the existing municipal road ROW, laneways, existing buildings, and buried utilities and other municipal infrastructure. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction activities which impact an area of low to no archaeological potential (Figure 14).**

Lastly, the Stage 1 archaeological assessment of the study area for the Project determined that portions of the study area, approximately 25.28%, overlap portions of the Detroit River. As the Detroit River is a designated Canadian Heritage River System, if any in-water disturbance is proposed as part of the Project for these portions of the waterways within the study area, a marine archaeological assessment is recommended. Marine archaeological assessments must be conducted by a qualified marine/underwater archaeologist under a Marine Licence acquired from the MCM.

The MCM is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*.



## 5 Advice of Compliance with Legislation

*In accordance with Section 7.5.9 of the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).*

This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 1990a). 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 study area of a development proposal have been addressed to the satisfaction of the MCM, 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* (Government of Ontario 1990a) 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 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 Archaeological Reports* referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990a)

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a) 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* (Government of Ontario 1990a)

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c. 33 (Government of Ontario 2002), requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry Public and Business Service Delivery is also immediately notified.

Archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.





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## Stage 1 Archaeological Assessment: Boblo Island Community Expansion

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## Stage 1 Archaeological Assessment: Boblo Island Community Expansion

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## Stage 1 Archaeological Assessment: Boblo Island Community Expansion

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## 7 Images

### 7.1 Photographs

**Photo 1: View of the study area, showing disturbed areas, including residential buildings, laneways, and ROW, facing north**



**Photo 2: View of the study area, showing disturbed areas, including residential buildings, laneways, and ROW, facing southeast**



**Photo 3: View of the study area, showing disturbed areas, including ROW, and buried utilities, facing north-northwest**



**Photo 4: View of the study area, showing disturbed areas, including buried municipal infrastructure, facing east-northeast**



**Stage 1 Archaeological Assessment: Boblo Island Community Expansion**

**7 Images**

June 28, 2023

**Photo 5: View of the study area, showing disturbed areas, including residential buildings, laneways, and ROW, facing north**



**Photo 6: View of the study area, showing disturbed areas, including construction disturbance, facing south**



**Photo 7: View of the study area, showing disturbed areas, including municipal ROW, facing south**



**Photo 8: View of study area, showing disturbed area, including buried municipal utilities, parking lot, facing northwest**





**Stage 1 Archaeological Assessment: Boblo Island Community Expansion**

**7 Images**

June 28, 2023

**Photo 9: View of study area, showing area retaining archaeological potential with surficial disturbance, facing southeast**



**Photo 10: View of study area, showing manicured lawn and area retaining archaeological potential in background, facing northwest**



**Photo 11: View of study area, showing maintained scrubland and area retaining archaeological potential in background, facing southeast**



**Photo 12: View of study area, showing manicured lawn, facing northeast**



## **8 Maps**

Maps for the Stage 1 archaeological assessment of the Project follow on the subsequent pages. Maps illustrating the exact location of the registered archaeological sites associated with the study area are not included in this public report but may be found in the Supplementary Documentation.



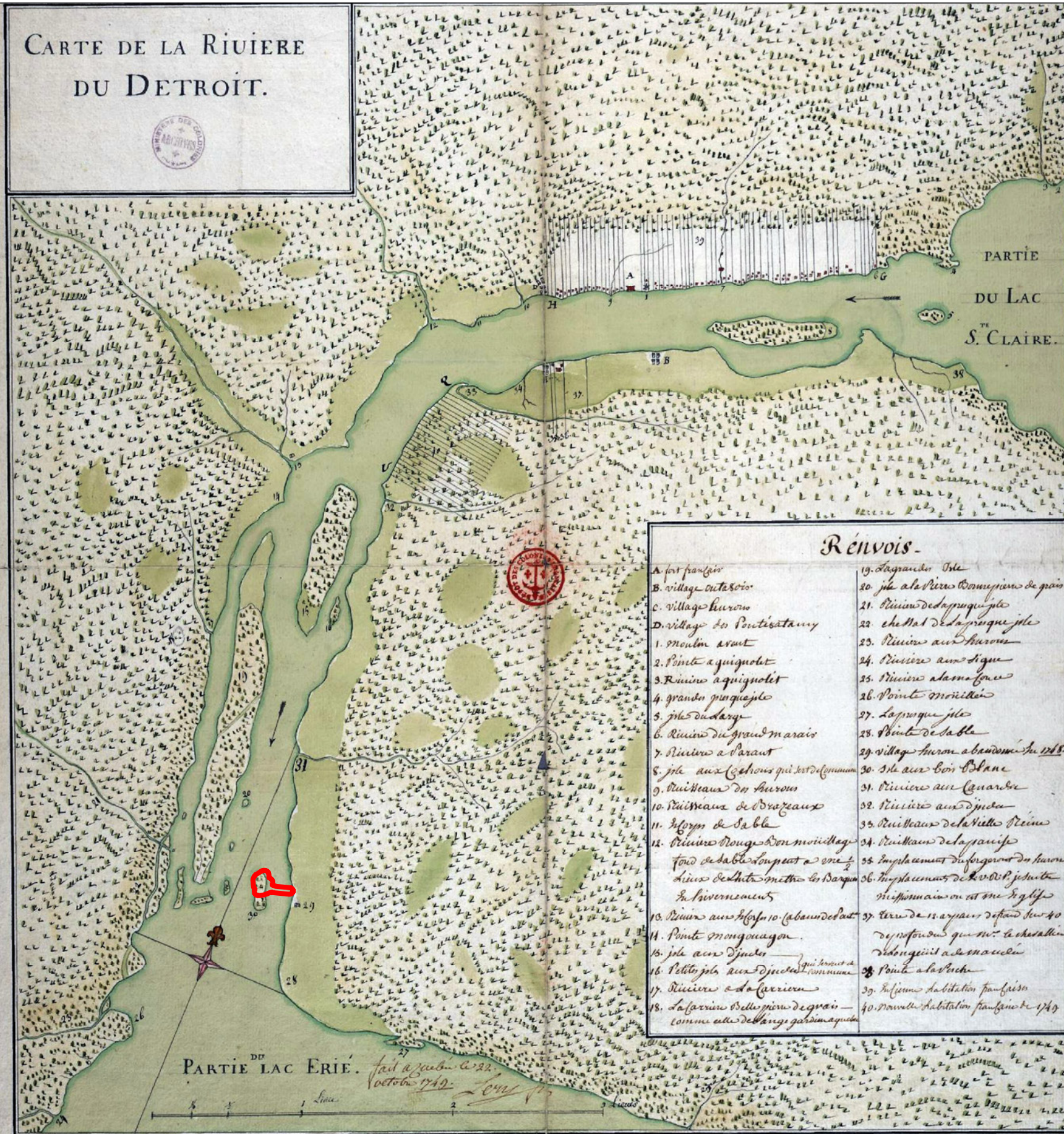








CARTE DE LA RIVIERE  
DU DETROIT.



Legend  
 Study Area (Approximate)

Figure Not to Scale

Notes  
 1. Reference: Chaussegros de Lery, Gaspar-Joseph. 1752. Carte de La Riviere du Detroit depuis de le Lac Erie jusques au Lac S. Claire. Department of Marine, Paris.



Project Location: Boblo Island, Ontario  
 160951386 REVA  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 3  
 Title: Study Area as Shown Over Portion of the 1861 Map of Waterloo Township



Legend

★ Study Area (Approximate)

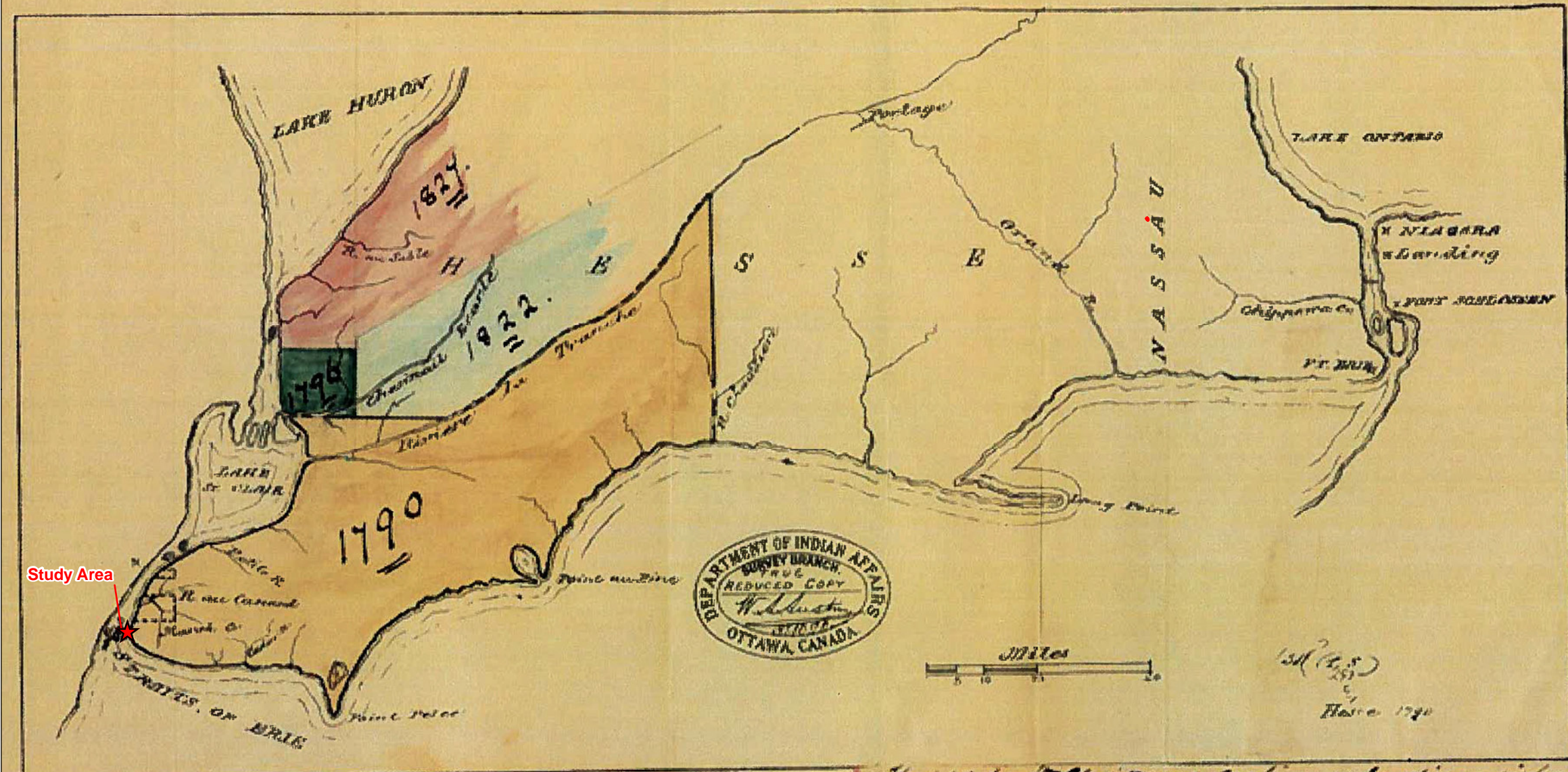





Figure Not to Scale

Notes  
 1. Reference: Government of Canada. n.d. Map of Treaty Areas in Upper Canada. Ottawa: Department of Indian Affairs, Survey Branch.



Study Area

	10 <sup>th</sup> July 1827	That part of the Chippewa nation of Indians inhabiting and claiming the territory re...
	8 <sup>th</sup> July 1822	Some of the signatories signed the treaty of 1796...
	7 <sup>th</sup> Sept. 1796	People of the Chippewa nation... Three also signed the 1790 treaty.

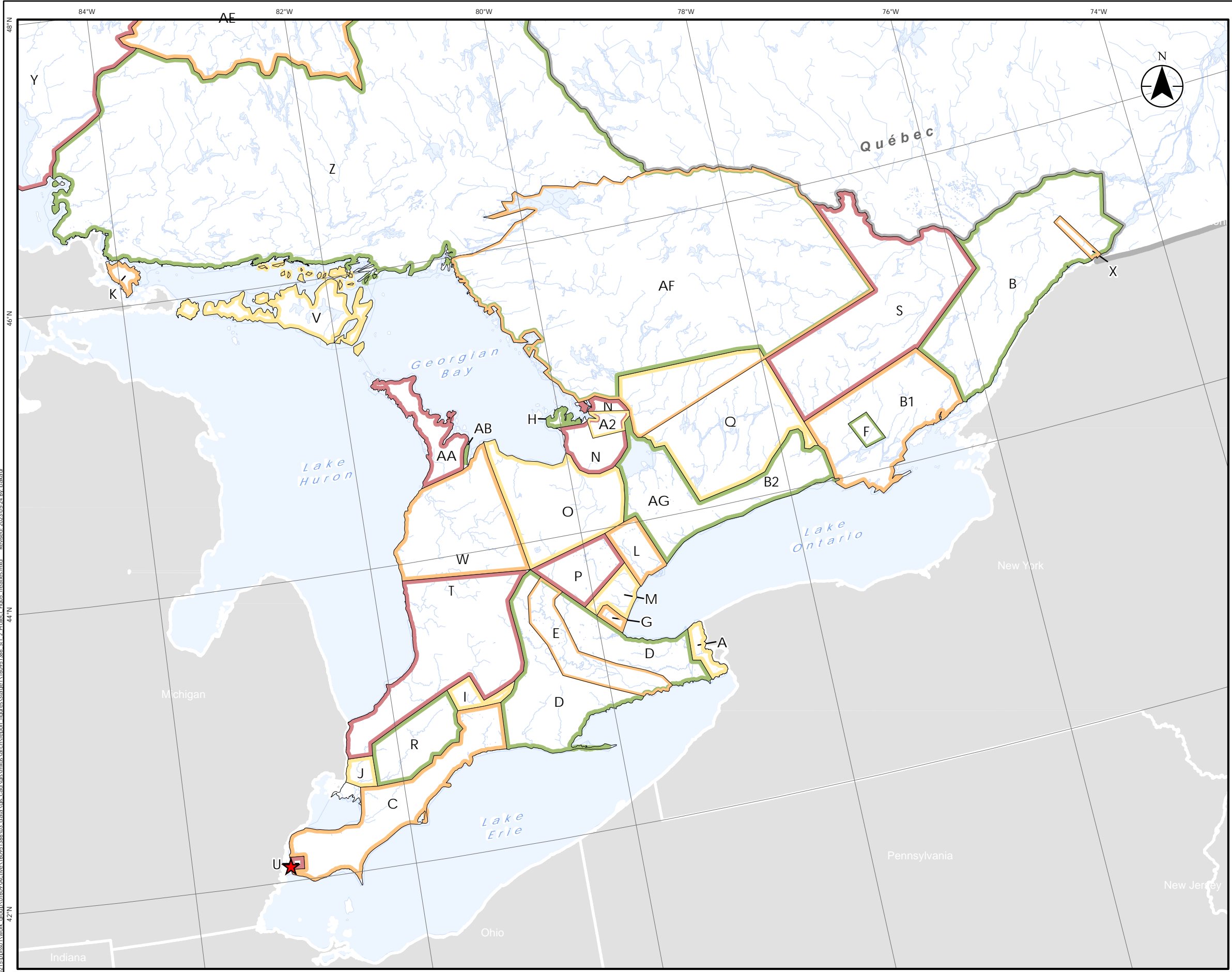
Project Location: Boblo Island, Ontario  
 160951386 REVA  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 4

Title: Map of Treaty Areas in Upper Canada

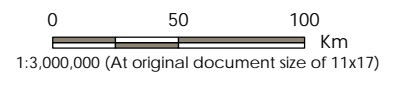




Legend

- ★ Study Area
- Waterbody

- A Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
- AA Treaty No. 72, October 30th, 1854 (Chippewa)
- AB Treaty No. 82, February 9th, 1857 (Chippewa)
- AE Treaty No. 9, James Bay 1905, 1906 (Ojibway and Cree)
- AF Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
- AG Williams Treaty, October 31st, 1923 (Chippewa)
- A2 John Collins' Purchase, 1785 (Chippewa)
- B Crawford's Purchase, October 9th, 1783 (Algonquin and Iroquois)
- B1 Crawford's Purchase, October 9th, 1783 (Mississauga)
- B2 Crawford's Purchase, 1783, 1787, 1788 (Mississauga)
- C Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
- D Treaty No. 3, December 2nd, 1792 (Mississauga)
- E Haidimand Tract: from the Crown to the Mohawk, 1793
- F Tyendinaga: from the Crown to the Mohawk, 1793
- G Treaty No. 3 3/4: from the Crown to Joseph Brant, October 24th, 1795
- H Treaty No. 5, May 22nd, 1798 (Chippewa)
- I Treaty No. 6, September 7th, 1796 (Chippewa)
- J Treaty No. 7, September 7th, 1796 (Chippewa)
- K Treaty No. 11, June 30th, 1798 (Chippewa)
- L Treaty No. 13, August 1st, 1805 (Mississauga)
- M Treaty No. 13A, August 2nd, 1805 (Mississauga)
- N Treaty No. 16, November 18th, 1815 (Chippewa)
- O Treaty No. 18, October 17th, 1818 (Chippewa)
- P Treaty No. 19, October 28th 1818 (Chippewa)
- Q Treaty No. 20, November 5th, 1818 (Chippewa)
- R Treaty No. 21, March 9th, 1819 (Chippewa)
- S Treaty No. 27, May 31st, 1819 (Mississauga)
- T Treaty No. 27½, April 25th, 1825 (Ojibwa and Chippewa)
- U Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
- V Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
- W Treaty No. 45½, August 9th, 1836 (Saugeen)
- X Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
- Y Treaty No. 60, Robinson, Superior, September 7th, 1850 (Ojibwa)
- Z Treaty No. 61, Robinson, Huron, September 9th, 1850 (Ojibwa)



- Notes
1. Coordinate System: NAD 1983 Statistics Canada Lambert
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
  3. Treaty boundaries adapted from Morris 1943 (1964 reprint). For cartographic representation only.

Project Location: Boblo Island, Ontario  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 5

Title: Treaties and Purchases (Adapted from Morris 1943)

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Legend

Study Area (Approximate)

- Indigenous Places Found in Essex County and Vicinity
1. Village, cornfields, and portage, Point Pelee (plan by Iredell 1799)
  2. Two Indigenous entrenchments, Gosfield Township (plan by McNiff 1794)
  3. Village on Cedar Creek, entrenched, Gosfield Township
  4. Village, Colchester, South Township
  5. Indigenous encampment, Colchester Township (McNiff 1794)
  6. Village and mound, Daniel Wright farm, Colchester Township
  7. Several mounds, Colchester Township
  8. Village, Big Creek (plan by Iredell 1796)
  9. Former village of the Hurons abandoned in 1748 (map by Chaussegros de Léry, fils, 1749)
  10. Camping site used by all tribes, Bois Blanc Island
  11. Village above Fort Malden (McNiff's map of 1790)
  12. Huron village, Anderdon Township (McNiff 1790)
  13. Cornfields, Anderdon Township (McNiff 1790)
  14. Huron village, Huron Church Line
  15. Burial mound, Huron Church Line and Third Concession, Sandwich West Township (excavated by W.J. Wintemberg for National Museum of Canada 1936)
  16. Ottawa village and cemetery, Louis Avenue, Windsor (Chaussegros de Léry 1754)
  17. Huron village, Brownstowe, Wayne County, Michigan
  18. The great mound at the mouth of the Rouge River, Wayne County, Michigan
  19. Circular mound and several smaller mounds at old Fort Wayne
  20. Indigenous village, Ruscum River, Rochester Township (plan by Col. Burwell 1823)
  21. Chippewa town reported by Major E.B. Littlehales in 1793

- Indigenous Trails and Paths
- A. Talbot Road, through the county from beyond Wheatley to Sandwich (shown on McNiff's map of 1791)
  - B. From Lake Erie to Lake St. Clair, following the Ruscum River (Burwell's map 1823)
  - C. From Point Pelee to Talbot Road
  - D. Lake Erie trail connecting shoreline settlements
  - E. From Lake Erie shoreline to Amherstburg area
  - F. River shore path, now Highway 18
  - G. River and lake shoreline to the Thames River and eastward, followed by Governor Simcoe in 1793

Figure Not to Scale

- Notes
1. Reference: Lajeunesse, Ernest J. 1960. The Windsor Border Region: Canada's Southernmost Frontier. The Champlain Society, Toronto: University of Toronto Press.

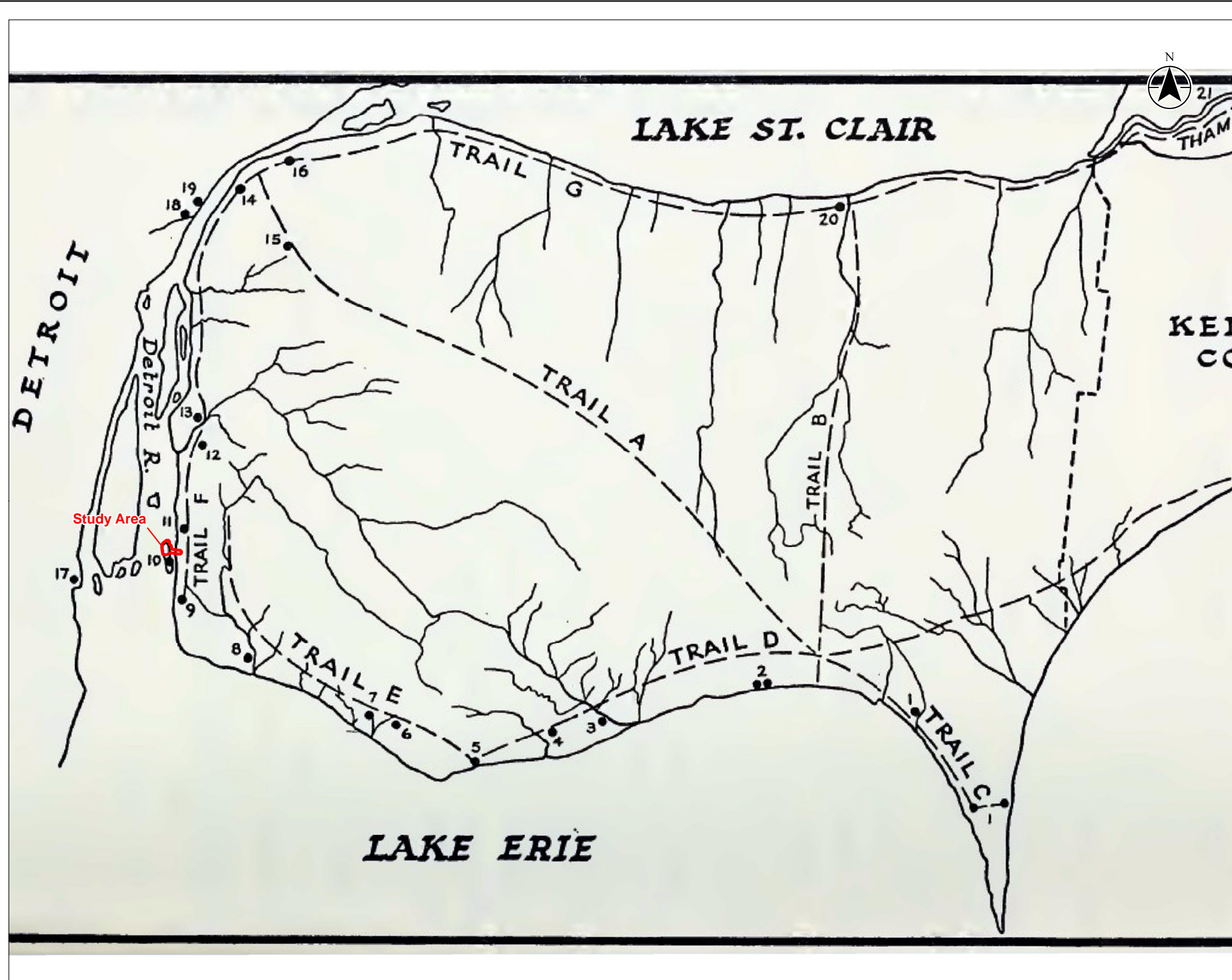


Project Location: Boblo Island, Ontario  
 160951386 REVA  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 6

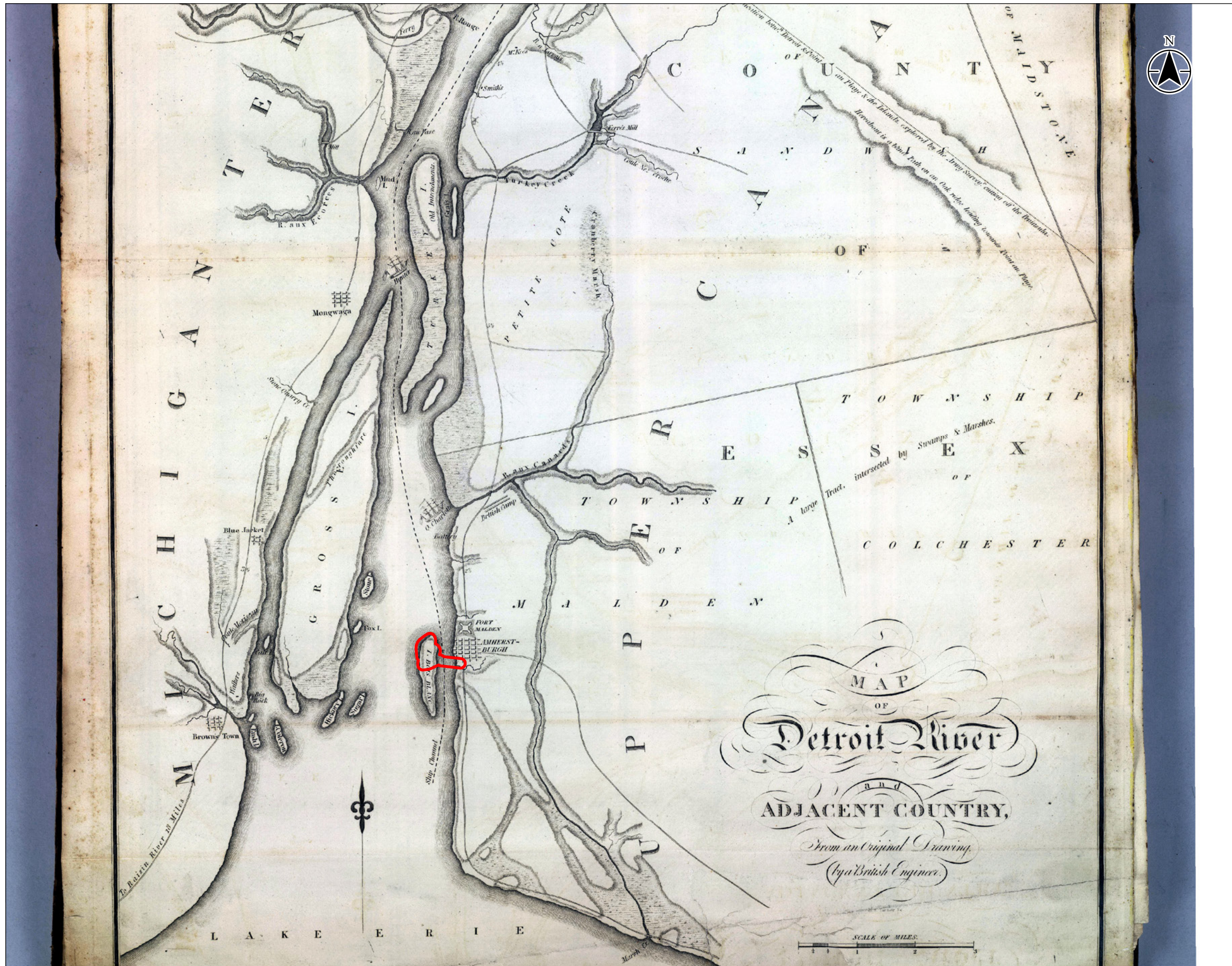
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Legend  
 Study Area (Approximate)

Figure Not to Scale

Notes  
 1. Reference: Melish, John. 1824. Map of Detroit River and Adjacent Country. From the Original Drawing by a British Engineer. H.S. Tanner. Philadelphia.



Project Location: Boblo Island, Ontario  
 160951386 REVA  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 7

Title: Portion of the 1824 Map of the Detroit River and Adjacent Country









Legend

Study Area (Approximate)

Figure Not to Scale

Notes  
 1. Reference: Comstock, C.B. 1876. Chart of Detroit River. Survey of the Northern and Northwestern Lakes. Washington: Corps of Engineers, War Department.



Project Location: Boblo Island, Ontario  
 160951386 REVA  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.  
 9

Title  
 Portion of the 1876 Chart of Detroit River

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Legend  
Study Area (Approximate)

Figure Not to Scale

Notes  
1. Reference: Walling, H.F. 1877. Map of Essex County, Ontario. R.M. Tackabury.



Project Location: Boblo Island, Ontario  
160940742 REVA  
Prepared by BK on 2023-05-24  
Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
BOBLO ISLAND COMMUNITY EXPANSION  
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 10  
Title: Portion of the 1877 Historical Map of Essex County



Legend

Study Area (Approximate)

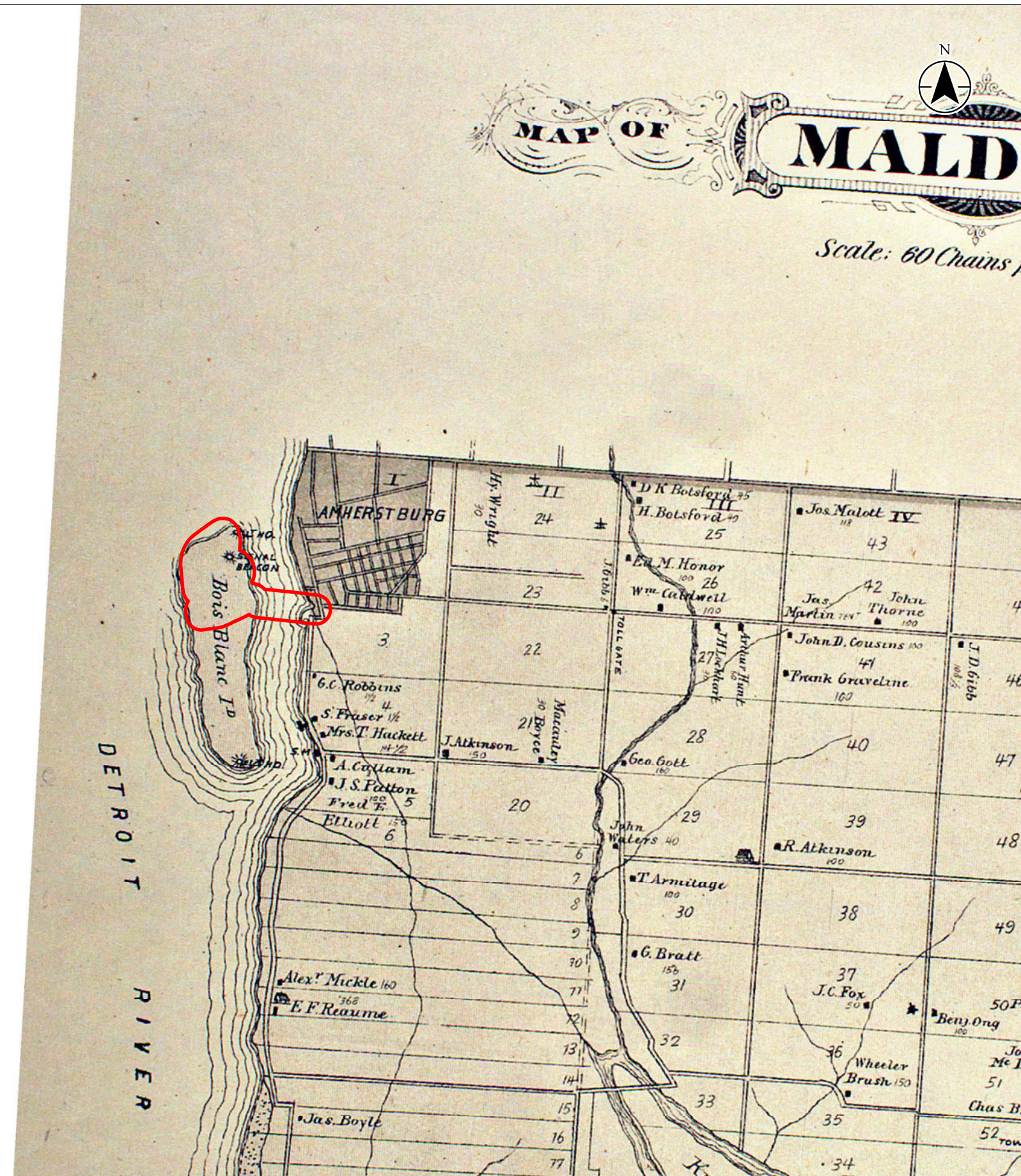


Figure Not to Scale

Notes  
1. Reference: Belden, H. 1881. Illustrated Historical Atlas of the Counties of Essex and Kent. Toronto: H. Belden and Co.



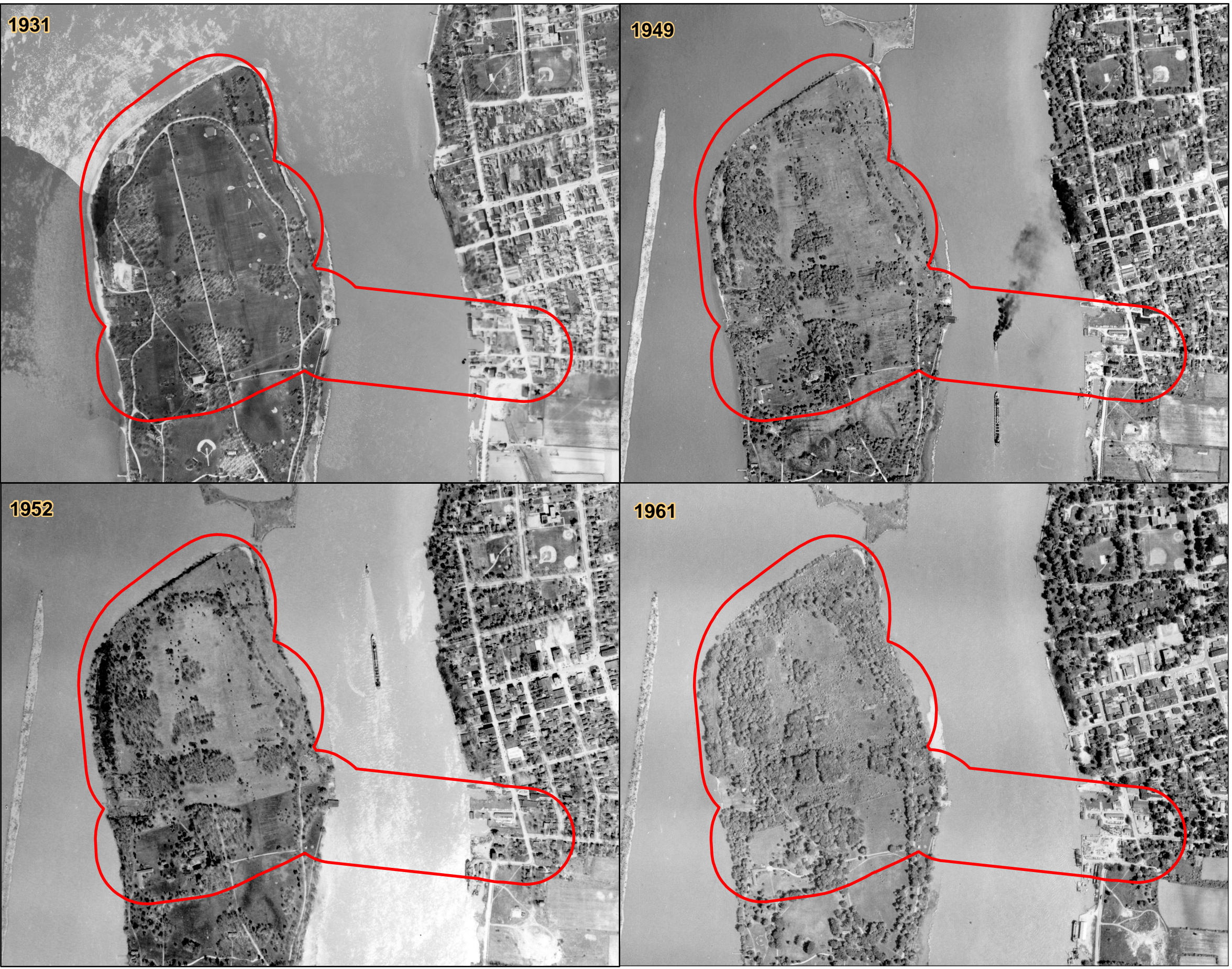
Project Location: Boblo Island, Ontario  
160940742 REVA  
Prepared by BK on 2023-05-24  
Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
BOBLO ISLAND COMMUNITY EXPANSION  
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 11

Title: Portion of the 1881 Historical Map of Malden Township






Legend  
 Study Area (Approximate)

Figure Not to Scale

Notes  
 1. Reference: DTE Aerial Photo Collection at Wayne State University, Essex Region Conservation Authority, Interactive Mapping.



Project Location: Boblo Island, Ontario  
 160951386 REVA  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 12

Title: Historical Aerial Photographs - 1931, 1949, 1952 and 1961

\\ca0215.pds01\work\_group\01609\_Actives\160951386\03\_data\03\_data\03\_data\mxd\Arch\report\_figures\Stantec\160951386\_S1\_2\_Project\_Fig12\_Historic\_Aerials.mxd Revised: 2023-05-24 By: bkalaur



1981

2000



Legend

Study Area (Approximate)

Figure Not to Scale

Notes  
 1. Reference: DTE Aerial Photo Collection at Wayne State University, Essex Region Conservation Authority, Interactive Mapping.



Project Location: Boblo Island, Ontario  
 160951386 REVA  
 Prepared by BK on 2023-05-24  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.

13

Title

Historical Aerial Photographs - 1981 and 2000

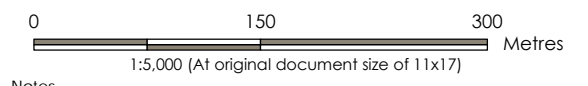
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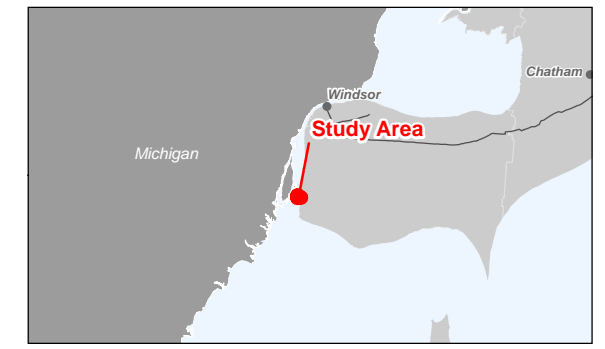


Legend

- Study Area
  - Archaeology Photo Log
- Assessment Method
- Area of Archaeological Potential - Further Archaeological Work Required (Stage 2)
  - Previously Disturbed, No to Low Archaeological Potential
  - Marine Archaeological Assessment Recommended
  - Previously Assessed, Dillon 1994 (94-022) – No Further Archaeological Work Required
  - Previously Assessed, Dillon 1994; 1996a (94-022; 95-066) – No Further Archaeological Work Required
  - Previously Assessed, Mayer Heritage 1993 (92-013) – No Further Archaeological Work Required



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
  3. Orthoimagery © First Base Solutions, 2023. Imagery Date, 2022.



Project Location: Boblo Island, Ontario  
 Prepared by BK on 2023-05-25  
 Technical Review by SPE on 2023-05-10

Client/Project: ENBRIDGE GAS INC.  
 BOBLO ISLAND COMMUNITY EXPANSION  
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 14  
 Title: Stage 1 Results and Recommendations

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 4663000  
 4663500  
 Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.



## 9 Closure

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Quality Review \_\_\_\_\_

 Digitally signed by  
Nithiyanantham, Ragavan  
Date: 2023.06.28  
14:33:01 -04'00'

**Ragavan Nithiyanantham – Senior Archaeologist**

Independent Review \_\_\_\_\_

 Dickson, Parker  
2023.06.29  
10:51:22 -04'00'

**Parker Dickson – Senior Associate, Environmental Services**



## **Appendix F      Draft Cultural Heritage Screening Report**



To: Sarah Kingdon-Benson, Senior Advisor, From: Jenn Como, BA  
Environment Meaghan Rivard, MA, CAHP  
Enbridge Gas Inc. Stantec Consulting Ltd.  
101 Honda Boulevard, 600-171 Queens Avenue  
Markham ON L6C 0M6 London ON N6A 5J7

Project/File: 160951386 Date: June 26, 2023

---

**Reference: Boblo Island Community Expansion Project**

## 1 Introduction

Stantec Consulting Ltd. (Stantec) has been retained by Enbridge Gas Inc. (Enbridge Gas) to prepare a Heritage Checklist as part of the proposed Boblo Island Community Expansion Project (the Project) to supply the north part of Boblo Island with natural gas. The proposed pipeline route includes Park Street between the Detroit River and Dalhousie Street in the town of Amherstburg as well as the following streets in the residential neighbourhood located on the north end of Boblo Island: Boblo Island Boulevard, Red Oak Crescent, Crystal Bay Drive, Goldcoast Drive, and Riverwalk Crescent (Figure 1).

To facilitate the completion of an Environmental Report, Enbridge Gas has retained Stantec to undertake a Cultural Heritage Screening Report (CHSR). For this CHSR, Stantec defined a “Study Area” for the assessment that includes the proposed pipeline route with a 50-metre buffer.

The CHSR follows the Ministry of Citizenship and Multiculturalism’s (MCM) *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (2016). The CHSR aims to identify known and potential built heritage resources or cultural heritage landscapes within the Study Area and to provide recommendations for further cultural heritage reporting, if required, such as a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHR) or site-specific Cultural Heritage Evaluation Reports (CHERs) or Heritage Impact Assessments (HIAs).







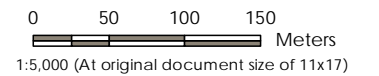
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Legend

-  Preliminary Preferred Route
-  Study Area
-  Parcel Boundary
-  Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
  3. Orthoimagery © First Base Solutions, 2023. Imagery Date, 2022.



Project Location: TOWN OF AMHERSTBURG  
 Prepared by SPE on 2023-05-09  
 Technical Review by BC on 2023-04-21

Client/Project: ENBRIDGE GAS INC., BOBLO ISLAND COMMUNITY EXPANSION

Figure No.: 1  
 Title: Site Location and Study Area

\\ca0215.prd601\work\_group\01\_609\_Actives\160951386\_03\_data\GIS\_data\GIS\_data\mxd\ch\report\_bouras\160951386\_03\_EI\01\_Study\_Area.mxd  
 Reviewed: 2023-05-09 By: spantec  
 4633000



Reference: Boblo Island Community Expansion Project

## 2 Scope and Method

The scope for a CHSR is outlined in the *MCM Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist* (2016; the MCM Checklist). The MCM Checklist provides a tool to identify from desktop sources known or recognized built heritage resources and cultural heritage landscapes in the Study Area, as well as commemorative plaques, cemeteries, Canadian Heritage River watersheds, properties with buildings 40 or more years old, or potential cultural heritage landscapes. Under the *Ontario Heritage Act*, cultural heritage is linked to real property.

This CHSR was composed of a program of agency consultation and documentary research in accordance with the scope outlined in the *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (MCM 2016).

To complete the MCM Checklist, the following tasks were undertaken:

- **Task 1:** Review of available desktop sources for applicable aerial imagery, historical maps, and municipal, provincial, and federal registers, inventories or databases. Sources used include:
  - The Parks Canada Directory of Federal Heritage Designations ([http://www.pc.gc.ca/apps/dfhd/search-recherche\\_eng.aspx](http://www.pc.gc.ca/apps/dfhd/search-recherche_eng.aspx))
  - The Canadian Register of Historic Places (<https://www.historicplaces.ca/en/home-accueil.aspx>)
  - The UNESCO World Heritage List (<https://whc.unesco.org/en/statesparties/CA>)
  - The Ontario's Historic Plaques website (<https://www.ontarioplaques.com/>)
  - The Ontario Heritage Trust's Inventory of Provincial Plaques ([https://www.heritagetrust.on.ca/user\\_assets/documents/Inventory-of-provincial-plaques-ENG.pdf](https://www.heritagetrust.on.ca/user_assets/documents/Inventory-of-provincial-plaques-ENG.pdf))
  - CanadaGenWeb's Cemetery Project Map (<https://cemetery.canadagenweb.org/map-project/>)
  - Canadian Heritage Rivers System (<https://chrs.ca/en>)
  - Google Earth Pro and Google Streetview
  - The Ontario Council of University Libraries' Historical Topographic Map Digitization Project (<https://ocul.on.ca/topomaps/collection/>)
  - Ontario Trails Council (<https://www.ontariotrails.on.ca/index.php?url=trails>)
  - Previously completed archaeological assessments for Boblo Island
- **Task 2:** Consultation with Adam Coats, Heritage Planner, from the Town of Amherstburg to identify known or potential properties of cultural heritage value or interest (CHVI) within the Study Area.
- **Task 3:** Identification and mapping of known (i.e., designated, listed, inventoried) and potential built heritage resources and cultural heritage landscapes in the Study Area, and recommendation of further studies, if required.

Reference: Boblo Island Community Expansion Project

## 2.1 Results of Engagement

Agency consultation included both provincial and municipal consultation. Consultation occurred via email and included mapping of the Study Area. At the provincial level, Kevin Baksh, Provincial Heritage Registrar with the Ontario Heritage Trust (OHT), reported that there are no OHT easement sites in the vicinity of the Study Area. Karla Barboza, Team Lead, Heritage with the MCM, confirmed that there are no provincial heritage properties in the Study Area.

No response had been received from the municipality at the time this memo was completed.

## 2.2 Overview of Study Results

Tasks 1 to 3 identified the following within or adjacent to the Study Area:

- No protected heritage properties designated under Part IV of the *Ontario Heritage Act*
- No protected heritage properties designated under Part V of the *Ontario Heritage Act*
- No listed properties
- Three properties with buildings or structures 40 or more years old
- No potential cultural heritage landscapes

The three identified properties with buildings or structures 40 or more years old are as follows:

- 340 Dalhousie Street
- 355 Dalhousie Street
- 356 Dalhousie Street

These potential resources are illustrated on Figure 2.

However, based on a desktop review and review of Google Street View photography, the present-day structure at 340 Dalhousie Street, which is in the same location as a structure illustrated on topographic mapping from 1961, appears to be a newer construction or to have been heavily modified. Therefore, 340 Dalhousie Street does not retain potential for cultural heritage value or interest and no further cultural heritage studies or mitigation measures are recommended for this property.



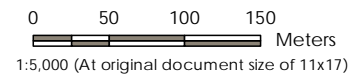
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Legend

- Potential Built Heritage Resource
- Preliminary Preferred Route
- Study Area
- Parcel Boundary
- Potential Built Heritage Resource
- Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
  2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
  3. Orthoimagery © First Base Solutions, 2023. Imagery Date, 2022.



Project Location: TOWN OF AMHERSTBURG  
 Prepared by SPE on 2023-05-09  
 Technical Review by BC on 2023-04-21

Client/Project: ENBRIDGE GAS INC., BOBLO ISLAND COMMUNITY EXPANSION

Figure No.: 2  
 Title: Identified Built Heritage Resources

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 Revised: 2023-05-09 Bx: scs/bks  
 4663000



Reference: Boblo Island Community Expansion Project

### 3 Recommendations

Based on a review of applicable background data, historical mapping, and consultation with regulatory bodies, two properties with potential cultural heritage resources were identified within the Study Area. Of these two properties, one has a structure that is outside the buffer (355 Dalhousie Street) and one has a structure located within the 50 m buffer (356 Dalhousie Street):

Municipal Address	Distance from Proposed Pipeline Route to Closest Corner of Structure (m)
355 Dalhousie Street	60.9
356 Dalhousie Street	44.7

Given that the structure associated with 355 Dalhousie Street is located outside the buffer, no direct impacts or indirect vibration impacts are anticipated and no further cultural heritage studies or mitigation measures are required for this property.

The structure at 356 Dalhousie Street is a vernacular residence with Queen Ann design influences, an architectural style popular during the second half of the 19<sup>th</sup> century. This structure retains potential CHVI. Because the residence is located within the buffer there is potential for indirect vibration impacts to this property, though no direct impacts are anticipated. The preferred option is to avoid properties containing potential built heritage resources (BHRs) or cultural heritage landscapes (CHLs) by establishing a buffer zone around the resource to avoid construction activity within 50 metres of the BHR or CHL. The preferred option should use appropriate preventive measures such as mapping on construction maps and temporary fencing. Staging and laydown areas are non-invasive and avoid known or potential BHRs or CHLs. Where avoidance is not feasible, the alternative option should be applied.

The alternative option to mitigate this risk is for a building condition specialist or engineer familiar with vibration effects to review construction activities that are to occur within 50 metres of 356 Dalhousie Street. If recommended at the discretion of the specialist or engineer, strategies to mitigate possible indirect vibration effects to the identified built heritage resource should be taken. Potential mitigation measures, if any are recommended, include the conditions surveys and vibration monitoring. If project activities are altered and direct impacts to 356 Dalhousie Street or 355 Dalhousie Street become anticipated, a *Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment* will be required.

Therefore, based on the results of this CHSR, Stantec recommends:

- **Mitigate potential indirect vibration impacts at 356 Dalhousie Street**
  - **Preferred Option:** Avoid the potential BHR by establishing a buffer zone around the residence to limit construction activity to more than 50 metres away. This should use appropriate preventative measures such as mapping of the potential BHR on construction maps and temporary fencing. Staging and laydown areas should also be selected so that they are non-invasive and avoid the potential BHR. Where avoidance is not feasible, the alternative option should be applied.
  - **Alternative Option:** Where construction activities are anticipated within the 50 metre buffer zone a preconstruction vibration assessment by a qualified engineer is recommended in order to determine if vibration monitoring or site plan controls are required.

Reference: Boblo Island Community Expansion Project

- **No further cultural heritage studies for direct impacts or indirect vibration impacts for 355 Dalhousie Street**

This CHSR has been prepared for the sole benefit of Enbridge Gas and may not be used by any third party without the express written consent of Stantec and Enbridge Gas.

**STANTEC CONSULTING LTD.**

**Jenn Como, BA**

Cultural Heritage Specialist

Mobile: 226-927-5319

Email: [Jenn.Como@stantec.com](mailto:Jenn.Como@stantec.com)

**Meaghan Rivard, MA, CAHP**

Senior Cultural Heritage Specialist

Mobile: 226-268-9025

Email: [Meaghan.Rivard@stantec.com](mailto:Meaghan.Rivard@stantec.com)

Attachments: A – MCM Checklist  
B – Supplementary Documentation

# Attachment A MCM Checklist



Project or Property Name  
**Boblo Island Community Expansion Project**

Project or Property Location (upper and lower or single tier municipality)  
**Town of Amherstberg, County of Essex**

Proponent Name  
**Enbridge Gas Inc.**

Proponent Contact Information  
**George Tatolis, Environmental Permitting Advisor**

**Yes**      **No**

1. Is there a pre-approved screening checklist, methodology or process in place?           

**If Yes**, please follow the pre-approved screening checklist, methodology or process.

**If No**, continue to Question 2.

**Yes**      **No**

2. Has the property (or project area) been evaluated before and found **not** to be of cultural heritage value?           

**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 *Ontario Heritage Act* as being of cultural heritage value?           

b. a National Historic Site (or part of)?           

c. designated under the *Heritage Railway Stations Protection Act*?           

d. designated under the *Heritage Lighthouse Protection Act*?           

e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?           

f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?           

**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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>
b. has a special association with a community, person or historical event?	<input type="checkbox"/>	<input checked="" 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

**Attachment B    Supplementary Documentation**



From: [Barboza, Karla \(MCM\)](#) on behalf of [Registrar \(MCM\)](#)  
To: [Como, Jenn](#)  
Cc: [Registrar \(MCM\)](#); [Harvey, Joseph \(MCM\)](#)  
Subject: MCM Response: Reference: Boblo Island Community Expansion Project  
Date: Tuesday, April 11, 2023 12:48:57 PM  
Attachments: [160951386\\_Fig01\\_Study Area\\_20230217.pdf](#)

---

## MCM File 0018193 - Boblo Island Community Expansion Project

Hi Jenn,

Hope this email finds you well!

As you may know, the Ministry developed screening checklists to assist property owners, developers, consultants and others to identify known and potential cultural heritage resources:

- [Criteria for Evaluating Archaeological Potential](#)
- [Criteria for Evaluating Marine Archaeological Potential](#)
- [Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes](#)

I have used the document above (Built Heritage and Cultural Heritage Landscapes) in order to respond to your question:

- Question 3a. i. Is the property (or project area) identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value e.g. a property that is designated by order of the Minister of Citizenship and Multiculturalism as being of cultural heritage value or interest of provincial significance [s.34.5]?  
*MCM Response:* To date, no properties have been designated by the Minister.
- Question 3a.v. Is the property (or project area) identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value included in the Ministry of Citizenship and Multiculturalism's list of provincial heritage properties?  
*MCM Response:* At this time, we are not aware of any provincial heritage properties within or adjacent to the study area.

Please note that if the subject lands or parts of the subject lands are owned or controlled by an Ontario Ministry or Prescribed Public Body (PPB) on behalf of the Crown (the list of PPBs is available as O. Reg. 157/10), a Ministry or PPB may have responsibilities under the [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

MCM would appreciate if any technical cultural heritage studies (e.g., Cultural Heritage Assessment Report, Cultural Heritage Evaluation Report, Heritage Impact Assessment) be sent for our review as part of the OEB process.

I hope this helps. Let me know if you have any questions.

Regards,  
Karla

Karla Barboza, RPP, MCIP, CAHP

Team Lead, Heritage | Heritage Planning Unit | **Ministry of Citizenship and Multiculturalism** | 416-660-1027

[|karla.barboza@ontario.ca](mailto:karla.barboza@ontario.ca)

---

**From:** Como, Jenn <Jenn.Como@stantec.com>

**Sent:** April-03-23 2:14 PM

**To:** Registrar (MCM) <Registrar@ontario.ca>

**Subject:** Reference: Boblo Island Community Expansion Project

**CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.**

Dear Registrar,

**Reference: Boblo Island Community Expansion Project**

Stantec Consulting Ltd. has been retained by Enbridge Gas Inc. to prepare a Heritage Checklist as part of the proposed Boblo Island Community Expansion Project to supply the north part of Boblo Island with natural gas. In order to complete the Ministry of Citizenship and Multiculturalism's *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (the Checklist), we are seeking information on protected heritage resources (properties, landscapes, or districts) within or adjacent to the Study Area.

We are inquiring about any properties within the Study Area that have been identified, designated, or otherwise protected under the Ontario Heritage Act. The Study Area includes a 50-metre buffer around the proposed pipeline route. Specifically, the Study Area spans across historical Lot 3, Concession 1, and the residential neighbourhood on the north end of Boblo Island in the former Township of Malden, now the Town of Amherstburg, in Essex County. The streets included within the proposed pipeline route on Boblo Island are Boblo Island Boulevard, Red Oak Crescent, Crystal Bay Drive, Goldcoast Drive, and Riverwalk Crescent.

**Are you aware of any MCM heritage interests within or adjacent to the Study Area?**

For the ease of review, mapping has been provided depicting the proposed Study Area. This map appears in draft form and may contain confidential information not yet released to the public. We ask that you maintain confidentiality when responding to this inquiry.

Regards,  
STANTEC CONSULTING LTD.

**Jenn Como**

Cultural Heritage Specialist and Material Culture Analyst

[she/her]

Cell: 226-927-5319

[Jenn.como@stantec.com](mailto:Jenn.como@stantec.com)



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From: [Kevin Baksh](#)  
To: [Como, Jenn](#)  
Subject: RE: Reference: Boblo Island Community Expansion Project  
Date: Thursday, April 13, 2023 10:10:47 AM  
Attachments: [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[image004.png](#)

---

Hi Jenn,

Thank you for your information request related to a Cultural Heritage Evaluation Report/EA for the **Boblo Island Community Expansion Project**. Your request to verify the presence of OHT heritage properties or easements within or adjacent to the study area has been processed. I've reviewed the study area against our database of OHT easements and properties. We can confirm that the OHT does not have any conservation easements or Trust-owned properties within or adjacent to the study areas provided in your map.

If you have not already done so, I recommend you check the Trust's Plaque Database (PDF available online) <https://www.heritagetrust.on.ca/en/index.php/pages/tools/data-inventories> to verify the presence of plaques. Additionally, I recommend you check the Trust's register (available online) <http://www.heritagetrust.on.ca/en/index.php/pages/tools/ontario-heritage-act-register> and contact the local municipality to verify no local heritage properties are present within the identified study area.

As described in Section 23 of the Ontario Heritage Act, the Trust holds and maintains the provincial Ontario Heritage Act Register of properties that have been designated by municipalities under sections 29 and 41 of the Act as well as properties designated under the Act by the Minister. We rely on municipalities to send us information and it is advisable to check with the clerk's office to verify information.

Under Section 27 of the Act (OHA) the clerk of a municipality is required to maintain a local register of all designated properties. Section 27 also states that municipalities may keep a register of property that has not been designated, but that the municipality has determined to be of cultural heritage value or interest. These are often referred to as "listed" properties. These non-designated heritage properties are not reflected in the OHA Register.

Regards,

**Kevin Baksh** (he/him)

(A) Provincial Heritage Registrar



---

**From:** Como, Jenn <Jenn.Como@stantec.com>

**Sent:** April 3, 2023 2:16 PM

**To:** Kevin Baksh <Kevin.Baksh@heritagetrust.on.ca>

**Subject:** Reference: Boblo Island Community Expansion Project

**CAUTION: External mail. Do not click on links or open attachments unless you recognize the sender and know the content.**

Dear Kevin,

**Reference: Boblo Island Community Expansion Project**

Stantec Consulting Ltd. has been retained by Enbridge Gas Inc. to prepare a Heritage Checklist as part of the proposed Boblo Island Community Expansion Project to supply the north part of Boblo Island with natural gas. In order to complete the Ministry of Citizenship and Multiculturalism's *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (the Checklist), we are seeking information on protected heritage resources (properties, landscapes, or districts) within or adjacent to the Study Area.

We are inquiring about any properties within the Study Area that have been identified, designated, or otherwise protected under the Ontario Heritage Act. The Study Area includes a 50-metre buffer around the proposed pipeline route. Specifically, the Study Area spans across historical Lot 3, Concession 1, and the residential neighbourhood on the north end of Boblo Island in the former Township of Malden, now the Town of Amherstburg, in Essex County. The streets included within the proposed pipeline route on Boblo Island are Boblo Island Boulevard, Red Oak Crescent, Crystal Bay Drive, Goldcoast Drive, and Riverwalk Crescent.

**Are you aware of any properties with an OHT conservation easement or any OHT-owned properties within or adjacent to the Study Area?**

For the ease of review, mapping has been provided depicting the proposed Study Area. This map appears in draft form and may contain confidential information not yet released to the public. We ask that you maintain confidentiality when responding to this inquiry.

Regards,  
STANTEC CONSULTING LTD.

**Jenn Como**

Cultural Heritage Specialist and Material Culture Analyst

[she/her]

Cell: 226-927-5319

[Jenn.como@stantec.com](mailto:Jenn.como@stantec.com)



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## **Appendix G      Environmental Alignment Sheets**



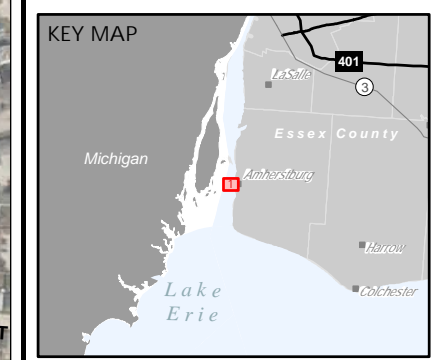
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI			ERCA Regulated Area		
	WETLAND WATERCOURSE ANSI			Detroit River		
	VEGETATION			Wooded Area		
	WATER WELL WITHIN 50 m	Water Well	Water Well			
	LINEAR FEATURES			Driveways and Roads		Driveways and Roads
	ENVIRONMENTALLY SENSITIVE AREA					
SPECIES AT RISK (SAR) HABITAT			Potential SAR Habitat			

Legend

- Preliminary Preferred Route
- Base / Environmental Features
- Water Well (MOECC)
- Harardous Waste (MOECC)
- Watercourse
- Waterbody
- Wooded Area
- Regulated Area (ERCA)

Construction Mitigation Notes:  
 Note 1: HDD construction method recommended. Refer to Section 4.4.1 and Table 5.1 of the ER and Sections 12.1, 12.4 and 15.0 of the ECMM 2022.  
 Note 2: No clearing activities during the migratory breeding bird restricted activity period (April 1 – August 31) without preconstruction nesting surveys. Refer to Section 4.4.4 and Table 5.1 of the ER and Section 8.2 of the ECMM 2022.  
 Note 3: Tree removal to avoid the active season for bats (mid-April to mid-September). Refer to Section 4.4.4 and Table 5.1 of the ER and Section 8.2 of the ECMM 2022.  
 Note 4: Groundwater wells present – Refer to Section 4.3.3 and 7.1.2 of the ER and Section 8.6.2 of the ECMM 2022.  
 Note 5: Water well monitoring program recommended. Refer to Section 7.1.2 of the ER.  
 Note 6: Permit from ERCA required. Refer to Sections 3.2.8 and 3.3.1 of the ER.  
 Note 7: Linear facility – Refer to Section 4.5.4 of the ER and Sections 12.0 and 18.0 of the ECMM 2022.  
 Note 8: Maintain emergency egress. Refer to Section 4.5.3 of the ER and Section 18.0 of the ECMM 2022.  
 Note 9: Warmwater watercourse crossing - no in water works are anticipated, however should there be in water works, in-water work for warm-water habitats is permitted from July 16 to March 14 (no work from March 15 to July 15). Refer to Section 4.4.1 and Table 5.1 of the ER and Section 15.2 of the ECMM 2022.  
 Note 10: Overall Benefit Permit under the Endangered Species Act, 2007 from the MNRF may be required if the species, or protected habitat, are impacted by project activities. Refer to Section 4.4.1 of the ER and Section 7.5 of the ECMM 2022.  
 Note 11: The Detroit River falls under the *Navigation Protection Act* (NPA). Works taking place on the Detroit River fall under the *Minor Works Order* (Order). The Order exempts certain minor works from the application and formal authorization process under the NPA. A Transport Canada self-assessment should be completed to determine if the works falls within one of the exempted classes of minor works under the Order. A Notice of Works form should be completed if the works do not meet the criteria set forth in the Order.

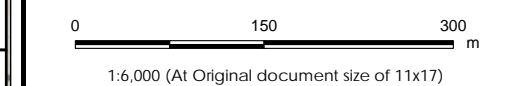
Acronyms List:  
 ER: Environmental Report (Stantec 2023)  
 ERCA: Essex Region Conservation Authority



Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 8		Note 8		
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)			Note 9		
	PIPELINE CROSSING METHODS			Note 1		
	VEGETATION RESTRICTIONS	Notes 2 & 3				
	MONITORING	Notes 4 & 5	Notes 4 & 5			
	PERMITTING REQUIREMENTS	Notes 6 & 11				
SPECIES AT RISK (SAR) HABITAT			Note 10			

Notes

- Coordinate System: NAD 1983 UTM Zone 17N
- Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2023.
- Orthoimagery © First Base Solutions, 2023. Imagery Date, 2022.
- MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2023.
- Contains information from Essex Region Conservation Authority Under EULA, 2023.



Project Location: TOWN OF AMHERSTBURG  
 Prepared by SPE on 2023-06-29  
 Technical Review by BCC on 2023-04-21

Client/Project: ENBRIDGE GAS INC. BOBLO ISLAND COMMUNITY EXPANSION

Figure No. A-1  
 Title: Environmental Alignment Sheets - Map 1

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 Revised: 2023-06-29 By: searles

**Appendix H**      **DFO and Enbridge Gas Inc. Agreement  
Related to Watercourse Crossings for  
Pipeline Construction and Maintenance in  
Ontario**



## Generic Sediment Control Plan – Horizontal Directional Drill

This Plan is applicable to Enbridge Gas Inc. (EGI) workers and Contractors involved in HDD activities. It establishes best management practices to prevent and/or mitigate an unauthorized death of fish or harmful alteration, disruption or destruction (HADD) of fish and fish habitat or the impairment of water quality from an inadvertent release of drilling fluid or sedimentation in the vicinity of, or beneath, watercourses. **NOTE:** There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD of fish habitat to DFO.

Drilling fluid is typically composed of bentonite clay-water mixture, which is considered non-toxic/hazardous, however, if it is released to a watercourse, there is the potential for the drilling fluid to adversely impact fish and invertebrates. EGI recognizes the need to protect downstream water users, as well as aquatic species and their habitat, from sedimentation. As such, extensive planning prior to, and constant vigilance during, construction operations are essential.

### Conditions for use

- Work is taking place outside of Critical Habitat including any identified riparian areas
- Work is taking place at least 30m from any watercourse that has aquatic species at risk
- Work is taking place at least 15m from any watercourse

### Planning and Pre-Construction

The following precautionary measures should be implemented to minimize the risk of an inadvertent release or sedimentation during HDD activities:

- Select a pipeline route to minimize the number of watercourse crossings;
- If possible, schedule HDD activities during low flow times;
- Ensure watercourse crossing permits and approvals are obtained, reviewed and remain on-site throughout the duration of the project;
- Where necessary, EGI will notify the required regulatory authorities (i.e. Conservation Authority) prior to the watercourse crossing;
- Ensure that all construction personnel are aware of this contingency plan prior to the commencement of drilling activity;
- Conduct a feasibility assessment (i.e. geotechnical assessment) to assess the suitability of subsurface conditions (if required);
- Maximize distance of HDD entry and exit points from the watercourse and ensure they are at least 10 m from a watercourse if aquatic species at risk are not present in 30 m if present; and
- Maximize depth of the drill path beneath the watercourse.

### Construction Mitigation Measures

The steps and precautions that follow should be completed when conducting HDD activities beneath, or in the vicinity of, a watercourse:

- Clearly flag the expected drill path prior to commencing any drilling operations, to facilitate monitoring for potential drilling fluid releases.
- Assign personnel to monitor the drill path for inadvertent returns of drilling fluid or sedimentation.
- Fluid volumes, annular pressure and cutting returns will be continuously monitored to ensure potential drilling fluid losses are detected and addressed immediately. Dedicated personnel should be assigned to continuously monitor drilling pressure and fluid volumes.
- Ensure an approved spill kit is on site and readily available, as per the Spill Response Procedure.
- Sediment control measures (i.e. silt fencing, SiltSoxx™, etc.) should be set-up prior to initiating HDD operations to contain potential releases of drilling fluid, sediment-laden groundwater or run-off along the proposed drill path. Sediment control measures shall be installed:
  - Around entry and exit pits;
  - Around drilling fluid containment pits;
  - Surrounding spoil piles;
  - Between all HDD operations and watercourse as identified on this drawing;
  - Over-excavate the entry and exit pits to create drilling fluid sump pits;
- Drilling fluid must be contained in entry and exit pits (sump pits) and as they are filled, drilling fluids should be promptly removed and/or removed at the completion of HDD operations at an approved location;
- All vehicles, machinery and other equipment shall not enter the water. There must be no fording of any watercourse;
- If possible, refueling of equipment should not occur within a minimum of 30 m from a watercourse, however, if required, secondary containment must be used around the refuelling area to prevent entry into the watercourse; and
- If necessary, ensure dewatering occurs through a ‘sediment-bag’ and utilizes other erosion and sediment control (ESC) measures, as required, and is released greater than 30 m from the top-of-bank into a vegetated area.

During HDD operations, workers should keep enough spill response material on-site and readily available to contain any inadvertent releases of drilling fluid or release of sediment-laden groundwater, including (but not limited to):

- Sandbags
- Filter cloth (i.e. silt fence)
- T-Posts
- Corrugated culverts
- Numerous 5-gallon pails
- Vacuum trucks
- Straw bales
- Snow fencing
- Sediment control lots (i.e. SiltSoxx™) or equivalent
- Polyethylene sheets
- Shovels

In addition to the above, for larger watercourse crossings, the following materials should also be kept on-site:

- Turbidity curtains
- Floating sediment boom
- Trash pumps complete with sufficient lengths of leak-free hose, suction heads, and fish screens

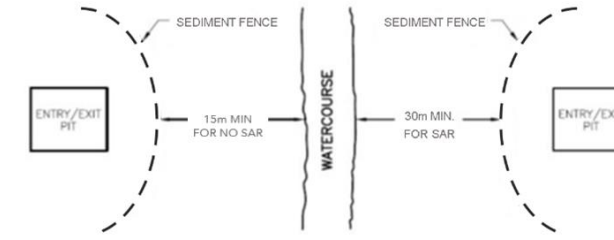
### Contingency Plan for Inadvertent Release

#### Bank and Riparian Zone Areas

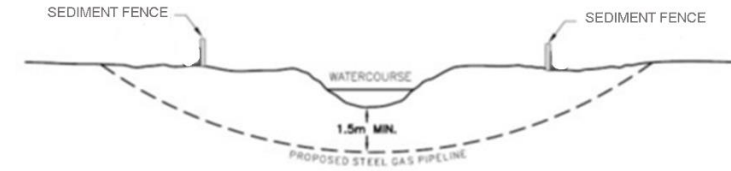
The steps that follow should be completed when pipeline installation by HDD is occurring adjacent to a watercourse bank or riparian zone and drilling fluid is identified along the drill path.

- HDD operations should stop immediately and spill containment be established using EGI’s approved methods including, but not limited to:
  - Straw bales and sediment control fencing;
  - Sandbags and polyethylene sheets;
  - Containment pits, rings and/or absorbent booms;
  - Vacuum trucks; and,
  - Site re-grading (berms).
- The EGI Supervisor and Environmental Inspector (if applicable) must be notified of the inadvertent release of drilling fluid or sedimentation.
- The EGI Supervisor must follow the reporting requirements outlined in the Spill Response Procedure and at a minimum, contact, the Environmental Advisor at **1-855-336-2056** to ensure regulatory reporting requirements are met and to ensure clean-up operations are completed.
- If in doubt, report the spill. At a minimum, the following information will be required when reporting to the Environmental Advisor:
  1. Date and time of spill
  2. How the spill occurred
  3. Location of spill
  4. Type of material spilled
  5. Volume of material spilled
  6. Any impacts from the spill
  7. Immediate spill response actions
  8. Photographs
- Contact an approved environmental consultant to support spill cleanup and restoration, if deemed necessary based on the extent and impacts of the release.
- Workers including the EGI Inspector, Environmental Advisor and Contractor and Environmental Inspector (if used) should check for the root cause of release and identify potential solutions including (but not limited to):
  - Reducing the pressure of slurry flow (i.e. excavate pressure relief pits);
  - Reducing the speed of drill rotation;
  - Reducing the speed of drill rod advancement;
  - Moving the drill location (laterally, depth, etc.); and,
  - Utilizing water to replace the bentonite drilling fluid, if site conditions allow.
- Any substantial deviation (i.e. installation method, crossing location/depth) from approved pipeline construction drawings must be resubmitted to the respective regulatory agencies (i.e. Conservation Authority) prior to resuming work.
- Residual drilling fluid must be removed by shovel or vacuum truck. Clean-up activities must minimize further disruption to the bank and riparian zone area.
- Any damage must be repaired, such as settlement and/or heaving.
- HDD activities may resume when preventative actions have been implemented and all parties are satisfied with the approach (i.e. EGI Supervisor, Environmental Advisor, Environmental Inspector and regulatory authorities [if involved]).

## Minimum Horizontal Directional Drill Setback and Depth



**PLAN**



**PROFILE**

### NOTES

- SEDIMENT FENCE TO BE SET UP A MINIMUM OF 15m FROM A NO SPECIES AT RISK WATERCOURSE AND 30m FOR A SPECIES AT RISK WATERCOURSE.
- HORIZONTAL DIRECTIONAL DRILL TO BE SET UP BEHIND SEDIMENT FENCE.
- MINIMUM OF 1.5m COVER FROM TOP OF PIPE TO BED OF WATERCOURSE.
- ALL DISTURBED AREAS TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR AS CLOSE AS POSSIBLE.

## Watercourses

In addition to the above steps and precautions for bank and riparian zone areas, the following should be completed when pipeline installation by HDD is occurring beneath a watercourse and drilling fluid is identified or suspected in the watercourse itself:

- Where leakage of drilling fluids is suspected in a watercourse (i.e. sediment plume) operations should stop immediately and a visual inspection be conducted to verify the presence and extent. All necessary steps should be taken to minimize the impacts.
- Containment and clean-up activities must be initiated as soon as possible, where appropriate.
- Where the release is small with no visible sediment plume it should be allowed to dissipate naturally. Clean-up efforts within the watercourse may potentially be disruptive and cause further suspension of sediment in the water column than if the release were left to dissipate.
- Where the release is large with a visible sediment plume extending beyond the drilling site, the Environmental Advisor must be contacted to retain an environmental consultant to monitor the turbidity levels of the plume and associated potential impacts. In addition, the location of the inadvertent release should be isolated from the watercourse by installing a cofferdam or other containment system by utilizing the following materials:
  - Sandbags and polyethylene sheets;
  - Siltsoxx™, filter cloth (silt fence), straw bales;
  - Corrugated culverts; and/or,
  - Turbidity curtains.
- The following materials can be used to control and clean up the release:
  - Shovels and 5-gallon pails (if conditions are dry)
  - Trash pumps with hose, suction head and fish screens; and/or
  - Vacuum trucks.
- If subsequent drilling attempts result in additional inadvertent returns of drilling fluid, the crossing should be halted, the Supervisor contact the Environment Department and refer to the Contingency Plan for Installation Alternatives below.

### Contingency Plan for Installation Alternatives

If EGI is unable to use HDD methodology to install the pipeline even with the mitigation implemented above, construction activities must be suspended, and the Environmental and/or Permit Advisor must be contacted to discuss alternate crossing methods. Any changes to the permitted crossing method may require permit amendments or government agency approval.

EGI should consider the following (from most to least preferred):

- Further geotechnical investigations to revise the pipeline alignment or depth
- Implement another crossing method as outlined in the Enbridge Gas Inc. and Department of Fisheries and Oceans Agreement Related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (EGI DFO Agreement)
- Implement another crossing method such as a Non-Isolated Trench/Wet Open Cut method (work area is not isolated from flowing water)

Once the crossing method is reviewed by all internal parties and has been revised, the revised crossing method must be resubmitted for review and approval to the respective regulatory agencies (i.e. Conservation Authority, DFO [if required]) prior to resuming work.

#### Death of Fish or Harmful Alteration, Disruption or Destruction of Fish Habitat (HADD)

- If death of fish or HADD has occurred due to failure of this plan, a restoration plan should be developed and implemented by the company in consultation with and upon receipt of approval from the respected Conservation Authority and the DFO.

If a HADD occurs, notification are required as per the Contingency Plan for Inadvertent Release section above. **NOTE:** There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD to DFO.

## Restoration

The following conditions should be considered when restoring any areas impacted by an inadvertent release of drilling fluid:

- Ensure the drilling exit and entry pits are cleaned of drilling fluid and the fluids are disposed of at an approved location.
- Any disturbed areas adjacent to the watercourse should be seeded, covered with erosion control matting (or equivalent) and restored as close as possible to pre-construction condition.
- All seeding and vegetation replacement will be with native species and as directed by the landowner or regulator (as required).
- If post-construction monitoring reveals erosion, remedial work will be taken as quickly as possible.
- If there is insufficient time in the growing season, the site should be stabilized (i.e. cover exposed soils with erosion control matting) and seeded the following spring.
- Maintain effective erosion and sediment controls until revegetation of disturbed areas is achieved, then remove the control measures.
- All debris and garbage shall be removed from the construction site to an approved location.

## NOTES



### LOCATION

**ALL HORIZONTAL DIRECTIONAL DRILL CROSSINGS IN ONTARIO**

### DRAWING TITLE

**GENERIC SEDIMENT CONTROL PLAN HORIZONTAL DIRECTIONAL DRILL**

<b>SCALE</b>		<b>DATE</b>	
NTS		DECEMBER 2021	
<b>FILE No.</b>		<b>PROJECT No.</b>	
<b>DRAWN</b>	<b>CHECKED</b>	<b>DRAWING</b>	<b>REV</b>
GTH			0
<b>APPROVED</b>			