



**Haldimand Shores Community
Expansion Project:
Environmental Report**

ORIGINAL REPORT

Prepared for:
Enbridge Gas Inc.
50 Keil Drive North
Chatham, ON N7M 5J5

Prepared by:
Stantec Consulting Ltd.
100-300 Hagey Blvd.
Waterloo, ON N2L 0A4

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Sign-off Sheet

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Prepared by Kayla Ginter
(signature)

Kayla Ginter MES, OPPI Candidate
Environmental Planner

Reviewed by Mark Knight
(signature)

Mark Knight, MA, MCIP, RPP
Senior Associate – Assessment and Permitting

Reviewed by David Wesenger
(signature)

David Wesenger, BES
Operations Leader – Environmental Management



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Land Acknowledgement

We respectfully and thoughtfully acknowledge that the Haldimand Shores Community Expansion Project resides on the Michi Saagiig (commonly referred to as the Mississauga First Nations), Treaty 20 territory. Since time immemorial, these lands and waters were, and are today, the traditional territory of the Michi Saagiig and Chippewa Nations, collectively known as the Williams Treaties First Nations. This includes Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Beausoleil First Nation, Chippewas of Georgina Island First Nation, Chippewas of Scugog Island First Nation, and Chippewas of Rama First Nation. Additionally, we would gratefully recognize that the Project area is also on the ancestral lands of the Huron Wendat Nation.

Executive Summary

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand (the Project). The Project may involve the construction of up to approximately 9 kilometers (km) of a combination of Nominal Pipe Size (NPS) 2- and 4-inch steel and polyethylene natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive, Fox Run Road, and Killdeer Crescent. Construction may also include the installation of approximately 104 m of 2-inch pipeline outside the road allowance in the area connecting Nawautin Drive to North Shore Road.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the proposed pipeline. 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).

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

The potential effects and impacts of the Project on physical, biophysical, and socio-economic features have been assessed for the Project. In the opinion of Stantec, the recommended program of supplemental studies, mitigation, protective and contingency measures are considered appropriate to



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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, appropriate mitigation, and protective measures are implemented, potential cumulative effects will be of low probability and magnitude, short duration, and reversible, positive, 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
BGS	Below ground surface
CHAR	Cultural Heritage Assessment Report
CHVI	cultural heritage value or interest
COSSARO	Committee on the Status of Species at Risk in Ontario
CN	Canadian National
CP	Canadian Pacific
HDD	Horizontal Directional Drilling
DFO	Fisheries and Oceans Canada
EASR	Environmental Activity and Sector Registry
Enbridge Gas	Enbridge Gas Inc.
END	Endangered
EPP	Environmental Protection Plan
ER	Environmental Report
ESA	<i>Endangered Species Act, 2007</i>
ESC	Erosion and Sediment Control
GTAH	Greater Toronto Area and Hamilton
HDD	Horizontal Directional Drill
HKPR	Haliburton, Kawartha, Pine Ridge District Health Unit
HVA	Highly Vulnerable Aquifer
IPZ	Intake Protection Zone
km	Kilometre(s)



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LIO	Land Information Ontario
LTC	Leave to Construct
m	Metre(s)
MBCA	<i>Migratory Birds Convention Act, 1994</i>
MECP	Ministry of the Environment, Conservation and Parks
MENDM	Ministry of Energy, Northern Development and Mines
MMAH	Ministry of Municipal Affairs and Housing
MOE	Ministry of Energy
MTO	Ontario Ministry of Transportation
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
MTO	Ministry of Transportation
NAR	Not at Risk
NDMNRF	Ministry of Northern Development, Mines, Natural Resources and Forestry
NHIC	Natural Heritage Information Centre
NPS	Nominal Pipe Size
OEB	Ontario Energy Board
OGS	Ontario Geological Survey
OHA	<i>Ontario Heritage Act</i>
OPCC	Ontario Pipeline Coordinating Committee
OPP	Ontario Provincial Police
O. Reg.	Ontario Regulation
ORAA	Ontario Reptile and Amphibian Atlas
OWES	Ontario Wetland Evaluation System
PPR	Preliminary Preferred Route
PR	Preferred Route



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PTTW	Permit to Take Water
PSW	Provincially Significant Wetland
RoW	Right-of-Way
SAR	Species at Risk
SARA	<i>Species at Risk Act</i>
SARO	Species at Risk in Ontario
SGRA	Significant Groundwater Recharge Area
SOCC	Species of Conservation Concern
SC	Special Concern
Stantec	Stantec Consulting Ltd.
TC	Transport Canada
THR	Threatened
TSSA	Technical Standards and Safety Authority
WHPA	Wellhead Protection Area
WWR	Water Well Record(s)



1.0 INTRODUCTION

1.1 PROJECT DESCRIPTION

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand (the Project). The Project may involve the construction of up to approximately 9 kilometers (km) of a combination of Nominal Pipe Size (NPS) 2- and 4-inch steel and polyethylene natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive, Fox Run Road, and Killdeer Crescent. Construction may also include the installation of approximately 104 metres (m) of 2-inch pipeline outside the road allowance in the area connecting Nawautin Drive to North Shore Road.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the proposed pipeline. 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).

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), as well as relevant federal and provincial environmental guidelines and regulations.

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). To meet this objective, the environmental study was prepared to:

- Identify a Preferred Route that reduces potential environmental impacts
- Complete a detailed review of environmental features along the Preferred Route 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 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



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1.2.2 Process

The environmental study was divided into two main phases:

Phase I: Identification and Consultation on a Preliminary Preferred Route

The environmental study began by identifying the Preliminary Preferred Route, herein “PPR”. The PPR was determined by Enbridge Gas based on their engineering considerations, as well as consideration of environmental constraints as identified by Stantec.

The following entities were notified of the Project:

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

Feedback on the PPR was sought from these entities through newspaper notices, letters, and a Virtual Open House held from November 8, 2021 – November 22, 2021.

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

Phase II: Confirmation of the Preferred Route; Environmental Report

Based on feedback received during the consultation program, the PPR was confirmed to be the Preferred Route, herein “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 E).

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.



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The ER is organized into the following sections:

- 1.0 Introduction:** provides a description of the Project and the environmental study
- 2.0 Route Evaluation and Selection:** provides an overview of the pipeline route evaluation and selection process
- 3.0 Consultation Program:** describes the consultation program
- 4.0 Impact Identification, Assessment and Mitigation:** describes the existing conditions, predicts potential effects and impacts, recommends supplemental studies, mitigation, and protective measures, and considers net impacts
- 5.0 Potential Impacts, Mitigation and Protective Measures:** 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.
- 6.0 Cumulative Effects Assessment:** provides an analysis of potential cumulative effects associated with the proposed Project
- 7.0 Monitoring and Contingency Plans:** describes monitoring and contingency plans to address potential environmental impacts of the proposed Project
- 8.0 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.



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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.



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Table 1.1: Summary of Potential Environmental Permit and Approval Requirements

Permit/Approval Name	Administering Agency	Description
FEDERAL PERMITS AND APPROVALS		
Clearing of Vegetation under the <i>Migratory Bird Convention Act, 1994</i> (MBCA) (1994)	Environment Canada	No permit is necessary; however, precautions need to be taken so that no breeding birds or their nests are harmed or destroyed during the bird nesting season. Nest sweeps will be required at a maximum of 7 days prior to vegetation removal during the MBCA bird nesting season (April 1 to August 31).
Review and authorization under the <i>Fisheries Act</i> (1985)	Fisheries and Oceans Canada (DFO)	DFO review and possible Fisheries Act authorization is required at watercourse crossing containing species protected under the <i>Species at Risk Act</i> (SARA) (2002). The DFO may authorize activities that have the potential to affect fish or mussel species protected under the SARA (2002). The Fisheries Act (R.S.C. 1985, c. F-14) prohibits activities that result in the death of fish or the harmful alteration, disruption, or destruction of fish habitat (s.35[1]) unless authorized by the Minister of Fisheries and Oceans Canada (DFO). The SARA (2002) prohibits the killing, harming, harassing, capturing, or taking of a species (s.32) or damaging or destroying the residence of a species (s.33) that is listed as extirpated, endangered, or threatened. For federally regulated aquatic species, these activities may be permitted through a SARA Permit, issued by DFO. The above prohibitions apply to activities that occur in or near waterbodies that support fish and fish habitat and/or aquatic species at risk (SAR) protected under the SARA (2002).
Permitting under the SARA (2002)	DFO	A SARA permit is required to capture, handle, and relocate SARA Schedule 1 fish or mussel species during construction. As indicated in Section 32 (1) of the SARA (2002), "No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species or a threatened species." As indicated in Section 73 (1) of the SARA (2002), "The competent minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals."
PROVINCIAL PERMITS AND APPROVALS		
Development Permits under <i>Ontario Regulation (O. Reg) 163/06</i> (Regulation of Development, Interference with Wetlands and Alterations to Shorelines and	Lower Trent Conservation	Required for works in Lower Trent Conservation Regulated Areas, including shorelines, watercourses, and hazardous lands (flooding and erosion hazards, and unstable soils and bedrock).



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Table 1.1: Summary of Potential Environmental Permit and Approval Requirements

Permit/Approval Name	Administering Agency	Description
Watercourses), as per the <i>Conservation Authorities Act</i> (1990a)		
Permit to Take Water (PTTW) or Environmental Activity and Sector Registry (EASR) (surface and groundwater) under the <i>Ontario Water Resources Act</i> (1990b)	Ministry of the Environment, Conservation and Parks (MECP)	Under 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 from 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.
Permitting or registration under the <i>Endangered Species Act, 2007</i> (ESA) (2007)	MECP	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. 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." 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."
Archaeological clearance under the <i>Ontario Heritage Act</i> (OHA)	Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)	A Stage 1-2 archaeological assessment (AA) is required along the road allowance and temporary land use areas to identify areas of archaeological potential prior to any ground disturbances and/or site alterations. Depending on the results of the Stage 1-2 AA, Stage 3 and 4 AA's may be required. The completed archaeological assessment reports are forwarded to the MHSTCI for review and comment.
Review of Built Heritage and Cultural Landscape under the OHA	MHSTCI	A Heritage Overview Study will be completed to determine the presence of built heritage and cultural landscapes. If identified, a Heritage Impact Assessment is required to determine the effects of the project on heritage resources and recommend mitigation measures, if necessary.
MUNICIPAL PERMITS AND APPROVALS		
Noise By-Law No. 73-2013	Township of Alnwick/Haldimand	Project activities should adhere to the local noise by-law.
Annual Wide Load Permit	Northumberland County	Vehicles and loads in excess of the width and or length prescribed under Section 109 of the Highway Traffic Act shall request an Annual Wide Load Permit from the Municipality prior to construction. Each application submitted to the Municipality must be accompanied by the appropriate application and permit fee per year per truck.



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Table 1.1: Summary of Potential Environmental Permit and Approval Requirements

Permit/Approval Name	Administering Agency	Description
Open Cut and Boring Permits		Prior to construction, utility owners are required to request permission to place a utility within the road allowance, and one of the following forms may be needed: <ul style="list-style-type: none">• Open Cut Permit (required to place utility in road allowance)• Boring Permit (form to place utility in road allowance)
By-Law No. 2015-27		Permits are required for the destruction of trees in woodland greater than one hectare for non-personal use or unless another exemption to the By-Law is met.



2.0 ROUTE EVALUATION AND SELECTION

2.1 THE PROCESS

The route evaluation and selection process was undertaken in accordance with the OEB *Environmental Guidelines* (2016). The OEB *Environmental Guidelines* (2016) identify the environmental and socio-economic features to take into consideration and the routing principles to be considered. As noted in the Project Description (Section 1.1), Enbridge Gas identified a PPR and no alternative routes were proposed.

2.2 CONFIRMATION OF THE PIPELINE ROUTE

Input on the PPR was sought through consultation (see Section 3). Comments received were generally positive, with concerns largely focused on reducing impacts to mature trees adjacent to the road allowance. Concerns regarding avoidance of construction in the Chub Point Nature Reserve, Nawautin Nature Sanctuary, and adjacent natural heritage features (e.g., wetlands, woodlands) were also expressed. As no comments were received that would cause a change in the PPR, it was confirmed as the PR (Figure 1, Appendix A).

The PR is currently illustrated in a general location on figures presented as part of the environmental study and ER. The PR has been developed for purposes of the study 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 final location of the running line, temporary land use requirements, and road crossing method. It is understood that Enbridge Gas will consider the above advice during detailed design as well as the other recommendations made in the ER. Stantec reviewed comments from the consultation program, aerial mapping along the PR, and provided advice on environmental constraints. Detailed design will also be influenced by supplemental studies and site-specific requests from landowners and agencies.



3.0 CONSULTATION AND ENGAGEMENT PROGRAM

3.1 OBJECTIVES

Consultation is an important component of the OEB *Environmental Guidelines* (2016). As noted by the OEB (2016), 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 consultation and engagement 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 consultation and engagement 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

3.2 IDENTIFYING INTERESTED AND POTENTIALLY AFFECTED PARTIES

As part of the consultation and engagement 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.

3.2.1 Identifying Indigenous Communities

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



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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).¹ This submission to the MOE provided details on the Project location and sought to determine the requirements of the duty to consult. Potentially impacted Indigenous communities were identified by the MOE in a Letter of Delegation dated October 20, 2021. See Appendix B1.

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:

- Alderville First Nation
- Beausoleil First Nation
- Chippewas of Georgina Island
- Chippewas of Rama First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Huron-Wendat Nation
- Kawartha Nishnawbe
- Mississaugas of Scugog Island First Nation
- Mohawks of the Bay of Quinte

3.2.2 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
- Special interest groups and third-party utility owners/operators

As the environmental study progressed, the initial Contact Lists evolved, and updates were made in response to changes in personnel, correspondence, and feedback gathered from the Notice of Study Commencement. Updates to the Contact List also included adding directly impacted or surrounding landowners who had received the Notice of Study Commencement and who had contacted the Project Team. The Project Indigenous and stakeholder Contacts Lists are provided in Appendix B2.

¹ 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.



3.3 COMMUNICATION METHODS

3.3.1 Newspaper Notices

A Notice of Study Commencement and Virtual Open House was published on November 4, 2021, in the Northumberland News. The Notice introduced and described the Project, provided a map of the PPR, noted the format and dates of the Virtual Open House, and listed Project contact information.

Copies of tear sheets from the newspaper notice are provided in Appendix B3.

3.3.2 Letters and Emails

3.3.2.1 Notice of Study Commencement and Virtual Open House

Letters were sent via email to all parties identified on the Indigenous Contact List on October 8, 2021, and to parties identified on the OPCC and Agency Contact List on November 1, 2021, to provide information on the Project and on the Virtual Open House. Letters were mailed to landowners located in the Study Area via Canada Post regular mail on November 1, 2021. Letters to landowners were officially delivered to mailboxes on November 8, 2021. Appended to these letters and emails was a map of the Study Area and PPR.

Generic copies of the letters noted above are included as Appendix B4.

3.3.3 Virtual Open House – Presentation Slides, Interactive Map and Exit Questionnaire

Presentation slides were developed for the Virtual Open House. The presentation slides provided information on the Project, the OEB regulatory process, environmental study process, the PPR, anticipated environmental and socio-economic impacts and mitigation, and next steps. A voiceover recording was paired with the presentation slides.

Following the 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 were provided in the “Resources” tab on the Virtual Open House Project webpage (as described below). The exit questionnaire requested feedback on potential impacts, important features along the PPR, and the content of the Virtual Open House. The interactive map allowed attendees to view the PPR 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 waterways and wooded areas.

Copies of the first Virtual Open House presentation slides, presentation script, exit questionnaire, and completed questionnaires are provided in Appendix B5.



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3.3.4 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 document as the Virtual Open House webpage, was developed using the ArcGIS StoryMaps platform ([Haldimand Shores Community Expansion Project \(arcgis.com\)](https://www.arcgis.com/storymaps)) to host the Virtual Open House. 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/about-enbridge-gas/projects/haldimand-shores>) and was designed to provide information on the Project and a link to the Virtual Open House. Upon completion of this Environmental Report, additional details on the Project and future Project notices will be published on the Enbridge Gas website.

The Project webpages were communicated to interested and potentially affected parties in the newspaper notice, letters, emails, and Virtual Open House presentation.

3.4 CONSULTATION EVENTS

3.4.1 Meetings

Meetings regarding the Project have or may occur, if required or requested, between Enbridge Gas and the lower/upper-tier municipalities, Lower Trent Conservation, key stakeholders, Indigenous communities, third party utilities owners and operators, and directly impacted and surrounding landowners, and will continue as the Project progresses towards detailed design and construction.

3.4.2 Virtual Open House

As a result of the health risks associated with in-person gatherings and physical distancing requirements set out by the Province of Ontario due to COVID-19, a Virtual Open House was hosted online. The Virtual Open House was accessible from November 8, 2021 – November 22, 2021. This two-week period was selected to allow agencies, Indigenous communities, landowners, residents, and other stakeholders ample opportunity to review the Project information and provide input.

A Project email address and phone number were provided in the Virtual Open House for attendees to ask questions and leave comments. The Virtual Open House received 125 visits to the ArcGIS StoryMaps webpage, with 11 visits to the presentation; of those that visited the webpage, 72 were from Ontario. Following the Virtual Open House, twelve (12) questionnaires were submitted via either the Project email address or through the questionnaire link in the presentation.

Redacted copies of the completed exit questionnaires are included in Appendix B5.



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3.5 INPUT RECEIVED

The consultation and engagement 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 and a copy of all written comments and responses are also provided in Appendix B6.

3.5.1 Public Input

Twenty-three (23) comments were received as of January 11, 2022, in the form of twelve (12) completed questionnaires, seven (7) emails, and four (4) telephone conversations regarding the Project. The main areas of comment include:

- clarification on the proximity of the pipeline in relation to the landowner's property;
- Landowners interested in receiving natural gas inquired on how they might be connected to the pipeline. Landowners disinterested in natural gas alternatively questioned how they could prevent their homes from being connected to the pipeline;
- several inquiries arose as to whether specific properties can be serviced by natural gas and if the Project footprint could extend further down select streets;
- seeking information on funding and cost to residents to construct the Project;
- potential timelines to complete the Project;
- concerns about the potential impacts to the natural environment, landowner lawns, the socio-economic environment, and cumulative environmental effects. Environmental concerns were mostly focused on impacts to terrestrial species (i.e., salamanders), watercourses, wetlands, trees (i.e., Striped Maple) and wooded areas, the Nawautin Nature Sanctuary, and the Chub Point Nature Reserve;
- the scope of the ER and the OEB approval process; and
- the design aspect (i.e., what side of the road the pipeline would be installed, if any private land would be crossed, if the pipeline is to intersect with the Nawautin Nature Sanctuary or the Chub Point Nature Reserve, and watercourse crossing methodologies).

3.5.2 Agency Input

Thirteen (13) comments were received as of January 11, 2022, from federal and provincial agencies and considered in the preparation of this ER. A summary of the comments received is provided below.

Federal Agencies

- The MOE provided Enbridge Gas with a Letter of Delegation detailing the Indigenous communities who's Aboriginal and treaty rights may be impacted by the Project.
- The DFO provided confirmation of receipt of the Notice of Study Commencement and submission of a Request for Review form.



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- Transport Canada (TC) does not require receipt of all individual or class EA related notifications. Project proponents are required to self-assess if a project: (1) will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property and (2) will require approval and/or authorization under any Acts administered by TC.
- The Impact Assessment Agency of Canada provided information to determine if the proposed project is described under the regulations of the Impact Assessment Act.

Provincial Agencies and Authorities

- The Technical Standards and Safety Authority (TSSA) replied to the Notice of Study Commencement noting an Application for Review of a Pipeline Project will need to be filled and submitted for review by the TSSA.
- The MECP requested a shape file for the Study Area in order to provide a preliminary review and comment on the Project. The MECP also requested that Stantec confirm if the Species at Risk Branch had been notified of the Project.
- Conservation Ontario advised Stantec to contact the local conservation authority about the Project.
- Ministry of Transportation Ontario (MTO) provided confirmation they had received the Notice of Study Commencement. Cheryl Tolles responded to the notice to advise Stantec that Alex Gitkow will be reviewing the Project and that all notifications on the Project should be forwarded to that contact. In a separate email, Amanda Rodek, provided MTO's initial review of the Project and notified that the MTO had no concerns with the proposed Project as the proposed route follows the municipal road system and is well beyond the provincial highway system.
- Ontario Parks confirmed receipt of the Notice of Study Commencement and indicated they would be following up with Stantec if they have any comments or questions on the proposed Project.
- Infrastructure Ontario noted that an initial scan indicates property owned by the Ministry of Government and Consumer Services is in and adjacent to the Study Area.
- The Ministry of Northern Development, Mines, Natural Resources and Forestry NDMNRF confirmed that the Peterborough District had received a copy of the Notice of Study Commencement. In response to the notice, NDMNRF provided information to guide the identification and assessment of natural features and resources as required by applicable policies and legislation. NDMNRF further provided the general recommendation that new footprint or disturbance (including temporary disturbance e.g., laydown areas) be avoided within or adjacent to wetlands. Work should avoid negative impacts to these features by following best practices for construction e.g., avoiding sedimentation into wetlands. NDMNRF also included details on SAR in Ontario and general turtle critical periods to consider during the construction of the Project. In their email, NDMNRF identified deer yarding areas (Stratum 1) and deer winter congregation areas (Stratum 2) as Significant Wildlife Habitat in the Study Area. The Study Area was also identified as containing unevaluated wetlands. The NDMNRF recommended that the unevaluated wetlands be treated as Provincially Significant Wetland (PSW) or evaluated by an Ontario Wetland Evaluation System (OWES) certified evaluator.



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- The MHSTCI provided advice on how to incorporate consideration of cultural heritage in the Report and expanded on how to apply sections 4.3 and 5.3 of the OEB *Environmental Guidelines* (2016) by outlining the technical cultural heritage studies and level of detail required to address cultural heritage in pipeline and facilities projects. MHSTCI also provided details on the role of the Stage 1 Archaeological Assessment and acknowledged that a Stage 1 Archaeological Assessment (under Project Information Form number P1148-0013-2021) is being undertaken for this Project.

3.5.3 Municipal Input

One (1) comment was received from the Township of Alnwick/Haldimand at the time of writing this ER:

- Councillor Mike Filip requested clarification on whether installation of fiber optic cable (a planned development in the area) would be installed at the same time as construction of the Project. Councillor Mike Filip recommended that both projects occur concurrently.

3.5.4 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.

On August 31, 2021 and September 16, 2021, Enbridge Gas provided the potentially affected Indigenous communities with an initial notification of the Project. This was followed with a formal Notice of Study Commencement letter, which was distributed to communities on October 8, 2021 and provided details on the Virtual Open House.

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. In order to accurately document Indigenous engagement activities and ensure follow-up, applicable supporting documents are tracked using a database. 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.

3.5.5 Interest Group Input and Third-Party Utility Owners/Operators

No comments were received from interest groups at the time of writing this ER.



3.6 REFINEMENTS BASED ON INPUT

At each stage of the consultation program, input received was compiled, reviewed, and incorporated into the environmental study process. Responses were provided, as applicable, to questions and comments received. As noted in Section 2.2., concerns received during consultation focused on reducing clearing, and avoidance of construction in the Chub Point Nature Reserve, Nawautin Nature Sanctuary, and adjacent natural heritage features (e.g., wetlands, woodlands). Given that no comments or concerns were received to cause a change in the Project and proposed route, no refinements were required and the PPR was confirmed to be the PR.

Enbridge Gas has committed to on-going 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.



4.0 IMPACT IDENTIFICATION, ASSESSMENT AND MITIGATION

4.1 STUDY AREA

A Study Area is the area in which direct interactions with the socio-economic and natural environment could occur. For the purposes of the environmental study, the northern, eastern, and western extents of the Study Area were determined by applying an approximate buffer of 500 m from the centre line of the PR. The Lake Ontario Shoreline was selected to represent the southern boundary of the Study Area (see Figure 1, Appendix A).

4.2 DATA SOURCES

Information requests were made to agencies and municipalities. The information collected assisted in identifying environmental features located in the Study Area. If agencies requested that information be kept confidential, such as archaeological sites, such information has been withheld from the ER or mapped in such a way that specific site locations cannot be determined.

The existing conditions maps (Appendix C) have been generated from base mapping provided from Enbridge Gas (2010) and data obtained from GeoHub, formerly known as Land Information Ontario (LIO) (NDMNRF 2021a). Conservation Authority regulated area data was obtained from Lower Trent Conservation. Scales have been adjusted from the original source to better represent the features mapped. Stantec has digitally reproduced features added to the base maps. Additional mapping sources are identified on the respective map, and in the references.

For the socio-economic elements of the assessment, the most recent economy and employment statistics were extracted from the 2016 Census of Population (Statistics Canada 2017). The selected census divisions included Ontario, Northumberland County, and the Township of Alnwick/Haldimand (Statistics Canada 2017 a. b.). These census divisions were selected to consider the County as a whole, which includes statistics for all seven of the lower-tier municipalities in the County, including the Township of Alnwick/Haldimand.

4.3 PHYSICAL FEATURES

4.3.1 Bedrock Geology and Drift Thickness

The bedrock geology of the Study Area is uniformly the Ottawa Group; Simcoe Group; and the Shadow Lake formation (now considered Upper Ordovician formation) (OGS 1991). A map of bedrock geology is provided in Figure 1, Appendix C.

To determine the general depth from the soil surface to the bedrock, drift thickness (also referred to as overburden) was reviewed, and results indicate that, in the Study Area, the layer of overburden ranges from 10 to 30 m. As shown on Figure 2, Appendix C, drift thickness increases along the PR as it travels



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west. Conversely, drift thickness generally decreases in areas adjacent to watercourses in the Study Area – notably in the areas surrounding the Nawautin Drive and Kanata Drive watercourse crossings.

A review of available Water Well Records (WWR) in 1 km of the Project confirms these results as it indicates that the depth to bedrock is between 0 to 21.3 m below ground surface (BGS), the average depth being approximately 4.49 m BGS (Government of Ontario n.d.).

4.3.2 Physiography and Surficial Geology

The topography of the Study Area tends to be flat to gently rolling and gradually sloping towards the Lake Ontario Shoreline and watercourses.

As shown in Figure 3, Appendix C, the Study Area traverses sandy till plains (Chapman and Putnam 2007). As shown in surficial geology mapping, see Figure 4, Appendix C, the Study Area is underlain by Paleozoic bedrock-drift complex and massive well laminated fine-textured glaciolacustrine deposits. Stone-poor, carbonate-derived silty to sandy also underlays parts of PR in the Study Area.

4.3.3 Groundwater

In the County of Northumberland, two Source Protection Plans have been prepared in compliance with the Clean Water Act, 2006. These plans are the Trent Source Protection Plan and the Ganaraska Source Protection Plan. The Source Protection Plans and associated technical studies (Assessment Reports) identify potential threats to drinking water in the County and map areas of significance, such as Wellhead Protection Areas (WHPA), Highly Vulnerable Aquifers (HVAs), Intake Protection Zones (IPZs), and Significant Groundwater Recharge Areas (SGRAs).

Lower-tier municipalities, i.e., the Township of Alnwick/Haldimand, are responsible for mapping source protection areas in the County and delineating source water protection policies. The features mapped in the local Official Plan correspond to those identified in the Trent Assessment Report (2014) – the technical report which captures water quality and quantity in the Study Area. The following is a description of the mapped features as shown in the technical report (2014) and identified in Schedule 'D – Wellhead Protection' of the Township of Alnwick/Haldimand Official Plan (2015):

Two HVA's, with a vulnerability score of 6, are in the Study Area and will be traversed by the PR as it travels along Station Road, North Shore Road, and parts of Lakeshore Road. The second HVA is in the western portion of the Study Area and will be traversed as the PR travels along Fox Run Road and the western extent of Lakeshore Road (Trent Conservation Coalition 2014).

According to the Trent Assessment Report, no SGRA's will be traversed by the PR. One mapped SGRA is located approximately 100 m west of the western extent of the PR and a second SGRA is located 70 m north of the PR that travels Killdeer Crescent (Trent Conservation Coalition 2014).

No IPZ's, municipal wellheads, or Source Protection Plan Policy Areas are in the Study Area (Trent Conservation Coalition 2014). The nearest of these features is a Source Protection Plan Policy Area located immediately north of Hwy 401 at Hwy 401 and County Road 23. This area corresponds to the presence of a WHPA-A and WHPA-B, that have been given a vulnerability score of 10, and a WHPA-C,



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that has been given a vulnerability score of 8 (Trent Conservation Coalition 2014). The nearest IPZ is in Lake Ontario, 7 km east of the Study Area.

In addition to identifying source protection features, the Trent Assessment Report (2014) provides an overview of water supply infrastructure and services in the Region. As outlined in the Trent Assessment Report, drinking water systems in the Trent Conservation Coalition Source Protection Region include municipal systems of various sizes that draw raw water from both groundwater and surface water sources. The majority of existing development in the Municipality is served by individual private or on-site water supply (Township of Alnwick/Haldimand 2015). In the Study Area, most residents rely on private wells for domestic water supply. MECP WWR's indicated that 179 well records occur within 1 km of the Study Area; 152 of these well records have uses designated as domestic, 4 wells are designated for public use, 10 are not used, and the remaining are either unknown well types, abandoned, or observation/test wells. Private wells are not regulated under the *Safe Drinking Water Act*. For more details on municipal water supply, see Section 4.5.3 and Figure 5, Appendix C, for a map of groundwater conditions, including WHPA's and location of nearby domestic and municipal wells.

Regional groundwater flow is generally interpreted to be to the south towards Lake Ontario, with local groundwater flow conditions impacted by surface water features.

4.3.4 Aggregates and Petroleum Resources

A review of the Northumberland County Official Plan, (2015) and the Township of Alnwick/Haldimand Official Plan (2015) indicates the presence of aggregate mineral resources located in the Study Area. As shown on Schedule 'B' of the County's Official Plan (2015), a designated Selected Bedrock Area is in the portion of the Study Area from Nawautin Drive eastward to the boundary of the Study Area. No other aggregate or petroleum resources were identified. See Section 4.5.7 for a fuller discussion on the policies which apply to Selected Bedrock Areas.

4.3.5 Soil and Soil Capability

There are several soil types identified in the Study Area: Brighton Sandy Loam, Tecumseth Sandy Loam, Granby Sandy Loam, and Colborne Sandy Loam (Government of Ontario, NDMNRF 2021a). The Soils of Northumberland County (Hoffman and Acton 1974) describes these soils as follows:

Brighton Sandy Loam – part of the Brighton Series, is located in the southeast portion of the County between Percy Reach and Lake Ontario. They are described as well-drained soils which contain calcareous materials. In the County, the Brighton soils are the principal tobacco and fruit growing soils that are used to grow apples. Due to the low water holding capacity and a low natural fertility, production of crop in these soils is limited but can be increased considerably with commercial fertilizers (1974, pg. 31).

Tecumseth Sandy Loam – part of the Tecumseth Series, is an imperfectly-drained soil that, similar to Brighton soils, are developed from calcareous sand deposits. Tecumseth soils are in areas which have little visible sloping. The principal crop grown in these soils is hay (1974, pg. 31).



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Granby Sandy Loam – part of the Granby Series, is a poorly-drained soil that generally occurs in depressional areas and in landscapes of soils developed on glacial till, as well as those developed on kame or outwash materials. As they occur in depressions, the soils are saturated with water for the greater part of the year (1974, pg. 27) and, apropos of the poorly-drained, and saturated nature of these soils, Granby soils are seldom used for arable crops and, instead, used for pasture or grazing.

Colborne Sandy Loam – part of the Colborne Series, are described as well-drained soils which consist of sandy loam surface horizons. According to the Soils of Northumberland County (1974), Colborne Sandy Loam is the most common soil type in the southern part of the County. It is generally associated with topography that is gently undulating, except along the edge of the beaches where slopes are often steep. Gravel, stones, and cobbles are seldom present on the soil surface and throughout the soil profile. Where the sandy overburden is thin, stones are more numerous and may interfere with cultivation (1974, pg. 31). Due to the lack of moisture commonly found in these soils, Colborne soils are generally better suited for orchards and canning crops, but also support some production of spring grains, winter wheat, and hay.

A small section of the Study Area, corresponding with a watercourse to the west of the pipeline, is also comprised of *Stream Course* soil. According to the Soils of Northumberland County (Hoffman 1974), Stream Course soils represent the narrow-eroded channels through which small streams are flowing and indicate the pattern of surface drainage.

The soil types which occur in the Study Area are illustrated on Figure 6, Appendix C.

Soil capability for agriculture is mapped by Agriculture and Agri-Food Canada (AAFC 2005). 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. Class 2,3, and 5 soils occur in the Study Area and are traversed by the PR (Appendix C, Figure 8). Soils in Class 2 have moderate limitations that restrict the range of crops or require moderate conservation practices, soils in Class 3 have moderately severe limitations that restrict the range of crops or require special conservation practices, and soils in Class 5 have very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible. A map of soil capability is shown on Figure 7, Appendix C.

4.3.6 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. The closest mapped drainage tile is located immediately outside the Study Area, approximately 100 m south of Orchard Grove Road.

Agricultural tile drains are mapped in Figure 8, Appendix C.



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4.3.7 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. The Township of Alnwick/Halidmand Official Plan (2015), limits or restricts development in areas subject to natural hazards or human-made hazards. Potential natural hazards in the Study Area are limited and would likely be the result of flooding of watercourses, the pipelines proximity to the Lake Ontario Shoreline and associated flooding/high-water levels, and seismic activity.

Regarding the latter, the Study Area lies in the Southern Great Lakes Seismic Zone (Natural Resources Canada 2019). 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. According to data from Natural Resources Canada (2019), 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 time period, the smaller region of Western Quebec experienced 15 magnitude 2.5 or greater earthquakes per year.

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.

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 Country (Lower Trent Conservation n.d.). Flooding can occur throughout the year as a result of heavy rainfall but often occurs in the in the spring and is the result of rapid snow melt or ice melt (Lower Trent Conservation n.d.). The majority of the PR occurs immediately outside the mapped Floodline; however, a small portion of the west extent of the PR, near Killdeer Crescent and Fox Run, is located in the mapped Floodline associated with watercourse PB-0001-BAR.

South of the PR is a mapped Dynamic Beach Hazard area. The Ministry of Municipal Affairs and Housing (MMAH) defines Dynamic Beach Hazards areas *“portions of the dynamic beach which are highly unstable and/or critical to the natural protection and maintenance of the first main dune feature and/or beach profile, where any development or site alteration would create or aggravate flooding or erosion hazards, cause updrift and/or downdrift impacts and/or cause adverse environmental impacts.”* (MMAH n.d.)

A map of the Lower Trent Conservation regulation limit, Floodline, and Dynamic Beach Hazard area, is provided in Figure 9, Appendix C.



4.4 BIOPHYSICAL FEATURES

4.4.1 Aquatic Features

4.4.1.1 Watercourses

Ontario GeoHub (Government of Ontario, NDMNRF 2021a) identifies three unnamed watercourses that will be crossed by the PR. As two of the watercourses are crossed twice, there are a total of five watercourse crossings. These crossings are shown on Appendix C, Figure 10.

All three watercourses will be crossed using the horizontal directional drill method, they are located within the Trent River watershed and are regulated by Lower Trent Conservation (2021). Each of the three watercourses are identified as having a cold-water thermal regime (NDMNRF 2021a) and are tributaries to Lake Ontario.

None of the crossed watercourses are classified as municipal drains.

4.4.1.2 Fish and Fish Habitat

Fish community data is not available for the three unnamed crossed watercourses in the Study Area. DFO aquatic species at risk mapping (2021) identifies one watercourse in the Study Area as being potentially suitable habitat for Silver Lamprey (*Ichthyomyzon unicuspis*; Special Concern 'SC'), referred to as ND-02 and KD-01 in Figure 11, Appendix C. Under the ESA and SARA, SC species (i.e., Silver Lamprey) are not afforded individual or habitat protection.

4.4.2 Designated Natural Areas and Vegetation

The Study Area is in the Niagara section of the Deciduous Forest Region (Rowe 1972). This section is heavily settled and has been significantly altered by anthropogenic activities. Extensive forest tracts have been replaced by row crop agriculture and regenerating old fields where agriculture is not feasible. The natural forest of the area has been reduced to farm woodlots, hedgerows, and remnant stands. Woodlands and other natural areas such as corridors defined as Significant in the Township of Alnwick-Haldimand (2015) and Northumberland County (2016) Official Plans do not occur in the Study Area. Grafton Swamp, a PSW, was identified in the Northeast corner of the Study Area (NDMNRF 2021b). The PR does not traverse any PSW's but does traverse areas delineated as mapped non-evaluated wetlands. Areas mapped as designated Environmental Protection areas are located in the Study Area, these areas correspond to the presence of the Nawautin Nature Sanctuary and Chub Point Nature Reserve (Township of Alnwick/Haldimand 2015). Mapped designated natural areas, including non-evaluated wetlands and Environmental Protection areas, are provided in Figure 11, Appendix C.



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Woodlands

A woodland is defined as a treed area, woodlot, or forested area. Ontario GeoHub (2021) identifies woodlands that are traversed by the PR in the Study Area. The criteria for designating significant woodlands at a provincial level includes woodland size; ecological function (shape, proximity to other woodlands or natural features, linkages); species diversity; uncommon characteristics; and, economic and social values (NDMNRF 2010). It is the local planning authority's responsibility to designate significant woodlands. The Township of Alnwick/Haldimand Official Plan (2015) has not yet evaluated wooded areas in the Township to determine their significance, except for those that are on the Oak Ridges Moraine. Prior to the next *municipal comprehensive review* of the Plan, the Township will work with the County of Northumberland and the NDMNRF to identify significant woodlands within the Township as part of a comprehensive natural heritage system. In the interim, according to the Official Plan (2015 pg. 111) *"[...] all wooded areas larger than 0.5 hectares shall be considered as having the potential to be significant. Proponents of development proposals within and adjacent to these areas shall be required to submit a preliminary Ecological Site Assessment (ESA) completed by a qualified professional to determine the significance of the woodland as part of the application requirements. The preliminary ESA shall consider the recommended Significant Woodland Evaluation Criteria and Standards in Table 7-2 of the NDMNRF Natural Heritage Reference Manual."*

There are no significant woodlands identified through either Schedule A of the Northumberland Official Plan (2016) of the Township of Alnwick/Haldimand Official Plan (2015); however, based on the above interim direction, the adjacent woodlands are considered as significant.

Wetlands

The OWES is used to identify 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 the NDMNRF Ontario GeoHub mapping (Government of Ontario, NDMNRF 2021a), LIO data (Government of Ontario, NDMNRF 2021) and the NHIC database (Government of Ontario, NDMNRF 2021) indicates that there is one PSW complex that is partially in the Study Area, the Grafton Swamp. This PSW, although located in the Study Area, is not traversed by the PR. Ontario GeoHub/LIO identifies several unevaluated wetlands associated with woodlands in the Study Area that are crossed by the PR. Locations where the PR traverses sections of these unevaluated wetlands are identified on Figure 11, Appendix C.

NDMNRF Peterborough District, through correspondence, recommended that all unevaluated wetlands be treated as PSWs or that they be evaluated by an OWES certified evaluator. They also recommended contacting Lower Trent Conservation for more information on approvals that may be required. NDMNRF correspondence is summarized in section 3.5.2 and included in Appendix B6.



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4.4.3 Wildlife Habitat, Wildlife, and Species at Risk

4.4.3.1 Wildlife Habitat, and Wildlife

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle, and areas that are important to migratory and non-migratory species (ECCC 2020). Significant wildlife habitats are grouped into four categories:

1. Seasonal concentration areas
2. Animal movement corridors
3. Rare vegetation communities or specialized habitats
4. Habitats of species of conservation concern

Seasonal Concentration Areas

Seasonal concentration areas are those sites where large numbers of a species gather at one time of the year, or where several species congregate. Two seasonal concentration zones were identified to occur in the Study Area. The seasonal concentration zones identified by the NDMNRF include deer yarding areas and deer winter congregation areas. This is due to the presence of suitable Stratum 1 (deer yard) and Stratum 2 (deer wintering). The NDMNRF considers these to be mixed forest, deciduous forest, or agricultural lands where deer can forage adequately.

Animal Movement Corridors

Animal movement corridors are elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another (NDMNRF 2000). Rivers, creeks, and drains may be used as movement corridors. Hedgerows may also serve as small linkages (NDMNRF 2000). There were no Animal Movement Corridors identified to be in the Study Area. Unnamed tributaries may provide migratory corridors for aquatic species in some capacity. Additionally, deer likely use the Study Area as a migratory corridor given the presence of significant deer yarding and deer overwinter habitat as noted in the NDMNRF correspondence.

Rare Vegetation Communities or Specialized Habitats

Rare or specialized habitats are two separate components. Rare habitats are those with vegetation communities that are considered rare in the province. SRANKS are rarity rankings applied to species at the “state”, or in Canada at the provincial level, and are part of a system developed under the auspices of the Nature Conservancy. Generally, community types with SRANKS of S1 to S3 (i.e., extremely rare to rare – uncommon in Ontario), as defined by the NHIC, could qualify. It is assumed that these habitats are at risk and that they are also likely to support additional wildlife species that are considered significant.



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Specialized habitats are microhabitats that are critical to some wildlife species. The Significant Wildlife Habitat Technical Guide (NDMNRF 2000) identifies eight potential specialized habitats associated with the eco-region (6E) of Ontario in which the Project is located:

- Waterfowl nesting area
- Bald Eagle and Osprey Nesting, Foraging and Perching Habitat
- Woodland Raptor Nesting Habitat
- Turtle Nesting Areas
- Seeps and Springs
- Amphibian Breeding Habitat (Woodland)
- Amphibian Breeding Habitat (Wetlands)
- Woodland Area-Sensitive Bird Breeding Habitat

Based on a preliminary review of background information and available aerial imagery, there is potential for the above listed specialized habitats to occur in the Study Area.

Habitat for Species of Conservation Concern

There are four types of species of conservation concern (SOCC): those which are rare, those with significantly declining populations, 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.

Rare species are considered at five levels: globally rare, federally rare (with designations by the SARA), provincially rare (with designations by Committee on the Status of Species at Risk in Ontario (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 the importance of maintaining species. Some species have been identified as being susceptible to certain practices, and their presence may result in an area being designated significant wildlife habitat. Examples include species vulnerable to habitat loss and species such as woodland raptors that may be vulnerable to forest management or human disturbance. The final group of species of conservation concern includes species that have a high proportion of their global population in Ontario. Although they may be common in Ontario, they are found in low numbers in other jurisdictions.

The NHIC database (NDMNRF 2021c) was searched to obtain historic records of SOCC from the vicinity of the Study Area. The following wildlife atlases were also consulted:

- eBird Canada (ebird 2021)
- iNaturalist Canada (iNaturalist 2021)
- Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature 2021)
- Ontario Butterfly Atlas Online (TEA 2021)
- Atlas of the Mammals of Ontario (Dobbyn 1994)
- Species at Risk in Ontario List (SARO) (MECP 2021a)



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The background review identified 13 SOCC that are known to occur in the vicinity of the Study Area, including eight (8) bird species, one (1) insect species, three (3) reptile species, and one (1) fish species (**Table 4.1**).

Exact locations of species documented are not available from wildlife atlases and, instead, are recorded within 1 x 1 km or 10 x 10 km squares. Species documented from iNaturalist do provide exact observed location. The potential for species to be present will be limited by habitat suitability and availability. Therefore, the identified species recorded from these databases may not be present in the Study Area. This list will be further refined upon field investigations and consultation with the NDMNRF and/or Lower Trent Conservation.

Table 4.1: Species of Conservation Concern potentially within Study Area

Common Name	Scientific Name	S-RANK	Provincial Status (COSSARO)	Federal Status, Schedule I (SARA)
Birds				
Eastern Wood-pewee ^{3,6}	<i>Contopus virens</i>	S4B	SC	SC
Wood Thrush ^{3,6}	<i>Hylocichla mustelina</i>	S4B	SC	THR
Black Tern ³	<i>Chlidonias niger</i>	S3B	SC	No Schedule, No Status
Great Egret ³	<i>Ardea alba</i>	S2B	NAR	No Schedule, No Status
Black-crowned Night Heron ³	<i>Nycticorax nycticorax</i>	S3B,S3N	NAR	No Schedule, No Status
Grasshopper Sparrow ^{3,6}	<i>Ammodramus savannarum</i>	S4B	SC	SC
Prairie Warbler ^{3,6}	<i>Setophaga discolor</i>	S3B	NAR	No Schedule, No Status
Canada Warbler ^{3,6}	<i>Cardellina canadensis</i>	S4B	SC	THR
Insects				
Monarch ^{1,2}	<i>Danaus plexippus</i>	S4B,S2N	SC	SC
Reptiles				
Eastern Milksnake ^{1,2}	<i>Lampropeltis triangulum</i>	S3	NAR	SC
Midland Painted Turtle ²	<i>Chrysemys picta marginata</i>	S5	NAR	SC
Snapping Turtle ^{1,2}	<i>Chelydra serpentina</i>	S3	SC	SC
Aquatics				
Silver Lamprey ¹	<i>Ichthyomyzon unicuspis</i>	S3	SC	SC

¹ NHIC

² Ontario Nature

³ Ontario Breeding Bird Atlas (2001-2005)

⁴ Dobbyn, 1994

⁵ iNaturalist

⁶ eBird

NAR – Not at Risk

THR - Threatened



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4.4.3.2 Species At Risk

SAR are identified as endangered or threatened under provincial (ESA) legislation. The NHIC database (NDMNRF 2021 b and c) was searched to obtain historic records of species at risk from the vicinity of the Study Area. The following wildlife atlases and information sources were also consulted:

- eBird Canada (ebird 2021)
- iNaturalist Canada (iNaturalist 2021)
- ORAA (Ontario Nature 2020)
- Ontario Butterfly Atlas Online (TEA 2021)
- Atlas of the Mammals of Ontario (Dobbyn 1994)
- SAR List (MECP 2021a)

Based on a review of background information, 18 SAR are known to occur in the vicinity of the Study Area, including thirteen (13) species of breeding birds, four (4) species of mammals, and one (1) aquatic eel (**Table 4.2**).

Exact locations of species documented are not available from these wildlife atlases and, instead, are recorded within 1 x 1 km or 10 x 10 km squares. Species documented from iNaturalist do not provide exact observed location. The potential for species to be present will be limited by habitat suitability and availability. Therefore, the identified species recorded from these databases may not be present in the Study Area. This list will be further refined upon field investigations and consultation with the NDMNRF and/or Lower Trent Conservation.

Table 4.2: Species at Risk Potentially Present in the Study Area

Common Name	Scientific Name	Provincial Status (COSSARO)	Federal Status, Schedule 1 (SARA)	Suitable Habitat Present in Study Area? (Y/N)
Birds				
Bank Swallow ³	<i>Riparia riparia</i>	THR	THR	N
Barn Swallow ^{3,6}	<i>Hirundo rustica</i>	THR	THR	Y
Eastern Whip-poor-will ^{3,6}	<i>Antrostomus vociferus</i>	THR	THR	N
King Rail ³	<i>Rallus elegans</i>	END	END	N
Least Bittern ³	<i>Ixobrychus exilis</i>	THR	THR	Y
Short-eared Owl ³	<i>Asio flammeus</i>	SC	SC	N
Red-headed Woodpecker ^{3,6}	<i>Melanerpes erythrocephalus</i>	SC	THR	Y
Loggerhead Shrike ³	<i>Lanius ludovicianus</i>	END	END	N
Henslow's Sparrow ³	<i>Centronyx henslowii</i>	END	END	N
Bobolink ^{1,3,6}	<i>Dolichonyx oryzivorus</i>	THR	THR	Y
Eastern Meadowlark ^{1,3,6}	<i>Sturnella magna</i>	THR	THR	Y



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Table 4.2: Species at Risk Potentially Present in the Study Area

Common Name	Scientific Name	Provincial Status (COSSARO)	Federal Status, Schedule 1 (SARA)	Suitable Habitat Present in Study Area? (Y/N)
Golden-winged Warbler ^{3,6}	<i>Vermivora chrysoptera</i>	SC	THR	Y
Cerulean Warbler ³	<i>Setophaga cerulea</i>	THR	END	N
Mammals				
Little Brown Myotis ⁴	<i>Myotis lucifugus</i>	END	END	Y
Eastern Small-footed Myotis ⁴	<i>Myotis leibii</i>	END	No Schedule, No Status	Y
Northern Myotis ⁴	<i>Myotis septentrionalis</i>	END	END	Y
Tricolored Bat ⁴	<i>Perimyotis subflavus</i>	END	END	Y
Aquatics				
American Eel ¹	<i>Anguilla rostrata</i>	END	No Schedule, No Status	Y

¹ NHIC

² Ontario Nature

³ Ontario Breeding Bird Atlas (2001-2005)

⁴ Dobbyn, 1994

⁵ iNaturalist

⁶ eBird

END - Endangered

Species occurrences that were older than 20 years (40 years for turtle species) were omitted from the lists above as the species is considered to no longer be present. Species were then screened to assess their relevance to the Study Area. Species were removed from consideration if no suitable habitat was observed in the Study Area.

1. The habitat in the Study Area may potentially support the following SAR: **Grassland SAR birds (Eastern Meadowlark, Bobolink)**: Eastern meadowlark and bobolink are both grassland obligate species that nest in a variety of open grassland habitats in Ontario including pastures, savannahs, alvar grasslands, and hayfields. They are mostly found in agricultural habitats (i.e., hayfields, pastures, fallow cropfields) in Ontario due to the loss of native grassland habitats. Sites with a higher ratio of grasses to forbs, abundant litter cover, and moderately dense vegetation cover with a low proportion of woody vegetation (COSEWIC 2010 and 2011b). Neither Eastern meadowlark or bobolink were observed during the 2021 visit, however suitable grassland habitat was observed. Additionally, both species have several recent eBird observations from in the Study Area.
2. **SAR Bats (Little Brown Myotis, Northern Myotis, Tri-Coloured Bats, Eastern Small-footed Myotis)**: These *Myotis* SAR species have been documented roosting in buildings, under bridges, in tree cavities, foliage, under tree bark and in rock crevices (Environment Canada 2015). Maternity roosting habitat for these *Myotis* SAR may occur in the mid-aged and mature woodlots, where tree stands have a diameter at breast height of >10 centimetres. Due to the presence of woodlands in the Study Area and rural farm properties, there is a potential for *Myotis* SAR to be encountered.



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- 3. Woodland SAR songbirds (Wood Thrush, Golden-winged warbler, and Canada Warbler):** All birds mentioned above will nest in deciduous or mixed upland forest habitat, nests mainly within second growth (i.e., the edge of deciduous forested section surrounding the alignment) and mature deciduous and mixed forests with saplings that has a well-developed understory layer. Though these SAR songbirds may show a stronger preference for larger, contiguous forests it is also found with regularity in smaller forest fragments (COSEWIC 2012b; COSEWIC 2013; ECCC 2016a and 2016b). Given the structure and type of deciduous forest adjacent to the pipe alignment, these SAR songbirds could be present during their breeding season (April – August). No wood thrush, golden-winged warbler or Canada warbler were observed during Stantec's 2021 field investigation. However, all three of the SAR songbirds had historical records from eBird in the forested areas in the Study Area.
- 4. Red-headed Woodpecker:** Red-headed woodpecker is a habitat generalist and breeds in open woodlands and forest edges, often found in disturbed areas such as parks, cemeteries, and golf courses (ECCC 2021). The site visit occurred outside the breeding bird season (i.e., April through August) and no Red-headed Woodpecker were observed. Suitable habitat was observed at the Site; however, the deciduous woodlot that surrounds the alignment could provide appropriate breeding habitat.
- 5. Barn Swallow:** Barn Swallow are aerial insectivorous birds which have adapted to human altered landscapes and preferentially nest on/in anthropogenic structures. Before European settlement, Barn Swallows used caves, holes, crevices, and rocky cliff faces for nesting. Now, Barn Swallow nest in barns, garages, sheds, buildings with overhanging ledges, and under bridges and culverts (COSEWIC 2011a). No Barn Swallow were observed during the 2021 field visit, however most of the land is rural with properties that have old buildings and barns that are suitable for Barn Swallow to nest in.
- 6. Least Bittern:** Least Bittern is a small heron species that breeds in freshwater and brackish marshes with plenty of tall emergent plant species, such as cattail. During the breeding season the species will occupy marshes (ideally > 5ha) where they will nest and forage for small fish, molluscs, insects, and tadpoles (Environment Canada 2014). No bitterns were observed during the 2021 visit; however, the Study Area contains several unevaluated wetlands as well as one PSW, the Grafton Swamp. All of which could provide suitable breeding habitat for the Least Bittern. In addition to this, there are several eBird observations recorded for the species within or adjacent to the Study Area.
- 7. American Eel:** The American Eel is a long cylindrical freshwater fish and is the only freshwater eel in North America. It can be found in almost any freshwater habitat, and is thus found in a diversity of habitats (i.e., lotic and lentic systems). Eel are often observed in tributaries which are believed to be important eel habitat. American Eel is important for freshwater aquatic ecosystems because it is a predatory fish and plays a vital ecological role in community structure (COSEWIC 2012a). No surveys were performed to assess if American Eel is present in any of the unnamed tributaries in the Study Area. A NHIC search identified one of the unnamed tributaries as being potentially suitable American Eel habitat.



4.5 SOCIO-ECONOMIC ENVIRONMENT

4.5.1 Demographics

Northumberland County is located in the eastern portion of the Outer Ring of the Greater Toronto Area and Hamilton (GTAH). According to the Technical Report on Demographics produced by Hemson Consulting Ltd (2020), the pattern of settlement in the County is predominantly rural, with small urban centers that follow the lakeshore and adjacent Highway 401 corridor, the main economic connection to the GTAH. The Project is in the rural portion of the Township of Alnwick/Haldimand, part of Northumberland County, along the lakeshore.

The population of the Township of Alnwick/Haldimand accounts for 8% of the County's total population, making it the second smallest of the seven municipalities in Northumberland County. The majority of the County's population resides in the Cobourg (22%), located west of the Study Area, which was 19,031 people in 2016 (Statistics Canada 2017a).

The population breakdown in 2016 in the municipalities in which the Study Area occurs, is presented in **Table 4.3** below.

Table 4.3: Population, 2016

Location	Total Population	Land Area (km ²)	Population Density per km ²	Percent Change from 2011
Ontario	13,448,494	908,699	14.8	4.6
Northumberland (County)	85,598	1,905	44.9	4.2
Alnwick/Haldimand (Township)	6,869	398	17.2	3.8

Source: Statistics Canada 2017a and 2017b

The Township of Alnwick/Haldimand and Northumberland County saw an increase in population between 2011 and 2016 that was comparable to the increase in population seen across the province of Ontario. In the five-year period between 2011-2016, the Township of Alnwick/Haldimand experienced an annual population growth rate of 3.8% (Statistics Canada 2017b). As shown in **Table 4.4**, during this five-year period, the Township's population increased from 6,617 to 6,869 while Northumberland County's population increased from 82,126 to 85,598.

Table 4.4: Population Growth from 2011-2016

Location	Total Population 2011	Total Population 2016	Annual Growth (%)
Ontario	12,851,821	13,448,494	4.6
Northumberland (County)	82,126	85,598	4.2
Alnwick/Haldimand (Township)	6,617	6,869	3.8



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According to population projections, the population for Northumberland County will continue to grow modestly to 122,000 people and 44,000 jobs by the year 2051 (Northumberland County n.d. a.). Fueled by in-migration, population growth will largely be of retirees and second homeowners moving to the County from the GTA. As a result of this influx of retirees and second homeowners, by 2051, Northumberland's age structure is predicted to have an older age profile compared to most other parts of the Greater Golden Horseshoe. At present, the Study Area is comprised of residential and cottage properties and recreational facilities.

To accommodate the growth that is to take place, rural portions of the County are expected to undergo development. This will change the landscape of rural areas, which are presently sparsely populated, and will increase the demand for municipal services and utilities, including natural gas.

4.5.2 Employment and Business

The most recent economy and employment statistics are provided in the 2016 Census of Population (Statistics Canada 2017a and 2017b). **Table 4.5** 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, Northumberland County and the Township of Alnwick/Haldimand.

Table 4.5: Labour Characteristics for Persons > 15 years, 2016

Location	Total Population 15 years and Over	Labour Force	Employed	Participation Rate (%)	Employment Rate (%)	Unemployment Rate (%)
Ontario	11,038,440	7,141,675	6,612,150	64.7	59.9	7.4
Northumberland (County)	72,040	40,880	37,880	56.7	52.6	7.3
Alnwick/Haldimand (Township)	5,810	3,690	3,460	63.6	59.6	6.2

Source: Statistics Canada (2017a and 2017b).

As shown in **Table 4.5** in 2016, the Township of Alnwick/Haldimand and Northumberland County had lower participation and employment rates when compared to the rates for the wider province of Ontario.

Median income for households and individuals is presented in **Table 4.6**.

Table 4.6: Median Income, 2015

Location	Median Total Income of Households (\$)	Median Total Income of Individuals (\$)
Ontario	\$74,287	\$33,539
Northumberland (County)	\$70,208	\$33,927
Alnwick/Haldimand (Township)	\$85,837	\$36,184

Source: Statistics Canada (2017a and 2017b).



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Median income of households in Northumberland County overall was less than the provincial median by \$4,079 while the Township of Alnwick/Haldimand was \$11,550 greater than the provincial median. Median income of individuals in Northumberland County was more than the provincial median by \$388 and \$2,645 more in the Township of Alnwick/Haldimand.

The top three occupation classifications in Township of Alnwick/Haldimand were manufacturing (11.8%) construction (11.4%), and health care and social assistance (10.7%).

4.5.3 Community Services & Municipal Infrastructure

Permanent and Temporary Accommodations

In 2016, there were 2,620 occupied private dwellings in the Township of Alnwick/Haldimand. Most homes were single-detached houses (2,550) and the average household size was 2.6 persons. Most occupants were owners (92%) and not renters (Statistics Canada 2017a).

In Northumberland County, there were 35,685 occupied private dwellings, the majority of which were single-detached houses (28,345) and the average household size was 2.3 persons recorded at the time of census. Most occupants were owners (81%) and not renters (Statistics Canada 2017b).

Northumberland County is in the Provincial Tourism Region 8 (Kawarthas Northumberland Region Ontario) (MHSTCI 2009). Guests staying in Northumberland County have the option of 1270 rooms and 2006 campsites (MHSTCI 2009). Accommodation categories range from full-service hotel/inns and bed and breakfasts, to campsites, with traditional hotels, motels, and rental cottages (MHSTCI 2009).

Temporary accommodations in the Study Area are limited. There are, however, several accommodations available outside the Study Area, such as Jubilee Beach Park, a campground/trailer park located 3.2 km east of the Study Area, and the Cobourg East Campground, that is located to the northeast of the Study Area. Ste. Anne's Spa and Resort and Northumberland Heights are also located north of the Study Area and offer temporary accommodation.

The COVID-19 pandemic has had an impact on travel and tourism in Ontario (MHSTCI 2021), and the number of operating establishments offering temporary accommodations has likely changed as a result of the pandemic and travel restrictions.

Municipal Services and Infrastructure

As outlined in the Trent Assessment Report (2014), referenced in Section 4.3.3 of this ER, water systems in the Trent Conservation Coalition Source Protection Region include municipal systems of various sizes that draw water from groundwater and surface water sources. In the Township, municipal water supply systems are limited – one municipal piped water supply service has been developed in the Hamlet of Grafton (Township of Alnwick/Haldimand 2015). The Grafton Drinking Water System is owned by the Corporation of the Township of Alnwick/Haldimand and operated by Lakefront Utility Services Inc., the main electricity provider in the Township. The water treatment plant is in the Hamlet of Grafton and is located at 434 Edwardson Road, Lot 24, Concession 1 in the Township of Alnwick/Haldimand.



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Aside from the Grafton Drinking Water System that is supplied by the Township, the majority of existing development in the municipality is served by individual private, on-site water supply (Township of Alnwick/Haldimand 2015). Most residents in the Study Area rely on private wells for domestic water supply uses.

Similarly, throughout the Township, most residences are served by individual private, on-site sewage disposal (Township of Alnwick/Haldimand 2015).

Northumberland County manages the Township's municipal waste and recycling services, and facilities provides weekly curbside pickup of household recycling and garbage. In the County, there are several landfills and waste management facilities, including: the Material Recovery Facility (currently closed to the public) (located at 280 Edwardson Road in Grafton), the Brighton, Bewdley, and Seymour Community Recycling Centers and the Hope Transfer Station (located at 4775 5th Line) (Northumberland County n.d. b.).

Health and Education Services and Infrastructure

All of Northumberland County is served by the Haliburton, Kawartha, Pine Ridge District Health Unit (HKPR). HKPR operates the Northumberland Hills Hospital, the nearest hospital to the Study Area, located at 1000 Depalma Drive in Cobourg.

There are no elementary public schools or public high schools in the Study Area. The St. Mary Catholic Elementary School, which is part of the Peterborough Victoria Northumberland and Clarington Catholic District School Board, is located 1.4 km north of the Study Area (Peterborough Victoria Northumberland and Clarington Catholic District School Board n.d.). Grafton Public School, part of the Kawartha Pine Ridge District School Board, is located 1.2 km north of the Study Area (Kawartha Pine Ridge District School Board n.d.). No other schools are located within 1.5 km of the Study Area; there are, however, several public and catholic schools which operate in Cobourg.

Roads, Highways and Culverts

The Public Works department of the Northumberland County is responsible for managing the County's road system, which includes 503 km of roadway, 110 structures, and two patrol yards (Northumberland County n.d. c.). There are two arterial county roads in the Study Area, including Station Road (County Road 30), which travels north-south, and Lakeshore Road (County Road 30), which travel east-west. There is a total of six local roads the PR will traverse which are maintained by the Township of Alnwick/Haldimand Public Works department.

Policing, Fire and Emergency Response Services

The Township of Alnwick/Haldimand has contracted their Police Services with the Ontario Provincial Police. There are no detachments in the Study Area; the nearest detachment in Cobourg, at 1165 Division Street (OPP 2019).



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In Township of Alnwick/Haldimand, there are three district area Volunteer Fire Stations which provide fire protection services to the residents and visitors of the municipality. These stations are located in Grafton, Centreton, and Roseneath.

The Alnwick/Haldimand Fire Rescue also provide Fire Protection Services to Alderville First Nation under the provisions of the mutually signed Agreement between the Band Council of Alderville First Nation and the Council of the Township of Alnwick/Haldimand (Township of Alnwick/Haldimand n.d.).

Mutual Aid Services are provided by the part-time, on-call Fire Departments when needed. Mutual Aid Services allows Alnwick/Haldimand Fire Rescue to aid and/or receive help from participating municipalities (Township of Alnwick/Haldimand n.d.).

4.5.4 Infrastructure

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

MTO Network Roads

No MTO network roads are in the Study Area and, through consultation, MTO confirmed no concerns with the proposed Project as the PR follows the municipal road system and is well beyond the provincial highway system.

Railways

Active Canadian Pacific (CP), Canadian National (CN), and VIA Rail lines are located in the northern extent of the Study Area. The PR will intersect with the rail lines at Station Road. A NPS 4-inch, steel pipeline will be installed at this crossing.

Utilities

A variety of buried and overhead utilities (e.g., telephone, low-voltage hydroelectric, watermains) are located in road allowances throughout Study Area. Consultation with the Municipality suggests that fiber optic cables will be installed in the Study Area. These utilities may be in the road allowance before the time the proposed pipeline is installed. See Appendix B6 for the record of correspondence with the Municipality on future utilities.

4.5.5 Culture, Tourism and Recreational Facilities

Residents of and visitors to Northumberland County have access to a variety of cultural, tourism, and recreational facilities and activities. Among the variety of opportunities made available to the public, the County is an especially popular vacation destination during the spring, summer, and fall months, and is also a popular location for hikers who use the walking/hiking trails and park land in the County. The Study Area contains parks and trails, most notably, the Nawautin Nature Sanctuary and Wetland Trail – a well used trail which serves as a place to hike and observe wildlife, including deer, fox, beaver, rabbits, and birds (Ontario Trails 2019). During consultation with the public, Nawautin Nature Sanctuary as well as the



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Chub Point Nature Reserve were identified by several surrounding landowners as areas of perceived environmental and recreational importance. The Lake Ontario shoreline, truncating the southern extent of the Study Area, also provides opportunity for hiking as well as water activities for residents and cottagers.

The Township of Alnwick/Haldimand provides mapping of municipal buildings/properties, heritage sites, and boat launches and parks in the Township on Map 2, Schedule 'B' of the Official Plan. According to the Official Plan, no mapped features (i.e., building/properties, heritage sites, etc.,) are in the Study Area. Only one mapped feature, the Nawautin Nature Sanctuary, is shown on Map 2 of the Official Plan (2015).

Map 1 of the Official Plan shows campgrounds, cemeteries, churches, and schools located in the Township. According to this mapping, no places of worship or cemeteries are located in the Study Area. There are, however, several religious establishments and cemeteries located 1.2 km north of the Study Area off Highway 401 (Township of Alnwick/Haldimand 2015).

Agricultural activities are also located in the Study Area and one camp, the Plast Camp for Ukrainian youth, is in the Study Area off Lakeshore Road (Plast n.d.).

4.5.6 Air Quality and Noise

The landscape of the Study Area is a rural, residential/cottage community that is comprised of some agricultural land and open space and/or natural heritage features. Albeit minimal, agricultural operations outside the Study Area and everyday vehicle use from residents have the potential to expel air emissions.

According to the Environmental Noise Guideline (MOECC 2013), the landscape of the Study Area would most likely be categorized as a Class 3 area. This means “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.”

The Study Area is expected to experience a low traffic volume that represents a minimal source of noise for most of the PR. Minor noise sources in the Study Area may result from occasional sounds due to anthropogenic agricultural activities and occasional sounds due to anthropogenic domestic activities such as property maintenance and recreation.

4.5.7 Indigenous Land Use and Traditional Knowledge

Stantec respectfully acknowledges that the Williams Treaties First Nations hold constitutionally protected harvesting rights in portions of the Study Area within Treaty 20. The value of traditional knowledge and oral history are acknowledged and welcomed, and provide 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 the communities.

A copy of the Michi Saagiig Historical/Background context, prepared by Gitgia Migizi, a respected Elder and Knowledge Keeper of the Michi Saagiig Nation, is attached to the draft Stage 1 Archeological Assessment Report located in Appendix D of the ER.



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4.5.8 Land Use

Municipal land uses, policies, and practices in the Study Area are governed by the Northumberland County Official Plan (2016), Township of Alnwick/Haldimand OP (2015), and local Zoning By-laws.

As per Schedule 'A' of the Northumberland Official Plan (2016), the Study Area occurs in the "Rural Areas" land use designation. The Rural Areas designation applies to all lands outside of the urban areas and rural settlement areas and which are not within the Agricultural Area. Permitted uses in this designation include permanent and seasonal dwellings; resource based recreational uses; cemeteries; appropriate recreation and tourism; forestry uses; and appropriate rural commercial and industrial uses. Schedule 'A' of the Township of Alnwick/Haldimand Official Plan (2015), similarly designates the Study Area as "Rural". The "Resort", "Shoreline", "Recreational/Conservation", and "Environmental Protection" land use designations are also used to describe portions of the Study Area. A description of each unique land use, according to the Alnwick/Haldimand OP (2015) is as follows (to maintain the intent of the policies which apply to these designations, the following text has been copied almost directly from the Official Plan):

The Rural designation applies to lands of marginal value for agriculture which have potential for non-agricultural development. The purpose in designating these areas is to direct low intensity rural uses into this area, thereby protecting Agricultural Resource Lands from incompatible, non-agricultural development.

The Resort designation applies to lands where the predominant use is for existing tourist accommodation and resort commercial uses. Land uses that are complementary to or serve the basic resort uses area also be permitted in these areas.

The Shoreline land use designation primarily applies to those lands along or in close proximity to the shoreline of water bodies used for limited service and seasonal residential purposes, and permanent residential purposes. Permitted uses in the Shoreline designation include permanent residential, seasonal residential uses, and existing limited service residential uses.

Land designated as Recreational/Conservation is intended primarily for resource-based recreational or conservation purposes. These lands, as per the OP (2015), may have inherent environmental hazards but are presently being used in some form of recreational or conservation activity or have a recreational potential. Permitted uses are limited to conservation uses, resource-based recreational uses.

The areas designated Environmental Protection and Environmental Protection/PSW on Schedules "A" and "A-1" of this Plan play an important role in the preservation of the Municipality's natural environmental systems, including wetlands, water courses and shoreline areas. The Environmental Protection designation also includes natural hazard areas and features, which may pose a threat to life and property due to inherent characteristics such as floodplains, erosion and dynamic beach hazards, and steep slopes.

Known deposits of mineral aggregate resources are shown on Schedule 'B' of the County's Official Plan (2016). According to this mapping, there is one Selected Bedrock Area located in the Study Area (2016).



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No designated land uses or other resources or features representing constraint areas are in the Study Area.

Schedule 'A-1' Oak Ridge Moraine Land Use Plan, which forms the Townships Official Plan (2015), maps the boundary of the Oak Ridges Moraine – where more strict policies on development apply. As shown on this mapping, the Study Area falls outside the boundary, but environmental protection features have been identified in the Study Area, as noted above, which largely correspond to the presence of watercourses in the Study Area and parts of the Lake Ontario Shoreline.

There are no policies in the local or County Official Plan indicating the development of natural gas pipelines is not permitted in the Study Area. The Township of Alnwick/Haldimand cites that, the Municipality shall, wherever possible, ensure that the inhabitants of the Township are aware of any new proposals for major power transmission lines, pipelines, or railway lines (2015 pg. 137). Consultation with stakeholders is outlined in Section 3 and discusses the efforts made to inform the Township and landowners of the Project.

4.5.9 Landfills and Contaminated Sites

Landfills

Waste management areas located in the County of Northumberland on Schedule 'B' of the Official Plan (2015). There are no federal water management facilities or open waste disposal sites in the Study Area. The nearest federal water management facility is located well-outside the Study Area, west of Port Hope, and the nearest open waste disposal site is 26 km northeast of the Study Area on County Road 26.

In accordance with the 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 Official Plan mapping for the Township of Alnwick/Haldimand (2014) and the aforementioned Schedule 'B' of the County's OP and the MECP's Small and Large Landfill Sites listed on the MECP website (2021b; 2021c).

Based on a review of the above sources, no landfill sites occur in the Study Area. MECP's Large Landfill Sites mapping shows the nearest municipal landfill to be the Bensfort Road – Peterborough landfill, located 34 km north of the Study Area. MECP's Small Landfill Sites maps identifies two closed landfills in Grafton, both occurring outside the Study Area (MECP 2021b). These sites correspond to the closed Waste Disposal Sites mapped on Schedule 'A-1' of the Township of Alnwick/Haldimand Official Plan (2015), located immediately south of Highway 401.

Contaminated Sites

Contaminated sites in and near the Study Area were determined by reviewing Official Plans, the MECP Brownfield's Environmental Site Registry (MECP 2011), and the Federal Contaminated Sites Inventory accessed through the Treasury Board of Canada Secretariat's website (Treasury Board 2011).

These sources did not identify any potential contaminated, brownfield sites, or formal industrial sites within 500 m of the Project.



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4.5.10 Archaeological Resources

A Stage 1 AA (Appendix D) has been conducted for the Study Area. A copy of the draft Stage 1 AA report has been circulated to interested Indigenous communities for review, and will be submitted to the MHSTCI for review and inclusion into the *Public Register of Archaeological Reports* once all Indigenous communities have had an opportunity to provide comments.

Initial background research compiled information concerning potential archaeological resources and features of archaeological potential in the Study Area. Stantec applied archaeological potential criteria stipulated in the *Standards and Guidelines for Consulting Archaeologists* (Government of Ontario 2011) to determine areas of archaeological potential in the Study Area. These variables include proximity to previously identified 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 (Government of Ontario 2011).

Primary water sources are identified in the Stage 1 Study Area, including Lake Ontario and associated tributaries flowing into the lake. Additional ancient and/or relic tributaries of water sources may have existed but are not identifiable today and are not indicated on historic or modern mapping. The soil composition of the Study Area generally comprises sand textured sediments, derived from glaciolacustrine deposits, and modern alluvial deposits, composed of sand and loam (Ontario Geological Survey 2011). Such conditions are suitable for Indigenous and Euro-Canadian agriculture, especially following the implementation of municipal drainage systems and agricultural field tiling in the 19th and 20th centuries. An examination of the *Ontario Archaeological Sites Database* has shown that there are five archaeological sites registered in the Study Area or within one kilometre of the Study Area (Government of Ontario 2021a).

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 1990c) or property that local histories or informants have identified with possible historical events, activities, or occupations. Historical mapping demonstrates that the Study Area includes early concession roads with structures illustrated as fronting these roads, particularly along major arterial roads. Much of the established road and rail networks and agricultural settlement from the 19th century are still visible today.

Overall, the Stage 1 AA determined that approximately 23.8% of the Study Area retains potential for the identification of Indigenous and Euro-Canadian archaeological resources.

4.5.11 Built Heritage Resources and Cultural Heritage Landscapes

The MHSTCI *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (the Checklist) was completed for the Study Area. The Checklist is used to identify protected and potential cultural heritage resources in the Study Area and make recommendations for future work, as appropriate. The Checklist completed for the Project identified two indicators of cultural heritage value



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or interest (CHVI) in the Study Area. Results of the Checklist are included in **Table 4.7** and the completed Checklist is included in Appendix E.

Table 4.7: Screening for Known (or recognized) Cultural Heritage Value According to MHSTCI Checklist

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	Identified
Contains or is part of a cultural heritage landscape	Not Identified

4.5.12 Indigenous Interests

As previously noted, this Project is located in the Williams Treaties and Johnson-Butler Purchase.

There are no Indigenous communities located in the Study Area. 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 October 20, 2021 (see Appendix B1) are as follows:

- Alderville First Nation
- Beausoleil First Nation
- Chippewas of Georgina Island
- Chippewas of Rama First Nation
- Curve Lake First Nation
- Hiawatha First Nation
- Huron-Wendat Nation
- Kawartha Nishnawbe
- Mississaugas of Scugog Island First Nation
- Mohawks of the Bay of Quinte



5.0 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 4.3-4.5. 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 setting
- 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.

Site-specific field surveys will be completed prior to construction.



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The existing conditions maps (Appendix C) have been generated from data obtained from Ontario GeoHub/LIO. Conservation Authority regulated area data was obtained from Lower Trent Conservation. Scales have been adjusted from the original source to better represent the features mapped. Stantec has digitally reproduced features added to the base maps. Additional mapping sources are identified on the respective map, and in the references.

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 4.3 - 4.5.

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 Right-of-Way (RoW) and temporary work areas. Next, the RoW and temporary work areas are cleared of brush and trees (typically during winter, under frozen ground conditions). 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.

Following site preparation and clearing, the pipeline may be installed by any one of three methods:

- 1) **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.
- 2) **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.
- 3) **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.

Hydrostatic/Pressure Testing: The pipeline is pressure tested by filling the pipe with water or nitrogen and holding it 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. Water is typically drawn by permit from nearby water sources such as watercourses or lakes, if available. Municipal water may also be used for



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hydrostatic testing. Upon completion of the hydrostatic testing, the pipeline is drained and dried then put into service with natural gas.

Clean-Up and Restoration: Clean-up is the restoration of the RoW and other work areas. In natural areas, clean-up restores the environment including re-seeding of the RoW, and restoring ditch banks and watercourse crossings. Any erosion and sediment controls (ESC) installed during construction are also removed. Clean-up will also restore landscaping, laneways, and driveways.

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 styles, foot bridges for ditch crossings (if applicable), and "test boxes" located along fence lines at roads that are used to assess the adequacy of the corrosion protection system.

Once the pipeline is operational, the following activities are undertaken to patrol and maintain the pipeline:

- Completing a 'line walk' of the entire pipeline by Enbridge Gas personnel on a 4 year cycle 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
- 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



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5.2 SUMMARY TABLE

Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
PHYSICAL FEATURES			
Bedrock Geology and Drift Thickness <i>Section 4.3.1</i>	<p>The planned excavation depth for the Project is approximately 1.2 m below grade with the potential to exceed this depth for watercourse, road crossings and other sensitive features. Based on the depth of the excavations and the average depth to bedrock being 4.49 m BGS across the Study Area (according to MECP WWR's), bedrock is not likely to be encountered.</p> <p>However, should bedrock be encountered during HDD, there is a potential to encounter cobbles and boulders in the overburden soils along the entire alignment.</p>	<ul style="list-style-type: none"> • If HDD is used, pressure relief pits can be considered for implementation in the design on either side of water crossings to dissipate high fluid pressures that may develop during drilling. • 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. • The over-drill typically used for HDD installation should be sufficient to address any rock squeeze that may occur. • 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. <p>Other mitigation measures specifically related to Open Cut and HDD are outlined under the row "Aquatic Species and Habitat Section 4.4.1".</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 4.3.2</i>	Due to the undulating topography and presence of coarser textured soils, there are potential erosion impacts to surficial deposits that may result in surface soil erosion and/or watercourse sedimentation during construction.	<ul style="list-style-type: none"> • 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. • 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. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts are anticipated.



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<ul style="list-style-type: none"> 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 through the life of construction and post-construction rehabilitation. 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. Permits obtained under O. Reg. 163/06 from Lower Trent Conservation may contain conditions pertaining to ESC. 	
Groundwater <i>Section 4.3.3</i>	<p><u>Hydrostatic Testing and Dewatering</u></p> <p>The pipeline will be hydrostatically tested before commissioning. Select sections of pipe may also be pre-tested. Water required for the testing may be obtained from a municipal or natural source. Before the withdrawal of water from a municipal source, the Township of Alnwick/Haldimand will be contacted to confirm the maximum rate of withdrawal.</p> <p>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</p>	<p><u>Hydrostatic Testing and Dewatering</u></p> <ul style="list-style-type: none"> 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. If surface water is used as the source water for the hydrostatic test, a PTTW application would be required and would include an assessment of the capacity of the source to provide the required water without impacting the ecosystem, and recommendations for mitigation measures such as screened water intakes to limit intake of debris and organisms and energy dissipation/erosion control measures during discharge to limit erosion and sedimentation. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on groundwater are anticipated.



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p>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.</p> <p><u>Private Water Wells</u></p> <p>In the Study Area, most, if not all, of residence rely on private wells for domestic water supply uses. There are approximately 179 water wells in the Study Area, 152 of which are designed as domestic supply. 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>	<ul style="list-style-type: none"> To reduce the potential for erosion and scouring at discharge locations during construction dewatering and/or hydrostatic testing, 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. To assess the potential for introduction of contaminated water to soils or bodies of water, testing of hydrostatic and trench dewatering discharge water should be considered. Testing requirements can be influenced by the nature and quality of the source water used, any additives to the test water, the nature of the pipeline, and pipeline contents. An environmental consultant should be consulted to determine what testing is necessary for the discharge water. 	



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p><u>Municipal Water Supply</u></p> <p>Mapping by the Trent Conservation Coalition Source Protection Region (2014) and Township of Alnwick/Haldimand Official Plan (2015) identify two HVA's, with a vulnerability score of 6, are located in the Study Area and will be traversed by the pipeline as it travels Station Road, North Shore Road, and parts of Lakeshore Road. The second HVA is in the western portion of the Study Area and will be traversed as the pipeline travels Fox Run Road and the western extent of Lakeshore Road.</p>	<p><u>Private Water Wells</u></p> <ul style="list-style-type: none"> Given the dependence on private water wells for domestic water supply, a private well survey should be conducted to assess domestic groundwater use near the Project and a private well monitoring program may be recommended for residents who rely on overburden groundwater supply for domestic 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 water supply should be provided, and the water well should be repaired or restored as required. <p>During construction, 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"> Refueling of equipment should be undertaken 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. 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. 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. 	



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
Aggregates and Petroleum Resources <i>Section 4.3.4</i>	The eastern portion of the pipeline will traverse an area identified as containing aggregate mineral resource. As the proposed pipeline is located in existing road allowances, potential impacts to identified aggregate resources are not anticipated.	<ul style="list-style-type: none"> 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 4.3.5</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. Some areas are anticipated to have been stripped and regraded and rehabilitated to a vegetated surface. As well, it is anticipated that some areas of the PR will have natural undisturbed soils.</p> <p>Generally, topsoil has a higher organic matter content that increases its water holding capacity and resilience to wear compared to subsoil. Soil characteristics relating to the potential for damage include: soil structure, moisture content, texture, organic matter content.</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</p>	<p>In addition to the soil erosion mitigation measures outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021), the following measures are recommended.</p> <ul style="list-style-type: none"> 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. 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's on-site inspection team should determine when construction activities may be resumed. 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, and installing surface protection measures. 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. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on soil or soil capability are anticipated.



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p>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.</p> <p>Construction activities have the potential to affect soil quality. When exposed, soils are more prone to erosion due to the loss of vegetative cover.</p>	<ul style="list-style-type: none"> • In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use as required. • 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 area for over-wintering. • It is noted that the MECP has new regulations for the movement of excess soils in the province of Ontario. Though the Project is not expected to generate excess soil, 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. 	



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Agricultural Tile Drainage <i>Section 4.3.6</i>	Construction activities, including trenching and the movement of heavy machinery, have the potential to crush and/or sever agricultural tile drains. During the environmental study, no agricultural tile drains were identified in the Study Area and, therefore, no mitigation and protective measures are warranted.	As no impacts are anticipated, no mitigation or protective measures are recommended.	As no impacts are anticipated, no net impacts will occur.
Regulated Area and Natural Hazards <i>Section 4.3.8</i>	<p>The probability of significant seismic activity in the Study Area is low; therefore, no potential impacts are anticipated.</p> <p>The likelihood of a flooding event interfering with Project construction is reduced by construction occurring outside of the spring freshet. A flooding 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 flooding event.</p>	<ul style="list-style-type: none"> • 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. • Temporary workspaces should be located above the floodplain to the extent practical, unless necessary for watercourse crossings. • All work in the floodplain will be subject to a permit under O. Reg. 163/06 from Lower Trent Conservation. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from natural hazards are anticipated.
BIOPHYSICAL FEATURES			
Aquatic Features <i>Section 4.4.1</i>	A field investigation will confirm the presence of the identified watercourses. There exists the potential to affect fish directly through impacts on water quality	<p>The following general mitigation measures, or equivalent, are recommended at watercourse crossings along the PR.</p> <p>The watercourses along the PR that are located in the Trent River watershed and are regulated by Lower Trent</p>	With the implementation of the HDD construction method and the aforementioned mitigation and protective measures, no



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p>(erosion, sedimentation, and accidental spills), disruption and harassment (vibration and noise), and loss of habitat. Indirect impacts include restrictions to habitat use and fish passage. Long-term impacts can include changes to habitat such as substrate, increased erosion potential, loss of in-stream cover and riparian shading.</p> <p>If trenched crossings are required at locations that support direct fish habitat, potential impacts could include restrictions to habitat use and fish passage, changes to habitat such as altered substrate composition, increased erosion potential, loss of in-stream cover and loss of riparian shading. Excessive sediment introduced into a watercourse can adversely impact fish through clogging of fish gills and promoting avoidance behaviour, and can impact habitat through sedimentation of spawning beds and alteration of habitat structure. There is a potential for trenched crossings to require DFO review and / or permitting, depending on the results of applying DFO's assessment criteria to determine if a project needs a review. Criteria are outlined at https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-003-eng.html.</p>	<p>Conservation will be crossed using the HDD method. Some of the following general measures may not be applicable to HDD crossing methods but are included in the event a trenched crossing is required. Additionally, activity-specific measures related to the crossing methods are provided following the general mitigation measures. All measures presented are intended to be 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><u>General Mitigation Measures</u></p> <ul style="list-style-type: none"> • Mitigation and protective measures for ESC are outlined in Section 4.3.2 and 4.3.5. • Crossings should be completed following the measures outlined in company specifications for construction. • In-water work for cold- water habitats is typically restricted during October 1 to May 31 (NDMNRF 2013). All the unnamed tributaries flowing to Lake Ontario were identified as having a cold-water regime. • Watercourses should not be obstructed in a way that impedes the free movement of water and fish. • Prior to removal of the vegetation cover, effective mitigation techniques for erosion and sedimentation 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. • Soil exposure should be reduced prior to commencing construction, and the period that soil remains exposed for grading should be limited. 	<p>adverse residual impacts on aquatic features are anticipated.</p>



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		<ul style="list-style-type: none"> Exposed soils surrounding watercourses should be seeded immediately following construction. Temporary ESC measures should be maintained and kept in place until work within or near a watercourse has been completed and stabilized. Temporary sediment control measures should be removed at the completion of the work but not until permanent erosion control measures have been established. Construction material, excess material, construction debris and empty containers should be stored a minimum of 30 m from watercourses and watercourse banks, where feasible. 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 watercourse, unless otherwise specified in the contract. Conditions of water crossing permit(s), if applicable, are to be adhered to. <p><u>Horizontal Directional Drill Mitigation Measures</u></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>	



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		<p>Mitigation measures as they relate to employing the HDD method can include:</p> <ul style="list-style-type: none"> • Standard ESC measures should be implemented around drill and pipe staging areas. • Drilling equipment should be set up a minimum of 30 m from the edge of watercourses, if possible. • Clearing of vegetation or grading of watercourse banks should not occur within 30 m from the edge of watercourses, if possible. • A drilling mud release contingency plan should be prepared and kept on-site. • Bentonite-based drilling mud should be used without the use of additives (except with approval from appropriate regulatory authorities). • Suitable drilling mud tanks or sumps should be installed to prevent contamination of watercourses. • 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). • Berms or check dams should be installed downslope from drill entry and anticipated exit points to contain the release of any drilling mud. • Drilling mud should be disposed in accordance with the appropriate regulatory authority requirements. <p><u>Bore Path Collapse Mitigation Measures</u></p> <p>The following mitigation measures should be applied as recommended by geotechnical studies to prevent HDD borehole collapse from occurring in susceptible soils:</p> <ul style="list-style-type: none"> • Fluid volumes, annular pressure and cutting returns should be strictly monitored to ensure bore hole plugging and fluid losses are detected and addressed immediately. 	



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		<ul style="list-style-type: none"> Alternative drill paths should be evaluated to minimize exposure to challenging soil materials. 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). <p><u>Drilling Mud Release (Inadvertent Returns) Mitigation Measures</u></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"> 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. Clean up operational releases daily to prevent mobilization of drilling mud off site during rain events. 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. Maintain smooth operation of the drilling string and slurry pumping systems to avoid pressure surges. Reduce slurry viscosity through appropriate filtering of drilled material to reduce the pressure gradient along the drill path due to frictional effects. Continually monitor slurry volumes to enable a quick response to any indications of lost circulation. Immediately contain any drilling mud that escapes onto land and transfer it into an on-site containment system. 	



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		<p><u>Flow Diversion/Dewatering</u></p> <p>If in-water works are required, the work area will be isolated from the remainder of the surface water feature. Downstream flows will be maintained using dam and pump or dam and flume techniques. When dewatering the work area, dewatering operations will be managed to prevent erosion and/or release of sediment laden or contaminated water to the waterbody (e.g., settling basin, filter bag, energy dispersion measures). An isolation/containment plan will be designed and implemented to isolate temporary in-water work zones and maintain flow around the work zone. Maintenance of downstream flow will avoid potential upstream flooding and desiccation of downstream aquatic habitat and organisms.</p> <p>To further reduce the potential for flooding during construction, the weather forecast will be monitored prior to the start of construction to ensure that in-water works occur during a dry period.</p> <p><u>Fish Rescue Plan</u></p> <p>Prior to dewatering the work zone, fish trapped in the construction area will be collected and moved using capture, handling, and release techniques to reduce harm and stress. Fish rescue plans will be developed on a site-specific basis and implemented by qualified professionals with the appropriate permitting in place (i.e., a Licence to Collect Fish for Scientific Purposes).</p> <p><u>Site Restoration and Riparian Planting</u></p> <p>Following construction, the bed and banks of the crossing locations will be restored to pre-construction conditions to the extent possible in accordance with environmental permits. Exposed banks will be re-vegetated with native plants to provide riparian cover and aid in erosion and sediment control. Stream beds will be restored to maintain slopes and tie in with existing grades. Bed material will be replaced to match pre-construction conditions.</p> <p><u>Permitting</u></p> <p>DFO review is requested through the submittal of a 'Request for Review' form. Following completion of their review, DFO can proceed in two ways: 1) Issue a Letter of Advice indicating work</p>	
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		<p>complies with the <i>Fisheries Act</i> or, 2) Refer the project to the Regulatory Review Unit for site specific review.</p> <p>The proposed pipeline will be located in the regulated boundary of Lower Trent Conservation. Permits under O.Reg. 163/06 will be required prior to construction activities in the regulated boundaries.</p>	
<p>Designated Natural Areas and Vegetation <i>Section 4.4.2</i></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 dominated by a mixture of wooded areas, rural residential properties, mature hedgerows, and wetlands.</p> <p>Potential impacts to significant woodland communities may be avoided using the HDD method of pipeline installation.</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>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"> 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. Limits of the work space 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. Clearing should be reduced to the extent possible in sensitive areas such as Significant Woodlands and unevaluated wetlands. Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain. Clearing should be completed in accordance with the municipal tree clearing by-law. A screening field program of wetlands and riparian areas should be undertaken prior to construction, to determine where precautionary measures (ex. equipment washing before site access) may be necessary to mitigate for the spread of non-native species. 	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on designated natural areas and vegetation are anticipated.</p>



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	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.	<ul style="list-style-type: none"> • Work within a wetland, including the potential location of the pipeline, may require permitting discussions with the Lower Trent Conservation under O. Reg. 163/06. • Should significant Phragmites stands be identified during field investigations, a Phragmites management plan should be developed. • A re-vegetation program should be developed and implemented for all vegetated temporary work areas. Enbridge Gas should consult with landowners and Lower Trent Conservation to confirm replanting plans. • Seeding of the disturbed temporary work areas and the permanent easement should be done with a native seed mix approved by Lower Trent Conservation. Replaced soils should contain native seed bank, facilitating successful revegetation. • One year following construction, planted vegetation should be inspected for survival; in areas of severe dieback, dead and diseased planted vegetation should be replaced. 	
Wildlife Habitat, Wildlife, and Species at Risk <i>Section 4.4.3</i>	Potential impacts on wildlife and wildlife habitat from construction include direct mortality from construction vehicles and/or adults abandoning young due to disturbance, habitat destruction through vegetation removal, habitat degradation through spills and sensory disturbance.	<u>General Mitigations</u> <ul style="list-style-type: none"> • Detailed design of the Project components 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. • Equipment and vehicles should yield to wildlife. • On-site personnel should be informed of the potential presence of the SAR and/or SOCC identified in the Study Area, obligations under the ESA (Government of Ontario 2007), and recommended actions in the event of an encounter. • The contractor should inform their personnel to not threaten, harass or injure wildlife. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on wildlife habitat, wildlife and SAR are anticipated.



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		<ul style="list-style-type: none"> • If wildlife are encountered during construction, personnel are required to move away from the animal and wait for the animal to move off the construction site. • ESA 2007 protected species cannot be handled unless authorized by MECP and NDMNRF • If SAR are found in the Study Area Enbridge Gas will undertake consultation with the MECP to identify species specific mitigation and/or permitting requirements under the ESA. • Any SAR individual that is incidentally encountered in the Study Area must be allowed to leave of its own accord. • 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. • Any SAR individual that is 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. • 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. <p><u>Amphibians</u></p> <ul style="list-style-type: none"> • Where practical, avoid construction in the vicinity of areas that may provide habitat for amphibians during the amphibian breeding season (March 1 – June 30). Amphibian habitat will be identified during 2022 field investigations. 	



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		<p><u>Bats</u></p> <ul style="list-style-type: none"> Areas of potential bat maternity roosting habitat will be identified during 2022 field investigations. Tree removal in identified areas should be limited to the extent possible and will avoid the active season for bats (April 1 to October 1). Mitigation recommendations for SAR bats will be prepared upon consultation with MECP. <p><u>Birds</u></p> <ul style="list-style-type: none"> 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. <p><u>Other Wildlife</u></p> <ul style="list-style-type: none"> Nuisance and large wildlife encounters or incidents involving wildlife should be reported to the NDMNRF. 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. 	
SOCIO-ECONOMIC ENVIRONMENT			
Demographics and Residents <i>Section 4.5.1</i>	According to population projections, the population for Northumberland County will continue to grow modestly over the next thirty years. To accommodate the growth that is to take place, rural portions of the County are expected to undergo development. This will change	<ul style="list-style-type: none"> Additional correspondence with residents adjacent to the Project should be held in advance of construction commencement. Contact information for a designated representative should be available prior to and during construction to address questions and concerns. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on residents are anticipated.



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	<p>the landscape of rural areas, which are presently sparsely populated, and will increase the demand for municipal services and utilities, including natural gas. The installation of natural gas and other utilities will therefore have a positive impact on the community as it will accommodate projected growth and the subsequent increase in natural gas demand and usage.</p> <p>During pipeline construction residents and cottagers in the Study Area may experience a general nuisance, and temporary disruption in the use and enjoyment of their property and in the use of local roads from associated vehicular traffic, dust, and equipment exhaust. Residents and business owners may experience temporary access disturbance. Construction activities also have the potential to disturb the perceived aesthetic value that residents place on their property and the area in general. Potential safety concerns for residents also exist at locations where properties, residents, and vehicles come in proximity to construction activities.</p>	<ul style="list-style-type: none"> Motorized construction equipment should be equipped with mufflers and silencers as available. Company and construction personnel should avoid idling of vehicles; vehicles or equipment should be turned off when not in use unless required for operation of the vehicle or equipment. Construction activities should adhere to the Township of Alnwick/Haldimand Noise By-Law No. 73-2013, which states that noise arising out of or created by construction equipment operated in the Township between the hours of 7 am to 8 pm from Monday to Friday inclusive and 7 am to 5 pm on Saturdays. 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. Where pipeline construction activities and machinery have the potential to temporarily affect the local landscape, 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. Tree removal should be reduced to the extent possible. Where tree removal is necessary, re-vegetation should occur in consultation with the landowner. Vegetative buffers at watercourse and road crossings should be restored where feasible. Access to driveways and roads should be maintained as practical during the construction period. The pipeline, once constructed, will not restrict access. The Constructor should protect lawns against damage by spoil, using tarpaulins, and/or plywood sheets. Wherever necessary, the Constructor must provide crossings to permit the landowner or tenant to have access to their property. 	



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		<ul style="list-style-type: none"> Safety fence should be installed at the edge of the construction area where public safety considerations are required. The contractor should implement a Traffic Management Plan for all roads affected by construction, which at a minimum outlines measures to: <ul style="list-style-type: none"> control the movement of materials and personnel to and from the construction site post signs to warn oncoming motorists of construction activity control traffic at road crossings reduce on-road disturbance and land closures store equipment as far from the edge of the road as practical install construction barricades at road crossings. 	
Employment and Business <i>Section 4.5.2</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"> Direct employment: labour that is hired directly for the project Indirect employment: labour hired by companies in order to produce and provide goods and services needed for the project 	<p>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:</p> <ul style="list-style-type: none"> 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 	<p>With the above initiatives to encourage local and Indigenous participation on the Project, it is anticipated that the effects from 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. Consultation with residents and businesses will address any concerns to their operations. With the implementation of the mitigation and protective</p>



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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<ul style="list-style-type: none"> 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 <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>	<p>and Indigenous businesses will enhance positive local economic effects.</p> <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"> 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. 	<p>measures, no significant adverse residual impacts on employment and business are anticipated.</p>
Community Services and Municipal Infrastructure <i>Section 4.5.3</i>	<p>The presence of temporary workers in the local communities during the construction period has the potential to increase the demand for housing and local community services and infrastructure. Non-local Project workers are expected to stay in temporary accommodations, including hotels, motels, and campgrounds. As there are limited temporary accommodations available in or adjacent to the Study Area, it is anticipated that non-local project workers will stay in accommodations closer to larger towns and cities, such as the Town of Cobourg. Non-local Project workers may</p>	<ul style="list-style-type: none"> 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, emergency call-out procedures and fire response plans. Safety fencing will be used where necessary to separate the work area. 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 	<p>Community services and infrastructure appear to have additional capacity to absorb potential increased temporary demands that may result from the Project, if not within the Township directly in nearby towns such as Cobourg or Port Hope. Adverse effects on traffic will be minimal because of the rural nature of the community where roads currently have low levels of traffic and alternative routes are readily accessible. Given the available capacity of the local community services</p>



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	<p>also choose to rent cottages or apartments. The vacancy rate for temporary rentals will likely be able to accommodate the temporary increase. The short duration of the Project, as well as the structure of the work shifts, will limit the need for workers to use the services and infrastructure in local communities.</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 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>strategies will result in a localized and low-intensity response.</p> <ul style="list-style-type: none"> • A Traffic Management Plan will be in place for all roads affected by construction, as per Section 4.5.1. • The capacity of waste disposal sites will be considered and if Project needs are not easily accommodated, alternative disposal locations will be considered. • 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 PR 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. • Approvals should be obtained from the municipalities for all road crossings. The contractor must adhere to Enbridge Gas's requirements for road crossings as outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021). 	<p>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>
Infrastructure <i>Section 4.5.4</i>	<p>A variety of buried and overhead utilities (e.g., telephone, low-voltage hydroelectric, fiber optic, watermains) are located in road allowances throughout Study Area. Potential to damage and service interruptions to infrastructure and compromise the safety of workers and surrounding residents may result from interactions</p>	<ul style="list-style-type: none"> • Prior to the commencement of construction Enbridge Gas should obtain subsurface utility engineering data for the PR. The contractor should be responsible for locating existing pipelines and utilities. 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. In addition, all necessary permits and conditions of the utility's 	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on infrastructure are anticipated.</p>



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	with rail, roads, hydrocarbon pipelines, hydroelectric facilities and buried and overhead utilities. The pipeline will cross active CP, CN, and VIA Rail lines at Station Road.	infrastructure will be met and abided by. Measures to mitigate induced voltage effects should be followed and are outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021). <ul style="list-style-type: none">Where the pipeline intersects with the active rail lines at Station Road a 4-inch steel pipeline will be installed. Furthermore, Enbridge Gas will be required to follow the Minimum Safety Requirements for Contractors Working on CP Property in Canada (2021), available at: safety-requirements-contractors-Canada-Oct-2018.pdf (cpr.ca). The requirements listed within apply to all who work on CP property. Railroad track protection required where the work site or when work requires contractor personnel to be 15 m or less from the nearest track centerline is provided in Section 12. Stantec recommends that Enbridge Gas consult with CP, CN, and Via Rail to confirm safety requirements.	
Culture, Tourism and Recreational Facilities <i>Section 4.5.5</i>	Construction of the Project may temporarily interfere with the use of the cultural and recreational facilities. Potential impacts include noise, dust and equipment exhaust associated with construction activity. Construction activities will temporarily affect the aesthetic landscape of the construction area. Potential safety concerns exist due to the proximity of construction activities to the facilities.	The following mitigation measures, or equivalent, are recommended to reduce any potential adverse impacts to recreation: <ul style="list-style-type: none">construction barricades should be erected at all areas of construction activity where recreational users may be present Other mitigation and protective measures for noise, dust and equipment exhaust, aesthetics and safety are outlined in Sections 4.5.1 and 4.5.3.	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on cultural, tourism, and recreational facilities are anticipated.
Air Quality and Noise <i>Section 4.5.6</i>	Residential, cottage, 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">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	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from air quality and noise are anticipated.



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>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.</p> <ul style="list-style-type: none"> 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"> Maintaining equipment in compliance with regulatory requirements Covering loads of friable materials during transport Dust suppression of source areas 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. 	
Land Use Designations <i>Section 4.5.7</i>	Natural gas pipelines and their associated facilities/structures are permitted land uses, and therefore no impacts are anticipated.	<ul style="list-style-type: none"> As no impacts are anticipated, no mitigation or protective measures are recommended. 	As no impacts are anticipated, no net impacts will occur.
Landfills and Contaminated Sites <i>Section 4.5.8</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>The PR is not expected to cross or be in the vicinity of lands that may have contaminants of concern, however the application of road salt for de-icing</p>	<p>All construction wastes should be disposed of in accordance with Enbridge Construction and Maintenance Manual (October 27, 2021). 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. Suggested mitigation and protective measures include the following:</p> <ul style="list-style-type: none"> Waste materials, sanitary waste, and recycling transported off-site by private waste contractors licensed by the MECP. Contractors required to remove their excess materials from the site. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from landfills and contaminated sites are anticipated.



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	activities along the roadways in the Study Area represent a potential source of contamination.	<ul style="list-style-type: none"> • Labelling and storage of hazardous and liquid wastes in a secure area that would contain material in the event of a spill. • Implementation of a waste management program consisting of reduction, reuse, and recycling of materials. • Should contaminated soils be encountered during construction, Enbridge Gas should implement their Suspect Soils Program (see Enbridge Construction and Maintenance Manual (October 27, 2021) for further details). • 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. • Soils that cannot be reused on site may be reused off-site in accordance with O. Reg. 406/19. 	
Archaeological Resources <i>Section 4.5.9</i>	The Stage 1 AA has determined that approximately 24% of the Study Area retains potential for the recovery of archaeological resources. Approximately 73% of the Study Area has either been previously assessed, previously disturbed, or does not retain archaeological potential.	<ul style="list-style-type: none"> • Based on the findings of the Stage 1 AA, Stage 2 AA is required. • The results of the Stage 2 AA will provide recommendations for further assessment, protection, and mitigation of archaeological resources. Where feasible for the project, archaeological sites that are determined to retain further cultural heritage value and interest should be mitigated in whole or in part by avoidance and protection/preservation measures. Where avoidance and protection/preservation measures are not feasible, archaeological resources may be mitigated in whole or in part by excavation. 	With the implementation of the AA and mitigation measures, including avoidance and protection/preservation (where feasible) and excavation, no significant adverse residual impacts on archaeological resources are anticipated.



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Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<ul style="list-style-type: none"> For Indigenous archaeological resources retaining further cultural heritage value or interest and which may be subject to impact by the Project, Stage 3 AA and Stage 4 archaeological mitigation options will be evaluated in discussions with interested Indigenous communities. 	
Built Heritage Resources and Cultural Heritage Landscapes <i>Section 4.5.10</i>	The completion of the Checklist included the identification of two indicators of CHVI. Given the findings of the Checklist, it is recommended that additional technical studies are required. Specifically, a Cultural Heritage Assessment Report (CHAR) is required prior to Project construction.	Prior to construction, a CHAR will be undertaken and submitted to the MHSTCI for their review and comment. The CHAR will contain mitigation measures for potential impacts, if required.	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on built heritage resources or cultural heritage landscapes are anticipated.
Indigenous Interests <i>Section 4.5.11</i>	The Project may affect traditional territories of Indigenous communities, and during construction harvesting and hunting in the construction location could be impeded. Archaeological surveys could also result in the finding of Indigenous artifacts. Potential permits and approvals required for the project (see Section 1.2.5) may trigger a duty to consult.	Enbridge Gas has sought input from the identified Indigenous communities and will continue engaging with Indigenous communities as the Project moves forward. Enbridge Gas will also continue to work with their respective Economic Development departments and Enbridge Gas's contractors to find opportunities for their participation in providing goods and services during construction. Information on the current state of Indigenous engagement will be provided in the application to the OEB.	By undertaking the engagement and archaeological assessments, no significant adverse residual impacts on Indigenous interests are anticipated.



6.0 CUMULATIVE EFFECTS ASSESSMENT

The recognition of cumulative effects assessment 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) notes that cumulative effects should be identified and discussed in the ER.

Building upon the intent of the *OEB Environmental Guidelines* (2016), 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 cumulative effects assessment has been prepared with consideration of this direction from the OEB.

6.1 METHODOLOGY

The cumulative effects assessment 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 cumulative effects assessment.

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 cumulative effects assessment 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 pipeline
- 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:

1. ER and technical design – 2021
2. Construction – Q4 of 2022 to Fall 2023
3. 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: Q4 of 2022 to 2023 and 2028. The years 2022 and 2023 were selected to represent the construction period, and the year 2028 was selected to represent the operation and maintenance period. Forecasting beyond 2028 increases the uncertainty in predicting whether projects will proceed, and the effects associated with these projects.

6.3 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 2021)
- Government of Ontario, Environmental Assessment Projects by Category (Government of Ontario 2021b)
- MTO, Ontario's Highways Program Interactive Map (2016-2024) (MTO 2020)
- Canadian Energy Regulator, Major Facilities Applications (CER 2021)
- Northumberland County, Major Construction Projects (Northumberland County n.d. d.)
- Township of Alnwick/Haldimand Parks Master Plan (2018)
- OEB Applications Currently Before the Board (facilities applications only) (OEB 2021)

Based on the review of publicly available resources, no projects are proposed in the Study Area. Several approved developments, all concentrated in Cobourg, are set to enter the build-out phase during the



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construction of the Project – these developments include the Elgin Park Redevelopment Project, Ontario Street Housing Project, and redevelopment of the Gold Plough Lodge and Northumberland County Archives and Museum. Although these are major projects, given their distance from the proposed pipeline and Study Area, these developments will have no cumulative impact or interaction with Project construction.

Although no developments are set to occur in the Study Area, it is assumed that on-going improvements, upgrades, and maintenance to municipal infrastructure such as bridges, culverts, drains or roads may occur within the spatial and temporal study 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 cumulative effects assessment evaluates the significance of residual impacts (after mitigation) of the project along with the effects of other unrelated projects.

6.4.1 Construction – Q4 2022 to Fall 2023

Residual project impacts which may occur during project construction are outlined in Sections 4.3-4.5 to consider the additive and interactive effects at their maximum intensity, the cumulative effects assessment assumes that construction of other unrelated projects and the proposed pipeline construction will occur concurrently.

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

Soil

Soil erosion and reduced soil capability is a potential residual effect associated with construction of the project. Mitigation and protective measures for soil are outlined in Section 4.2.2. Provided that concurrent projects follow mitigation measures similar to those outlined in this report, the probability of erosion control failure occurring concurrently is low and based on the nature of the proposed projects the magnitude of such an event would be low. As such, adverse cumulative residual effects on the natural environment from erosion are not anticipated to be significant, and cumulative effects on soil capability are not anticipated to occur.

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, such as 1:1 vegetation replanting, 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.



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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 sensory disturbance. Mitigation and protective measures for wildlife and wildlife habitat are outlined in Section 4.3.3. In the event of project-related wildlife deaths, the NDMNRF 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. Potential cumulative effects resulting from sensory disturbance (i.e., noise, air pollution and dust) are discussed below.

Provided that the above 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, and therefore 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 Section 4.4.5. 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.

6.4.2 Operation and Maintenance – Year 2024 to 2074

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. Each year, Northumberland County identifies areas of roadway that need maintenance. A description of the maintenance and construction and paving projects that are taking place each year and the corresponding schedule are posted on the County's webpage at: <https://www.northumberland.ca/en/living-here/annual-construction-program.aspx#Work-type-definitions>.
- Water works: Future installation of water and wastewater pipelines
- Pipeline construction and maintenance: Future pipeline construction and maintenance of existing hydrocarbon pipelines

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 be necessitated, this is the only anticipated instance when the Project would have potential temporary impacts during its operation.



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Any operation and maintenance activities undertaken by Enbridge Gas will be completed in co-ordination of the Enbridge Gas Environmental Planning 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 PR 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.



7.0 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.
- Recommendations and commitments made in this ER and other applicable permits and reports should be incorporated into an Environmental Protection Plan (EPP) detailing construction activity. The EPP should also include site and feature specific mitigation. The EPP should become part of the contract specification with the contractor selected to construct the project, as noted in section 5.8.4 of the OEB *Environmental Guidelines* (2016).
- 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.

7.1.2 Water Wells

Before construction, a private well survey should take place to assess domestic groundwater use near the Project and determine the need for a well monitoring program, as outlined in **Table 5.1**.



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7.1.3 Watercourse and Wetland Crossings

An Environmental Inspector should be on-site during sensitive watercourse and wetland crossings 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.

Follow-up inspections, three (3) months and 15 months after construction following spring runoff, should be completed to review effectiveness of the fill regulated area re-vegetation program, to check bank and slope stability and to ensure floodplain drainage has been maintained. Appropriate remediation measures should be completed as necessary, and additional follow-up monitoring should be conducted.

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. 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 any tree removals during the active season for bats it is recommended that a bat maternity roosting survey be completed to confirm the presence or absence of this species in 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 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



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attention should be paid to monitoring and documenting impacts associated with construction of the proposed pipeline

7.1.6 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.

7.1.7 Cultural Heritage Resources

Based on the results of the Checklist, a Cultural Heritage Report (CHAR) will be required. The CHAR will identify site plan controls and specific site-specific measures that are needed for the Project.

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 compliant, contaminated sites, watercourse sedimentation, inadvertent returns during HDD, accidental spills, and unexpected finds. Although unexpected problems are not anticipated to occur during construction, Enbridge and the pipeline contractor should be prepared to take action. Construction personnel should be made aware of and know how to implement contingency measures.

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



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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 the PR through a review of readily available information. Through circulation of the ER, the MECP will have an opportunity to review the PR in the event that 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 Suspect Soil Program should be implemented.

Enbridge's Suspect Soil Program will be implemented if contaminated soils that are encountered during construction.

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

Enbridge Gas Inc., Environment Department, 1-855-336-2056.

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 EPP.



HALDIMAND SHORES COMMUNITY EXPANSION PROJECT: ENVIRONMENTAL REPORT

Monitoring and Contingency Plans
January 14, 2022

7.2.5 Accidental Spills

During construction, 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. If necessary, the MECP Spills Action Center should be notified at 1-800-268-6060. 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 and Unknown Contaminated Soils

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 engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the Ontario Heritage Act (Government of Ontario 1990c). 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) require 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.



8.0 CONCLUSION

The environmental study investigated data on the physical, biophysical, and socio-economic environment along the PR. In the opinion of Stantec, the recommended program of supplemental studies, 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.



References

December 3, 2021

9.0 REFERENCES

- AAFC [Agriculture and Agri-Food Canada]. 2005. CLI Classes – Definitions. Available at: <http://sis.agr.gc.ca/cansis/nsdb/cli/class.html>.
- CER [Canada Energy Regulator]. 2021. Major Facilities. Available at: <https://www.nrcan.gc.ca/mining-materials/materials-technology/18909>. Accessed November, 2021.
- Chapman and Putnam. 1984. The Physiography of Southern Ontario. 3rd Edition. Published by the Government of Ontario, Ministry of Natural Resources.
- Cheminfo Services Inc. 2005. Best Practices for the Reduction of Air Emissions From Construction and Demolition Activities. Prepared by Cheminfo Services for Environment Canada. Available online: <http://www.bieapfrempp.org/Toolbox%20pdfs/EC%20-%20Final%20Code%20of%20Practice%20-%20Construction%20-%20Demolition.pdf>.
- COSEWIC. 2010. COSEWIC assessment and status report on the Bobolink *Dolichonyx oryzivorus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 43 pp.
- COSEWIC. 2011a. COSEWIC assessment and status report on the Barn Swallow *Hirundo rustica* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 37 pp.
- COSEWIC. 2011b. COSEWIC assessment and status report on the Eastern Meadowlark *Sturnella magna* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. x + 40 pp.
- COSEWIC. 2012a. COSEWIC assessment and status report on the American Eel *Anguilla rostrata* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xii + 109 pp. (www.registrelep-sararegistry.gc.ca/default_e.cfm).
- COSEWIC. 2012b. COSEWIC assessment and status report on the Wood Thrush *Hylocichla mustelina* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. ix + 46 pp.
- COSEWIC. 2013. COSEWIC assessment and status report on the Little Brown Myotis *Myotis lucifugus*, Northern Myotis *Myotis septentrionalis* and Tri-colored Bat *Perimyotis subflavus* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. xxiv + 93 pp.
- Dobbyn, J., 1994. Atlas of the Mammals of Ontario. Federation of Ontario Naturalists.
- DFO [Fisheries and Oceans Canada]. 2019. Measures to Avoid Causing Harm to Fish and Fish Habitat. Available at: <http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html>.
- DFO [Fisheries and Oceans Canada]. 2021. Aquatic Species at Risk Mapping. Available at: <http://www.dfo-mpo.gc.ca/species-especies/fpp-ppp/index-eng.htm>.



HALDIMAND SHORES COMMUNITY EXPANSION PROJECT: ENVIRONMENTAL REPORT

References

December 3, 2021

- eBird Canada. 2021. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available at: <http://www.ebird.org>. Accessed November 27, 2021.
- Environment Canada. 2014. Recovery Strategy for the Least Bittern (*Ixobrychus exilis*) in Canada. *Species at Risk Act Recovery Strategy Series*. Environment Canada. Ottawa. vi + 41 pp.
- Environment Canada. 2015. Recovery Strategy for Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*), and Tri-colored Bat (*Perimyotis subflavus*) in Canada [Proposed]. *Species at Risk Act Recovery Strategy Series*. Environment Canada, Ottawa. ix + 110 pp.
- Environment Canada. 2020. General nesting periods of migratory birds. <https://www.canada.ca/en/environment-climate-change/services/avoiding-harm-migratory-birds/general-nesting-periods.html>.
- Environment and Climate Change Canada. 2016a. Recovery Strategy for the Canada Warbler (*Cardellina canadensis*) in Canada. *Species at Risk Act Recovery Strategy Series*. Environment Canada, Ottawa. vii + 56 pp.
- Environment and Climate Change Canada. 2016b. Recovery Strategy for the Golden-winged Warbler (*Vermivora chrysoptera*) in Canada. *Species at Risk Act Recovery Strategy Series*. Environment and Climate Change Canada, Ottawa. vii + 59 pp.
- Environment and Climate Change Canada. 2021. Recovery Strategy for the Red-headed Woodpecker (*Melanerpes erythrocephalus*) in Canada. *Species at Risk Act Recovery Strategy Series*. Environment and Climate Change Canada, Ottawa. viii + 118 pp.
- Government of Ontario. No Date. Water Well Records. Available online: <https://www.ontario.ca/page/map-well-records>. Accessed November 2021.
- Government of Canada. 1985. Fisheries Act. R.S.C. 1985, c. F-14. Last amendment 2017. Electronic document. <http://laws-lois.justice.gc.ca/eng/acts/F-14/>
- Government of Ontario. 1990a. Conservation Authorities Act, R.S. O. 1990, c. C.27. O.Reg. 163/06: *Lower Trent Conservation Authority: Regulation of Development, Interference with Wetlands, and Alteration to Shorelines and Watercourses*.
- Government of Ontario. 1990b. Ontario Water Resources Act, R.S.O. 1990, c. O.40. Last amendment: 2017, c. 2, Sched. 11, s. 4. Electronic document: <https://www.ontario.ca/laws/statute/90o40#top>.
- Government of Ontario. 1990c. *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, CHAPTER F.31. Electronic document: <https://www.ontario.ca/laws/statute/90f31>. Last accessed
- Government of Canada. 1994. Migratory Birds Convention Act, S.C. 1994, c. 22. Last amendment 2017. Electronic document. <http://laws-lois.justice.gc.ca/eng/acts/m-7.01/>



HALDIMAND SHORES COMMUNITY EXPANSION PROJECT: ENVIRONMENTAL REPORT

References

December 3, 2021

- Government of Canada. 2002. Species at Risk Act. S.C. 2002, c. 29. Last amendment 2017. Electronic document. <http://laws.justice.gc.ca/eng/acts/S-15.3/>
- Government of Ontario. 2006. Clean Water Act. S.O. 2006, c. 22. Last amendment: 2017, c. 2, Sched.11, s.1. Electronic document: <https://www.ontario.ca/laws/statute/06c22>.
- Government of Ontario. 2007. Endangered Species Act. S.O. 2007, c.6. Electronic document: <https://www.ontario.ca/laws/statute/07e06>.
- Government of Ontario. 2011. Standards and Guidelines of Consultant Archaeologists. Toronto: Ministry of Tourism, Culture and Sport.
- Government of Ontario. 2021a. *Archaeological Sites Database Files*. Electronic document: <https://www.pastport.mtc.gov.on.ca/APSWeb/pif/projectSiteDataSearch.xhtml>. Last accessed September 2021.
- Government of Ontario. 2021b. Environmental Assessment Projects by Category. Available online: <https://www.ontario.ca/page/environmental-assessments>. Accessed November 2021.
- Hemson Consulting Ltd. 2020. Greater Golden Horseshoe: Growth Forecasts to 2051. Technical Report. Available online: <https://www.hemson.com/wp-content/uploads/2020/08/HEMSON-GGH-Growth-Outlook-Report-26Aug20.pdf>.
- Hoffman D.W. and Acton C.J. 1974. The soils of Northumberland County. Available online: https://ocul.yor.primo.exlibrisgroup.com/discovery/fulldisplay/alma991008627279705164/01OCUL_YOR:YOR_DEFAULT. Accessed November 2021.
- IAAC [Impact Assessment Agency of Canada]. 2021. Canadian Impact Assessment Registry. Available online: <https://iaac-aeic.gc.ca/050/evaluations>. Accessed September 2021.
- iNaturalist. 2021. Search Directory. Available online: <https://www.inaturalist.org/places/canada>.
- IO [Infrastructure Ontario] [Government of Ontario]. No date. Infrastructure Ontario Projects – Interactive Map. Available at: <https://www.ontario.ca/page/building-ontario>.
- Kawartha Pine Ridge District School Board. No date. Grafton Public School. Available online: <https://grafton.kprdsb.ca/>. Accessed October 2021.
- Lower Trent Conservation. No Date. Flooding. Available online: <http://www.ltc.on.ca/flood/>.
- MECP [Ministry of Environment, Conservation and Parks]. 1994. D-4 Land Use on or Near Landfills and Dumps. Available online: <https://www.ontario.ca/page/d-4-land-use-or-near-landfills-and-dumps>. Accessed August 2021.
- MECP [Ministry of Environment, Conservation and Parks]. 2011. Records of Site Condition. Available at: https://www.lrcsde.lrc.gov.on.ca/BFISWebPublic/pub/searchFiledRsc_search?request_locale=en



HALDIMAND SHORES COMMUNITY EXPANSION PROJECT: ENVIRONMENTAL REPORT

References

December 3, 2021

- MECP [Ministry of Environment, Conservation and Parks]. 2021a. Species at Risk in Ontario. Available online: <https://www.ontario.ca/page/species-risk-ontario>. Accessed September 2, 2021.
- MECP [Ministry of Environment, Conservation and Parks]. 2021b. Small Landfills Sites. Available online: <https://www.ontario.ca/page/small-landfill-sites-list>. Accessed August 2021.
- MECP [Ministry of Environment, Conservation and Parks]. 2021c. Large Landfills Sites. Available online: <https://www.ontario.ca/page/large-landfill-sites-map>. Accessed August 2021.
- MMAH [Ministry of Municipal Affairs and Housing]. No Date. Definitions. Available online: <http://www.mah.gov.on.ca/Page1491.aspx>.
- MHSTCI [Ministry of Heritage, Sport, Tourism, and Culture Industries]. 2009. Northumberland County Premier-Ranked Tourist Destination Project. Research Report]. Summary of Project Findings and Recommendation. Availability online; http://www.mtc.gov.on.ca/en/publications/PR_Northumberland_Report.pdf. Accessed October 2021.
- MHSTCI. [Ministry of Heritage, Sport, Tourism, and Culture Industries]. 2021. Tourism Economic Recovery Ministerial Task Force. Available at: <https://files.ontario.ca/mhstci-tourism-economic-recovery-ministerial-task-force-report-en-2021-06-21.pdf>. Accessed August 2021.
- MOECC [Ministry of the Environment and Climate Change]. 2013. Environmental Noise Guideline - Stationary and Transportation Sources, Approval and Planning (NPC-300). Available at: <https://www.ontario.ca/page/environmental-noise-guideline-stationary-and-transportation-sources-approval-and-planning#section-18>. Accessed August 2021.
- MTO [Ontario Ministry of Transportation]. (2016-2024) (MTO, No date.). Ontario Highway Programs Interactive Map. Available at: <https://www.ontario.ca/page/ontarios-highway-programs>. Accessed August 2021.
- Natural Resources Canada. 2019. Earthquake zones in Eastern Canada. Available at: <http://www.earthquakescanada.nrcan.gc.ca/zones/eastcan-en.php#SGLSZ>. Last accessed: July 2020.
- NDMNRF [Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry]. 2000. Significant wildlife habitat technical guide. Fish and Wildlife Branch, Wildlife Section, Science Development and Transfer Branch, South Central Sciences Branch. pp.151.
- NDMNRF [Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry]. 2010. Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005. Second Edition. Toronto: Queen's Printer for Ontario. 248 pp.
- NDMNRF [Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry]. 2013. In-water Work Timing Window Guidelines. March 11, 2013. Online: <https://docs.ontario.ca/documents/2579/stdprod-109170.pdf>



HALDIMAND SHORES COMMUNITY EXPANSION PROJECT: ENVIRONMENTAL REPORT

References

December 3, 2021

- NDMNRF [Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry]. 2021.a. GeoHub, Land Information Ontario (LIO). Available online: Ontario GeoHub (gov.on.ca). Accessed November 2021.
- NDMNRF [Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry]. 2021.b. Natural Heritage Information Centre (NHIC) Database. Available at: <http://nhic.mnr.gov.on.ca>. Accessed November 2021.
- NDMNRF [Ontario Ministry of Northern Development, Mines, Natural Resources and Forestry]. 2021.c. Species at Risk in Ontario List. Available online: [Species at risk in Ontario | Ontario.ca](https://species.atrisk.gov.on.ca). Accessed November 27, 2021.
- Northumberland County. No Date. a. Northumberland Next: Official Plan Update. Available online: <https://joinin.northumberland.ca/northumberland-next-official-plan-update>. Accessed October 2021.
- Northumberland County. No Date. b. Waste Management Facilities. Available online: <https://www.northumberland.ca/en/living-here/waste-management-facilities.aspx#Hope-Transfer-Station>. Accessed October 2021.
- Northumberland County. No Date. c. Roads. Available online: <https://www.northumberland.ca/en/living-here/roads.aspx?hdncontent=> Accessed October 2021.
- Northumberland County No Date. d. Major Construction Projects. Available online: <https://www.northumberland.ca/en/business-and-development/major-projects.aspx>. Accessed November 2021.
- Northumberland County. 2016. Official Plan. Available online: <https://www.northumberland.ca/en/business-and-development/official-plan.aspx>. Accessed November 2021.
- OEB [Ontario Energy Board]. 2016. *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines in Ontario, 7th Edition*.
- OGS [Ontario Geological Survey]. 1991. Bedrock geology of Ontario, Ontario Geological Survey, scale 1:250,000. Miscellaneous Release---Data 126-Revision 1.
- OGS [Ontario Geological Survey], 2011. Bedrock geology of Ontario, Southern Sheet; Ontario Geological Survey, Map 2544, scale 1:1,000,000.
- Ontario GeoHub, Government of Ontario, NDMNRF. 2021. Find Data. Available online: <https://geohub.lio.gov.on.ca>. Accessed November 2021.
- OPP [Ontario Provincial Police]. 2019. Detachments. Available at: <https://www.opp.ca/index.php?id=119>. Accessed August 2021.



HALDIMAND SHORES COMMUNITY EXPANSION PROJECT: ENVIRONMENTAL REPORT

References

December 3, 2021

Ontario Nature. 2021. Ontario Reptile and Amphibian Atlas. Available online:

http://www.ontarionature.org/protect/species/herpetofaunal_atlas.php. Accessed: November 27, 2021.

Ontario Trails. 2019. Nawautin Nature Sanctuary and Wetland Trail. Available online:

<https://www.ontariotrails.on.ca/index.php?url=trails/view/nawautin-nature-sanctuary-and-wetland-trail>. Accessed October 2021.

OEB 2021. Applications Currently Before the Board. Available online:

<https://www.oeb.ca/industry/applications-oeb>. Accessed November 2021.

Peterborough Victoria Northumberland and Clarington Catholic District School Board. No date. School Finder. Available online: <https://www.pvnccdsb.on.ca/our-schools/school-finder/>. Accessed October 2021.

Plast. No Date. About Us. Available online: <https://www.plast.ca/about/about-en/index.shtml>. Accessed October 2021.

Rowe, J.S., 1972. Forest Regions of Canada. Canadian Forestry Service Publication. No. 1300: 172pp.

Statistics Canada. 2017.a. *Alnwick/Haldimand, TP [Census subdivision], Ontario and Ontario [Province]* (table). *Census Profile*. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017.

Statistics Canada. 2017.b *Northumberland, CTY [Census division], Ontario and Canada [Country]* (table). *Census Profile*. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Released November 29, 2017.

<https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E> (accessed October 26, 2021).

TEA [Toronto Entomologists' Association]. 2021. Ontario Butterfly Atlas. Available online:

<https://www.ontarioinsects.org/atlas/>. Accessed November 27, 2021.

Township of Alnwick/Haldimand. No date. Emergency Services/Fire Department. Available online:

<https://www.ahtwp.ca/en/living-in-our-community/emergency-services-fire-department.aspx>. Accessed October 2021.

Township of Alnwick/Haldimand. 2013. Noise By-Law No. 73-2015. Available online: Official Plan of the

Township of Alnwick/Haldimand. Available online: <https://www.ahtwp.ca/en/township-government/resources/Documents/Noise-By-Law-No.-73-2013.pdf>.

Township of Alnwick/Haldimand. 2015. Official Plan of the Township of Alnwick/Haldimand. Available

online: <https://www.ahtwp.ca/en/business-and-development/official-plan.aspx?mid=19174>.

Township of Alnwick/Haldimand. 2018. Parks Master Plan. Final Report. Available online:

<https://www.ahtwp.ca/en/township-government/resources/Documents/AH-Parks-Plan-April-2018-Final.pdf>. Accessed November 2021.



HALDIMAND SHORES COMMUNITY EXPANSION PROJECT: ENVIRONMENTAL REPORT

References

December 3, 2021

Treasury Board [Government of Canada]. 2011. DFRP/FCSI- Map Navigator. Available online: <https://map-carte.tbs-sct.gc.ca/map-carte/fcsi-rscf/map-carte.aspx?Language=EN>. Accessed October 2020.

Trent Conservation Coalition. 2014. Trent Assessment Report. October 2014. Available at: <http://trentsourceprotection.on.ca/resources/reports-legislation/assessment-reports>

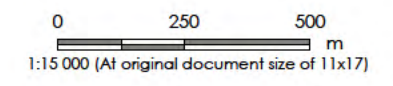


APPENDIX A: FIGURES

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- Legend
- Preferred Route
 - Study Area
 - Road
 - Watercourse



- 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 2021
 3. Orthoimagery © First Base Solutions 2021 Imagery Date: 2008



Project Location: 160961450 REVA
County of: Northumberland
Prepared by KB on 2022-01-11
Technical Review by SE on 2021-11-10

Client/Project:
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

Figure No.
1

Title
Study Area

APPENDIX B: CONSULTATION

*APPENDIX B1:
LETTER OF DELEGATION*

Ministry of Energy

Energy Networks & Indigenous Policy
Branch

Indigenous Energy Policy

77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Tel: 416-325-6810

Ministère de l'Énergie

Direction Générale des Réseaux Énergétiques
et des Politiques Autochtones

Politique Énergétique Autochtone

77, rue Grenville, 6^e étage
Toronto, ON M7A 2C1
Tél. 416-325-6810



October 20, 2021

VIA EMAIL

Mr. Dave Janisse, Technical Manager
Leave to Construct Applications, Regulatory Affairs
Enbridge Gas Incorporated
P. O. Box 2001
50 Keil Drive North
Chatham, ON N7M 5M1

Re: Haldimand Shores (Grafton) Community Expansion Project

Dear Mr. Janisse,

Thank you for your emails, dated August 27 and August 30, 2021, notifying the Ministry of Energy (Energy) of Enbridge Gas Incorporated's (Enbridge) intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for the Haldimand Shores (Grafton) Community Expansion Project (the Project).

I understand that Enbridge is planning to construct new natural gas pipelines and stations to provide services to the community of Haldimand Shores to transport natural gas supply from the existing Grafton system to the new distributions system pipelines in Haldimand Shores, and distribute natural gas volumes to residential customers in Haldimand Shores. I further understand that the Project will include the construction of the following facilities in the township of Alnwick/Haldimand:

- approximately 500 m of Nominal Pipe Size (NPS) 4 steel ("ST") natural gas distribution pipeline; and
- approximately 7, 250 m of NPS 2 polyethylene natural gas distribution pipeline.

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* (Indigenous Communities) 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 (the 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
Alderville First Nation*	P.O. Box 46 Roseneath ON K0K 2X0 T: (905) 352-2011 F: (905) 352-3242
Beausoleil First Nation*	General Delivery Cedar Point ON L0K 1C0 T: (705) 247-2051 F: (705) 247-2239
Curve Lake First Nation*	General Delivery Curve Lake ON K0L 1R0 T: (705) 657-8045, ext. 209 F: (705) 657-8708
Chippewas of Georgina Island*	R.R. #2, P.O. Box N-13 Sutton West ON L0E 1R0 T: (705) 437-1337 F: (705) 437-4597
Chippewas of Rama First Nation*	200-5884 Rama Road Rama ON L3V 6H6 T: (705) 325-3611 F: (705) 325-0879
Hiawatha First Nation*	123 Paudash Street, R.R. #2 Keene ON K0L 2G0 T: (705) 295-4421 F: N/A
Huron-Wendat Nation**	255, place Chef Michel Laveau

Community	Mailing Address
	Wendake QC G0A 4V0 T: (418) 843-3767 F: (418) 842-1108
Kawartha Nishnawbe	No mailing address, telephone, or fax information available. nodin.webb@hotmail.com; samgharvey@live.com; giiwednang@hotmail.com; kawarthanishnawbecouncil@outlook.com
Mississaugas of Scugog Island*	22521 Island Road Port Perry ON L9L 1B6 T: (905) 985-3337 F: N/A
Mohawks of the Bay of Quinte**	R.R. #1, 13 Old York Rd. Deseronto, ON K0K 1X0 T: (613) 396-3424 F: (613) 396-3627
Notes: * It is standard practice to copy Karry Sandy McKenzie, Williams Treaties First Nations Process Coordinator, on correspondence to the identified Williams Treaties First Nations identified above (inquiries@williamstreatiesfirstnations.ca). ** Interests are specific to archeological resources. If, as the project progresses, it is determined that there will be no impacts to archaeological resources, Enbridge should contact the Manager of Indigenous Energy Policy at the Ministry of Energy, as further consultation with these communities may not be required.	

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. First Nations and Métis 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 the 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 about this request, you may contact Jonathon Wilkinson by calling 705-313-3658, or by email at: jonathon.wilkinson@ontario.ca.

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Enbridge Gas Incorporated. 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 B2:
PROJECT CONTACT LIST

Enbridge Gas Inc.
Haldimand Shores Community Expansion Project - Agency and Municipal Contact List

TITLE	FIRST NAME	SURNAME	ORGANIZATION	DEPARTMENT	POSITION	ADDRESS	CITY/TOWN	POSTAL CODE	TELEPHONE	FAX	E-Mail
ELECTED OFFICIALS											
	David	Piccini	Constituency Office	Northumberland-Peterborough South	MPP	117 Peter Street	Port Hope, ON	L1A 1C5	905-372-4000	905-885-0050	david.piccinico@pc.ola.org
	Philip	Lawrence	Constituency Office	Northumberland-Peterborough South	MP	12 Elgin Street East Unit No. 4	Cobourg, ON	K9A 0C5	905-372-8757	905-372-1500	Philip.Lawrence@parl.gc.ca
FEDERAL AGENCIES											
	Sandro	Leonardelli	Environment and Climate Change Canada	Environmental Assessment Section- Environmental Protection Branch- Ontario	Manager	4905 Dufferin St.	Downsview, ON	M3H 5T4	416-739-5858		sandro.leonardelli@canada.ca
	Anjala	Puvananathan	Impact Assessment Agency of Canada	Ontario Regional Office	Director	55 York Street Suite 600	Toronto	ON	M5J 1R7	416-952-1575	anjala.puvananathan@canada.ca
	Stefan	Linder	CN Rail	Regulatory Affairs	Senior Manager	1 Administration Road	Concord, ON	L4K 1B9	905-669-3133		stefan.linder@cn.ca
To whom it may concern			Transport Canada								EnviroOnt@tc.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@dfco-mpo.gc.ca
ONTARIO PIPELINE COORDINATING COMMITTEE											
	Zora	Cmojacki	Ontario Energy Board	Ontario Pipeline Coordinating Committee	Project Advisor, Applications and Regulatory Audit	2300 Yonge Street, 26th Floor, PO Box 2319	Toronto, ON	M4P 1E4	416-440-8104	416-440-7656	Zora.Cmojacki@oeb.ca
	Helma	Geerts	Ministry of Agriculture, Food and Rural Affairs	Ontario Pipeline Coordinating Committee	Land Use Policy and Stewardship	1 Stone Road West, 3rd Floor, SE	Guelph, ON	N1G 4Y2	519-546-7423		Helma.Geerts@ontario.ca
	Karla	Barboza	Ministry of Heritage, Sport, Tourism, and Culture Industries	Ontario Pipeline Coordinating Committee	Heritage Planner, Heritage Planning Unit	400 University Avenue, 5th Floor	Toronto, ON	M7A 2R9	416-660-1027		karla.barboza@ontario.ca
	James	Hamilton	Ministry of Heritage, Sport, Tourism, and Culture Industries	Ontario Pipeline Coordinating Committee	Manager, Heritage Planning Unit	400 University Avenue, 5th Floor	Toronto, ON	M7A 2R9	416-995-8404		James.hamilton@ontario.ca
	Tony	DiFabio	Ministry of Transportation	Ontario Pipeline Coordinating Committee		301 St Paul Street, 2nd Floor	St. Catharines, ON	L2R 7R4	905-704-2656		Tony.DiFabio@ontario.ca
	Kourosh	Manouchchri	Technical Standards and Safety Authority	Ontario Pipeline Coordinating Committee		345 Carlingview Drive	Toronto, ON	M9W 6N9	416-734-3539	416-231-7525	kmanouchchri@tssa.org
	Keith	Johnston	Ministry of Northern Development, Mines, Natural Resources and Forestry	Ontario Pipeline Coordinating Committee	Land Use and Environmental Planning Section Environmental Planning Team Lead (Acting)	3rd Flr S, 300 Water Street	Peterborough	K9J 3C7	705-313-6960		Keith.Johnston@ontario.ca
	Michael	Elms	Ministry of Municipal Affairs and Housing	Ontario Pipeline Coordinating Committee	Manager, Community Planning and Development, Eastern Municipal Services Office	Rockwood House, 8 Estate Lane	Kingston, ON	K7M 9A8	613-545-2132		michael.elms@ontario.ca
	Jason	McCullough	Ministry of Energy, Northern Development and Mines	Ontario Pipeline Coordinating Committee	Senior Advisor, Indigenous Energy Policy Unit	6th Floor, 77 Grenville Street	Toronto, ON	M7A 2C1	416-526-2963		Jason.McCullough@ontario.ca
	Ruth	Orwin	Ministry of the Environment, Conservation and Parks	Ontario Pipeline Coordinating Committee	Supervisor, Regional Contact Eastern, Air, Pesticides and Environmental Planning	133 Dalton Ave, PO Box 820	Kingston, ON	K7L 4X6	613-549-4000	613-548-6908	ruth.orwin@ontario.ca
	Debbie	Scanlon	Ministry of Environment, Conservation and Parks	Ontario Pipeline Coordinating Committee	Manager, Approvals Section	40 St. Clair Ave. W., 14th Floor	Toronto, ON	M4V 1M2	647-627-5917		sourceprotectionscreening@ontario.ca
	Cory	Ostrowka	Infrastructure Ontario	Ontario Pipeline Coordinating Committee	Environmental Specialist, Environmental Management	1 Dundas St West Suite 2000	Toronto ON	M5G 2L5	Mobile: 416-571-8294Office: 647-264-3331		cory.ostrowka@infrastructureontario.ca
PROVINCIAL AGENCIES											
	Khalid	Khan	Ministry of Environment, Conservation and Parks			5776 Young St, 9th Flr	Toronto, ON	M2M 4J1			khalid.khan@ontario.ca
	Peter	Brown	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch - Indigenous Consultation	Senior Aboriginal Consultation Advisor	135 St Clair Ave W, 1st Floor	Toronto, ON	M4V 1P5	416-314-0149		peter.brown@ontario.ca
To whom it may concern			Ministry of Environment, Conservation and Parks	Species at Risk Branch		40 St. Clair Ave. W., 14th Floor	Toronto, ON	M4V 1M2			SAROntario@ontario.ca
To whom it may concern			Ministry of Environment, Conservation and Parks	Eastern Region							eanotification.eregion@ontario.ca
	Cassandra	Young	Ministry of Environment, Conservation and Parks	Ontario Parks Branch	Assistant Park Planner				519-873-4630		cassandra.young2@ontario.ca
	Meghan	Pomeroy	Ministry of Environment, Conservation and Parks								Meghan.Pomeroy@ontario.ca
	Angela	Adkinson	Ministry of Environment, Conservation and Parks	Ontario Parks -Southeast Zone	Senior Park Planner				705-313-3619		Angela.Adkinson@ontario.ca
	Jon	Orpana	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch - Eastern Region	EA & P Coordinator	1259 Gardiners Rd., PO Box 22032	Kingston, ON	K7M 8S5	613-548-6918	613-548-6098	jon.orpana@ontario.ca
	David	Bradley	Ministry of Environment, Conservation and Parks	Peterborough District	District Manager	300 Water Street, Robinson Place, S. Tower, 2nd Floor	Peterborough, ON	K9J 3C7	705-927-6165		david.bradley@ontario.ca
	Jacqueline	Fuller	Ministry of Environment, Conservation and Parks				Peterborough, ON				Jacqueline.Fuller@ontario.ca
	Peter	Makula	Ministry of Transportation	Engineering Office- Eastern Region	Manager	1355 John Counter Blvd, Postal Bag Box 4000	Kingston, ON	K7L 5A3	613-545-4754	613-540-5103	
	Michael	Helfinger	Ministry of Economic Development, Job Creation and Trade	Cabinet Office Liaison Unit-Policy Coordination Branch	Senior Policy Advisor	900 Bay St, 7th Floor, Hearst Block	Toronto, ON	M7A 2E1	416-325-6519	416-325-6534	michael.helfinger@ontario.ca
	Elizabeth	Spang	Ministry of Natural Resources and Forestry	Peterborough District	District Planner	300 Water St, South Tower, 1st Floor	Peterborough, ON	K9J 8M5	705-755-3360	705-755-3125	elizabeth.spang@ontario.ca
	Jocelyn	Beatty	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship- Food Safety and Environmental Policy Branch- Elora Resource Centre	Rural Planner	6484 Wellington Road 7	Elora, ON	N0B 1S0	519-846-3405		jocelyn.beatty@ontario.ca
	Mary	Perry	Ministry of Energy, Northern Development and Mines	Strategic Support Unit	Manager (A)	933 Ramsey Lake Rd, Willet Green Miller Centre, 2nd Floor	Sudbury, ON	P3E 6B5	705-690-0026		mary.perry@ontario.ca
	Alexandre	Gitkow	Ministry of Transportation	Corridor Management Section - Eastern Region			Kingston, ON	K7M 9A7	343-302-7392		Alexandre.Gitkow@ontario.ca
	Joanna	Brown	Infrastructure Ontario		Environmental Specialist	14 Gable Lane	Kingston, ON	K7M 9A7	343-302-7392		joanna.brown@infrastructureontario.ca
	Joseph	Harvey	Ministry of Tourism, Culture and Sport	Heritage Planning Unit Programs and Services Branch	Heritage Planner	402 Bay Street, Suite 1700	Toronto, ON	M7A 0A7			Joseph.Harvey@ontario.ca
To whom it may concern			Hydro One Networks Inc.								SecondaryLandUse@HydroOne.com
	Meaghan	Klassen	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
GOVERNMENT REVIEW TEAM FOR ABORIGINAL INFORMATION											
	Lise	Chabot	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
	Caroline	Vachon	Crown-Indigenous Relations and Northern Affairs Canada	Treaties and Aboriginal Government	Correspondence Coordinator	10 Wellington Street	Gatineau, QC	K1A 0H4	819-360-2503	819-953-3246	caroline.vachon2@canada.ca
NORTHUMBERLAND COUNTY											
	Bill	Cane	Township of Hamilton		Mayor	8285 Majestic Hills Drive P.O. Box 1060	Cobourg, ON	K9A 4W5	905-372-5599		wcane@hamiltontownship.ca
	Bob	Sanderson	Municipality of Port Hope		Mayor	56 Queen Street	Port Hope, ON	L1A 3Z9	905-885-4544 (general township fax number)	905-885-7698 (general township fax number)	mayor@porthope.ca
	John	Henderson	Town of Cobourg		Mayor	55 King Street West	Cobourg, ON	K9A 2M2	Business Phone: 905-372-4301 Ext. 4000 Cell Phone: 289-251-4193	905-372-7558 (general township fax number)	jhenderson@cobourg.ca
	Brian	Ostrander	Municipality of Brighton		Mayor	35 Alice Street, P.O. Box 189	Brighton, ON	K0K 1H0	613-475-0670 ext. 212	613-475-3453	mayor@brighton.ca
	Gail	Latchford	Township of Alnwick/Haldimand	Protective Service	Mayor	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	T: 1-705-924-3838C: 905-269-2000		gatchford@ahwp.ca
	Mandy	Martin	Township of Cramahe	Deputy Warden	Mayor	1 Toronto Street	Colborne, ON	K0K 1S0	905-376-7241		mmartin@cramahetownship.ca
	Bob	Crate	Municipality of Trent Hills		Mayor	66 Front St S P.O. Box 1030	Campbellford, ON	K0L 1L0	705-761-2278		crateb@northumberland.ca
To whom it may concern			Northumberland Paramedics (Non-emergency)			600 William Street	Cobourg, ON	K9A 3A5	T: 905-372-3329 ext. 6302 Paramedic Duty Superintendent: 1-866-660-8612		paramedics@northumberlandcounty.ca
To whom it may concern			Northumberland County	Major Projects		600 William Street	Cobourg, ON	K9A 3A5	T: 1-905-372-3329 ext. 6299		
To whom it may concern			Northumberland County	Environmental and Climate Change	Environmental Officer	555 Courthouse Road	Cobourg, ON	K9A 5J6	T: 905-372-3329 ext. 2237		
	Dwayne	Campbell	Northumberland County	Planning and Community Development	Manager	600 William Street	Cobourg, ON	K9A 3A5	T: 905-372-3329 ext. 2408	905-372-1746	campbelld@northumberlandcounty.ca
	Jennifer	Moore	Northumberland County	Office of the Chief Administrative Officer (CAO)	Chief Administrative Officer	555 Courthouse Road	Cobourg, ON	K9A 5J6	T: 905-372-3329 ext. 2259		moorej@northumberland.ca
TOWNSHIP OF ALNWICK/HALDIMAND											
	Sherry	Gibson	Township of Alnwick/Haldimand	Recreation, Tourism, Economic Development	Deputy Mayor	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	T: 905-396-8234		sgibson@ahwp.ca
	Mike	Filip	Township of Alnwick/Haldimand	Culture and Heritage	Councillor	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	T: 905-396-3901		mfilip@ahwp.ca
	Greg	Booth	Township of Alnwick/Haldimand	Rural and Environmental	Councillor	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	T: 905-376-9758		gbooth@ahwp.ca
	Jim	Hogg	Township of Alnwick/Haldimand	Public Works & Infrastructure	Councillor	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	T: 905-373-6323		jhogg@ahwp.ca
	Brian	McMillan	Township of Alnwick/Haldimand	Public Works & Roads	CRS-S	Grafton Municipal Building 10836 County Road # 2, P.O. Box	Grafton, ON	K0K 2G0	1-905-349-2700		bmcmillan@ahwp.ca
	Jennifer	Current	Township of Alnwick/Haldimand	Planning and Economic Development	Manager	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	1-905-349-2822 x 23		jcurrent@ahwp.ca
	Jennifer	Steen	Township of Alnwick/Haldimand	Parks, Recreation and Culture	Coordinator	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	905-349-2822 x 33		jsteen@ahwp.ca
	Daryl	Hall	Township of Alnwick/Haldimand	Building and Planning	Chief Building Official/By-Law Enforcement Officer	Grafton Municipal Building 10836 County Road # 2	Grafton, ON	K0K 2G0	1-905-349-2822 x 27		dhall@ahwp.ca
CONSERVATION AUTHORITIES											
	Gage	Comeau	Lower Trent Conservation	Watershed Science and Services	Water Resources Specialist/Regulations Officer	714 Murray St. RR#1	Trenton, ON	K8V 5P4	613-394-4829 ext. 224		gage.comeau@ltc.on.ca
	Leslie	Rich	Conservation Ontario		Policy and Planning Liaison	120 Bayview Parkway	Newmarket, ON	L3Y 3W3	905-895-0716 Ext. 226	905-895-0751	lrich@conservationontario.ca
	Keith	Taylor		Drinking Water Source Protection	Source Protection Program Coordinator	715 Murray St. RR#1	Trenton, ON	K8V 5P4	613-394-4829 ext. 246		keith.taylor@ltc.on.ca
INTEREST GROUPS/OTHER											
	Frank	Godfrey	Willow Beach Field Naturalists			PO Box 421	Port Hope, ON	L1A 3Z3			tfgodfrey@hotmail.com

Enbridge Gas Inc.
Haldimand Shores Community Expansion Project - Agency and Municipal Contact List

TITLE	FIRST NAME	SURNAME	ORGANIZATION	DEPARTMENT	POSITION	ADDRESS	CITY/TOWN	POSTAL CODE	TELEPHONE	FAX	E-Mail
To whom it may concern			Cobourg East Campground			253 Benlock Road	Grafton, ON	K0K 2G0	905-349-2594		
To whom it may concern			Federation of Ontario Cottager's Associations			#201- 159 King Street	Peterborough, ON	K9J 2R8	705-749-3622		info@foca.on.ca
	Gloria	Tompkins	Kawartha Pine Ridge District School Board	Teaching and Learning	Superintendent of Education: Teaching and Learning	1994 Fisher Drive	Peterborough, ON	K9J 6X6	Local: 705-742-9773 ex. 2032	705-742-7801 (general fax #)	Gloria_Tompkins@kprdsb.ca
	Joanna	Carragher	Peterborough Victoria Northumberland and Clarington Catholic District School Board		Director of Education / Secretary Treasurer	1355 Lansdowne St W	Peterborough, ON	K9J 7M3	705-748-4861 ext. 1224		jcarragher@pvnccdsb.on.ca
	Bob	Deane	Heritage Alnwick/Haldimand		Chairperson	10836 County Road # 2, PO Box 70	Grafton, ON	K0K 2G0	905-349-2822 Ext. 32		rwdm@ahtwp.ca
	Susan	Walmer	Oak Ridges Moraine Land Trust		Chief Executive Officer/Privacy Officer	18462 Bathurst Street	Newmarket, ON	L3Y 4V9	905-853-3171 Ext. 32		swalmer@oakridgesmoraine.org
To whom it may concern			Chub Point Nature Reserve	Northumberland Land Trust (main point of contact for the reserve itself)		PO Box 1153	Cobourg, ON	K9A 5A4			info@nltrust.ca
To whom it may concern			Ontario Federation of Snowmobile Clubs		OFSC District 2 Manager				613-478-5916		dist2@snowbase.ca
	Dave	Dawson	Alnwick/Haldimand Fire Rescue		Fire Chief	9160 County Road 45, PO Box 70	Roseneath, ON	K0X 2X0	905-352-1142		

TITLE	FIRST NAME	SURNAME	ORGANIZATION	DEPARTMENT	POSITION	ADDRESS	CITY/TOWN	ON	POSTAL CODE	PHONE NUMBER	FAX NUMBER	EMAIL
Chief	Dave	Mowat	Alderville First Nation			11696 Line Rd 2	Roseneath	ON	K0K 2X0	905-352-2011		dmowat@alderville.ca
Chief	Joanne P.	Sandy	Beausoleil First Nation			11 O'Gema Mikan	Christian Island	ON	L9M 0A9	705-247-2051	705-247-2239	jsandy@chinnissing.ca
Chief	Donna	Big Canoe	Chippewas of Georgina Island		Chief	Box N-13, RR #2	Sutton West	ON	L0E 1R0	705-437-1337	705-437-4597	dbigcanoe@georginaisland.com
Ms.	Natasha	Charles	Chippewas of Georgina Island		Community Consultation and Executive Assistant to Chief and Council	Box N-13, RR #2	Sutton West	ON	L0E 1R0	705-437-1337	705-437-4597	ncharles@georginaisland.com
Chief	Edward	Williams	Chippewas of Rama First Nation		Chief	5884 Rama Road, Suite 200	Rama	ON	L3V 6H6	705-325-3611	705-325-0879	chief@ramafirstnation.ca
Ms.	Sharday	James	Chippewas of Rama First Nation		Community Consultation	5885 Rama Road, Suite 200	Rama	ON	L3V 6H6	705-325-3611 ext. 1633	705-325-0879	sharday@ramafirstnation.ca
Chief	Emily	Whetung	Curve Lake First Nation		Chief	22 Winookedaa Road	Curve Lake	ON	K0L 1R0	705-657-8045	705-657-8708	emilyw@curvelake.ca
Dr.	Julie	Kapyrka	Curve Lake First Nation	Lands and Resources Consultation	Resource Consultation	22 Winookedaa Road	Curve Lake	ON	K0L 1R0	705-657-8045 ext 239		juliek@curvelake.ca
Chief	Laurie	Carr	Hiawatha First Nation		Chief	431 Hiawatha Line	Hiawatha	ON	K9J 0E6	705-295-4421		chiefcarr@hiawathafn.ca
Ms.	Wanda	McGonigle	Hiawatha First Nation	Lands	Lands Officer	431 Hiawatha Line	Hiawatha	ON	K9J 0E6	705-295-4421 ext. 219		lands@hiawathafn.ca
Mr.	Tom	Cowie	Hiawatha First Nation	Core Consultation and Land Resource Development	Lands/Resource Consultation	431 Hiawatha Line	Hiawatha	ON	K9J 0E6	705-295-4421 ext. 216		tcowie@hiawathafn.ca
Mr.	Louis	Lesage	Huron Wendat		Director of the Nonwewisio Office	255 place Chef Michel Laveau	Wendake	QC	G0A 4V0	418-843-3826 ext. 2109		louis.lesage@cnw.gc.ca
Chief	Kris	Nahmang	Kawartha Nishnawbe		Chief	257 Big Cedar Lake Road	Big Cedar	ON	K0L 2H0	705-930-1020		info@kpnitofthestone.ca
Chief	Kelly	LaRocca	Mississaugas of Scouog Island First Nation		Chief	22521 Island Road, RR#5	Port Perry	ON	L9L 1B6	905-985-3337, ext. 226	905-985-8828	klarocca@scuogofirstnation.com
Chief	R. Donald	Maracle	Mohawks of the Bay of Quinte		Chief	R.R. #1, 13 Old York Rd.	Deseronto	ON	K0K 1X0			

Enbridge Gas Inc.
Haldimand Shores Community Expansion Project - Public and Landowner Contact List

CORRESPONDENT	ADDRESS	CITY/TOWN	PROVINCE	POSTAL CODE	TELEPHONE	EMAIL
A ■ W ■	■	Grafton	Ontario	■	N/A	■
D ■ L ■	■	Grafton	Ontario	N/A	N/A	■
A ■ S ■	■	Grafton	Ontario	N/A	N/A	■
C ■ C ■	■	Grafton	Ontario	N/A	■	N/A
C ■ C ■	■	Grafton	Ontario	■	N/A	■
J ■	■	Grafton	Ontario	■	■	N/A
S ■ S ■	N/A	Grafton	Ontario	N/A	N/A	■
S ■ E ■	N/A	Grafton	Ontario	N/A	■	N/A
A ■ F ■	■	Grafton	Ontario	N/A	N/A	■
A ■ C ■	N/A	Grafton	Ontario	N/A	■	■

Enbridge Gas Inc.
Haldimand Shores Community Expansion Project - VOH Contact List

CORRESPONDENT	SKATEHOLDER GROUP	ADDRESS	CITY/TOWN	PROVINCE	POSTAL CODE	TELEPHONE	EMAIL
B [REDACTED] V [REDACTED]	Directly affected landowner	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
T [REDACTED] C [REDACTED]	Directly affected landowner/Resident interested in natural gas conversion	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
D [REDACTED] D [REDACTED]	Directly affected landowner	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
S [REDACTED] S [REDACTED]	Directly affected landowner	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
C [REDACTED] and S [REDACTED] L [REDACTED]	Directly affected landowner	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
D [REDACTED] D [REDACTED]	Directly affected landowner/Resident interested in natural gas conversion	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
J [REDACTED] P [REDACTED]	Interested citizen	[REDACTED]	Grafton	Ontario	[REDACTED]	N/A	[REDACTED]
R [REDACTED] D [REDACTED]	Interested citizen	N/A	Grafton	Ontario	N/A	N/A	[REDACTED]
R [REDACTED] H [REDACTED] and Y [REDACTED] C [REDACTED]	Directly affected landowner/Resident interested in natural gas conversion	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
W [REDACTED] R [REDACTED]	Directly affected landowner/Interested citizen	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
A [REDACTED] C [REDACTED]	Other: Land Steward for Chub Point Nature Reserve	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]
L [REDACTED] L [REDACTED]	Surrounding Landowner	[REDACTED]	Grafton	Ontario	[REDACTED]	[REDACTED]	[REDACTED]

APPENDIX B3:
NEWSPAPER NOTICE TEAR SHEETS

Enbridge Gas Inc.
Notice of Study Commencement and Virtual Open House
Haldimand Shores Community Expansion Project

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand (the Project). The Project will involve the construction of up to approximately 9 kilometers (km) of natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.

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 a result of the social distancing requirements set out by the Province of Ontario due to COVID-19, a Virtual Open House will be held in place of an in-person Open House.

The Virtual Open House will be available for two weeks starting on November 8, 2021, and finishing on November 22, 2021, at <https://solutions.ca/HaldimandShoresEA/>.

If you are unable to log onto the Virtual Open House between November 8-22, please dial (226) 980-5347 and leave a detailed message with your contact information and we will respond as soon as possible.

A questionnaire will be available as part of the Virtual Open House, and you will have the ability to submit comments and/or questions about the proposed Project. In addition, a copy of the Virtual Open House, story boards will be available on the Enbridge Gas project website provided below. Input received during the Virtual Open House will be used to inform the selection of the Preferred Route and to develop site specific environmental protection or mitigation measures for the Project.

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 the Environmental Report for the study will be completed in January 2022, after which Enbridge Gas may file a leave to construct application to the OEB, if required. Construction is anticipated to begin in Winter 2022.

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

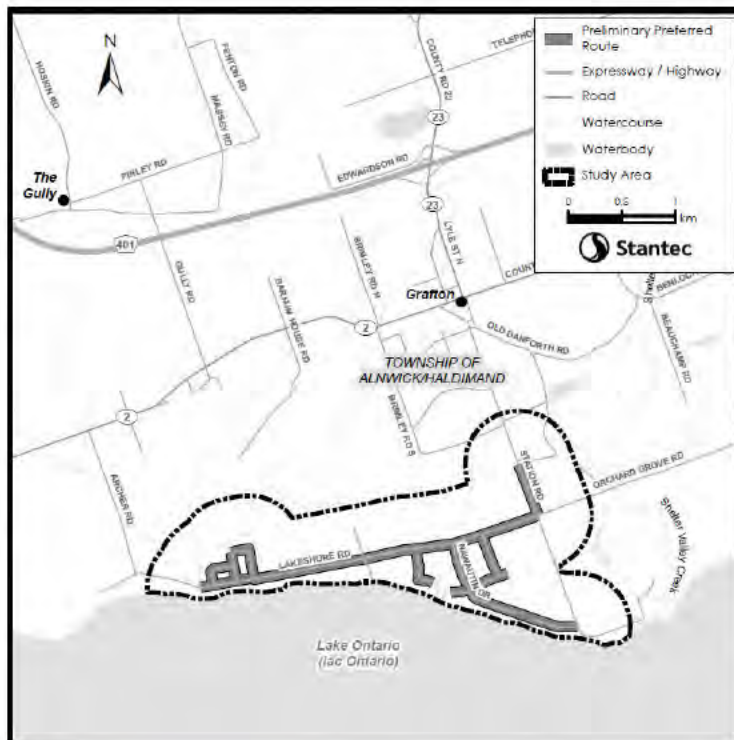
Kayla Ginter, Project Coordinator
Stantec Consulting Ltd.

Telephone: (226) 980-5347

Email: HaldimandShoresEA@stantec.com

Or visit the project website at:

<https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>



ENBRIDGE
Life Takes Energy[®]

CAPACITY LIMITS LIFTED FOR OUTDOOR PUBLIC EVENTS

'RESTRICTIONS ON OUTDOOR SOCIAL GATHERINGS WILL CONTINUE TO BE LIMITED TO 100 PEOPLE': PROVINCE

The province has lifted capacity limits for outdoor organized public events like parades and memorial services.

On Oct. 22, the government released A Plan to Safely Reopen Ontario and Manage COVID-19 for the Long-Term, which outlined the province's gradual approach to lifting remaining public health and workplace safety measures by March 2022.

A release from the office of Northumberland-Peterborough South MPP David Piccini stated that, at that time, the province announced its intention to allow for greater capacity at organized public events such as Remembrance Day ceremonies and Santa Claus parades.

Effective immediately, the government approved regulatory amendments, supported by the chief medical officer of health, that lift capacity limits for outdoor organized public events such as parades, memorial services and other similar events.

If physical distancing of two metres is not possible, a mask must be worn, it read.

"Restrictions on outdoor social gatherings will continue to be limited to 100 people," staff at the MPPs office said. "As the risk of COVID-19 transmission is significantly lower outdoors, the regulatory amendments also remove outdoor capacity limits in most other sectors where



Alana Lee photo

MPP David Piccini has announced that capacity limits for outdoor organized public events like parades and memorial services have been lifted.

they remain."

This includes but isn't limited to outdoor areas of fairs, rural exhibitions and festivals, and outdoor areas of museums, aquariums, zoos, and science centres, among others, they added.

"Ski hills and other outdoor recreational amenities are also able to operate outdoor without capacity limits," staff said, adding that these settings can also opt in for proof of vaccination in indoor settings to remove capacity limits. "Outdoor capacity limits for food or drink establishments with dance facilities, such as nightclubs, will remain in place."

In addition, as previously announced by the province, proof of vaccination continues to be required in certain outdoor settings where the capacity is 20,000 people or more, to help keep these venues safe for patrons.

A number of clarifying and housekeeping amendments were also approved to align with and support A Plan to Safely Reopen Ontario and Manage COVID-19 for the Long-Term.

These include removing

the expired provision that permitted a negative COVID-19 antigen test to be used in place of proof of vaccination for wedding and funeral receptions in meeting or event spaces; permitting indoor recreational amenities to opt in to proof-of-vaccination requirements to align with the approach for similar businesses and organizations; clarifying requirements for signage at wedding, funeral and religious services, rites or ceremonies that opt in to proof-of-vaccination requirements; specifying reservations are not required to attend unseated concerts, events, performances, and movies in addition to seated; and removing the requirement that motor vehicles maintain at least two-meters distance at drive-in/drive-through venues.

Visit <https://files.ontario.ca/solgen-732-21-amending-364-20-27-10-2021.pdf> to view the updated regulation.



SCAN THIS CODE
to stay up-to-date
on COVID-19
locally.

ENBRIDGE GAS INC. NOTICE OF STUDY COMMENCEMENT AND VIRTUAL OPEN HOUSE

Haldimand Shores Community Expansion Project

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand (the Project). The Project will involve the construction of up to approximately 9 kilometers (km) of natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.

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 a result of the social distancing requirements set out by the Province of Ontario due to COVID-19, a Virtual Open House will be held in place of an in-person Open House.

The Virtual Open House will be available for two weeks starting on November 8, 2021, and finishing on November 22, 2021, at <https://solutions.ca/HaldimandShoresEA/>.

If you are unable to log onto the Virtual Open House between November 8-22, please dial **(226) 980-5347** and leave a detailed message with your contact information and we will respond as soon as possible.

A questionnaire will be available as part of the Virtual Open House, and you will have the ability to submit comments and/or questions about the proposed Project. In addition, a copy of the Virtual Open House, story boards will be available on the Enbridge Gas project website provided below. Input received during the Virtual Open House will be used to inform the selection of the Preferred Route and to develop site specific environmental protection or mitigation measures for the Project.

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 the Environmental Report for the study will be completed in January 2022, after which Enbridge Gas may file an application to request OEB leave to construct the Project, if required. Construction is anticipated to begin in Winter 2022.

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

Kayla Ginter, Project Coordinator
Stantec Consulting Ltd.
Telephone: (226) 980-5347
Email: HaldimandShoresEA@stantec.com

Or visit the project website at:

<https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>



*APPENDIX B4:
NOTIFICATION LETTERS*



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



November 1, 2021

«FIRST_NAME» «SURNAME»
«POSITION»
«ORGANIZATION»
«DEPARTMENT»
«ADDRESS»
«CITYTOWN» «POSTAL_CODE»

Dear «TITLE» «FIRST_NAME» «SURNAME»,

Reference: Enbridge Gas Inc. – Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand (the Project). The Project will involve the construction of up to approximately 9 kilometers (km) of natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.

For further details, please refer to the attached map.

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)*".

An Environmental Report, summarizing the results of the Environmental Study, would accompany Enbridge Gas' application to the OEB as part of their Leave to Construct (LTC) application should one be required.¹ It is anticipated that the Environmental Report for the study will be completed in January 2022, after which Enbridge Gas may file an application for the Project to the OEB. Construction is currently anticipated to begin in Winter 2022.

As an agency with jurisdiction or a potential interest in developments in the area, 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. These sources of data will include a Stage 1 and 2 Archaeological Assessment, a Cultural Heritage Assessment, and a windshield survey.

To support the quality of 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.**

¹ Enbridge Gas is aware that the Ontario government has proposed a change to the Leave to Construct filing requirements within the OEB Act. If this proposed change is passed, Enbridge Gas anticipates that this Project will not require OEB review and approval before it could proceed. In any event, Enbridge Gas has decided to proceed with initiation of an Environmental Study.

November 1, 2021

«FIRST_NAME» «SURNAME»

Page 2 of 2

Reference: Enbridge Gas Inc. – Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House

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 a result of the social distancing requirements set out by the Province of Ontario due to COVID-19, a Virtual Open House will be held in place of an in-person Open House.

The Virtual Open House will be available for two weeks starting on **November 8, 2021**, and finishing on **November 22, 2021**, at <https://solutions.ca/HaldimandShoresEA/>

A questionnaire will be available as part of the Virtual Open House, and you will have the ability to submit comments and/or questions about the proposed Project. In addition, a copy of the Virtual Open House story boards will be available on the Enbridge Gas project website at: <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>.

Input received during the Virtual Open House will be used to inform the selection of the Preferred Route and to develop site specific environmental protection or mitigation measures for the Project.

We kindly request that any input and comments regarding the Project are provided by December 8, 2021.

If you have questions or comments regarding the Haldimand Shores Community Expansion Project, please do not hesitate to contact the undersigned.

Yours truly,

ENBRIDGE GAS INC.

Sonia Fazari

Sonia Fazari

Senior Advisor, Municipal & Stakeholder Engagement
Enbridge Gas Inc.

Phone: 416-762-9153

sonia.fazari@enbridge.com

Attachment: Figure 1 – Study Area

c. Norm Dumouchelle, Advisor Environmental, Enbridge Gas Inc
Kayla Ginter, Stantec Consulting Ltd.



Stantec Consulting Ltd.
100-300 Hagey Boulevard, Waterloo ON N2L 0A4



October 8, 2021

Attention: «FIRST_NAME» «SURNAME», «POSITION»
«ORGANIZATION»
«ADDRESS»
«CITYTOWN» «POSTAL_CODE»

Dear «FIRST_NAME» «SURNAME»,

Reference: Enbridge Gas Inc. – Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House

I am writing to advise you of an upcoming natural gas pipeline project in the Township of Alnwick/Haldimand, in the Williams Treaties Traditional Territory.

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand (the Project). The Project will involve the construction of up to approximately 9 kilometers (km) of natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.

For further details, please refer to the attached map.

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)*".

An Environmental Report, summarizing the results of the Environmental Study, would accompany Enbridge Gas' application to the OEB as part of the application requesting leave to construct (LTC) should one be required.¹ It is anticipated that the Environmental Report for the study will be completed in January 2022, after which Enbridge Gas may file an LTC application. Construction is currently anticipated to begin in Winter 2022.

Stantec is presently compiling an environmental, socio-economic, and archaeological/cultural heritage inventory of the Study Area. As an Indigenous community with a potential interest in the 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 study area and information about potential effects that the Project may have on asserted or established Aboriginal 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.

¹ The Ontario government has proposed a change to the LTC filing requirements to increase the cost threshold from \$2 million to \$10 million (see <https://ero.ontario.ca/notice/019-4029>). If this change takes effect January 1, 2022 as proposed, Enbridge Gas anticipates that this project will not require LTC approval before it could proceed. In any event, Enbridge Gas has decided to proceed with initiation of an Environmental Study.



As a result of the physical distancing requirements set out by the Province of Ontario due to COVID-19, a Virtual Open House will be held in place of an in-person Open House.

The Virtual Open House will be available for two weeks starting on **November 8, 2021**, and finishing on **November 22, 2021**, at <https://solutions.ca/HaldimandShoresEA/>

A questionnaire will be available as part of the Virtual Open House, and you will have the ability to submit comments and/or questions about the proposed Project. In addition, a copy of the Virtual Open House story boards will be available on the Enbridge Gas project website at: <https://www.Enbridgegas.com/HaldimandShoresProject>.

Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with «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 «ORGANIZATION» to ensure your interests are being considered and represented.

We kindly request that any initial input and comments regarding the Project are provided by your community by December 8, 2021. 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 Haldimand Shores Community Expansion Project, please do not hesitate to contact me directly.

Regards,

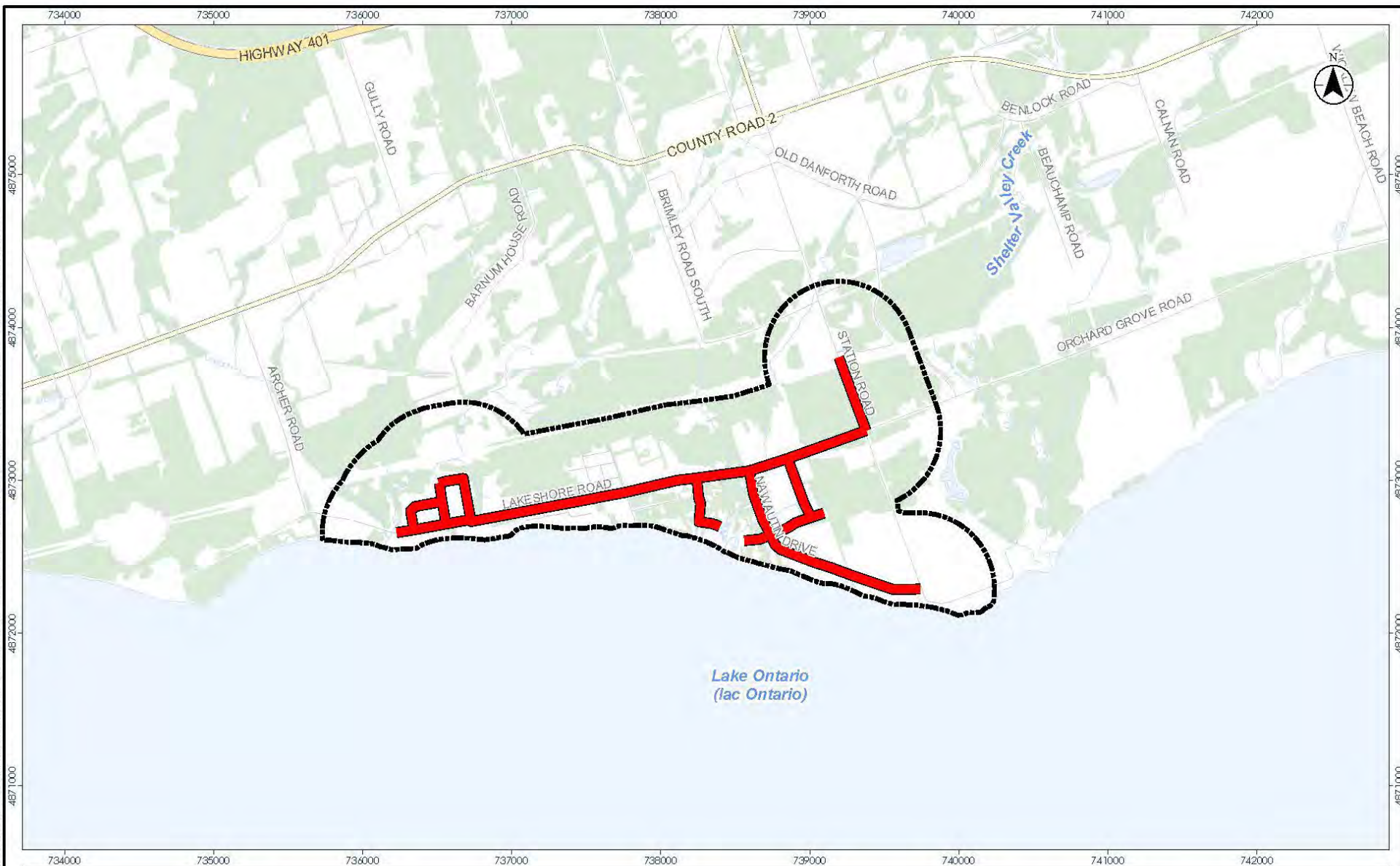
Melanie Book

Strategist, Community & Indigenous Engagement, South East Region
Enbridge Gas Inc.
Phone: 613-784-6814
Melanie.book@enbridge.com

Attachment: Figure 1 – Study Area

c. Norm Dumouchelle, Advisor Environmental, Enbridge Gas Inc
Kayla Ginter, Stantec Consulting Ltd.

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Legend

- | | |
|---|-------------|
| Preliminary Preferred Route | Minor Road |
| Watercourse | Wooded Area |
| Study Area | Waterbody |
| Natural / Environmental Features | |
| Expressway / Highway | |
| Major Road | |

0 500 1,000
metres
1:38,000 (At original document size of 8.5x11)

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, 2021.



Project Location 160961450 REVA
County of Northumberland Prepared by BK on 2021-09-28
Technical Review by SE on 2021-09-24

Client/Project
ENBRIDGE GAS INC. PROPOSED NATURAL GAS
PIPELINE TO SERVE THE COMMUNITY OF
HALDIMAND SHORES

Figure No.

1

Title
Study Area

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.



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



November 1, 2021

Dear Landowner / Resident

Reference: Enbridge Gas Inc. – Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand (the Project). The Project will involve the construction of up to approximately 9 kilometers (km) of natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.

For further details, please refer to the attached map.

You are receiving this letter because the preliminary preferred route is in proximity to your property.

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)*.

An Environmental Report, summarizing the results of the Environmental Study, would accompany Enbridge Gas' application to the OEB as part of the application requesting a Leave to Construct (LTC), should one be required.¹ It is anticipated that the Environmental Report for the study will be completed in January 2022, after which Enbridge Gas may file an LTC application. Construction is currently anticipated to begin in Winter 2022.

The Virtual Open House will be available for two weeks starting on **November 8, 2021**, and finishing on **November 22, 2021**, at <https://solutions.ca/HaldimandShoresEA/>.

A questionnaire will be available as part of the Virtual Open House, and you will have the ability to submit comments and/or questions about the proposed Project. In addition, a copy of the Virtual Open House story boards will be available on the Enbridge Gas project website at: <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>.

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 a result

¹ The Ontario government has proposed a change to the LTC filing requirements to increase the cost threshold from \$2 million to \$10 million (see <https://ero.ontario.ca/notice/019-4029>). If this change takes effect January 1, 2022, as proposed, Enbridge Gas anticipates that this Project will not require LTC approval before it could proceed. In any event, Enbridge Gas has decided to proceed with initiation of an Environmental Study.



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



of the social distancing requirements set out by the Province of Ontario due to COVID-19, a Virtual Open House will be held in place of an in-person Open House.

Input received during the Virtual Open House will be used to inform the selection of the Preferred Route and to develop site specific environmental protection or mitigation measures for the Project.

We kindly request that any input and comments regarding the Project are provided by December 8, 2021.

Please feel free to share this letter with your neighbours. If you are a landowner, it would also be appreciated if this letter could be shared with your tenants.

Regards,

Stantec Consulting Ltd.

Kayla Ginter

Kayla Ginter Environmental Coordinator, Assessment and Permitting
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

Attachment: Figure 1 – Study Area

- c. Norm Dumouchelle, Advisor Environmental, Enbridge Gas Inc.
Sonia Fazari, Sr. Advisor Municipal and Stakeholder Engagement, Enbridge Gas Inc.

*APPENDIX B5:
VIRTUAL OPEN HOUSE MATERIALS*

Haldimand Shores Community Expansion Project

Virtual Open House



Welcome

- This presentation will take you 15 minutes to complete.
- Press the next button to navigate to the next slide at any time.
- To return to the previous slide, press the previous button.
- You can mute the audio at any time by pressing the speaker icon.
- The presentation slides as well as the audio script are available for download (see the Resources tab in the top right corner).
- Questions and comments can be submitted using the questionnaire found in the Resources tab.
- If you would like to receive future Project updates, please complete the "Contact Information" section of the questionnaire.

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.



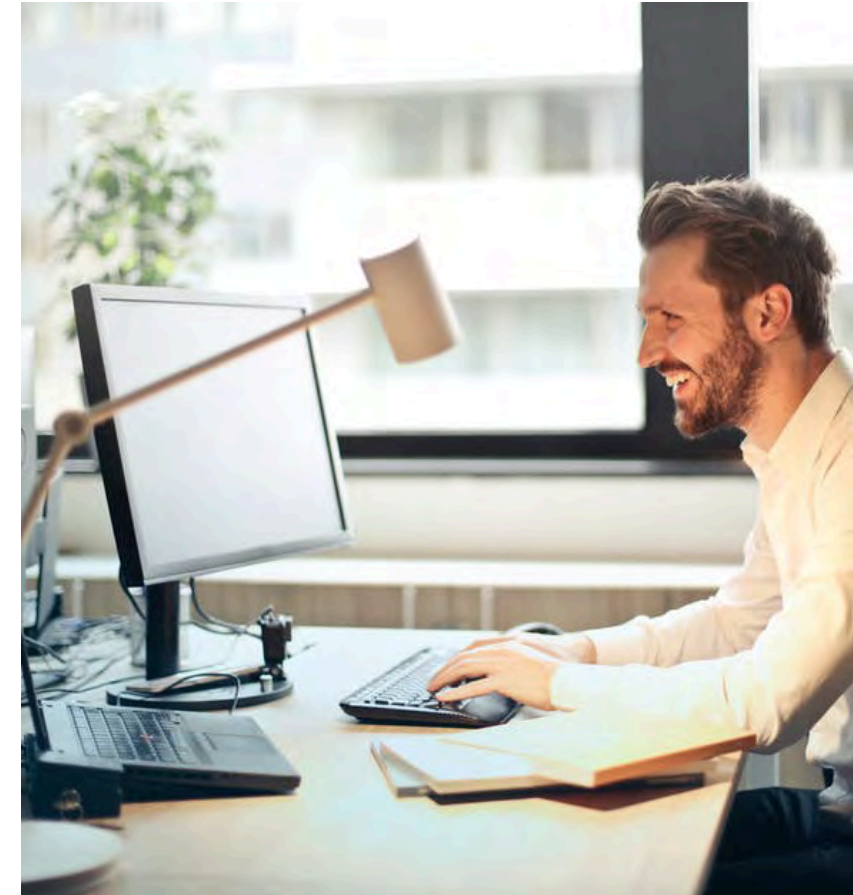
Haldimand Shores Community Expansion Project

Virtual Open House



Purpose of the Virtual Open House

- Provide a safe alternative to an in-person meeting due to current social distancing requirements set out by the Province of Ontario and the Government of Canada.
- 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.



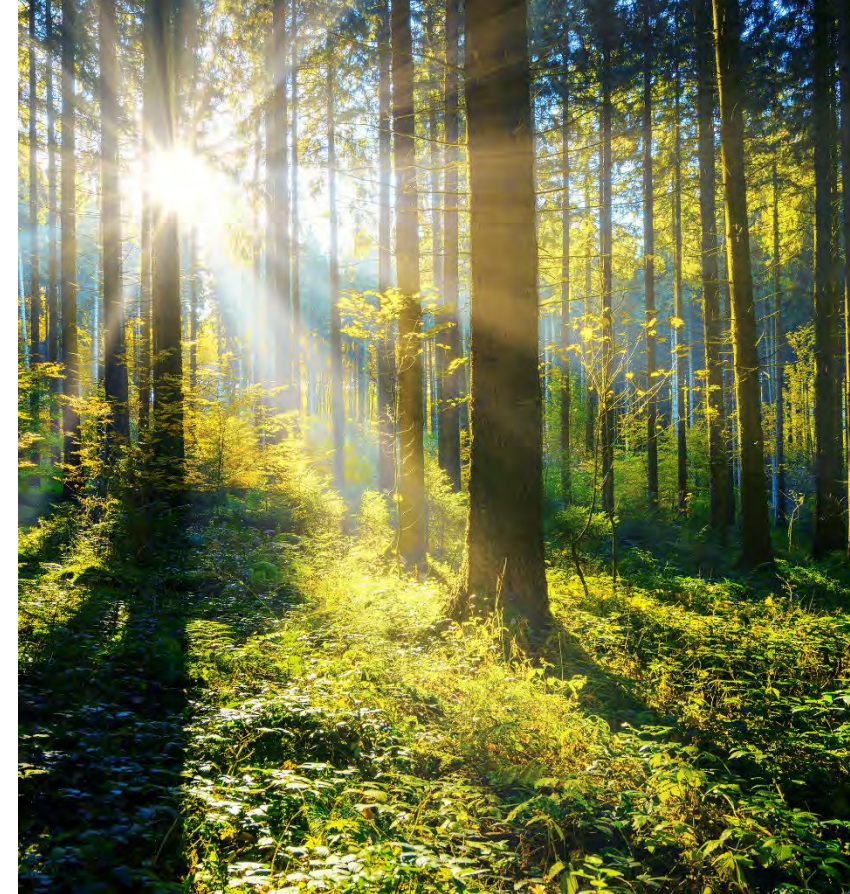
Haldimand Shores Community Expansion Project

Virtual Open House



Land Acknowledgement

We respectfully acknowledge that the Project is located in the traditional and treaty territory of the Michi Saagiig (Mississauga) and Chippewa Nations, collectively known as the Williams Treaties First Nations – Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Mississaugas of Scugog Island First Nation, Chippewas of Rama First Nation, Beausoleil First Nation, and Chippewas of Georgina Island First Nation.



Haldimand Shores Community Expansion Project

Virtual Open House



Indigenous Peoples Policy

Enbridge Gas 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 Gas 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 Gas commits to pursue sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge Gas conducts business. To achieve this, Enbridge Gas 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 Gas projects and operations through processes that seek to achieve early and meaningful engagement. Indigenous engagement help 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 Gas and Indigenous communities.

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



Haldimand Shores Community Expansion Project

Virtual Open House



Project Overview

- The Project will involve the installation of up to approximately 9 kilometers (km) of a combination of 2- and 4-inch steel and polyethylene natural gas pipeline.
- The proposed Project is located in the Township of Alnwick/Haldimand in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.



Haldimand Shores Community Expansion Project

Virtual Open House



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.



Haldimand Shores Community Expansion Project

Virtual Open House



Ontario Energy Board (OEB) Review and Approval Process

It is anticipated that the Environmental Report for the study will be completed in January 2022, after which Enbridge Gas may file an 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

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.



Haldimand Shores Community Expansion Project

Virtual Open House



Consultation and Engagement

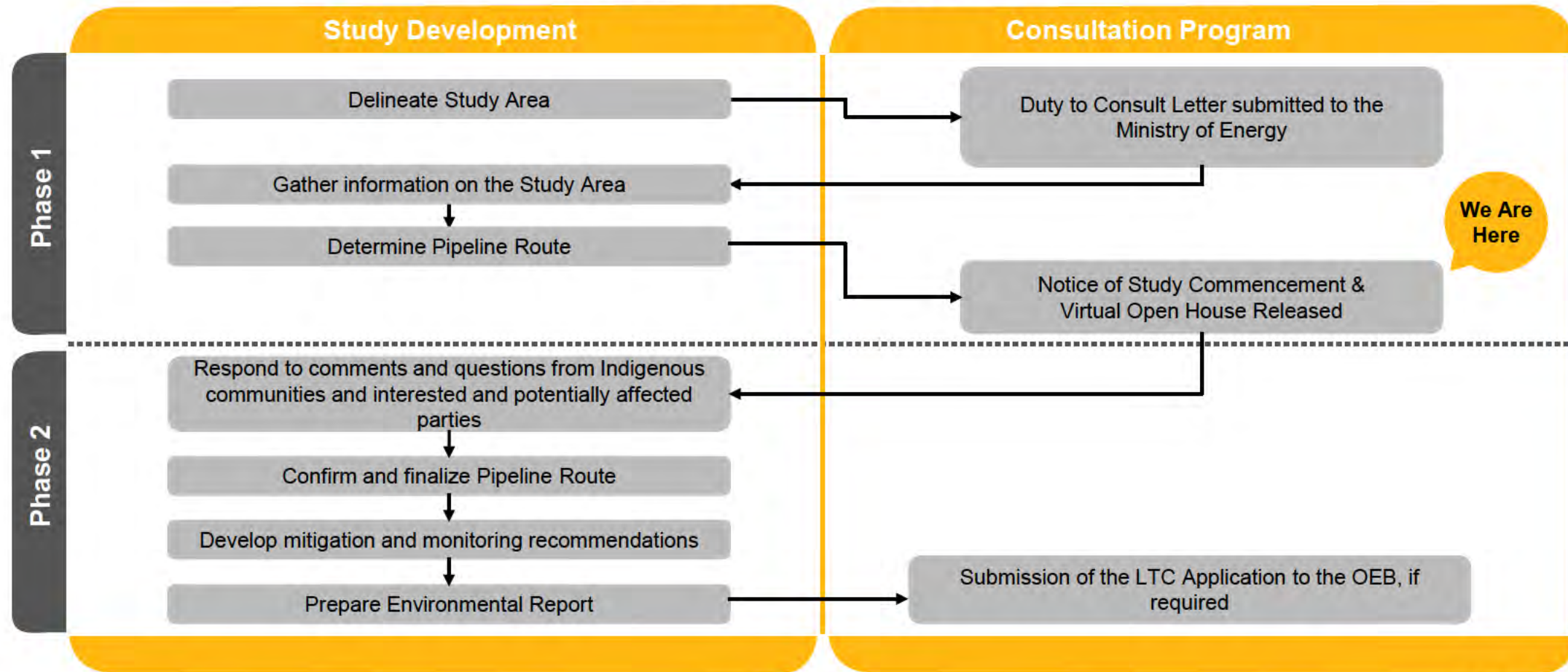
- Consultation and engagement are key components of the Environmental Report.
- At the outset of the Project, Enbridge Gas submits a Project Description to the Ministry of Energy; upon review, the Ministry of Energy determines potential impacts on aboriginal or treaty rights and identify Indigenous communities that Enbridge Gas must consult with during the entirety of the Project.
- The consultation and engagement program helps identify and address Indigenous community and stakeholder concerns and issues, provides information about the Project to the stakeholders, and allow for participation in the Project review and development process.
- Input will be used to help finalize the pipeline route and mitigation plans for the project.
- Once the LTC application is made to the OEB, any party with an interest in the Project, including members of the public, can participate in the process.



Haldimand Shores Community Expansion Project

Virtual Open House

Environmental Study Process



Haldimand Shores Community Expansion Project

Virtual Open House



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.



Haldimand Shores Community Expansion Project

Virtual Open House



Access and Land Requirements

- While the majority 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.



Haldimand Shores Community Expansion Project

Virtual Open House



Socio-economic Features

The Project will mainly be constructed in municipal road allowances. As a result of construction, private businesses, agricultural operations, residential land and cottages along the pipeline route as well as land regulated by Lower Trent Conservation 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 easement.

Example Mitigation Measures

- Provide access across the construction area.
- Restrict construction to daylight hours and adhere to applicable noise by-laws.
- Develop and implement a Traffic Control Plan.
- Place fencing at appropriate locations for safety.
- Implement a 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).



Haldimand Shores Community Expansion Project

Virtual Open House



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, if necessary.
- Replant vegetation along waterways.



Haldimand Shores Community Expansion Project

Virtual Open House



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, if required.

Potential Effects

- Damage or destruction of archaeological or historical resources.

Example Mitigation Measures

- Archaeological assessment of the construction footprint, with review and comment from the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI).
- Cultural heritage assessment (for built heritage features and cultural heritage landscapes) of the construction right-of-way, with review and comment from MHSTCI.
- Reporting of any previously unknown archaeological or historical resources uncovered, or suspected of being uncovered, during excavation.



Haldimand Shores Community Expansion Project

Virtual Open House



Terrestrial Resources

During construction, natural environmental features such as wildlife habitat and vegetated/wooded areas will 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.



Haldimand Shores Community Expansion Project

Virtual Open House



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.



Haldimand Shores Community Expansion Project

Virtual Open House



Next Steps

After this Virtual Open House, we intend to pursue the following schedule of activities:



Haldimand Shores Community Expansion Project

Virtual Open House



Thank-you!

On behalf of the Project team, thank-you for listening to the Virtual Open House presentation. Please complete the Questionnaire, located in the Resources Tab. Please complete the Questionnaire by December 8, 2021, for your comments to be considered as part of the Environmental Report.

Kayla Ginter

Project Coordinator
Stantec Consulting Ltd.
300W-675 Cochrane Drive,
Markham ON L3R 0B8
Phone: (226) 980-5347
Email:
HaldimandShoresEA@Stantec.com

Norm Dumouchelle

Advisor Environmental
Enbridge Gas Inc.
50 Keil Drive
Chatham, ON N7M 5M1
Phone: 1-519-436-4600 ext. 5003407
Email: HaldimandShoresEA@Stantec.com

For more information about the proposed project, please visit our project website at: <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>



Slide #	Slide Theme	Script
1	Welcome/ Our Commitment	<p>Welcome</p> <p>Thank-you for viewing the Virtual Open House for the Haldimand Shores Community Expansion Project. This presentation will take you 15 minutes to complete. You may pause the presentation at any time to read over the presentation slides. A copy of the presentation slides is available for download from the Resources Tab. Questions and comments can be submitted using the questionnaire, also found on the Resources tab, and an Enbridge Gas or Stantec representative will respond.</p> <p>If you would like to receive future Project updates, please complete the "Contact Information" section of the questionnaire.</p> <p>Our Commitment</p> <p>Enbridge Gas is committed to involving Indigenous communities, agencies, interest groups, and community members in this proposed project by providing you with up-to-date information in an open, honest and respectful manner, and will carefully consider your input.</p> <p>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 all operations in an environmentally responsible manner.</p>
2	Purpose of the Virtual Open House	<p>Enbridge Gas is committed to the health and safety of the public and its workers. As a result of the COVID-19 pandemic and physical distancing requirements set out by the Province of Ontario and the Government of Canada, Enbridge Gas is providing a Virtual Open House as a safe alternative to an in-person information session.</p> <p>The Purpose of the Virtual Open House is to consult with Indigenous communities and engage with members of the public and regulatory authorities regarding the proposed route, potential impacts, and mitigation measures. The Virtual Open House also provides an opportunity for individuals to ask any questions and provide comments to representatives from Enbridge Gas and Stantec.</p>
3	Land Acknowledgement	<p>We respectfully acknowledge that the Project is located in the traditional and treaty territory of the Michi Saagiig (Mississauga) and Chippewa Nations, collectively known as the Williams Treaties First Nations – Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Mississaugas of Scugog Island First Nation, Chippewas of Rama First Nation, Beausoleil First Nation, and Chippewas of Georgina Island First Nation.</p>
4	Indigenous Peoples Policy	<p>Enbridge Gas 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 Gas recognizes and realizes the importance of reconciliation between Indigenous communities and the</p>

		<p>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 Gas commits to pursue sustainable relationships with Indigenous Nations in proximity to where Enbridge Gas conducts business. To achieve this, Enbridge Gas will govern itself by the following principles as seen on this slide.</p>
5	Project Overview	<p>The Project will involve the installation of up to approximately 9 kilometers (km) of a combination of 2- and 4-inch steel and polyethylene natural gas pipeline.</p> <p>The proposed Project is located in the Township of Alnwick/Haldimand in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.</p> <p>Pending approval by the Ontario Energy Board, construction of the pipeline is planned to begin in Q4 of 2022 and be in service by 2023.</p>
6	Environmental Study Process	<p>The environmental study and Environmental Report will be completed according to the Ontario Energy Board's Environmental Guidelines.</p> <p>The study will:</p> <ul style="list-style-type: none"> • Undertake engagement to understand the views of interested and potentially affected parties. • Consult with Indigenous communities and key stakeholders 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; and, • Develop an appropriate environmental inspection, monitoring, and follow-up program.
7	OEB Review and Approval Process	<p>It is anticipated that the Environmental Report for the study will be completed in January 2022, after which Enbridge Gas may file a Leave-to-Construct application. The application to the Ontario Energy Board will include the following information on the Project:</p> <ul style="list-style-type: none"> • The need for the Project • Environmental Report and mitigation measures • Project costs and economics • Pipeline design and construction • Land requirements • Consultation with Indigenous Communities <p>The Ontario Energy Board will then hold a public hearing to review the Project. If the Ontario Energy Board determines that the Project is in the public interest, it will approve construction of the Project. Additional information about the Ontario Energy Board process can be found on their website.</p>

8	Consultation and Engagement	<p>Consultation and engagement are a key component of the Environmental Report being completed as part of the Leave to Construct Application. It helps to identify and address Indigenous community and stakeholder concerns in the early stages of a project.</p> <p>Enbridge Gas submits a Project Description to the Ministry of Energy who then use this Project Description to determine potential impacts on aboriginal and treaty rights and identify Indigenous communities that Enbridge Gas must consult with during the entirety of the Project.</p> <p>Input from this Virtual Open House will be used to help finalize the pipeline route and to create mitigation plans to be implemented in the final design and construction.</p> <p>Once the Leave-to-Construct application is submitted to the Ontario Energy Board, any party with an interest in the Project can participate in their review process.</p>
9	Environmental Study Process	<p>This slide shows the environmental study process that Enbridge Gas follows as part of the Ontario Energy Board's Environmental Guidelines. Enbridge Gas is currently nearing the end of Phase 1.</p>
10	Environment, Health and Safety Policy	<p>Enbridge Gas is committed to protecting the health and safety of all individuals affected by our activities.</p> <p>Enbridge Gas will provide a safe and healthy working environment and will not compromise the health and safety of any individual.</p> <p>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.</p> <p>Enbridge Gas is committed to environmental protection and stewardship and we recognize that pollution prevention, biodiversity, and resource conservation are key to a sustainable environment.</p> <p>All employees are responsible and accountable for contributing to a safe working environment, for fostering safe working attitudes, and for operating in an environmentally responsible manner.</p>
11	Access and Land Requirements	<p>While the majority 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.</p> <p>Enbridge Gas has a comprehensive Landowner Relations Program that uses a dedicated Lands Advisor who would:</p> <ul style="list-style-type: none"> • Provide direct contact & liaison between landowners and Enbridge Gas.

		<ul style="list-style-type: none"> • 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.
12	Socio-economic Features	<p>The Project will mainly be constructed in municipal road allowances. As a result of construction, private businesses, agricultural operations, residential land and cottages along the pipeline route as well as land regulated by Lower Trent Conservation may be impacted.</p> <p>Potential socio-economic effects of construction include temporary increases in noise, dust and air emissions, increased construction traffic, temporary impairment of residential and/or cottage property use and vegetation clearing.</p> <p>Some of the mitigation measures that could be implemented during construction include providing access across construction areas, restricting construction to daylight hours, adhering to applicable noise by-laws, implementing a water well monitoring program, and re-vegetating cleared areas. Additional examples are provided on this slide for your review.</p>
13	Aquatic Resources	<p>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.</p> <p>Potential Effects to aquatic environments include disruption and alteration to aquatic species and habitat, increased erosion, sedimentation, and turbidity resulting from removal of vegetation.</p> <p>The following are examples of mitigation measures that may be implemented to reduce the potential effects of construction:</p> <ul style="list-style-type: none"> • 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. • For in-channel construction, protect aquatic species through methods such as flow diversion and/or dewatering, fish rescue planning etc., and manage sedimentation and turbidity. • Restore and seed disturbed areas to establish habitat and reduce erosion, if necessary; and • Replant vegetation along waterways.

14	Cultural Heritage Resources	<p>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.</p> <p>As outlined on this slide, there are several mitigation measures that will be employed to reduce the potential effects construction could have on cultural heritage, as approved by the Ministry of Heritage, Sport, Tourism and Culture Industries.</p>
15	Terrestrial Resources	<p>During construction, natural environmental features such as wildlife habitat and vegetated or wooded areas will need to be crossed. Potential effects include damage of vegetation and wildlife in the construction area.</p> <p>Prior to construction, surveys (including Species at Risk surveys) will be conducted to determine opportunities for wildlife habitat to exist. Tree removals will be conducted outside of migratory bird windows (typically from April 1 – August 31), to the extent possible. Construction areas will be clearly marked to avoid accidental damage and affected areas will be restored or seeded to establish habitat and reduce erosion. Permits from conservation authorities, municipalities, and agencies will be secured as required, and conditions outlined will be followed in order to reduce damage and disturbance to vegetation and wildlife.</p>
16	Pipeline Design	<p>The high-grade plastic and steel pipeline is designed to meet or exceed the regulations of the Canadian Standards Association and the applicable regulations of the Technical Standards & Safety Association.</p> <p>Enbridge Gas takes many steps to ensure safe, reliable operation of the network of natural gas pipelines, such as designing, constructing, and testing pipelines to meet or exceed requirements set by industry standards and regulatory authorities, continuously monitoring the entire network, and performing regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.</p>
17	Next Steps	<p>Serving hundreds of communities in Ontario, we at Enbridge Gas consider ourselves strong community partners who believe in and are committed to consultation and engagement.</p> <p>During the planning stages for this Project, we have consulted and will continue to consult with Indigenous Communities and engage with local landowners, government agencies and other interested parties that could be impacted by the Project.</p> <p>After this Virtual Open House is complete, we plan to complete our Environmental Report.</p> <p>When complete, we may submit it to the Ontario Energy Board along with other Leave-to-Construct documents. If a Leave-to-Construct is required, we anticipate we'll receive a response from the Ontario Energy Board by Q3 of 2022. Permitting, pipeline design, and construction planning will then take place. We would plan to start construction in Q4 of 2022 and be in service by 2023.</p>

18	Thank-you	<p>On behalf of the Project team, thank-you for listening to the Virtual Open House presentation for the Haldimand Shores Community Expansion Project.</p> <p>If you have any questions or comments, or you would like to be kept up to date on the Project please complete the Questionnaire located in the Resources Tab. Please complete the Questionnaire by December 8, 2021, to be considered as part of the Environmental Report that will be submitted to the Ontario Energy Board. Please note that comments will still be received after this date and will be reviewed and considered during the planning and design phase, as applicable.</p> <p>To return to a specific slide, please press the “menu” button and select the slide you wish to review. To close the presentation, please press the “save and exit” button.</p> <p>For more information about the proposed project, please visit our project website at the website link shown on this slide.</p>
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Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



Thank you for attending the Haldimand Shores Community Expansion Project Virtual Open House! 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 send an email to HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message. If you have a question that requires a response, please fill out the **Contact Information** section at the end of this form and a representative will respond as soon as possible.

Please complete this questionnaire by **December 8, 2021**, to be considered as part of the Environmental Report submitted to the Ontario Energy Board (OEB). 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?

- ☐ Directly affected landowner
- ☐ 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 any features along the pipeline route you feel are important to consider during the environmental study.



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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 Environmental Assessment OEB process? Please note below:

7. Did the content provided in the Virtual Open House meet your needs?

8. How did you hear about the Virtual Open House? Check all that apply:

☐ Newspaper Advertisement

☐ Project Notification Letter

☐ Word of Mouth

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



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



Thank you for completing this questionnaire. If you would like to be informed of Project updates, please provide us with your full contact information. 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:

HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message.

Contact Information

Name: _____
Address: _____
Email: _____
Phone: (____) _____

Information will be collected and used in accordance with the Freedom of Information and Protection of Privacy Act. This information will be used to assist Enbridge Gas Inc. in meeting applicable approval requirements. This material will be maintained on file for use during the study and may be included in Project documentation. Unless indicated otherwise, personal information and all comments will become part of the public record and may be publicly released as part of Project documentation.



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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Please complete this questionnaire by **December 8, 2021**, to be considered as part of the Environmental Report submitted to the Ontario Energy Board (OEB). 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?

- ☒ Directly affected landowner
- ☐ 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?

Environmental damage, removal of mature trees, and treatment of water flows are my main concerns

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 any features along the pipeline route you feel are important to consider during the environmental study.

creeks flowing into the Nawautin Wildlife sanctuary, significant number of mature trees.



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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 Environmental Assessment OEB process? Please note below:

7. Did the content provided in the Virtual Open House meet your needs?

8. How did you hear about the Virtual Open House? Check all that apply:

☒ Newspaper Advertisement

☒ Project Notification Letter

☐ Word of Mouth

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



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



Thank you for completing this questionnaire. If you would like to be informed of Project updates, please provide us with your full contact information. 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:

HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message.

Contact Information	
Name:	<input type="text"/>
Address:	<input type="text"/>
Email:	<input type="text"/>
Phone:	<input type="text"/>

Information will be collected and used in accordance with the Freedom of Information and Protection of Privacy Act. This information will be used to assist Enbridge Gas Inc. in meeting applicable approval requirements. This material will be maintained on file for use during the study and may be included in Project documentation. Unless indicated otherwise, personal information and all comments will become part of the public record and may be publicly released as part of Project documentation.

EGI Haldimand Shores questionnaire

Submitted by: Anonymous user

Submitted time: Nov 9, 2021, 11:45:27 PM

1. What is your interest in this project?

- **dir_affected_landowner res_interest_gas_conv**

2. What is your view of the proposed Project?

The provision of natural gas will be a welcome addition to the community. A permanent source of natural gas for heating and other purposes will eliminate the vagaries of weather-related deliveries occasionally experienced with propane. It'll also mean the removal of a large and unsightly propane storage tank.

3. Please indicate if the Project will have any potential impacts to you, your property, or your business that you would like addressed.

No doubt there will be some temporary disruption and minor inconveniences. It is expected that the net gain will be worth the effort.

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

Protection of the waterways leading to the lake and the neighbouring nature sanctuary.

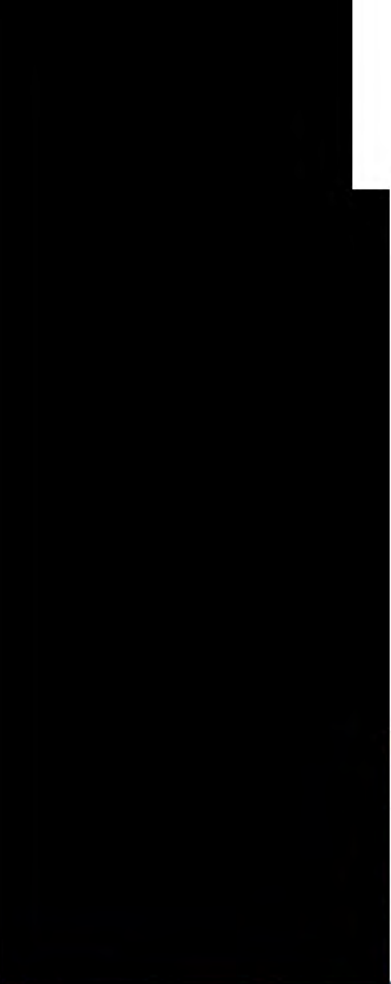
6. Please provide any additional information about the Project and/or Environmental Assessment OEB process? Please

no
Will there be an opportunity for every individual home along the route to be connected to the gas line to be in place? What are the details that need to be contracted between Enbridge and each homeowner? What impact will there be re: construction and connection at each home? Are there costs -and if so, what are the costs- associated with making home connections?

8. Please provide any additional information about the Virtual Open House?

- **h**

C
on



EGI Haldimand Shores questionnaire

Submitted by: Anonymous user

Submitted time: Nov 10, 2021, 9:14:57 AM

1. What is your interest in this project?

- **Directly affected landowner**

2. What is your view of the proposed Project?

Agree on using Natural gas, as yet to thoroughly read all the submitted information, but will proceed to do so in future.

3. Please indicate if the Project will have any potential impacts to you, your property, or your business that you would like addressed.

Yes it will hopefully have positive impacts.

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

I feel strongly that the right of way that leads to the Nauwatin Sanctuary be thoroughly inspected and preserved, I live beside it on Kanata Drive.

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

Yes

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

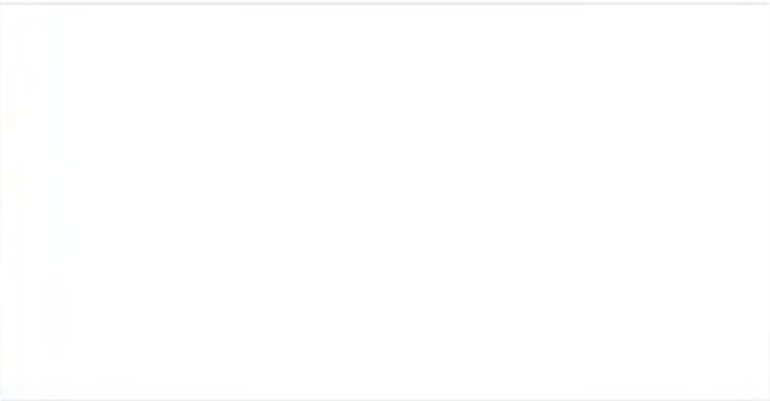
Not not at present

7. Did the content provided in the Virtual Open House meet your needs?

Will,let you know soon

8. How did you hear about the Virtual Open House?

- **Word of Mouth**





Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



Thank you for attending the Haldimand Shores Community Expansion Project Virtual Open House! 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 send an email to HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message. If you have a question that requires a response, please fill out the **Contact Information** section at the end of this form and a representative will respond as soon as possible.

Please complete this questionnaire by **December 8, 2021**, to be considered as part of the Environmental Report submitted to the Ontario Energy Board (OEB). 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?

- ☐ Directly affected landowner
- ☐ 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?

I think it is a good idea but with the current climate of wanting to stop all fossil fuel burning in the near future is the price going to sky rocket out of reach for the homeowners after this is installed?

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.).

As stated the pipeline will be installed in the road allowances but how far from the road edge would it be installed? Our property is lined with pine trees on our side of the ditch line. Where would it be installed along the road?

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

Consider the numerous large trees along the route line



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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 Environmental Assessment OEB process? Please note below:

no

7. Did the content provided in the Virtual Open House meet your needs?

Yes for now

8. How did you hear about the Virtual Open House? Check all that apply:

☒ Newspaper Advertisement

☒ Project Notification Letter

☐ Word of Mouth

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



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



Thank you for completing this questionnaire. If you would like to be informed of Project updates, please provide us with your full contact information. 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:

HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message.

Contact Information	
Name:	<input type="text"/>
Address:	<input type="text"/>
Email:	<input type="text"/>
Phone:	<input type="text"/>

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EGI Haldimand Shores questionnaire

Submitted by: Anonymous user

Submitted time: Nov 16, 2021, 5:33:32 PM

1. What is your interest in this project?

- **Directly affected landowner**

2. What is your view of the proposed Project?

The sooner the better

3. Please indicate if the Project will have any potential impacts to you, your property, or your business that you would like addressed.

No impacts but would like to know more pertaining to individual connections.

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

Stream crossings.

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

Yes

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

No

7. Did the content provided in the Virtual Open House meet your needs?

Yes

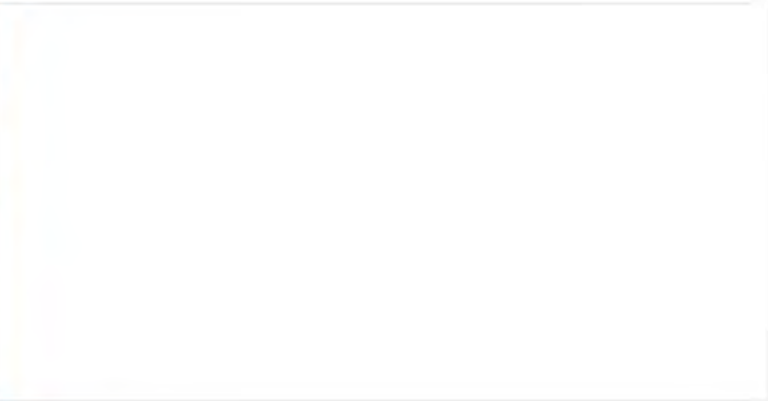
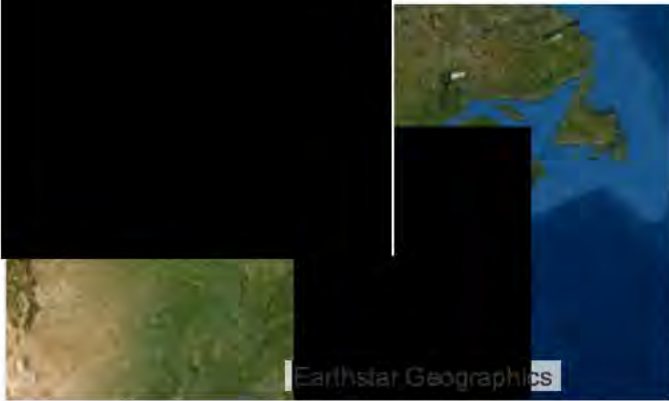
8. How did you hear about the Virtual Open House?

- **newspaper_advertisement project_notification_letter**

9
a
A
C

VOH Comment #5
comments about this Project, not addressed above, you would like to bring to our

individual homes?



EGI Haldimand Shores questionnaire

Submitted by: Anonymous user

Submitted time: Nov 18, 2021, 12:05:49 PM

1. What is your interest in this project?

- **dir_affected_landowner res_interest_gas_conv interested_citizen**

2. What is your view of the proposed Project?

In general good idea

3. Please indicate if the Project will have any potential impacts to you, your property, or your business that you would like addressed.

Concerns re access to our property extent and duration

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

Nature sanctuary

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

Yes

7. The information provided in the Virtual Open House meet your needs?

Yes

8. Do you have any comments or suggestions about the Virtual Open House?

- **Information Letter**

C





Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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Please complete this questionnaire by **December 8, 2021**, to be considered as part of the Environmental Report submitted to the Ontario Energy Board (OEB). 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?

- ☐ Directly affected landowner
- ☐ 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 any features along the pipeline route you feel are important to consider during the environmental study.

Chub Point Nature Reserve property of the Northumberland Land Trust



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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 Environmental Assessment OEB process? Please note below:

7. Did the content provided in the Virtual Open House meet your needs?

8. How did you hear about the Virtual Open House? Check all that apply:

☐ Newspaper Advertisement

☐ Project Notification Letter

☒ Word of Mouth

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

Please consider locating the pipeline on the west side of the road so as not to interfere with the Chub Point Nature Preserve. Many species that live in these wetlands would be adversely affected.



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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1. What is your interest in this Project?

- ☐ Directly affected landowner
- ☐ 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?

The concept of this project is correct at this moment in time.

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.).

No

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

It would be preferable for the Pipeline to be down the westy side of Station Rd and away from the Chub Point Nature Reserve



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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 Environmental Assessment OEB process? Please note below:**

No

7. **Did the content provided in the Virtual Open House meet your needs?**

Unable to attend

8. **How did you hear about the Virtual Open House? Check all that apply:**

☐ Newspaper Advertisement

☐ Project Notification Letter

☐ Word of Mouth

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

See # 5 above



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



Thank you for completing this questionnaire. If you would like to be informed of Project updates, please provide us with your full contact information. 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:

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Haldimand Shores Community Expansion Project Virtual Open House Questionnaire

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1. What is your interest in this Project?

- ☒ Directly affected landowner
☐ 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?

Welcome need for this community

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.).

The project will definitely impact us as we are along the pipeline route

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

Location of pipeline on our property

Haldimand Shores Community Expansion Project Virtual Open House Questionnaire

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 Environmental Assessment OEB process? Please note below:

Would like to be updated on progress

7. Did the content provided in the Virtual Open House meet your needs?

Met initial needs but still require info on location of pipeline especially on our property as well as costs

8. How did you hear about the Virtual Open House? Check all that apply:

☐ Newspaper Advertisement

☒ Project Notification Letter

☐ Word of Mouth

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

Haldimand Shores Community Expansion Project Virtual Open House Questionnaire

Thank you for completing this questionnaire. If you would like to be informed of Project updates, please provide us with your full contact information. 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: HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message.

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Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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1. What is your interest in this Project?

- ☒ Directly affected landowner
- ☐ 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?

I personally do not like the idea because I am happy with propane as it is less harmful to the environment.

Plus I would like to know what the cost to all of us would be. What if I had the piping installed but did not hook up to my furnace. What would be the cost? Are there any government grants associated with this 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.).

Digging up our land to put in piping - who is responsible for repairing it?

There is a possibility of you having to dig a trench again to repair any leaks, which will screw up my lawn again. Who pays for the repairs?

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

The fact that if a leak would happen, Methane gas will be released into the atmosphere (causing green house gases)

Plus natural gas is 90% Methane (when the mix is in the 5 to 15% range anything can ignite it including a cell phone call, a light switch, any kind of static spark or a lit cigarette.

This will not happen with propane.

I thought we as a country were aiming to reduce climate change (warming)





Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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 Environmental Assessment OEB process? Please note below:

OEB is a lost cause.

You should be dealing directly with the Ministry of the Environment for our area.

7. Did the content provided in the Virtual Open House meet your needs?

Not really

Especially since I really do not want the natural gas. I'm quite happy with my propane dealer and our delivery schedule

8. How did you hear about the Virtual Open House? Check all that apply:

☒ Newspaper Advertisement

☐ Project Notification Letter

☐ Word of Mouth

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

Yes I'm disappointed that there has been no communication between our town council and us the residents.

They don't seem to care about the effect to the environment or what our needs are. No one asked us or surveyed us to see if we wanted natural gas brought into our area.



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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1. What is your interest in this Project?

- ☐ Directly affected landowner
- ☐ Business Owner
- ☐ Surrounding landowner
- ☐ Resident interested in natural gas conversion
- ☐ Interested citizen
- ☐ Member of interest group
- ☐ Government official
- ☒ Other: Land Steward for Chub Point Nature Reserve

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.).

I am concerned that the pipeline will travel on the east side of Station Road down to the 4 way stop sign and proceed west from there along Lakeshore Road. I would rather that it travels down the west side of Station Road.

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

Chub Point is a Nature Reserve protected by Northumberland Land Trust, I am Land Steward for the property. This reserve has vulnerable species such as salamanders, turtles, snakes plus it is migratory stop for birds. Also, the property at the north end has Acer pensylvanicum, Striped Maple a small understory Maple that I have not seen anywhere else south of the 401. These are just a few of the species I am concerned with as I am a new Land Steward and I have just started documenting species there. The reptiles and amphibians are particularly vulnerable to checking





Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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 Environmental Assessment OEB process? Please note below:

I would like to see a map of where the pipeline will be actually placed and I am hoping it will be on the west side of Station Road.

7. Did the content provided in the Virtual Open House meet your needs?

It was informative

8. How did you hear about the Virtual Open House? Check all that apply:

☐ Newspaper Advertisement

☐ Project Notification Letter

☒ Word of Mouth

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

I understand the installation process, 3' from the road and 4' below ground. I am sure that the pipeline will be installed properly, but my concerns are the same as mentioned above. As it is the future of Chub Point and its relationship with this pipeline 100 years from now. I hope you understand and I thank you for letting me express my concerns.



Haldimand Shores Community Expansion Project Virtual Open House Questionnaire



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Thank you for attending the Haldimand Shores Community Expansion Project Virtual Open House! 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 send an email to HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message. If you have a question that requires a response, please fill out the **Contact Information** section at the end of this form and a representative will respond as soon as possible.

Please complete this questionnaire by **December 8, 2021**, to be considered as part of the Environmental Report submitted to the Ontario Energy Board (OEB). 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?

- ☐ Directly affected landowner
- ☐ 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.).
 Trucks and heavy vehicles through the heart of the village affecting the older houses - cannot handle the vibrations. Trucks need to use Brimley Road to go to Lakeshore Road.

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

The Nawautin conservation area and Chubb Point are very fragile ecosystems and Nawautin is a "quiet" place that needs to be respected.

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 Environmental Assessment OEB process? Please note below:**

I would like to be kept informed.

7. **Did the content provided in the Virtual Open House meet your needs?**

8. **How did you hear about the Virtual Open House? Check all that apply:**

☐ Newspaper Advertisement

☐ Project Notification Letter

☒ Word of Mouth

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. 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: HaldimandShoresEA@stantec.com or call (226) 980-5347 and leave a detailed message.

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APPENDIX B6:
PROJECT CORRESPONDENCE

N/A - Not Available

Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
1	Former Ministry of Energy (MOE)	Dan Delaquis (MOE)	Email	August 27, 2021 and August 30, 2021	Enbridge Gas provided the MOE, formerly the Ministry of Energy, Northern Development and Mines (MENDM), with a letter detailing an updated Project Description, noting that a Leave to Construct application will be filed with the Ontario Energy Board (OEB), and inquired as to if the Project triggers the Duty to Consult process.	20-Oct-21	The MOE responded with a Letter of Delegation noting that the Project may have the potential to affect Indigenous communities, and provided a list of these potentially affected communities to consult with.
See Appendix B1 and B2	All agencies and municipalities on the Project's Contact Lists	N/A	Email	1-Nov-21	Notice of Study Commencement.	N/A	N/A
2	Department of Fisheries and Oceans Canada	fisheriesprotection@dfo-mpo.gc.ca	Email	1-Nov-21	The DFO provided confirmation of receipt of the Notice of Study Commencement and submission of a Request for Review form.	N/A	N/A
3	Technical Standards and Safety Authority (TSSA)	Kourosh Manouchehri	Email	1-Nov-21	The TSSA replied to the Notice of Study Commencement noting an application will need to be filled and submitted for review by the TSSA.	1-Nov-21	Stantec thanked Kourosh Manouchehri for their email and confirmed an application to TSSA would be completed later in the planning process.
4	Ministry of Environment, Conservation, and Parks (MECP), Environmental Assessment Branch	Jon Orpana	Email	2-Nov-21	MECP requested a shape file of the proposed pipeline and requested that Stantec confirm if the Species at Risk Branch (SARB) of the MECP was notified about the Project.	2-Nov-21	Stantec confirmed the SARB was notified and a shape file of the Preliminary Preferred Route (PPR) was provided to the MECP.
5	Conservation Ontario	Leslie Rich	Email	2-Nov-21	Leslie Rich advised Stantec to contact the local conservation authority on the Project.	2-Nov-21	Stantec thanked Leslie Rich for their email and confirmed that Lower Trent Conservation was provided a Notice of Study Commencement.
6	Ministry of Transportation (MTO)	Cheryl Tolles	Email	2-Nov-21	Cheryl Tolles notified Stantec that the Notice of Study Commencement was forwarded to Alex Gitkow. Cheryl Tolles requested that Alex Gitkow be added to the Project Contact list.	2-Nov-21	Stantec thanked Cheryl Tolles for their email and confirmed that the Project Contact List was updated accordingly and Alex Gitkow had been provided a copy of the Notice.
6.1	Ministry of Transportation (MTO)	Alexandre Gitkow	Email	18-Nov-21	MTO confirmed they had no concerns with the proposed Project as the PPR follows the municipal road system and is well beyond the provincial highway system	N/A	N/A
7	Councillor at the Township of Alnwick/Haldimand	Mike Filip	Email	2-Nov-21	Councillor Mike Filip inquired on if the installation of fibre optic cable (a planned development in the area) would be installed at the same time as construction of the Project.	2-Nov-21	Stantec relayed that construction of the Project is currently anticipated to take place Q4 of 2022 to October 2023 and requested that Councillor Filip clarify when fibre conduit would be installed to determine if construction of the utilities would overlap.
8	Impact Assessment Agency of Canada (IAAC) / Government of Canada	Anjala Puvananathan	Email	9-Nov-21	IAAC provided a Letter of Non-Applicability, stating that the Project is not subject to the Impact Assessment Act.	9-Nov-21	Stantec thanked IAAC for their review of the Project.
9	Ontario Parks, MECP	Angela Adkinson	Email	10-Nov-21	Ontario Parks confirmed receipt of the Notice of Study Commencement and indicated they would be following up with Stantec they have any comments or questions on the proposed Project.	N/A	N/A
10	Infrastructure Ontario	Meaghan Gonsalves	Email	19-Nov-21	IO indicated that, based off an initial scan, no properties owned by the Minister of Government and Consumer Services are within the Project Study Area. IO noted it is the proponent's responsibility to verify if any provincial government property this finding.	29-Nov-21	Stantec thanked IO for their review of the project.
11	Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF)	Catherine Warren	Email	26-Nov-21	NDMNRF confirmed that the Peterborough District had received a copy of the Notice of Study Commencement. NDMNRF provided information to guide identification and assessment of natural features and resources as required by applicable policies and legislation. NDMNRF provided the general recommendation that new footprint or disturbance (including temporary disturbance e.g. laydown areas) be avoided within or adjacent to wetlands. Work should avoid negative impacts to these features by following best practices for construction e.g. avoiding sedimentation into wetlands. NDMRF also included details on Species at Risk in Ontario and general turtle critical periods.	29-Nov-21	Stantec thanked NDMNRF for their email.
12	Transport Canada (TC)		Email	26-Nov-21	TC advised that they do not require receipt of all individual or class EA related notifications. Project proponents are required to self-assess if their project: (1) will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property and (2) will require approval and/or authorization under any Acts administered by TC.	N/A	N/A
13	Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI)	Laura Romeo	Email	7-Dec-21	MHSTCI provided advice on how to incorporate consideration of cultural heritage in the Report, and expanded on how to apply sections 4.3 and 5.3 of the OEB <i>Environmental Guidelines</i> by outlining the technical cultural heritage studies and level of detail required to address cultural heritage in pipeline and facilities projects. MHSTCI also provided details on the role of the Stage 1 Archaeological Assessment and acknowledged that a Stage 1 archaeological assessment (under Project Information Form number P1148-0013-2021) is being undertaken for this Project.	N/A	N/A

Enbridge Gas Inc.
Haldimand Shores Community Expansion Project
Correspondence Tracking - Indigenous Communities

N/A - Not Available

Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment
See Appendix B1 and B2	All communities on contact list	N/A	Email	7-Jun-21	Notification letter and map sent to the Aanjiwaaang First Nation.
See Appendix B1 and B2	All communities on contact list	N/A	Email	8-Oct-21	Notice of Study Commencement letter and map sent to all communities and contacts on the Indigenous Communities contact list.

Enbridge Gas Inc.
Haldimand Shores Community Expansion Project
Correspondence Tracking - Landowner and Public

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
N/A - Not Applicable	Directly affected landowner	Stantec on the behalf of Enbridge Gas	Mail	N/A	N/A	8-Nov-21	Notice of Study Commencement mailed November 1, 2021 and delivered to mail boxes November 8, 2021.	N/A	N/A
1	Surrounding landowner		Email			10-Nov-21	Landowner at [REDACTED] wrote to the Project email to find out more details on the Project and extent of the running line. The landowner expressed interest in Enbridge Gas extending the proposed running line further west down Lakeshore Road so that new developments along Lakeshore Road would also have access to natural gas service.	12-Jan-22	Stantec thanked the landowner for providing a response to the Haldimand Shores Community Expansion Project and answered the respondents questions on how to get connected to the natural gas line. A link to the Enbridge Gas Project webpage was provided.
2	Directly affected landowner		Email			10-Nov-21	Landowner on [REDACTED] wrote to the Project email and inquired as to which natural gas company is to be providing natural gas to the Haldimand Shores.	10-Nov-21	Stantec thanked the resident for their email and indicated that Enbridge Gas is to be the utility provider responsible for the Haldimand Shores Community Expansion Project. A link to the Virtual Open House was provided to the resident for their reference.
3	Directly affected landowner		Email			10-Nov-21	Resident on [REDACTED] wrote to the Project email to learn if the pipeline is to extend down Chub Road. The landowner expressed interest in Enbridge Gas extending the proposed running line to bring natural gas service to their residence.	12-Jan-22	Stantec thanked the landowner for providing a response to the Haldimand Shores Community Expansion Project and answered the respondents questions on how to get connected to the natural gas line and the location of the PPR. A link to the Enbridge Gas Project webpage was provided.
N/A	Surrounding landowner		Phone			16-Nov-21	Resident on [REDACTED] left a voicemail regarding the extent of the Project on Nawautin Drive and asked for clarification on which road allowances the pipeline is to be installed in.	28-Nov-21	Stantec returned the call and provided further information on the Project and the extent of the PPR. Stantec provided the resident with the link to the Project webpage where a more detailed map of the Study Area and PPR could be found.
4	Directly affected landowner		Email			20-Nov-21	Landowner at [REDACTED] wrote to the Project email to find out more details on the Project and the potential cost to homeowners that can be expected as a result of the Project. The landowner noted that they are in support of the Project.	12-Jan-22	Stantec thanked the landowner for providing a response to the Haldimand Shores Community Expansion Project and answered the respondents questions on the cost of the Project and cost of natural gas. A link to the Enbridge Gas Project webpage was provided.
N/A	Surrounding landowner		Phone			26-Nov-21	Resident at [REDACTED] called regarding the Project, and requested more information on the construction and in-service timeline.	26-Nov-21	Stantec spoke with the landowner and provided details on the Project timeline and in-service date. The landowner was advised that Enbridge Gas would be providing landowners along the running line with regular updates on the planned time of construction as the further planning and build-out of the Project occur.
5	Surrounding landowner		Email			1-Dec-21	Requested a copy of the Environmental Report.	12-Jan-22	Stantec thanked the landowner for providing a response to the Haldimand Shores Community Expansion Project and answered the respondents questions on how to get a copy of the ER. A link to the Enbridge Gas Project webpage was provided.
N/A	Directly affected landowner		Phone			3-Dec-21	Landowner on [REDACTED] wished to have clarification on if the Project had been approved. The landowner voiced their concern over having natural gas provided to their home and noted that they did not wish to receive natural gas. The landowner also voiced their concern over the environmental concerns associated with natural gas noting that it was not a sustainable utility option.	3-Dec-21	Stantec spoke with the landowner and discussed details on the environmental planning process and the role of the Ontario Energy Board (OEB). Stantec explained that the Project is regulated by the OEB, an independent government agency that regulates the electricity and natural gas sectors. Once the Environmental Report for the Project is completed, Enbridge Gas may file an application to the OEB to request a leave to construct for the Project. The OEB will review the application, and if it is concluded that the Project is in the public's interest, construction is anticipated to begin Q4 of 2022. 12-Jan-22, Stantec followed up with the landowner and left a voicemail providing details on how landowners who are not interested in this utility, will not be connected to the main line if no application is submitted to Enbridge Gas.
6	Directly affected landowner		Email			6-Dec-21	Landowner on [REDACTED] requested to a copy of the Notice of Study Commencement. The landowner noted their disinterest in receiving natural gas and inquired as to the cost to landowners to construct and operate the pipeline and remediate lawns damaged from construction.	12-Jan-22	Stantec thanked the landowner for providing a response to the Haldimand Shores Community Expansion Project and answered the respondents questions on the cost of the Project and cost of natural gas, the impacts to residents and business, impacts to lawns, and general mitigation measures. A link to the Enbridge Gas Project webpage was provided.
N/A	Other: Land Steward for Chub Point Nature Reserve		Phone			6-Dec-21	Raised concerns regarding the Project's potential to impact the Chub Point Nature Reserve and environmental features in the Study Area - i.e., salamanders, turtles, snakes, and Striped Maple. Landowner indicated the pipeline should be built on the west side of Station Road as Striped Maple had been identified in the woodlot east of Station Road.	6-Dec-21	Stantec spoke with landowner and provided details on the scope of the Project. Stantec noted that public input would be incorporated into the ER and mitigation measures would be implemented during construction to reduce impacts, as outlined in the forthcoming ER. Stantec thanked the landowner for providing details on the environmental features identified in the Study Area.

Enbridge Gas Inc.
Haldimand Shores Community Expansion Project
Correspondence Tracking - Landowner and Public

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
7	Other: Land Steward for Chub Point Nature Reserve		Email			8-Dec-21	Provided details on the environmental work the volunteer group, the Northumberland Land Trust, has undertaken and provided photo's of Chub Point Nature Reserve and Northumberland Land Trust members. Reiterated the importance of installing the pipe on the west side of Station Road to minimize impacts to the woodlot and wetland.	12-Jan-22	Stantec thanked the landowner for providing a response to the Haldimand Shores Community Expansion Project and answered the respondents concerns regarding environmental impacts. A link to the Enbridge Gas Project webpage was provided.

Comment Number	Stakeholder Group	Correspondent	Address	Email	Phone Number	Method of Communication	Date of Correspondence	Reponses Provided	Date Response Provided	Summary of Response
See copy of the questionnaire provided in Appendix B5	N/A	Stantec on the behalf of Enbridge Gas	N/A	N/A	N/A	Virtual Open House Questionnaire	8-Nov-21	See Appendix B5 for a blank copy of the questionnaire provided during the Virtual Open House (VOH).	N/A	N/A
See copy of completed questionnaire provided in Appendix B5	Directly affected landowner	██████	██████	██████	██████30	Virtual Open House Questionnaire	9-Nov-21	1. Directly affected landowner. 2. Environmental damage, removal of mature trees, and treatment of water flows are my main concerns. 3. No response provided. 4. Creeks flowing into the Nawautin Wildlife sanctuary, significant number of mature trees. 5. No. 6. No response provided. 7. No response provided. 8. Newspaper Advertisement and Project Notification Letter. 9. No responses provided.	N/A	N/A
See copy of completed questionnaire provided in Appendix B5 and item 1 of the VOH Responses in B6	Directly affected landowner/Resident interested in natural gas conversion	██████	██████	██████	██████	Virtual Open House Questionnaire	9-Nov-21	1. Directly affected landowner/Resident interested in natural gas conversion. 2. The provision of natural gas will be a welcome addition to the community. A permanent source of natural gas for heating and other purposes will eliminate the vagaries of weather-related deliveries occasionally experienced with propane. It'll also mean the removal of a large and unsightly propane storage tank. 3. No doubt there will be some temporary disruption and minor inconveniences. It is expected that the net gain will be worth the effort. 4. Protection of the waterways leading to the lake and the neighboring nature sanctuary. 5. No response provided. 6. Will there be an opportunity for every individual home along the route to be connected to the gas line to be installed, or will that need to be contracted between Enbridge and each homeowner? What impact will there be regarding construction and connection at each home? Are there costs - and if so, what are the costs associated with making home connections? 7. No response provided. 8. Word of mouth. 9. No responses provided.	12-Jan-22	Stantec thanked the landowner for attending the VOH and responded to the respondents questions on cost to homeowners and how to get connected to the natural gas line. A link to the Enbridge Gas Project webpage was provided.
See copy of completed questionnaire provided in Appendix B5	Directly affected landowner	██████	██████	██████	██████	Virtual Open House Questionnaire	10-Nov-21	1. Directly affected landowner 2. Agree on using natural gas, have yet to thoroughly read all the submitted information, but will proceed to do so in future. 3. Yes it will hopefully have positive impacts. 4. I feel strongly that the right of way that leads to Nauwatin Sanctuary be thoroughly inspected and preserved, I live beside it on Kanta Drive. 5. Yes. 6. Not at present. 7. Will let you know soon. 8. Word of mouth. 9. Not at present time, but I still have to cover all subjects.	N/A	N/A
See copy of completed questionnaire provided in Appendix B5 and item 2 of the VOH Responses in B6	Directly affected landowner	██████	██████	██████	██████	Virtual Open House Questionnaire	15-Nov-21	1. Surrounding landowner/Interested citizen. 2. I think it is a good idea but with the current climate of wanting to stop all fossil fuel burning in the near future is the price going to skyrocket out of reach for the homeowners after this is installed? 3. As stated the pipeline will be installed in the road allowances but how far from the road edge would it be installed? Our property is lined with pine trees on our side of the ditch line. Where would it be installed along the road? 4. Consider the numerous large trees along the route line. 5. Yes. 6. No. 7. Yes for now. 8. Newspaper Advertisement and Project Notification Letter. 9. No responses provided.	12-Jan-22	Stantec thanked the landowner for attending the VOH and responded to the respondents questions on cost of natural gas, environmental impacts, and the proposed location of the pipeline. A link to the Enbridge Gas Project webpage was provided.
See copy of completed questionnaire provided in Appendix B5	Directly affected landowner	██████	██████	██████	██████	Virtual Open House Questionnaire	16-Nov-21	1. Directly affected landowner. 2. The sooner the better. 3. No impacts but would like to know more pertaining to individual connections. 4. Stream crossings. 5. Yes. 6. No. 7. Yes. 8. Newspaper Advertisement and Project Notification Letter. 9. Any idea of costs to connect to individual homes?	N/A	N/A
See copy of completed questionnaire provided in Appendix B5 and item 3 of the VOH Responses in B6	Directly affected landowner/Resident interested in natural gas conversion	██████	██████	██████	██████	Virtual Open House Questionnaire	18-Nov-21	1. Directly affected landowner/resident interested in natural gas conversion. 2. In general good idea. 3. Concerns regarding access to our property extent and duration. 4. Nature sanctuary. 5. Yes. 6. No response provided. 7. Yes. 8. Project Notification Letter. 9. No response provided.	12-Jan-22	Stantec thanked the landowner for attending the Virtual Open House (VOH) and responded to the respondents questions on access and construction. A link to the Enbridge Gas Project webpage was provided.
See copy of completed questionnaire provided in Appendix B5 and item 4 of the VOH Responses in B6	Interested citizen	██████	██████	██████	██████	Virtual Open House Questionnaire	24-Nov-21	1. Interested citizen. 2. No response provided. 3. No response provided. 4. Chub Point Nature Reserve property of the Northumberland Land Trust. 5. No. 6. No response provided. 7. No response provided. 8. Word of mouth. 9. Please consider locating the pipeline on the west side of the road so as not to interfere with the Chub Point Nature Preserve. Many species that live in these wetlands would be adversely affected.	12-Jan-22	Stantec thanked the landowner for attending the Virtual Open House (VOH) and responded to the respondents questions on environmental impacts. A link to the Enbridge Gas Project webpage was provided.

Comment Number	Stakeholder Group	Correspondent	Address	Email	Phone Number	Method of Communication	Date of Correspondence	Reponses Provided	Date Response Provided	Summary of Response
See copy of completed questionnaire provided in Appendix B5	Interested citizen					Virtual Open House Questionnaire	26-Nov-21	1. Interested citizen. 2. The concept of the project is correct at this moment in time. 3. No. 4. It would be preferable for the Pipeline to be down the west side of Station Rd and away from the Chub Point Nature Reserve. 5. No. 6. No. 7. Unable to attend. 8. Word of mouth. 9. No response provided.		N/A
See copy of completed questionnaire provided in Appendix B5 and item 5 of the VOH Responses in B6	Directly affected landowner/Resident interested in natural gas conversion					Virtual Open House Questionnaire	27-Nov-21	1. Directly affected landowner/Resident interested in natural gas conversion. 2. Welcome need for this community. 3. The project will definitely impact us as we are along the pipeline route. 4. Location of pipeline on our property. 5. No response provided. 6. Would like to be updated on progress. 7. Met initial needs but still require info on location of pipeline, especially on our property as well as costs. 8. Project notification letter. 9. No response provided.	12-Jan-22	Stantec thanked the landowner for attending the VOH and responded to the respondents questions on cost to construct and location of the pipeline. A link to the Enbridge Gas Project webpage was provided.
See copy of completed questionnaire provided in Appendix B5 and item 6 of the VOH Responses in B6	Directly affected landowner/Interested citizen					Virtual Open House Questionnaire	28-Nov-21	1. Directly affected landowner/Interested citizen 2. I personally do not like the idea because I am happy with propane as it is less harmful to the environment. Plus I would like to know what the cost to all of us would be. What if I had the piping installed but did not hook up to my furnace. What would be the cost? Are there any government grants associated with this project? 3. Digging up our land to put in piping - who is responsible for repairing it? There is a possibility of you having to dig a trench again to repair any leaks, which will screw up my lawn again. Who pays for the repairs? 4. The fact that if a leak would happen, Methane gas will be released into the atmosphere (causing green house gases) Plus natural gas is 90% Methane (when the mix is in the 5 to 15% range anything can ignite it including a cell phone call, a light switch, any kind of static spark or a lit cigarette. This will not happen with propane. I thought we as a country were aiming to reduce climate change (warming) 5. No. 6. OEB is a lost cause. You should be dealing directly with the Ministry of the Environment for our area. 7. Not really. Especially since I really do not want the natural gas. I'm quite happy with my propane dealer and our delivery schedule 8. Newspaper Advertisement and Project notification letter. 9. Yes I'm disappointed that there has been no communication between our town council and us the residents. They don't seem to care about the effect to the environment or what our needs are. No one asked us or surveyed us to see if we wanted natural gas brought into our area.	12-Jan-22	Stantec thanked the landowner for attending the VOH and responded to the respondents questions on cost of natural gas, environmental impacts, the proposed location of the pipeline, and the OEB. A link to the Enbridge Gas Project webpage was provided.
See copy of completed questionnaire provided in Appendix B5	Other: Land Steward for Chub Point Nature Reserve					Virtual Open House Questionnaire	2-Dec-21	1.Other: Land Steward for Chub Point Nature Reserve 2.No response provided. 3.I am concerned that the pipeline will travel on the east side of Station Road down to the 4 way stop sign and proceed west from there along Lakeshore Road. I would rather that it travels down the west side of Station Road. 4.Chub Point is a Nature Reserve protected by Northumberland Land Trust, I am Land Steward for the property. This reserve has vulnerable species such as salamanders, turtles, snakes plus it is migratory stop for birds. Also, the property at the north end has Acer pensylvanicum, Striped Maple a small understory Maple that I have not seen anywhere else south of the 401. These are just a few of the species I am concerned with as I am a new Land Steward and I have just started documenting species there. The reptiles and amphibians are particularly vulnerable to absorbing anything from their environment and this is of great concern. Chub Point is a wetland, you cannot go in there without rubber boots, it is full of vernal pools, small ponds and wet boggy ground and moss on deep loamy soil, the whole property is like a spongy, mossy soft wetland. As well, as I sure you are aware, it is full of ticks, so you do need to wear protective covering. 5.No response provided. 6.I would like to see a map of where the pipeline will be actually placed and I am hoping it will be on the west side of Station Road. 7. I was informative 8.Word of Mouth 9.I understand the installation process, 3' from the road and 4' below ground. I am sure that the pipeline will be installed properly, but my concerns are the same as mentioned above. As it is the future of Chub Point and its relationship with this pipeline 100 years from now. I hope you understand and I thank you for letting me express my concerns.	N/A	N/A - Response to landowner recorded in the Landowner and Public Correspondence Table.

Comment Number	Stakeholder Group	Correspondent	Address	Email	Phone Number	Method of Communication	Date of Correspondence	Reponses Provided	Date Response Provided	Summary of Response
See copy of completed questionnaire provided in Appendix B5	Surrounding Landowner					Virtual Open House Questionnaire	6-Dec-21	1.Directly affected landowner/Interested citizen 2.No response provided. 3.Trucks and heavy vehicles through the heart of the village affecting the older houses - cannot handle the vibrations. Trucks need to use Brimley Road to go to Lakeshore Road. 4.Trucks and heavy vehicles through the heart of the village affecting the older houses - cannot handle the vibrations. Trucks need to use Brimley Road to go to Lakeshore Road. 5.No response provided. 6.I would like to be kept informed. 7.No response provided. 8.Word of Mouth 9.No response provided.	N/A	N/A

Ministry of EnergyEnergy Networks & Indigenous Policy
Branch

Indigenous Energy Policy

77 Grenville Street, 6th Floor
Toronto, ON M7A 2C1
Tel: 416-325-6810**Ministère de l'Énergie**Direction Générale des Réseaux Énergétiques
et des Politiques Autochtones

Politique Énergétique Autochtone

77, rue Grenville, 6^e étage
Toronto, ON M7A 2C1
Tél. 416-325-6810

October 20, 2021

VIA EMAIL

Mr. Dave Janisse, Technical Manager
Leave to Construct Applications, Regulatory Affairs
Enbridge Gas Incorporated
P. O. Box 2001
50 Keil Drive North
Chatham, ON N7M 5M1

Re: Haldimand Shores (Grafton) Community Expansion Project

Dear Mr. Janisse,

Thank you for your emails, dated August 27 and August 30, 2021, notifying the Ministry of Energy (Energy) of Enbridge Gas Incorporated's (Enbridge) intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for the Haldimand Shores (Grafton) Community Expansion Project (the Project).

I understand that Enbridge is planning to construct new natural gas pipelines and stations to provide services to the community of Haldimand Shores to transport natural gas supply from the existing Grafton system to the new distributions system pipelines in Haldimand Shores, and distribute natural gas volumes to residential customers in Haldimand Shores. I further understand that the Project will include the construction of the following facilities in the township of Alnwick/Haldimand:

- approximately 500 m of Nominal Pipe Size (NPS) 4 steel ("ST") natural gas distribution pipeline; and
- approximately 7, 250 m of NPS 2 polyethylene natural gas distribution pipeline.

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* (Indigenous Communities) 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 (the 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
Alderville First Nation*	P.O. Box 46 Roseneath ON K0K 2X0 T: (905) 352-2011 F: (905) 352-3242
Beausoleil First Nation*	General Delivery Cedar Point ON L0K 1C0 T: (705) 247-2051 F: (705) 247-2239
Curve Lake First Nation*	General Delivery Curve Lake ON K0L 1R0 T: (705) 657-8045, ext. 209 F: (705) 657-8708
Chippewas of Georgina Island*	R.R. #2, P.O. Box N-13 Sutton West ON L0E 1R0 T: (705) 437-1337 F: (705) 437-4597
Chippewas of Rama First Nation*	200-5884 Rama Road Rama ON L3V 6H6 T: (705) 325-3611 F: (705) 325-0879
Hiawatha First Nation*	123 Paudash Street, R.R. #2 Keene ON K0L 2G0 T: (705) 295-4421 F: N/A
Huron-Wendat Nation**	255, place Chef Michel Laveau

Community	Mailing Address
	Wendake QC G0A 4V0 T: (418) 843-3767 F: (418) 842-1108
Kawartha Nishnawbe	No mailing address, telephone, or fax information available. nodin.webb@hotmail.com; samgharvey@live.com; giiwednang@hotmail.com; kawarthanishnawbecouncil@outlook.com
Mississaugas of Scugog Island*	22521 Island Road Port Perry ON L9L 1B6 T: (905) 985-3337 F: N/A
Mohawks of the Bay of Quinte**	R.R. #1, 13 Old York Rd. Deseronto, ON K0K 1X0 T: (613) 396-3424 F: (613) 396-3627
<p>Notes:</p> <p>* It is standard practice to copy Karry Sandy McKenzie, Williams Treaties First Nations Process Coordinator, on correspondence to the identified Williams Treaties First Nations identified above (inquiries@williamstreatiesfirstnations.ca).</p> <p>** Interests are specific to archeological resources. If, as the project progresses, it is determined that there will be no impacts to archaeological resources, Enbridge should contact the Manager of Indigenous Energy Policy at the Ministry of Energy, as further consultation with these communities may not be required.</p>	

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. First Nations and Métis 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 the 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 about this request, you may contact Jonathon Wilkinson by calling 705-313-3658, or by email at: jonathon.wilkinson@ontario.ca.

I trust that this information provides clarity and direction regarding the respective roles of the Crown and Enbridge Gas Incorporated. 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.

From: [FPP.CA / PPP.CA \(DFO/MPO\)](mailto:FPP.CA / PPP.CA (DFO/MPO))
To: [Ginter, Kayla](#)
Subject: FFHPP.CA Auto-Reply
Date: Monday, November 1, 2021 4:15:07 PM

Thank you for contacting Fisheries and Oceans Canada, Fish and Fish Habitat Protection Program.

This e-mail is a confirmation of receipt for your submission of a Request for Review form or Code of Practice notification form. Please do not mail a hard copy of your submission to any of our offices at this time unless you are unable to submit a digital version.

Please note that we are currently receiving a higher than normal volume of submissions and inquiries and continue to operate under alternate work arrangements.

We will respond to your email as soon as possible. Thank you for your patience.

Merci d'avoir pris contact avec le Programme de protection du poisson et de son habitat de Pêches et Océans Canada.

Le présent courriel accuse réception du formulaire de demande d'examen ou d'avis de code de pratique que vous avez envoyé. Veuillez ne pas envoyer de copie papier à nos bureaux pour le moment à moins que vous soyez dans l'incapacité d'envoyer une version numérique.

Veuillez noter que nous recevons actuellement un volume d'envois et de demandes supérieur à la normale et que nous continuons à travailler selon des modalités adaptées.

Nous répondrons à votre courriel dès que possible. Nous vous remercions pour votre patience.

From: [Ginter, Kayla](#)
To: [Kourosh Manouchehri](#)
Cc: [HaldimandShoresEA](#); [Knight, Mark](#); [Gasser, Matthew](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Monday, November 1, 2021 4:31:00 PM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Thanks, Kourosh. When the project is farther along, we will complete the application to TSSA. Thanks for providing that info in advance.

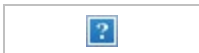
Warmly,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

Kayla.Ginter@stantec.com

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



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From: Kourosh Manouchehri <KManouchehri@tssa.org>
Sent: Monday, November 1, 2021 4:05 PM
To: Gasser, Matthew <Matthew.Gasser@stantec.com>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Hi Matthew,

Thank you for the provided information about this project. Later for review of this project by TSSA, there is need for submission of an application to TSSA. The application can be submitted by the pipeline operator or other parties on behalf of the pipeline operator. Please see the link for [Application for Review of Pipeline Project](#), which should be submitted to the email address provided on the form.

If you have any question, please contact me.

Regards,

**Kourosh Manouchehri, P.Eng., PMP | Engineer, Fuels**

Engineering

345 Carlingview Drive

Toronto, Ontario M9W 6N9

Tel: +1 416-734-3539 | Fax: +1 416-231-7525 | E-Mail: kmanouchehri@tssa.orgwww.tssa.org

From: Gasser, Matthew <Matthew.Gasser@stantec.com>**Sent:** November 1, 2021 3:47 PM**To:** Kourosh Manouchehri <KManouchehri@tssa.org>**Cc:** HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>**Subject:** Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

[CAUTION]: This email originated outside the organisation.

Please do not click links or open attachments unless you recognise the source of this email and know the content is safe.

Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc. Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES
Environmental Consultant

Matthew.Gasser@stantec.com

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



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From: [Orpana, Jon \(MECP\)](#)
To: [Ginter, Kayla](#)
Cc: [HaldimandShoresEA](#); [Knight, Mark](#); [Gasser, Matthew](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Tuesday, November 2, 2021 3:56:58 PM

Thanks Kayla!

I will forward this on to our GIS Officer right now.

Regards,

Jon

Jon K. Orpana
Regional Environmental Planner
Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
Kingston Regional Office
PO Box 22032, 1259 Gardiners Road
Kingston, Ontario
K7M 8S5
Phone: (613) 548-6918
Fax: (613) 548-6908
Email: jon.orpana@ontario.ca

From: Ginter, Kayla <Kayla.Ginter@stantec.com>
Sent: November 2, 2021 3:41 PM
To: Orpana, Jon (MECP) <Jon.Orpana@ontario.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>; Gasser, Matthew <Matthew.Gasser@stantec.com>
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

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Hi Jon,

As promised, attached please find the shapefile of the preliminary design of the pipeline route.

Warmly,

Kayla Ginter M.ES. (Planning), OPPI Candidate

Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

Kayla.Ginter@stantec.com

Stantec

300W-675 Cochrane Drive

Markham ON L3R 0B8



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From: Orpana, Jon (MECP) <Jon.Orpana@ontario.ca>

Sent: Tuesday, November 2, 2021 1:10 PM

To: Ginter, Kayla <Kayla.Ginter@stantec.com>

Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Knight, Mark
<Mark.Knight@stantec.com>; Gasser, Matthew <Matthew.Gasser@stantec.com>

Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and
Virtual Open House

Thanks for this Kayla,

It is appreciated and our SAR Branch will endeavour to work on some preliminary items for you to consider in the development of your project and your Environmental Report in advance of its formal circulation.

Have a great day.

Jon

Jon K. Orpana
Regional Environmental Planner
Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
Kingston Regional Office
PO Box 22032, 1259 Gardiners Road
Kingston, Ontario
K7M 8S5

Phone: (613) 548-6918

Fax: (613) 548-6908

Email: jon.orpana@ontario.ca

From: Ginter, Kayla <Kayla.Ginter@stantec.com>
Sent: November 2, 2021 11:05 AM
To: Orpana, Jon (MECP) <Jon.Orpana@ontario.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>; Gasser, Matthew <Matthew.Gasser@stantec.com>
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

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Good Morning Jon,

Thank you for your email. I will work on getting you a shapefile of the proposed line.

My colleague, Matt, provided a Notice of Commencement to the Species at Risk Branch in yesterday's "mail-out". That email is attached for your reference.

Warmly,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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From: Orpana, Jon (MECP) <Jon.Orpana@ontario.ca>
Sent: Tuesday, November 2, 2021 9:47 AM
To: Gasser, Matthew <Matthew.Gasser@stantec.com>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Thanks for this Matthew,

Would it be possible to send on a shape file for this project.

My GIS Officer produces a map which I circulate to other internal MECP staff for preliminary review and comments which I in turn include in a response to your Notice of Commencement.

I would also like to know if this Notice has been circulated to our Species At Risk Email address.

Thanks in advance.

Jon

Jon K. Orpana
Regional Environmental Planner
Environmental Assessment Branch
Ministry of the Environment, Conservation and Parks
Kingston Regional Office
PO Box 22032, 1259 Gardiners Road
Kingston, Ontario
K7M 8S5

Phone: (613) 548-6918
Fax: (613) 548-6908
Email: jon.orpana@ontario.ca

From: Gasser, Matthew <Matthew.Gasser@stantec.com>
Sent: November 1, 2021 4:14 PM
To: Orpana, Jon (MECP) <Jon.Orpana@ontario.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

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Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc.

Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES

Environmental Consultant

Matthew.Gasser@stantec.com

Stantec

300W-675 Cochrane Drive

Markham ON L3R 0B8



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From: [Ginter, Kayla](#)
To: lrich@conservationontario.ca
Cc: [Gasser, Matthew](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Tuesday, November 2, 2021 11:23:00 AM

Thanks for your email, Leslie. I can confirm that LTC was notified on the project in yesterdays "mail-out".

Have a nice day,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

Kayla.Ginter@stantec.com

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



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From: Leslie Rich <lrich@conservationontario.ca>
Sent: Tuesday, November 2, 2021 9:16 AM
To: Gasser, Matthew <Matthew.Gasser@stantec.com>
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Hi Matthew,

Thank you for your email. Please contact the local conservation authority about your project.
<https://conservationontario.ca/conservation-authorities/find-a-conservation-authority>

Kind regards,

Leslie Rich, MES, RPP
Policy and Planning Liaison
Conservation Ontario
120 Bayview Parkway
Newmarket, Ontario
Cell 705-716-6174

From: Gasser, Matthew [<mailto:Matthew.Gasser@stantec.com>]
Sent: Monday, November 1, 2021 4:29 PM
To: Leslie Rich <lrich@conservationontario.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc. Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES
Environmental Consultant

Matthew.Gasser@stantec.com

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



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From: [Ginter, Kayla](#)
To: [Tolles, Cheryl \(MTO\)](#); [Gitkow, Alexandre \(MTO\)](#)
Cc: [HaldimandShoresEA](#); [Knight, Mark](#); [Pedlar, Mark \(MTO\)](#); [Gasser, Matthew](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Tuesday, November 2, 2021 12:21:00 PM
Attachments: [image001.png](#)
[Gitkow, Alexandre.pdf](#)

Good Afternoon Cheryl,

Thank you for providing the Corridor Management Areas mapping. I have revised the contact list accordingly. I look forward to connecting with you [@Gitkow, Alexandre \(MTO\)](#), please reach out if you have any questions on the proposed natural gas project. A revised NoC letter is attached that is addressed to you.

Congratulations on your coming retirement, Cheryl, and all the best!

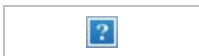
Warmly,

Kayla Ginter M.ES. (Planning), OPPI Candidate
 Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

Kayla.Ginter@stantec.com

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



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From: Tolles, Cheryl (MTO) <Cheryl.Tolles@ontario.ca>

Sent: Tuesday, November 2, 2021 12:03 PM

To: Gasser, Matthew <Matthew.Gasser@stantec.com>; Gitkow, Alexandre (MTO) <Alexandre.Gitkow@ontario.ca>

Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>; Pedlar, Mark (MTO) <Mark.Pedlar@ontario.ca>

Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Matthew, thank you for circulating MTO....we certainly want to provide our comments at the earliest stage possible stage of any proposal, including utilities.

I am forwarding this email to Alex Gitkow at MTO. All correspondence for any utility projects that is being sent to MTO for MTO Eastern Region, Alex will be your contact and is our utility coordinator.

Any future projects that fall within MTO Eastern Region (see attached map) you can

remove me from your mailing list as I am going to be retiring in a few short weeks and am transitioning all of my files to Mark Pedlar and Alex for all utility issues. Mark will be your contact for any development and Alex will be your contact for all utility proposals, from the initial planning stages throw to detail design/permits.

I will leave this to Alex to review and provide comments.

Cheryl

Cheryl Tolles
Senior Project Manager
Corridor Management Section
Ministry of Transportation
1355 John Counter Blvd.
Kingston, ON K7L 5A3

Email: Cheryl.Tolles@ontario.ca
Telephone: 613-449-0313 (cell)



From: Gasser, Matthew <Matthew.Gasser@stantec.com>
Sent: Monday, November 1, 2021 4:40 PM
To: Tolles, Cheryl (MTO) <Cheryl.Tolles@ontario.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc.

Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES

Environmental Consultant

Matthew.Gasser@stantec.com

Stantec

300W-675 Cochrane Drive

Markham ON L3R 0B8



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From: [Gitkow, Alexandre \(MTO\)](#)
To: [HaldimandShoresEA](#); [Ginter, Kayla](#)
Cc: [Green, Kate \(MTO\)](#); [Pedlar, Mark \(MTO\)](#)
Subject: MTO comment on Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Wednesday, November 17, 2021 7:49:18 AM
Attachments: [Gitkow, Alexandre.pdf](#)
[Haldimand Shores Community Expansion Project, \(MTO comment Letter Nov 17, 2021\).doc](#)

Good Morning,

Please see attached the MTO comment for the Haldimand Shores Community Expansion Project.

Please do not hesitate to contact me should you require more information.

Sincerely Yours,

Alexandre Gitkow
Corridor Management Officer (Utility)
Corridor Management Section | East Operations
Ministry of Transportation (MTO)
1355 John Counter Boulevard,
Kingston, ON K7L 5A3
Cell: 613-323-1253 | Email: Alexandre.Gitkow@Ontario.ca

Ministry of Transportation

Corridor Management Section
1355 John Counter Boulevard
Postal Bag 4000
Kingston, Ontario K7L 5A3
Tel.: 613 323-1253
Fax: 613-540-5106
Alexandre.gitkow@ontario.ca

Ministère des Transports

Section de gestion des couloirs routiers
1355, boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél.: 613 323-1253
Télééc. 613 540-5106



November 17, 2021

Sonia Fazari
Senior Advisor, Municipal & Stakeholder Engagement
Enbridge Gas Inc.
300W-675 Cochrane Drive,
Markham ON
L3R 0B8

Via email: BobcaygeonEA@stantec.com

Dear Sonia Fazari:

Re: Enbridge Gas Inc. – Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House

Thank you for circulating the notice of commencement for the Enbridge proposed Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House to the Ministry of Transportation (MTO) for review and comments. As you are aware, under the Public Transportation and Highway Improvement Act (PTHIA), the ministry, through the issuance of permits, has a control area that includes the Highway right of way corridor, and an area of 395 metres radius around each interchange/intersection and 45 m from the highway property limit. MTO review, approval and permits are required prior to the issuance of any other permits. This also includes any pre-engineering work that you may require.

An Encroachment Permit or other Permit or approval required by the Ministry must be obtained prior to any construction occurring on site. The construction or operation of works within the limits of the right-of-way of a highway by other than the Ministry or its agent shall be considered an encroachment, and any application will also be required to be submitted with a full Traffic Management Plan in accordance with Book 7 requirements, including any restrictions required by MTO such as hours of work, etc.

The MTO have reviewed the Haldimand Shores Community Expansion Project and we have the following preliminary comment. The proposed project is outside MTO jurisdiction and/or property, so we have no issue or comments on the project, if the project scope or route change the MTO would like the chance to review and comment again.

If Stantec or Enbridge require more detail please direct your request to me at Alexandre.Gitkow@ontario.ca.

Sincerely Yours,

Alexandre Gitkow
Corridor Management Officer

cc. Kate Green, Ministry of Transportation, Corridor Management Head
Mark Pedlar, Ministry of Transportation, Corridor (A) Senior Project Manager

From: [Mike Filip](#)
To: [Ginter, Kayla](#)
Subject: Re: Gas Line Haldimand Shores
Date: Tuesday, November 2, 2021 12:30:27 PM

Hi Kayla,

Actually my question is Do you know if fibre optics will be added at the same time as your gas upgrade/ install?

It would make sense to do it all at the same time from my point of view.

Mike

Sent from my iPhone

> On Nov 2, 2021, at 10:56 AM, Ginter, Kayla <Kayla.Ginter@stantec.com> wrote:

>

> Good Morning Councillor,

>

> Thank you for your email. Construction of the Project is currently anticipated to take place Q4 of 2022 to October 2023. Are you able to provide more details on when the telecom conduit is to be installed in the area so that I am better able to clarify if construction of these utilities will overlap?

>

> With thanks,

>

> Kayla Ginter M.ES. (Planning), OPPI Candidate

> Environmental Coordinator, Assessment and Permitting

>

> Direct: 226-980-5347

> Kayla.Ginter@stantec.com

>

> Stantec

> 300W-675 Cochrane Drive

> Markham ON L3R 0B8

>

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>

> -----Original Message-----

> From: Mike Filip <mfilip@ahwp.ca>

> Sent: Tuesday, November 2, 2021 9:06 AM

> To: Ginter, Kayla <Kayla.Ginter@stantec.com>

> Subject: Gas Line Haldimand Shores

>

> Good Morning,

> I have been asked by many of my tax payers in this area whether fibre optics will be installed at the same time as the gas is brought in.

> Could you clarify this for me so I may share with my constituents .

> Thank you,

> Mike Filip

> Councillor A/H

>

> Sent from my iPhone

From: [Ginter, Kayla](#)
To: ontarioregion-regiondontario@iaac-aeic.gc.ca
Cc: [Sonia Fazari](#); [Gasser, Matthew](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Tuesday, November 9, 2021 10:36:00 AM

Good Morning Kim,

Thank you for your initial review of the Project. We understand IAAC's is of the opinion that the Project is not a designated project. Should the scope of work change, we will reach out.

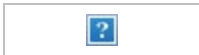
Have a nice day,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

Kayla.Ginter@stantec.com

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



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From: Ontario Region / Region d'Ontario (IAAC/AEIC) <ontarioregion-regiondontario@iaac-aeic.gc.ca>

Sent: Tuesday, November 9, 2021 8:31 AM

To: Gasser, Matthew <Matthew.Gasser@stantec.com>

Cc: 'sonia.fazari@enbridge.com' <sonia.fazari@enbridge.com>

Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Hello Matthew,

Please see the attached response to the November 1st letter regarding the Haldimand Shores Community Expansion Project.

Kind regards,
Kim Valentine
(she/her|elle)
Administrative Clerk, Ontario Region
Impact Assessment Agency of Canada / Government of Canada
Kimberly.Valentine@iaac-aeic.gc.ca / Tel: 647-617-5960

Commis administrative, Bureau régional de l'Ontario
Agence d'évaluation d'impact du Canada / Gouvernement du Canada
Kimberly.Valentine@iaac-aeic.gc.ca / Tél. : 647-617-5960

From: Gasser, Matthew <Matthew.Gasser@stantec.com>
Sent: November 1, 2021 4:25 PM
To: Puvananathan, Anjala (IAAC/AEIC) <anjala.puvananathan@iaac-aeic.gc.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc. Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES
Environmental Consultant

Matthew.Gasser@stantec.com

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



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Impact Assessment
Agency of Canada

Ontario Region
600-55 York Street
Toronto ON M5J 1R7

Agence d'évaluation
d'impact du Canada

Région de l'Ontario
600-55 rue York
Toronto ON M5J 1R7

November 5, 2021

Sent by email

Sonia Fazari
Senior Advisor
Enbridge Gas Inc.
Sonia.fazari@enbridge.com

Dear Sonia Fazari:

Subject: Applicability of the *Impact Assessment Act* to the Review of the Haldimand Shores Community Expansion Project proposed by Enbridge Gas Inc.

Thank you for your correspondence, dated November 1, 2021, regarding the Haldimand Shores Community Expansion (the Project) proposed by Enbridge Gas Inc. (the proponent).

The *Impact Assessment Act* (the IAA) sets out the federal process for assessing the impacts of certain major projects, including the assessment of positive and negative environmental, economic, health and social effects that are within the legislative authority of the Parliament of Canada. The *Physical Activities Regulations* (the Regulations) under the IAA identify the physical activities that constitute the “designated projects” that are subject to the IAA and may require an impact assessment. Proponents of designated projects are required to submit an Initial Project Description to the Impact Assessment Agency of Canada (the Agency) to inform a determination of whether an impact assessment is required.

Based on the information you provided to the Agency on November 1, 2021, it is the Agency's view that the Project is not a designated project. As a result, the proponent is not required to submit an Initial Project Description.

Should details or design aspects of the Project change such that the Project may include physical activities that are described in the Regulations, contact the Agency to discuss these changes and the implications on the applicability of the IAA.

.../2



-2-

Please note that for physical activities not described in the Regulations, subsection 9(1) of the IAA provides that the Minister of Environment and Climate Change (the Minister) may designate a physical activity. The Minister may designate on request or on his or her own initiative. A physical activity may be designated if the Minister is of the opinion that the carrying out of that activity may cause adverse effects within federal jurisdiction or adverse direct or incidental effects (resulting from federal decisions), or if public concerns related to those effects warrant the designation. Should the Minister designate the physical activity it would be considered a designated project and an Initial Project Description would be required.

Should the Project be carried out in whole or in part on federal lands, section 82 of the IAA would apply if any federal authority is required to exercise a power, duty or function under an Act other than IAA in order for the Project to proceed, or is providing financial assistance for the purpose of enabling the Project to be carried out. In that case, that federal authority must ensure that any Project assessment requirements under those provisions are satisfied.

In addition, other federal regulatory permits, authorizations and/or licences may still be required.

Further information on the IAA and associated regulations can be found at <https://www.canada.ca/en/impact-assessment-agency.html>.

If you have any questions, please feel free to contact us at iaac.ontarioregion-regiondontario.aeic@canada.ca.

Sincerely,

A handwritten signature in black ink, appearing to read 'AP', with a long horizontal stroke extending to the right. There are small red marks above and below the signature.

Anjala Puvananathan
Director, Ontario Region

c.c.: Matthew Gasser, Environnemental Consultant, Stantec Consulting Ltd.

Attachment – Useful Legislation, Regulation, and Guidance Documents

For more information on the *Impact Assessment Act*, please refer to the following links:

Legislation and Regulations:

<https://www.canada.ca/en/impact-assessment-agency/corporate/acts-regulations/legislation-regulations.html>

Impact Assessment Process Overview:

<https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/impact-assessment-process-overview.html>

Practitioner's Guide to Federal Impact Assessments under the *Impact Assessment Act*. <https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act.html>

Compendium of Policies and Guidance Documents:

<https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance.html>

Government of Canada News Release dated August 8, 2019:

<https://www.canada.ca/en/impact-assessment-agency/news/2019/08/better-rules-for-impact-assessments-come-into-effect-this-month.html>

From: [Pomeroy, Meghan \(MECP\)](#)
To: [Gasser, Matthew](#)
Cc: [HaldimandShoresEA](#); [Ginter, Kayla](#); [Knight, Mark](#); [Adkinson, Angela \(MECP\)](#)
Subject: FW: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Wednesday, November 10, 2021 2:12:16 PM
Attachments: [image002.png](#)
[Young_Cassandra.pdf](#)

Hello Matthew,

Thank you for sending this notice. Angela Adkinson is a Senior Park Planner with Ontario Parks, MECP, who oversees planning for provincial parks and conservation reserves in southeastern Ontario, including the Alnwick/Haldimand Township area. I have copied Angela on this email for a response regarding your project.

Meg

Meghan Pomeroy | A/ Senior Program Coordinator – Issues Management, Coordination & Planning Section

Ontario Parks

1350 High Falls Road, Bracebridge, Ontario, P1L 0L1

C: 705-571-1506 **E:** meghan.pomeroy@ontario.ca **W:** OntarioParks.com



Ministry of the Environment, Conservation and Parks

Please note: As part of providing [accessible customer service](#), please let me know if you have any accommodation needs or require communication supports or alternate formats.

From: Gasser, Matthew <Matthew.Gasser@stantec.com>
Sent: November 1, 2021 5:05 PM
To: Pomeroy, Meghan (MECP) <Meghan.Pomeroy@ontario.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: FW: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

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Hi Meghan,

It is my understanding that I should be passing on the attached Notice of Commencement and Virtual Open House to you in Cassandra's absence. This is for the Enbridge Gas Inc. Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES
Environmental Consultant

Matthew.Gasser@stantec.com

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



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From: Young, Cassandra (MECP) <Cassandra.Young2@ontario.ca>

Sent: Monday, November 1, 2021 4:49 PM

To: Gasser, Matthew <Matthew.Gasser@stantec.com>

Subject: Automatic reply: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Thank you for your message, however I am currently away from the office and will not be checking messages. Please contact Senior Park Planner Meghan Pomeroy for assistance at Meghan.Pomeroy@ontario.ca.

Take care,

Cassandra Young | A/Assistant Park Planner - Ontario Parks
659 Exeter Rd., London, Ontario, N6E 1L3
P: 226-559-0954 **W:** OntarioParks.com

Ministry of the Environment, Conservation and Parks

Please note: As part of providing [accessible customer service](#), please let me know if you have any accommodation needs or require communication supports or alternate formats.

From: [Ginter, Kayla](#)
To: ["Gonsalves, Meaghan \(IO\)"](#)
Subject: RE: Haldimand Shores Community Expansion Project - EA Notice Response
Date: Monday, November 29, 2021 12:28:00 AM
Attachments: [image001.png](#)

Good Evening Meaghan,

Thank you for taking time to review the project. I understand IO has not identified any properties owned by the Minister of Government and Consumer Services within the Project's study area. Should the scope of the Project change, our Team will reach out.

Warmly,

Kayla

From: Gonsalves, Meaghan (IO) <Meaghan.Gonsalves@infrastructureontario.ca>
Sent: Friday, November 19, 2021 3:13 PM
To: HaldimandShoresEA <HaldimandShoresEA@stantec.com>
Subject: Haldimand Shores Community Expansion Project - EA Notice Response

Good afternoon,

Thank you for sending us the Notice of Commencement for the Haldimand Shores Community Expansion Project.

While our initial scan indicates that there are no properties owned by the Minister of Government and Consumer Services within your project's study area, it is the proponent's responsibility to verify if any provincial government property is within the study area. Title documents may identify owners of provincial government property as any of the following or variations:

- Her Majesty the Queen
- His Majesty the King
- Hydro One
- Hydro One Networks Inc.
- Management Board Secretariat (MBS)
- Minister of Economic Development, Employment and Infrastructure (MEDEI)
- Minister of Energy and Infrastructure (MEI)
- Minister of Government and Consumer Services (MGCS)
- Minister of Infrastructure (MOI)
- Minister of Natural Resources and Forestry (MNRF)
- Minister of Public Infrastructure Renewal (PIR)
- Minister of Public Works
- Minister of Transportation (MTO)
- Ontario Lands Corporation (OLC)
- Ontario Realty Corporation (ORC)

If the proponent confirms that no provincial government property exists in the project area, please remove the following stakeholder from the contact list for this project:

Lisa Myslicki
Infrastructure Ontario, 1 Dundas Street West, Suite 2000
Toronto, ON M5G 1Z3
Lisa.Myslicki@infrastructureontario.ca

If provincial government property is in the study area but not required for the project, you should continue to consult us as a directly affected stakeholder. However, if government property is required for the project, the proponent should contact us so that we can advise about requirements for obtaining government property.

Additionally, please remember to send notices to our dedicated notice email address:
notice@infrastructureontario.ca

Kind regards,



Meaghan Gonsalves (she, her)
Infrastructure Ontario
Co-op, Environmental Management
meaghan.gonsalves@infrastructureontario.ca
Phone: +1 647-361-5030
www.infrastructureontario.ca

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From: [Ginter, Kayla](#)
To: [Warren, Catherine \(NDMNRF\)](#)
Cc: [HaldimandShoresEA](#); [Knight, Mark](#); [Gasser, Matthew](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House Our file: 21-HALD-NOR-EAE-3186
Date: Monday, November 29, 2021 12:04:00 AM

Good Evening Catherine,

Thank you for providing the Project Team with this information to guide the assessment of impacts as they relate to the Project. NDMNRF's general comments will be incorporated into the Environmental Report which will accompany the assessment.

Warmly,
Kayla

From: Warren, Catherine (NDMNRF) <Catherine.Warren@ontario.ca>
Sent: Friday, November 26, 2021 11:45 AM
To: Gasser, Matthew <Matthew.Gasser@stantec.com>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House Our file: 21-HALD-NOR-EAE-3186

Hello Matthew,

NDMNRF, Peterborough District has received your e-mail dated November 1, 2021 regarding the Enbridge Gas Haldimand Shores Community Expansion Project located in the (Geographic Township of Haldimand) in Northumberland. We provide the following general information for your consideration.

General: NDMNRF Data and Information

NDMNRF's natural heritage and natural resources GIS data layers can be obtained through the Ministry's [Land Information Ontario \(LIO\) website](#). You may also view natural heritage information online (e.g., Provincially Significant Wetlands, ANSIs, woodlands, etc.) using the [Natural Heritage Make a Map](#) tool.

We recommend that you use the above-noted sources of information during the review of your project proposal.

The NDMNRF may provide additional information and technical advice if additional details of the proposed works are circulated to our office.

Natural Heritage Systems/ Growth Plan

Infrastructure policies of the Growth Plan state that an environmental assessment should demonstrate "that any impacts on key natural heritage features in the Natural Heritage System for the Growth Plan, key hydrologic features and key hydrologic areas have been avoided, or if avoidance is not possible, minimized and to the extent feasible mitigated." (S. 3.2.5). Please see the Growth Plan definitions for a list of key

natural heritage features and key hydrologic features. Please note that not all key natural heritage features or key hydrologic features have been mapped in advance and field verifications may be required to map some of these features.

Wetlands

The subject area contains unevaluated wetlands. The NDMNRF recommends that the unevaluated wetlands be treated as Provincially Significant Wetland or evaluated by an Ontario Wetland Evaluation System (OWES) certified evaluator.

Any new evaluations or proposed changes made to an evaluated wetland boundary must be submitted to our office for approval as per the Ontario Wetland Evaluation System (OWES).

If a new OWES evaluation will be undertaken, please contact our office early in the process for advice on scoping the evaluation/field studies.

We recommend contacting your local Conservation Authority for more information on approvals that they may require. In areas without Conservation Authority (CA) coverage, the delegated CA responsibilities fall to the municipality.

NDMNRF recommends that new footprint or disturbance (including temporary disturbance e.g. laydown areas) be avoided within or adjacent to wetlands. Work should avoid negative impacts to these features by following best practices for construction e.g. avoiding sedimentation into wetlands. The use of equipment cleaning protocols is strongly recommended to prevent the introduction or spread of invasive species (e.g. European common reed, *Phragmites australis*) into natural heritage features. An example protocol can be found here:

http://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/Clean-Equipment-Protocol_June2016_D3_WEB-1.pdf

General turtle critical periods include;

Active season: April 15th – October 15th

Hibernation: October 15th – April 15th

Nesting: May 15th – June 30th; lasts about 3 weeks each year

Hatching: August 15th – September 30st

Dispersal/migration: April 15th – May 15th; September 1st – September 30th

If works are planned between May 15 and September 30 and work locations are adjacent to wetlands, ponds, or lakes, they should have turtle exclusion fencing erected prior to May 15 and maintained until June 30 to prevent turtles from nesting in the work area. BMP for fencing can be found at

https://files.ontario.ca/bmp_herp_2016_final_final_resized.pdf

Species at Risk

The Ministry of Environment, Conservation and Parks (MECP) has now assumed responsibility for the Endangered Species Act (ESA), including species at risk (SAR) in Ontario. Please contact SAROntario@ontario.ca to reach the MECP for advice

about species at risk and the ESA.

Significant Wildlife Habitat (SWH)**Deer Yarding Areas and Deer Winter Congregation Areas**

NDMNRF is responsible for the identification of Significant Wildlife Habitat – Deer Yarding Areas and Deer Winter Congregation Areas. A review of our available information indicates that some of the subject area is located within a stratum 2 deer wintering area. According to the latest Ecoregion 6E Criterion Schedule for the identification of Significant Wildlife Habitat (January 2015), both Stratum 1 (deer yard) and 2 (deer wintering area) are recommended to be considered Significant Wildlife Habitat. Stratum 2 deer yards can also contain agricultural areas.

Fish and Wildlife Conservation Act

Please note that you may require a Licence to Collect Fish for Scientific Purposes or Wildlife Scientific Collector's Authorization from our office if you will be doing any fish or wildlife sampling, collection, salvage, or relocation. For more information, please contact Julie Formsma, Fish and Wildlife Technical Specialist, at 705-772-9863.

Other Approvals

It is the responsibility of the proponent to acquire all other information and necessary approvals from any other municipal, Conservation Authority, provincial, or federal authority under other legislation.

If you have any questions regarding the above comments, don't hesitate to contact me. Please reference file number 21-HALD-NOR-EAE-3186 for any future correspondence.

Sincerely,

Catherine

From: Spang, Elizabeth (NDMNRF) <Elizabeth.Spang@ontario.ca>

Sent: November 1, 2021 4:38 PM

To: Warren, Catherine (NDMNRF) <Catherine.Warren@ontario.ca>

Subject: FW: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Hi Catherine – for you!

Liz

From: Gasser, Matthew <Matthew.Gasser@stantec.com>

Sent: November 1, 2021 4:35 PM

To: Spang, Elizabeth (NDMNRF) <Elizabeth.Spang@ontario.ca>

Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>

Subject: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

CAUTION -- EXTERNAL E-MAIL - Do not click links or open attachments unless you recognize the sender.

Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc. Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES
Environmental Consultant

Matthew.Gasser@stantec.com

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



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From: [ONT Environment / Environnement ONT](#)
To: [Gasser, Matthew](#)
Cc: [HaldimandShoresEA](#); [Ginter, Kayla](#); [Knight, Mark](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Friday, November 26, 2021 5:49:12 PM
Attachments: [Transport_Canada.pdf](#)

UNCLASSIFIED / NON CLASSIFIÉ

Greetings,

Thank you for your correspondence.

Please note Transport Canada **does not** require receipt of all individual or Class EA related notifications. We are requesting project proponents self-assess if their project:

1. Will interact with a federal property and/or waterway by reviewing the Directory of Federal Real Property, available at www.tbs-sct.gc.ca/dfrp-rbif/; **and**
2. Will require approval and/or authorization under any Acts administered by Transport Canada* available at <http://www.tc.gc.ca/eng/acts-regulations/menu.htm>.

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*.

If the aforementioned does not apply, the Environmental Assessment program should not be included in any further correspondence and future notifications will not receive a response. If there is a role under the program, correspondence should be forwarded *electronically* to: EnviroOnt@tc.gc.ca with a **brief description of Transport Canada's expected role**.

*Below is a summary of the most common Acts that have applied to projects in an Environmental Assessment context:

- **Canadian Navigable Waters Act (CNWA)** – the Act applies primarily to works constructed or placed in, on, over, under, through, or across navigable waters set out under the Act. The Navigation Protection Program administers the CNWA through the review and authorization of works affecting navigable waters. Information about the Program, CNWA and approval process is available at: <http://www.tc.gc.ca/eng/programs-621.html>. Enquiries can be directed to NPPONT-PPNONT@tc.gc.ca or by calling (519) 383-1863.
- **Railway Safety Act (RSA)** – the Act provides the regulatory framework for railway safety, security, and some of the environmental impacts of railway operations in Canada. The Rail Safety Program develops and enforces regulations, rules, standards and procedures governing safe railway operations. Additional information about the Program is available at: <https://www.tc.gc.ca/eng/railsafety/menu.htm>. Enquiries can be directed to RailSafety@tc.gc.ca or by calling (613) 998-2985.

- **Transportation of Dangerous Goods Act (TDGA)** – the transportation of dangerous goods by air, marine, rail and road is regulated under the TDGA. Transport Canada, based on risks, develops safety standards and regulations, provides oversight and gives expert advice on dangerous goods to promote public safety. Additional information about the transportation of dangerous goods is available at: <https://www.tc.gc.ca/eng/tdg/safety-menu.htm>. Enquiries can be directed to TDG-TMDOntario@tc.gc.ca or by calling (416) 973-1868.
- **Aeronautics Act** – Transport Canada has sole jurisdiction over aeronautics, which includes aerodromes and all related buildings or services used for aviation purposes. Aviation safety in Canada is regulated under this Act and the Canadian Aviation Regulations (CARs). Elevated Structures, such as wind turbines and communication towers, would be examples of projects that must be assessed for lighting and marking requirements in accordance with the CARs. Transport Canada also has an interest in projects that have the potential to cause interference between wildlife and aviation activities. One example would be waste facilities, which may attract birds into commercial and recreational flight paths. The *Land Use In The Vicinity of Aerodromes* publication recommends guidelines for and uses in the vicinity of aerodromes, available at: <https://www.tc.gc.ca/eng/civilaviation/publications/tp1247-menu-1418.htm>. Enquires can be directed to tc.aviationservicesont-servicesaviationont.tc@tc.gc.ca or by calling 1 (800) 305-2059 / (416) 952-0230.

Please advise if additional information is needed.

Thank you,

Environmental Assessment Program, Ontario Region

Transport Canada / Government of Canada / 4900 Yonge St., Toronto, ON M2N 6A5
EnviroOnt@tc.gc.ca / Facsimile : (416) 952-0514 / TTY: 1-888-675-6863

Programme d'évaluation environnementale, Région de l'Ontario

Transports Canada / Gouvernement du Canada / 4900, rue Yonge, Toronto, ON, M2N 6A5
EnviroOnt@tc.gc.ca / télécopieur: (416) 952-0514

From: Gasser, Matthew <Matthew.Gasser@stantec.com>

Sent: Monday, November 01, 2021 4:45 PM

To: ONT Environment / Environnement ONT <EnviroOnt@tc.gc.ca>

Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Ginter, Kayla <Kayla.Ginter@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>

Subject: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc. Haldimand Shores Community Expansion Project.

Warmly,

Matthew Gasser BES
Environmental Consultant

Matthew.Gasser@stantec.com

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



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Ministry of Transportation

Corridor Management Section
1355 John Counter Boulevard
Postal Bag 4000
Kingston, Ontario K7L 5A3
Tel.: 613 323-1253
Fax: 613-540-5106
Alexandre.gitkow@ontario.ca

Ministère des Transports

Section de gestion des couloirs routiers
1355, boulevard John Counter
CP/Service de sacs 4000
Kingston (Ontario) K7L 5A3
Tél.: 613 323-1253
Télééc. 613 540-5106



November 17, 2021

Sonia Fazari
Senior Advisor, Municipal & Stakeholder Engagement
Enbridge Gas Inc.
300W-675 Cochrane Drive,
Markham ON
L3R 0B8

Via email: BobcaygeonEA@stantec.com

Dear Sonia Fazari:

Re: Enbridge Gas Inc. – Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House

Thank you for circulating the notice of commencement for the Enbridge proposed Haldimand Shores Community Expansion Project, Notice of Study Commencement and Virtual Open House to the Ministry of Transportation (MTO) for review and comments. As you are aware, under the Public Transportation and Highway Improvement Act (PTHIA), the ministry, through the issuance of permits, has a control area that includes the Highway right of way corridor, and an area of 395 metres radius around each interchange/intersection and 45 m from the highway property limit. MTO review, approval and permits are required prior to the issuance of any other permits. This also includes any pre-engineering work that you may require.

An Encroachment Permit or other Permit or approval required by the Ministry must be obtained prior to any construction occurring on site. The construction or operation of works within the limits of the right-of-way of a highway by other than the Ministry or its agent shall be considered an encroachment, and any application will also be required to be submitted with a full Traffic Management Plan in accordance with Book 7 requirements, including any restrictions required by MTO such as hours of work, etc.

The MTO have reviewed the Haldimand Shores Community Expansion Project and we have the following preliminary comment. The proposed project is outside MTO jurisdiction and/or property, so we have no issue or comments on the project, if the project scope or route change the MTO would like the chance to review and comment again.

If Stantec or Enbridge require more detail please direct your request to me at Alexandre.Gitkow@ontario.ca.

Sincerely Yours,

Alexandre Gitkow
Corridor Management Officer

cc. Kate Green, Ministry of Transportation, Corridor Management Head
Mark Pedlar, Ministry of Transportation, Corridor (A) Senior Project Manager

From: [Romeo, Laura \(MHSTCI\)](#)
To: sonia.fazari@enbridge.com
Cc: zora.crnjacki@oeb.ca; [Barboza, Karla \(MHSTCI\)](#); [Ginter, Kayla](#); [HaldimandShoresEA](#)
Subject: RE: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House
Date: Tuesday, December 7, 2021 9:45:33 AM
Attachments: [2021-12-07_Haldimand Shores OEB-EA-MHSTCI Comments.pdf](#)

Good morning Sonia,

Please find attached the MHSTCI comments on the above referenced project. Please let me know if you have any questions or concerns.

Kind regards,
Laura

Laura Romeo | Heritage Planner (A)
Heritage, Tourism and Culture Division | Programs and Services Branch | Heritage Planning Unit
Ministry of Heritage, Sport, Tourism and Culture Industries
Laura.Romeo@ontario.ca

From: Ginter, Kayla <Kayla.Ginter@stantec.com>
Sent: November-01-21 3:28 PM
To: Barboza, Karla (MHSTCI) <Karla.Barboza@ontario.ca>
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>; Gasser, Matthew <Matthew.Gasser@stantec.com>; Knight, Mark <Mark.Knight@stantec.com>
Subject: Haldimand Shores Community Expansion Project – Notice of Commencement and Virtual Open House

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Good Afternoon,

Please find attached a Notice of Commencement and Virtual Open House for the Enbridge Gas Inc. Haldimand Shores Community Expansion Project.

Warmly,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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**Ministry of Heritage, Sport,
Tourism and Culture Industries**

Programs and Services Branch
400 University Ave, 5th Flr
Toronto, ON M7A 2R9
Tel: 416.660.1027

**Ministère des Industries du Patrimoine,
du Sport, du Tourisme et de la Culture**

Direction des programmes et des services
400, av. University, 5e étage
Toronto, ON M7A 2R9
Tél: 416.660.1027



December 7, 2021

EMAIL ONLY

Sonia Fazari
Senior Advisor, Municipal & Stakeholder Engagement
Enbridge Gas Inc.
sonia.fazari@enbridge.com

MHSTCI File : 0015384
Proponent : Enbridge Gas Inc.
Subject : Notice of Study Commencement
Project : Haldimand Shores Community Expansion Project
Location : Township of Alnwick/Haldimand

Dear Ms. Fazari:

Thank you for contacting the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) about the above-referenced project, which requires Ontario Energy Board (OEB)'s leave to construction under the Ontario Energy Board Act.

Please note that the OEB issued the [*Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition*](#) to assist applicants how to identify, manage and document environmental impacts. The Guidelines encourage applicants to consult with the Ontario Pipeline Coordinating Committee (which MHSTCI is a member) and other agencies. MHSTCI's interest in this process relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Among the planning activities outlined in Chapter 2 of the Guidelines, an applicant is advised to:

- describe the rationale for study area delineation (including construction staging, land requirements);
- identify existing baseline environmental conditions;
- identify potential environmental impacts expected to occur during construction and operation of the project, including cumulative impacts;
- describe proposed measures to mitigate potential negative impacts.

This letter provides advice on how to incorporate consideration of cultural heritage in the above mentioned planning activities, and also expands on sections 4.3 and 5.3 of the Guidelines by outlining the technical cultural heritage studies and level of detail required to address cultural heritage in pipeline and facilities projects. The outcomes and recommendations of the studies will be reported in the Environmental Report and form the basis for any future commitments.

Project Summary

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Haldimand Shores Community Expansion Project to provide affordable natural gas to the community in the Township of Alnwick/Haldimand. The Project will involve the construction of up to approximately 9 kilometers (km) of natural gas pipeline in the road allowance of Lakeshore Road, Shawano Drive, North Shore Road, Station Road, Keewatin Drive, Nawautin Drive N, Fox Run Road, and Killdeer Crescent.

Identifying Cultural Heritage Resources

While some cultural heritage resources may have already been formally identified, others may be identified through assessment.

Archaeological Resources (Land and Marine, if applicable)

We understand that a Stage 1 archaeological assessment (under Project Information Form number P1148-0013-2021) is being undertaken for this project.

The results of the Stage 1 AA will inform the OEB and will be summarized in the Environmental Report. If the Stage 1 AA recommends further AA(s), then MHSTCI recommends that further stages of AA be completed as early as possible during the design phase of the project, and prior to the completion of detailed design.

Archaeological assessments are required to be undertaken by an archaeologist licenced under the *Ontario Heritage Act*, who is responsible for submitting the report directly to MHSTCI for review.

The Environmental Report must include specific information from the AA report(s). The Executive Summary of each AA report provides a brief summary of the work completed and the recommendations for next steps, whether for further archaeological assessment, in which case the report will include a map that identifies those areas, or for no further assessment. The Environmental Report must also include clear commitments to undertake any further AA stages recommended, and a timeline for their completion.

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 OEB and will be summarized in the Environmental Report. This study will:

1. Identify existing baseline cultural heritage conditions within the study area.
 - Study Area: The consultants preparing the Cultural Heritage Report will need to define a study area and explain their rationale. The common practice has been to define a study area as including the right-of-way (ROW) and a 50-metre buffer (construction zone) on either side of the ROW.
 - The report will include a historical summary of the study area and will identify all known or potential built heritage resources and cultural heritage landscapes in the study area. MHSTCI has developed screening criteria that may assist with this exercise: [*Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes*](#).
2. Identify preliminary potential project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report

should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified.

3. Recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design.

Where a known or potential built heritage resource or cultural heritage landscape may be directly and adversely impacted¹, and where it has not yet been evaluated for Cultural Heritage Value or Interest (CHVI), completion of a Cultural Heritage Evaluation Report (CHER) is required to fully understand its CHVI and level of significance. The CHER must be completed as part of the Environmental Report. If a potential resource is found to be of CHVI, then a Heritage Impact Assessment (HIA) will be undertaken by a qualified person. The HIA will be completed in consultation with MHSTCI and the proponent as early as possible during detail design, following the OEB's Leave to Construct.

While some cultural heritage landscapes are contained within individual property boundaries, others span across multiple properties. For certain cultural heritage landscapes, it will be more appropriate for the CHER and HIA to include multiple properties, in order to reflect the extent of that cultural heritage landscape in its entirety.

Cultural Heritage Reports will be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed.

Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, historical societies and other local heritage organizations.

Cultural heritage resources are often of critical importance to Indigenous communities. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them.

Environmental Reporting

The findings of the above-mentioned studies should be summarized as part of the Environmental Report discussion of existing conditions, impact assessment, mitigation, and future commitments. Commitments for further studies should clearly state what is to be done, who is responsible for implementation, and when. Recommendations from the technical cultural heritage studies described above should be reflected as commitments in the Environmental Report.

MHSTCI welcomes the opportunity to review and comment upon relevant sections of the draft Environmental Report, before the final draft Environmental Report is submitted to the OPCC for review.

Thank you for consulting MHSTCI on this project and please continue to do so throughout the OEB process. If you have any questions, require clarification, or would like additional examples to assist with project reporting, do not hesitate to contact me.

¹ A direct adverse impact would have a permanent and irreversible negative effect on the cultural heritage value or interest of a property or result in the loss of a heritage attribute on all or part of the property. Examples include, but are not limited to: removal or demolition of a heritage attribute, land disturbance, alterations that are not sympathetic to the CHVI of the property, introduction of new elements that diminish the integrity of the property, changing the character of the property, intensification of the property without conservation of heritage attributes.

Sincerely,

Laura Romeo
Heritage Planner (A)
Heritage Planning Unit
laura.romeo@ontario.ca

Copied to: Norm Dumouchelle, Advisor Environmental, Enbridge Gas Inc
Kayla Ginter, Environmental Coordinator, Stantec Consulting Ltd.
Zora Crnojacki, Project Advisor, OEB
Karla Barboza, Team Lead (A), Heritage Planning Unit, MHSTCI

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MHSTCI makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MHSTCI be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MHSTCI if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

From: [Ginter, Kayla](#)
To: [REDACTED]
Subject: [HaldimandShoresEA](#)
Date: RE: Lakeshore road Grafton
Wednesday, January 12, 2022 4:57:00 PM

Good afternoon [REDACTED],

Thank-you for providing your response below regarding the Haldimand Shores Community Expansion Project.

We will note your comments in the Environmental Report. I understand you are interested in receiving natural gas and had a question, to that effect, on if the pipeline for the Project will extend further west down Lakeshore Road. Please note, the extent of running line has not been finalized as we are still in the preliminary phase of this Project. Should the final route not extend to your residence, your interest will be taken into consideration for future regional expansion decisions/planning.

For information on the Project and for a map of the proposed pipeline route, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores. Each homeowner that is in proximity to the proposed pipeline and interested in receiving natural gas will need to complete a 2-step application on the Enbridge webpage. For more information on service applications & related costs, please email ceapplications@enbridge.com. Alternatively, you can call 1-833-356-2689 and your questions will be addressed by an Attachment Specialist.

Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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From: [REDACTED]
Sent: Wednesday, November 10, 2021 12:53 AM
To: HaldimandShoresEA <HaldimandShoresEA@stantec.com>
Subject: Lakeshore road Grafton

Good Afternoon,

I have viewed the map of natural gas coming to Grafton. Is there any chance of expanding the project to complete lakeshore road going west towards Cobourg? We are a few houses down from

where it stops ([REDACTED] There are quite a few new builds going west on lakeshore.

Thanks,

[REDACTED]

Get [Outlook for Android](#)

From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: RE: Natural gas expansion
Date: Wednesday, November 10, 2021 11:08:00 PM

Hi [REDACTED]

Thank you for your question. Enbridge Gas will be responsible for providing natural gas to Haldimand Shores. For more information on the Project, please visit the Virtual Open House, now available online until November 22, 2021, at <https://solutions.ca/HaldimandShoresEA/>.

Warmly,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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

-----Original Message-----

From: [REDACTED]
Sent: Wednesday, November 10, 2021 9:22 AM
To: [HaldimandShoresEA](#) <HaldimandShoresEA@stantec.com>
Subject: Natural gas expansion

What company will be providing the natural gas to the Haldimand Shores project?

Regards,

[REDACTED]

From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: RE: New gas line
Date: Wednesday, January 12, 2022 5:00:00 PM

Good afternoon [REDACTED]

Thank-you for providing your response below regarding the Haldimand Shores Community Expansion Project.

We will note your comments in the Environmental Report. I understand you are interested in receiving natural gas and had a question, to that effect, on if the pipeline for the Project will extend to your home. Please note, the extent of running line has not been finalized as we are still in the preliminary phase of this Project. Should the final route not extend to your home, your interest will be taken into consideration for future regional expansion decisions/planning.

For information on the Project and for a map of the proposed pipeline route, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores. Each homeowner that is in proximity to the proposed pipeline and interested in receiving natural gas will need to complete a 2-step application on the Enbridge webpage. For more information on service applications & related costs, please email ceapplications@enbridge.com. Alternatively, you can call 1-833-356-2689 and your questions will be addressed by an Attachment Specialist.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

Stantec
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Markham ON L3R 0B8

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-----Original Message-----

From: [REDACTED]
Sent: Wednesday, November 10, 2021 11:10 AM
To: [HaldimandShoresEA](#) <HaldimandShoresEA@stantec.com>
Subject: New gas line

To whom it may concern

I just heard of the proposed pipeline going in on Haldimand Shores. I live on [REDACTED] It did not look like it was coming on our street. Could you tell me why, seeing as it's so close. Maybe I have misread the plans.

I would appreciate you getting back to me with an answer.

THANKYOU

[REDACTED]

Sent from my iPad

From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: RE: NG expansion
Date: Wednesday, January 12, 2022 5:02:00 PM

Good afternoon [REDACTED],

Thank-you for providing your response below regarding the Haldimand Shores Community Expansion Project.

We will note your comments in the Environmental Report. I understand that you had questions on the potential cost of the Project to homeowners. For information regarding potential connection costs, you can send an email enquiry to ceapplications@enbridge.com or call the number 1-833-356-2689.

For more information on the Project as well as Project news and updates, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores.

Regards,
Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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-----Original Message-----

From: [REDACTED] >
Sent: Saturday, November 20, 2021 9:24 AM
To: HaldimandShoresEA <HaldimandShoresEA@stantec.com>
Subject: NG expansion

Hello,

I am interested in understanding what costs as a homeowner could be expected to have NG services. I am in support of this proposal and wish to understand whether homeowners will be responsible for costs having NG lines run from the road to residence and tie in to the furnace.

[REDACTED]

Sent from my iPhone

From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: norm.dumouchelle@enbridge.com; [HaldimandShoresEA](#)
Subject: RE: Haldimand Shores Community Expansion Project
Date: Wednesday, January 12, 2022 5:04:00 PM

Good afternoon [REDACTED]

Thank-you for providing your response below regarding the Haldimand Shores Community Expansion Project.

A copy of the Final Environmental Report, which accompanied the Study, will be uploaded to the Enbridge Gas webpage <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>. It is anticipated that the Environmental Report will be completed end of January 2022 and should be available for review on the Project webpage at that time. The Report will present a summary of the Environmental Study completed for the Project, existing conditions, and recommended mitigation measures.

For more information on the Project as well as Project news and updates, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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From: [REDACTED] >
Sent: Wednesday, December 1, 2021 9:34 PM
To: Ginter, Kayla <Kayla.Ginter@stantec.com>
Cc: norm.dumouchelle@enbridge.com
Subject: Haldimand Shores Community Expansion Project

Ms. Ginter,

I am an interested property owner who lives in the area of the above noted project (my home is in Grafton).

How can I get a copy of the environmental report that your firm is undertaking and is expected to be out in January, 2022?

Simon Schneiderman

From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: RE: Haldimand Shores Community Expansion Project
Date: Wednesday, January 12, 2022 5:09:00 PM

Good afternoon [REDACTED]

As promised, I am in the process of getting back to landowners, like yourself, who had additional questions on the Haldimand Shores Community Expansion Project.

We will note your comments in the Environmental Report. I understand that you had questions on the potential cost of the Project to homeowners. For information regarding potential connection costs, you can send an email enquiry to ceapplications@enbridge.com or call the number 1-833-356-2689. I also understand that you had questions regarding the potential impact of the Project to your lawn. Please note, the pipeline will be located in the municipal road allowance and as such, no impacts to homeowners property/lawns, with respect to lawns being disturbed, are anticipated. During the Environmental Study for the Project, it was concluded that during pipeline construction, residents in the Study Area may experience a general nuisance, and temporary disruption in the use and enjoyment of their property and in the use of local roads from associated vehicular traffic, dust, and equipment exhaust. Residents and business owners may also experience temporary access disturbance. To reduce these potential Project impacts, Enbridge will be committing to a number of mitigation and protective measures.

Findings on potential impacts to residents and the recommended mitigation measures will be documented in the final Environmental Report. A copy of the final Report, will be uploaded to the Enbridge Gas webpage <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>. It is anticipated that the Environmental Report will be completed end of January 2022 and should be available for review on the Project webpage after that time.

For more information on the Project as well as Project news and updates, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores

Regards,

Kayla

-----Original Message-----

From: Ginter, Kayla
Sent: Monday, December 6, 2021 6:47 PM
To: [REDACTED] >
Cc: HaldimandShoresEA <HaldimandShoresEA@stantec.com>
Subject: RE: Haldimand Shores Community Expansion Project

Good Evening Amy,

Thank you for your email. A Notice of Study Commencement was mailed to landowners along the proposed running line on November 1, 2021. Apologies that you did not receive the letter at this time. I have attached the Notice of Study Commencement letter that was distributed for your reference.

Regarding your questions, we will be getting back to landowners shortly.

Warmly,
Kayla

-----Original Message-----

From: [REDACTED] >

Sent: Monday, December 6, 2021 5:20 PM
To: HaldimandShoresEA <HaldimandShoresEA@stantec.com>
Subject: Haldimand Shores Community Expansion Project

One of our neighbours just advised us that a questionnaire had been sent to directly affected landowners. We own land and a house on Nawautin Drive but didn't receive anything.

As it seems to be the eleventh hour for completing the questionnaire, we wish to express a few points.

We are very happy with propane as it is less harmful to the environment. We would like to know the costs involved both with pipes and conversion/replacement of furnace.

Who is responsible for the costs of repairs to pipelines and damage to lawns, etc.

I am sure there are many other questions but as we have not received any information and the deadline is apparently tomorrow we haven't had a chance to think about it.

I wonder how many other people were missed.



From: [Ginter, Kayla](#)
To: [REDACTED]
Subject: RE: Photos
Date: Wednesday, January 12, 2022 5:12:00 PM

Good afternoon [REDACTED]

Thank-you for your on-going effort to provide input on the Haldimand Shores Community Expansion Project. Your time spent providing these pictures and details on the Study Area is appreciated.

I understand from our previous phone calls and your email below that you have some concerns on the location of the pipeline and its potential to impact/intersect with natural areas and environmental features in the Study Area. Enbridge Gas has advised that the main pipeline will be installed in the municipal road allowance. While, the extent of running line has not been finalized, as we are still in the preliminary phase of this Project, the final location of the pipeline will be determined based on reducing environmental and socio-economic impacts and construction constraints. In an effort to reduce environmental impacts, sensitive areas (i.e., wetlands and woodlots) will be avoided to the greatest extent practical and an Environmental Protection Plan for the Project will be developed to mitigate impacts or the extent of impacts on the environment. The Environmental Report for the Project outlines the recommended mitigation measures to reduce impacts. A copy of the Final Environmental Report, which summarizes the Environmental Study, will be uploaded to the Enbridge Gas webpage <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>. It is anticipated that the Environmental Report will be completed end of January 2022 and should be available for review on the Project webpage at that time.

We will note your comment in the Environmental Report and Enbridge Gas will take into consideration your concerns on impacts to the natural environment, the Chub Point Nature Reserve, and other natural areas in the Study Area when determining the final location of the pipeline. As the pipeline will be located in the municipal road allowance, the Chub Point Nature Reserve will be avoided. Please note, I have also spoken with our biologists to discuss the terrestrial species, i.e. Stripped Maple, you identified in your email as a potential concern. For your interest, the Environmental Report will document the existing environmental conditions and will present a summary of the natural heritage field study that was undertaken to determine existing conditions and potential impacts to terrestrial species, aquatic features, and species at risk.

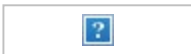
Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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From: [REDACTED] >
Sent: Wednesday, December 8, 2021 11:30 AM
To: Ginter, Kayla <Kayla.Ginter@stantec.com>

Subject: Photos

Kayla,

I am sending you some photos of our work and species in Chubb Point. This property has been under the care of Northumberland Land Trust for a few years, but I think that I am the first "Land Steward" for the property. Before they would go in as small maintenance group to remove invasive plants species and record anything they saw. We just had a group expedition in there in September, this was my first visit in as the new Land Steward.

Now, that I am the Land Steward (since September 2021) and I live up the road, I can go into the wetland as much as I want to record species and movements of wildlife. This also will allow me to track invasive species as well. Every time I go in I fill in a report on what I did while in there, that includes removal of garbage from ditches, species photographed and documented, invasive species and if I removed them. I also included time, date and other people included on the hike. Here are some photos with descriptions that I have taken since September.

This property and its future means everything to the future of protected species here in Northumberland and the Province. As I mentioned in our conversation, it is the future, what happens after my lifetime and in 100 or 200 years from now to Chub Point. This is why I ask that the pipeline if installed could be installed on the west side of the road before it reaches Chub Point, preferably north of the train tracks.

These are just a few of the species in the Reserve, in the spring I will be down there documenting bird migrations, as these birds migrate at night and during the day they rest and forage for food. This is a perfect food source for spring migrating birds. There is so much to learn here at Chub Point, it has real value in ecological terms.

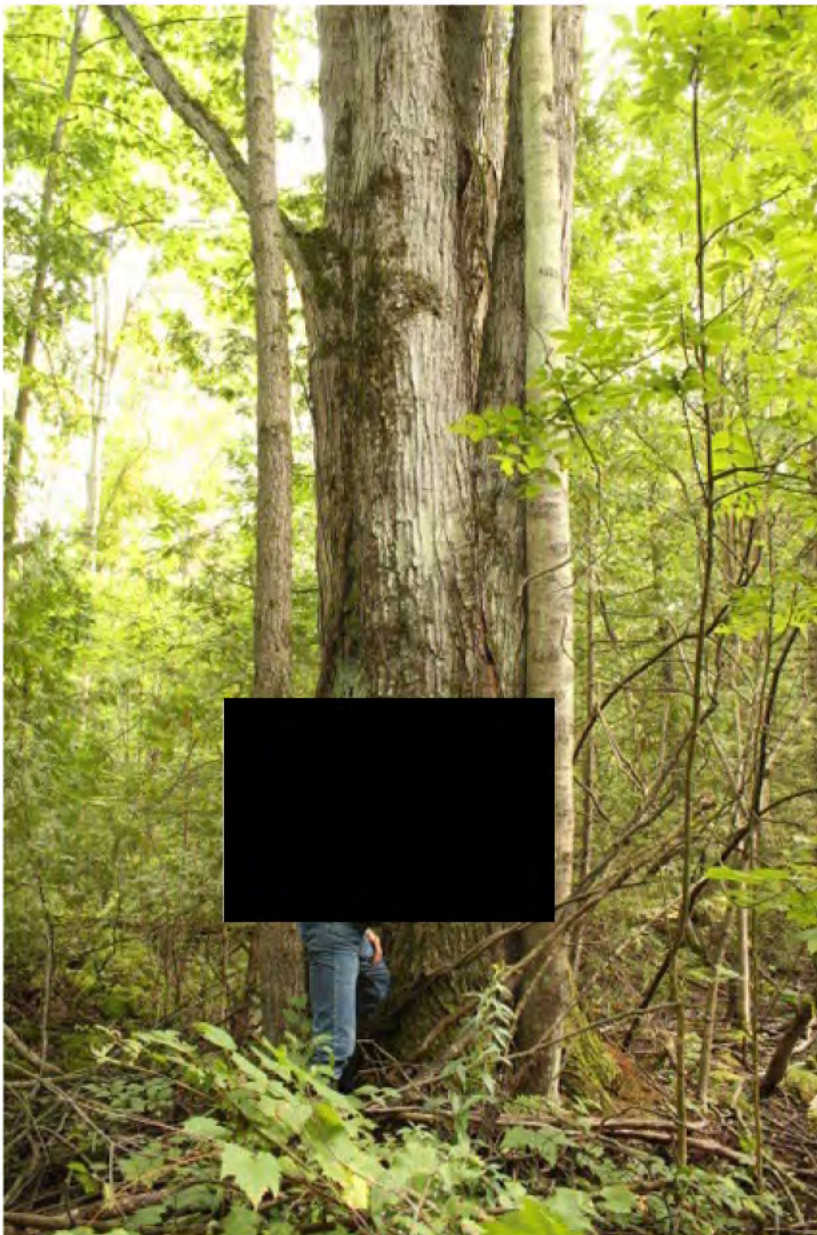
Thank you so much for your patience with me,

[REDACTED]

Land Steward Chub Point Nature Reserve.

[REDACTED] standing in front of a very large and old *Acer rubrum* - Red Maple. This is a tree which would be worth having a Dendrologist come and core to see it's age. I have a cousin who is a Dendrologist and I am going to ask him if he would do this for us so we can age this tree properly.

I am studying this property closely as I am not sure, but I suspect if it was cut since Colonization, it may have been cut only once. This tree could tell part of the history and story of Chub Point.



A young Garter Snake in September

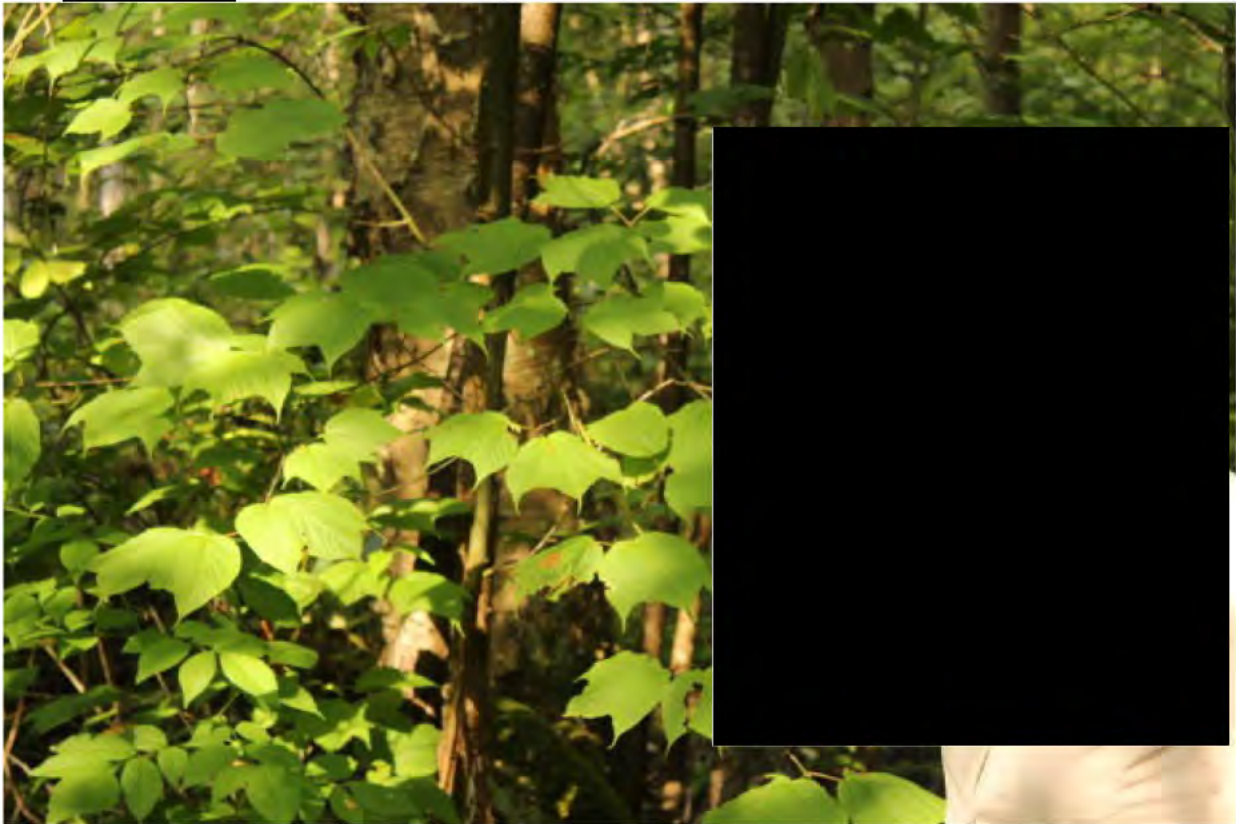


Goldthread - *Crotaphytus wislizeni*



Acer pensylvanicum

Here [REDACTED] is standing beside the Striped Maple well inside the Reserve.



This photo is along the East side of the Reserve showing our sign from the road the sign is surrounded by Striped Maple leaves.



The bark of the Striped Maple, which photosynthesizes even without leaves as the tree grows in low light



From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House
Date: Wednesday, January 12, 2022 5:15:00 PM

Good afternoon,

Thank-you for attending the Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House (VOH). I understand that you completed a questionnaire following the VOH and had some questions regarding cost to homeowners and how to get connected to the natural gas line. For information regarding potential connection costs, you can send an email enquiry to ceapplications@enbridge.com or call the number 1-833-356-2689.

Enbridge Gas has advised that the main pipeline will be installed in the municipal road allowance. Landowners that are interested in connecting to the main line will need to submit an application to access natural gas. Each homeowner that is in proximity to the proposed main pipeline will need to complete a 2-step application. For more information on service applications & related costs, please email ceapplications@enbridge.com. Alternatively, you can call 1-833-356-2689 and your questions will be addressed by an Attachment Specialist. For information on the Project and for a map of the proposed pipeline route, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores.

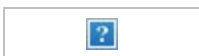
Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House
Date: Wednesday, January 12, 2022 5:17:00 PM

Good afternoon,

Thank-you for attending the Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House (VOH). I understand that you completed a questionnaire following the VOH and had some general concerns regarding the cost of natural gas, environmental impacts, and the proposed location of the pipeline. For information regarding potential connection costs, you can send an email enquiry to ceapplications@enbridge.com or call the number 1-833-356-2689. For questions on future costs of natural gas, please note that the price of natural gas is regulated by the provincial government under the Ontario Energy Board (OEB). Please refer to the OEB webpage for information on how often the OEB set rates, how the price of natural gas is determined and affected by a change in seasons, and how to calculate your natural gas bill <https://www.oeb.ca/consumer-information-and-protection/natural-gas-rates>.

Enbridge Gas has advised that the main pipeline will be installed in the municipal road allowance. While, the extent of running line has not been finalized, as we are still in the preliminary phase of this Project, the final location of the pipeline will be determined based on reducing environmental and socio-economic impacts and construction constraints. In an effort to reduce environmental impacts, tree removal will be avoided to the greatest extent practical. For information on the Project and for a map of the proposed pipeline route, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores.

Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House
Date: Wednesday, January 12, 2022 5:18:00 PM

Good afternoon,

Thank-you for attending the Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House (VOH). I understand that you completed a questionnaire following the VOH and had some questions regarding access and construction. Regarding your question on access, residents and business owners may experience temporary access disturbance during construction, however, access to property will not be restricted at any point. To reduce potential Project impacts on access and aspects such as local traffic, Enbridge will be committing to a number of mitigation and protective measures. Please note, construction is currently anticipated to begin Q4 of 2022 and will continue to October 2023.

For information on the Project and for a map of the proposed pipeline route, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores.

Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347

Kayla.Ginter@stantec.com

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



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From: [Ginter, Kayla](#)
To: [REDACTED]
Cc: [HaldimandShoresEA](#)
Subject: Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House
Date: Wednesday, January 12, 2022 5:20:00 PM

Good afternoon,

Thank-you for attending the Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House (VOH). I understand that you completed a questionnaire following the VOH and a concern regarding environmental impacts.

Enbridge Gas has advised that the main pipeline will be installed in the municipal road allowance. While, the extent of running line has not been finalized, as we are still in the preliminary phase of this Project, the final location of the pipeline will be determined based on reducing environmental and socio-economic impacts and construction constraints. In an effort to reduce environmental impacts, sensitive areas (i.e., wetlands) will be avoided to the greatest extent practical and an Environmental Protection Plan for the Project will be developed to mitigate impacts or the extent of impacts on the environment. The Environmental Report for the Project outlines the recommended mitigation measures to reduce impacts. A copy of the Final Environmental Report, which summarizes the Environmental Study, will be uploaded to the Enbridge Gas webpage <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>. It is anticipated that the Environmental Report will be completed end of January 2022 and should be available for review on the Project webpage at that time.

We will note your comment in the Environmental Report and Enbridge Gas will take into consideration your concerns on impacts to the natural environment when determining the final location of the pipeline.

Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

Stantec
300W-675 Cochrane Drive
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From: [Ginter, Kayla](#)
To: [REDACTED]
Subject: [HaldimandShoresEA](#)
Date: Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House
Wednesday, January 12, 2022 5:22:00 PM

Good afternoon,

Thank-you for attending the Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House (VOH). I understand that you completed a questionnaire following the VOH and had some questions regarding the cost to construct and location of the pipeline. Please note, the pipeline will be located within the municipal road allowance and not on landowner property. A map of the pipeline route was presented on the Virtual Open House (VOH) webpage and is now available on the Enbridge Gas website at the following link: <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>. The pipeline route, as shown at the VOH and on the Project webpage, is currently illustrated in a general location. Enbridge Gas will undertake detailed design to determine the final location of the running line. Detailed design will also be influenced by supplemental studies and site-specific requests from landowners and agencies.

For information regarding potential connection costs, you can send an email enquiry to ceapplications@enbridge.com or call the number 1-833-356-2689 and for information on the Project and for a map of the proposed pipeline route, you can visit the Project site at www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores. If you are a homeowner interested in receiving natural gas, please note that each homeowner that is in proximity to the proposed pipeline will need to complete a 2-step application on the Enbridge webpage. For more information on service applications, please email ceapplications@enbridge.com. Alternatively, you can call the number above and your questions will be addressed by an Attachment Specialist.

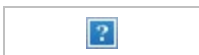
Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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From: [Ginter, Kayla](#)
To: [REDACTED]
Subject: Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House
Date: Wednesday, January 12, 2022 5:24:00 PM

Good afternoon,

Thank-you for attending the Enbridge Gas Inc. Haldimand Shores Community Expansion Project Virtual Open House (VOH). I understand that you completed a questionnaire following the VOH and had some concerns regarding the cost to construct and environmental impacts.

Cost of Construction

In June 2021, the Government of Ontario announced the province's Natural Gas Expansion Program. This Program was designed to increase access to natural gas across the province to help keep the cost of energy low for families, businesses, and farmers. The province has entered Phase 2 of the Natural Gas Expansion Program which will allocate more than \$234 million to support approximately 8750 connections in 43 rural, northern and Indigenous communities <https://news.ontario.ca/en/release/1000298/ontario-expands-access-to-natural-gas-in-rural-northern-and-indigenous-communities>. As a community expansion project, Enbridge Gas has received government funding to construct the Project. For information regarding potential connection costs, you can send an email enquiry to ceapplications@enbridge.com or call the number 1-833-356-2689.

Environmental Impacts and the location of the Pipeline Route

A map of the pipeline route was presented on the Virtual Open House (VOH) webpage and is now available on the Enbridge Gas website at the following link: <https://www.enbridgegas.com/about-enbridge-gas/projects/haldimand-shores>. Enbridge Gas has advised that the main pipeline will be installed in the municipal road allowance. While the extent of running line has not been finalized, as we are still in the preliminary phase of this Project, the final location of the pipeline will be determined based on reducing environmental and socio-economic impacts and construction constraints. The construction of the pipeline will be completed in accordance with all applicable local and provincial regulations, permits, and approvals (including the Ministry of Environment, Conservation and Parks (MECP) which you reference), and the environmental guideline's established by the Ontario Energy Board (OEB). The Project is regulated by the OEB, an independent government agency that regulates the electricity and natural gas sectors. Once the Environmental Report for the Project is completed, Enbridge Gas may file an application to the OEB to request a leave to construct for the Project. The OEB will review the application, and if it is concluded that the Project is in the public's interest, construction of the Project can proceed.

Should you have any other questions or concerns, please let me know.

Regards,

Kayla Ginter M.ES. (Planning), OPPI Candidate
Environmental Coordinator, Assessment and Permitting

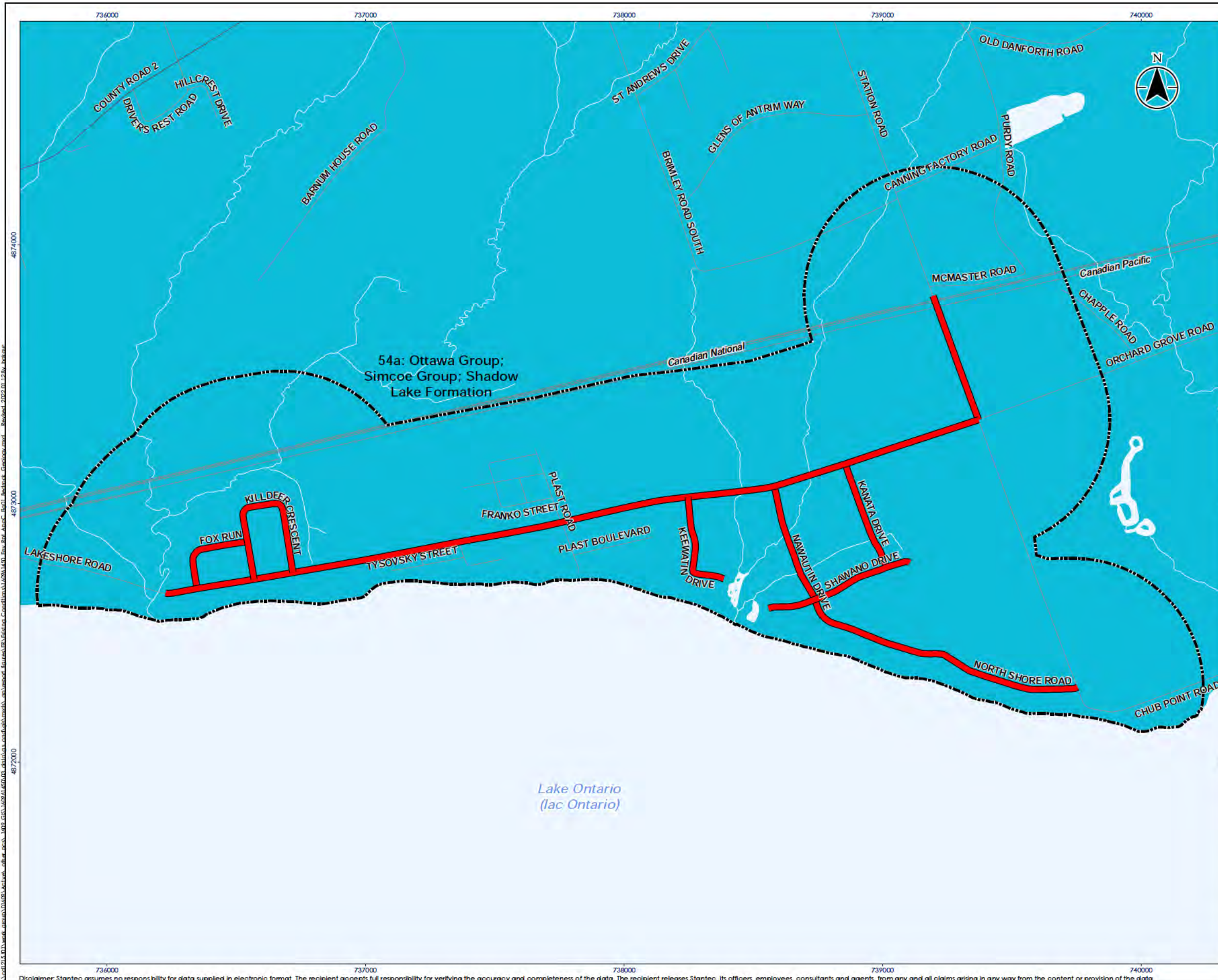
Direct: 226-980-5347
Kayla.Ginter@stantec.com

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



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APPENDIX C: EXISTING CONDITIONS FIGURES

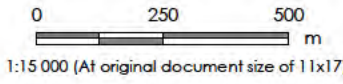


Legend

- Preferred Route
- Study Area
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody

Bedrock Geology

- 54a: Ottawa Gp.; Simcoe Gp.; Shadow Lake Fm. (now considered Upper Ordovician)



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, 2021
3. Bedrock geology data source: Ontario Geological Survey 2011 1:250 000 scale bedrock geology of Ontario; Ontario Geological Survey Miscellaneous Release-Data 126-Revision 1 ISBN 978-1-4435-5704-7 (CD) ISBN 978-1-4435-5705-4



Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2022-01-12
Technical Review by SE on 2021-11-10

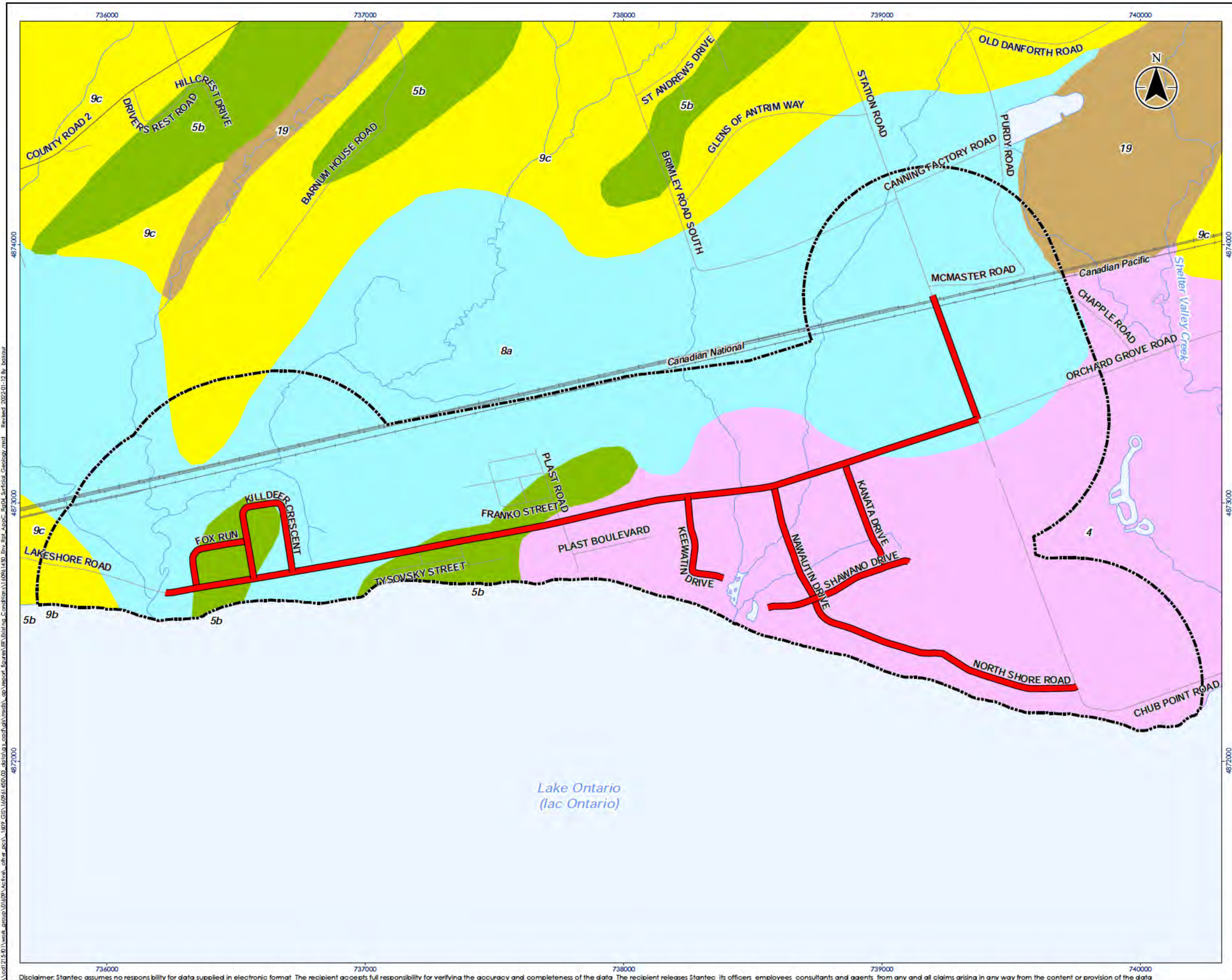
Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

Figure No.

1

Title

Bedrock Geology



Legend

Preferred Route

Study Area

Major Road

Minor Road

Railway

Watercourse (Intermittent)

Watercourse (Permanent)

Waterbody

Surficial Geology

19: Modern alluvial deposits

9b: Coarse-textured glaciolacustrine deposits

(Littoral-foreshore deposits)

9c: Coarse-textured glaciolacustrine deposits

(Foreshore-basinal deposits)

8a: Fine-textured glaciolacustrine deposits

(Massive-well laminated)

5b: Stone-poor, carbonate-derived silty to sandy

fill

4: Paleozoic bedrock-drift complex

0 250 500
m

1:15 000 (At original document size of 11x17)

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 2021
- 3 Surficial geology data source: Ontario Geological Survey 2010. Surficial geology of Southern Ontario; Ontario Geological Survey Miscellaneous Release-Data 128-REV ISBN 978-1-4435-2483-4



Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2022-01-12
Technical Review by SE on 2021-11-10

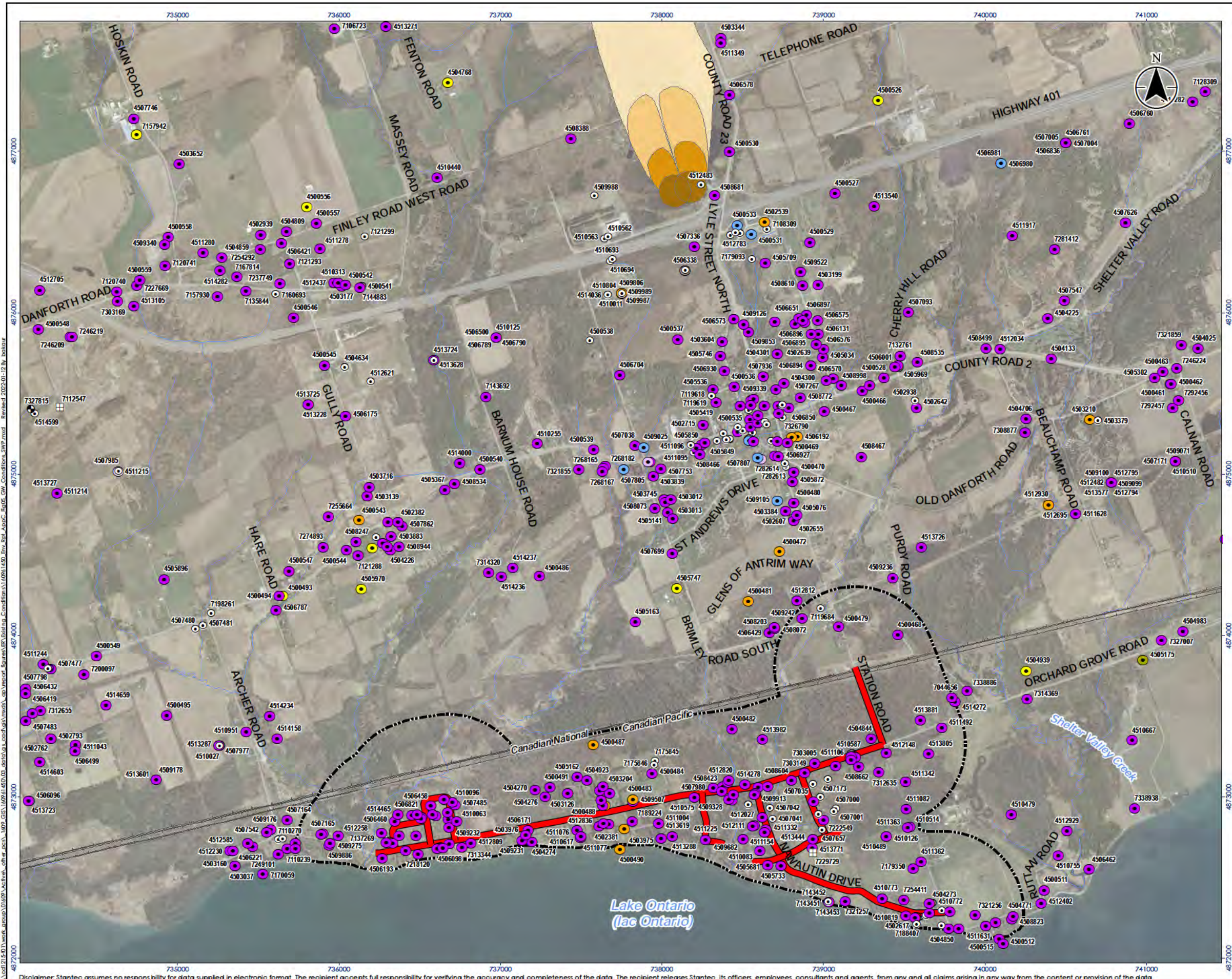
Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

Figure No.

4

Title

Surficial Geology



Legend

- Preferred Route
- Study Area
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)

MECP Water Well (Well ID)

- Commercial
- Municipal
- Public
- Irrigation
- Domestic
- Livestock
- Test Hole
- Monitoring
- Well use not identified

Wellhead Protection Area

- A
- B
- C
- D

0 300 600
m

1:24,000 (At original document size of 11x17)

Notes

- Coordinate System: NAD 1983 UTM Zone 18N
- Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario 2021
- Orthoimagery © First Base Solutions 2021 Imagery Date 2019
- MECP water well record locations have been positioned based on published UTM coordinates and their locations should be considered approximate
- Contains information made available under the Trent Conservation Coalition Open Data Licence v2



Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2022-01-12
Technical Review by SE on 2021-11-10

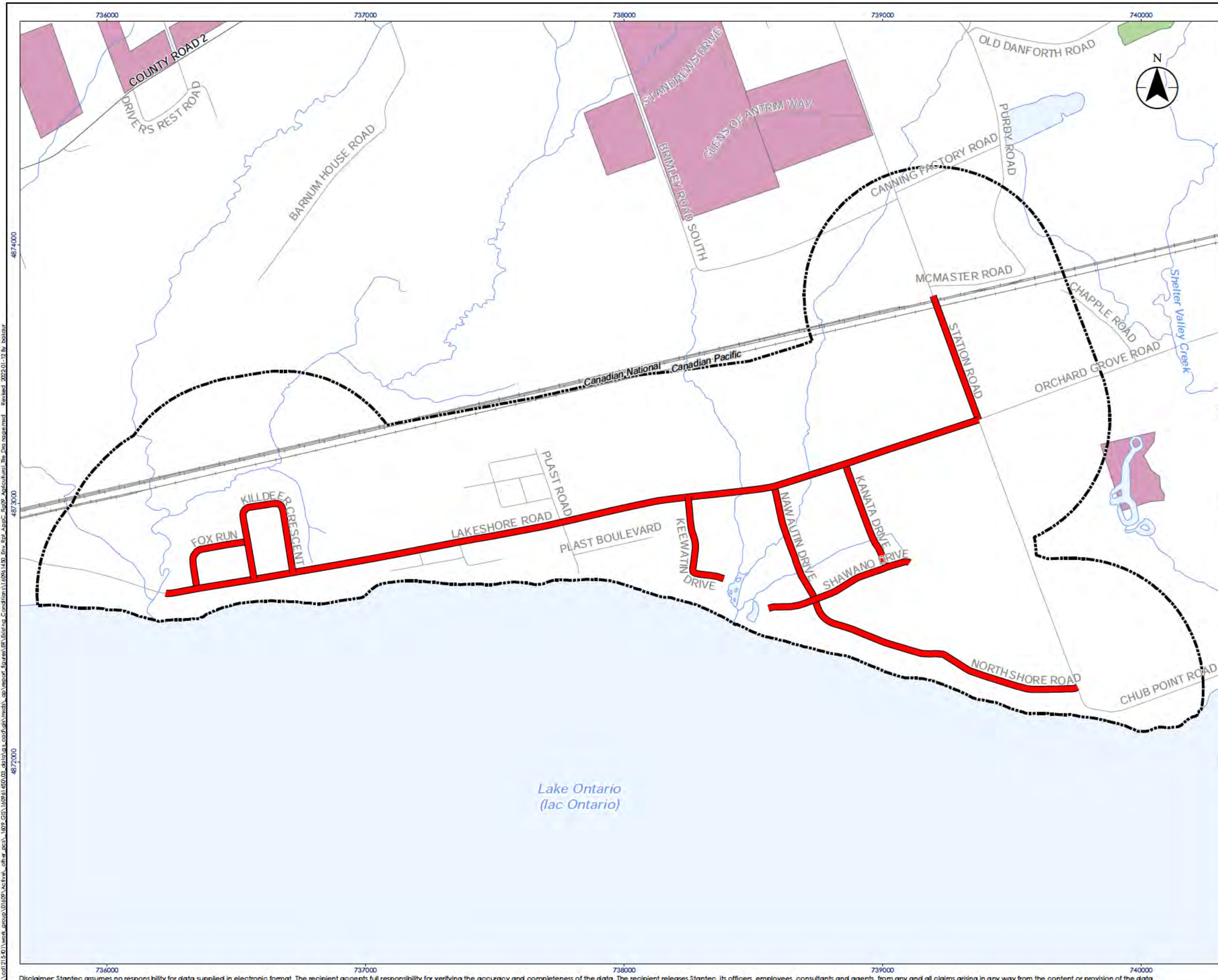
Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

Figure No.

5

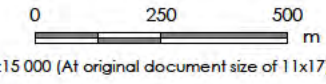
Title

Groundwater Conditions



Legend

- Preferred Route
- Study Area
- Major Road
- Minor Road
- +— Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Tile System Type**
- Random
- Systematic



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 2021



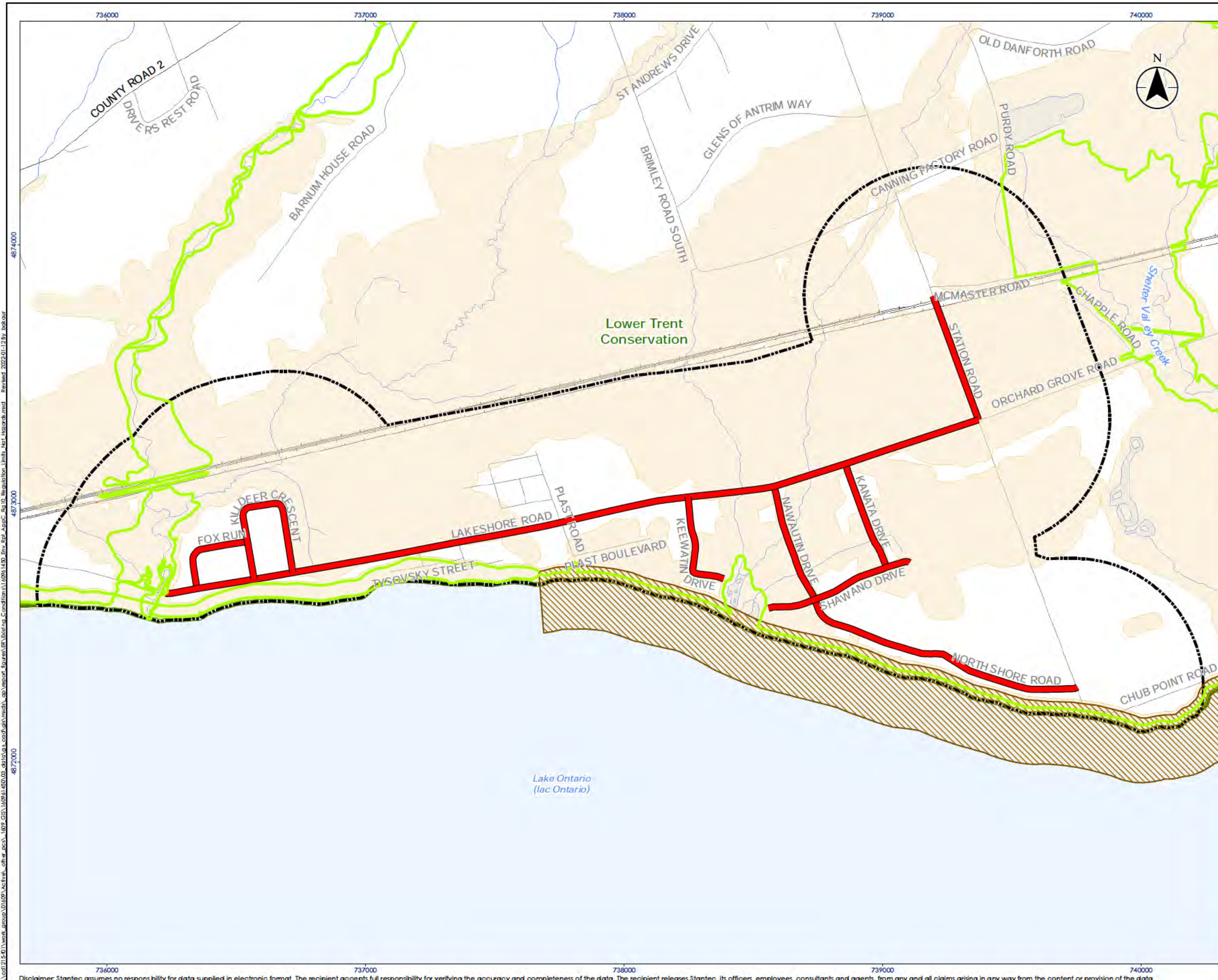
Project Location 160961450 REVA
 County of Northumberland Prepared by KB on 2022-01-12
 Technical Review by SE on 2021-11-10

Client/Project
 ENBRIDGE GAS INC.
 HALDIMAND SHORES COMMUNITY EXPANSION
 PROJECT

Figure No.
8

Title
Agricultural Tile Drainage

\\cd1215-01\work\arcmap\01009\Active\chfr.docx\1609_GIS\160961450\03_data\Map_Locations.mxd\geopoint_layers\B\Existing_Condition\160961450_Env_Rpt_Agri_Tile_Drainage_The_Drainage.mxd Revised: 2022-01-12 By: bobair



Legend

- Preferred Route
- Study Area
- Major Road
- Minor Road
- Railway
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Conservation Area Administrative Boundary
- Waterbody
- Lower Trent Conservation Features
 - Floodline
 - Dynamic Beach Hazard
 - Regulation Screening Area

0 250 500 m

- 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 2021
 - Lower Trent Conservation data provided to Stantec on Dec 1 2021

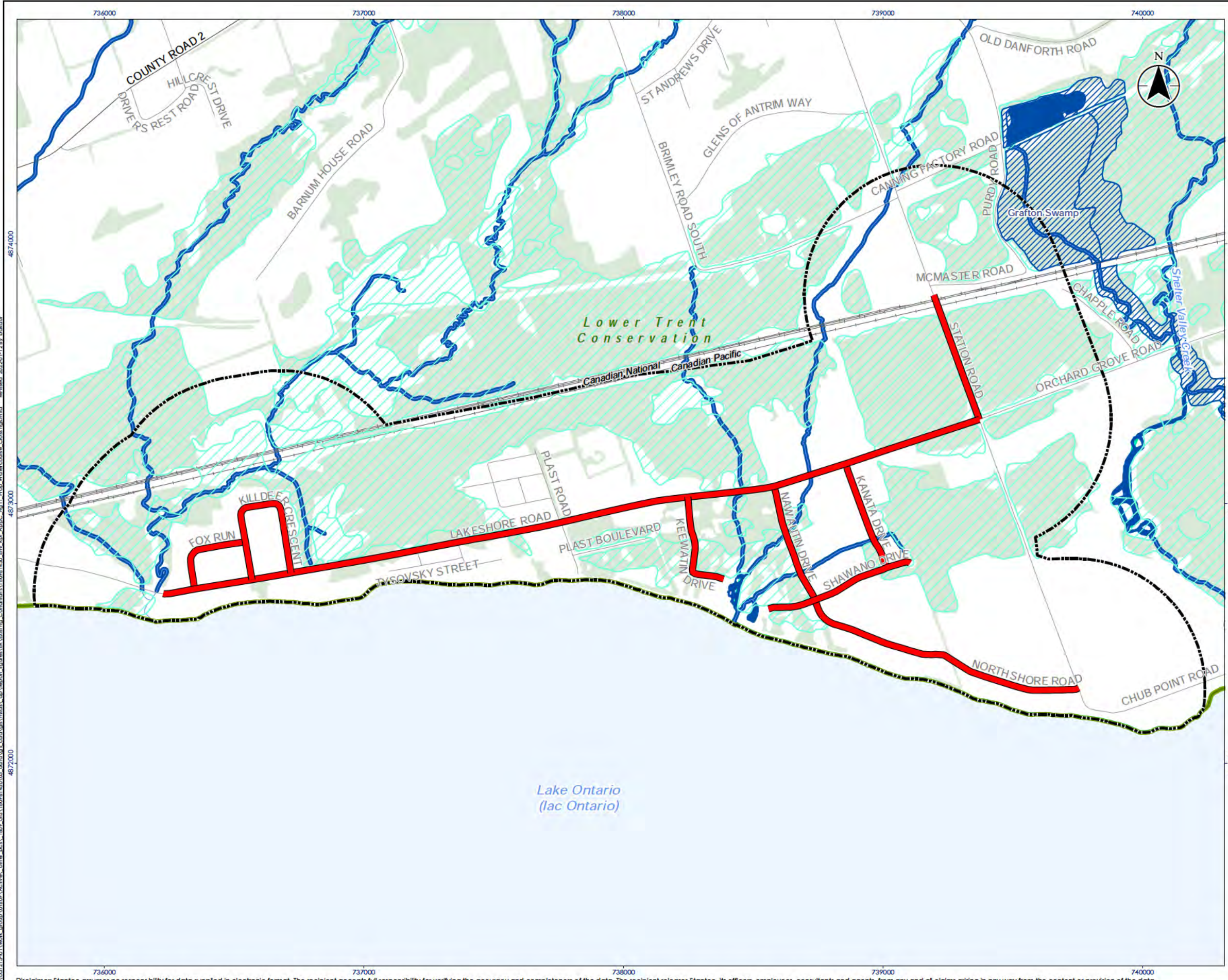


Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2022-01-12
Technical Review by SE on 2021-11-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

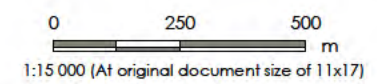
Figure No.
9

Title
Regulation Area and Natural Hazards



Legend

- Preferred Route
- Study Area
- Cold Water, Thermal Regime
- Major Road
- Minor Road
- Railway
- - - Watercourse (Intermittent)
- Watercourse (Permanent)
- Conservation Area Administrative Boundary
- Thermal Regime, Cold
- Waterbody
- Wetland, Provincially Significant
- Wetland, Not evaluated per OWES
- Wooded Area



- 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 2021

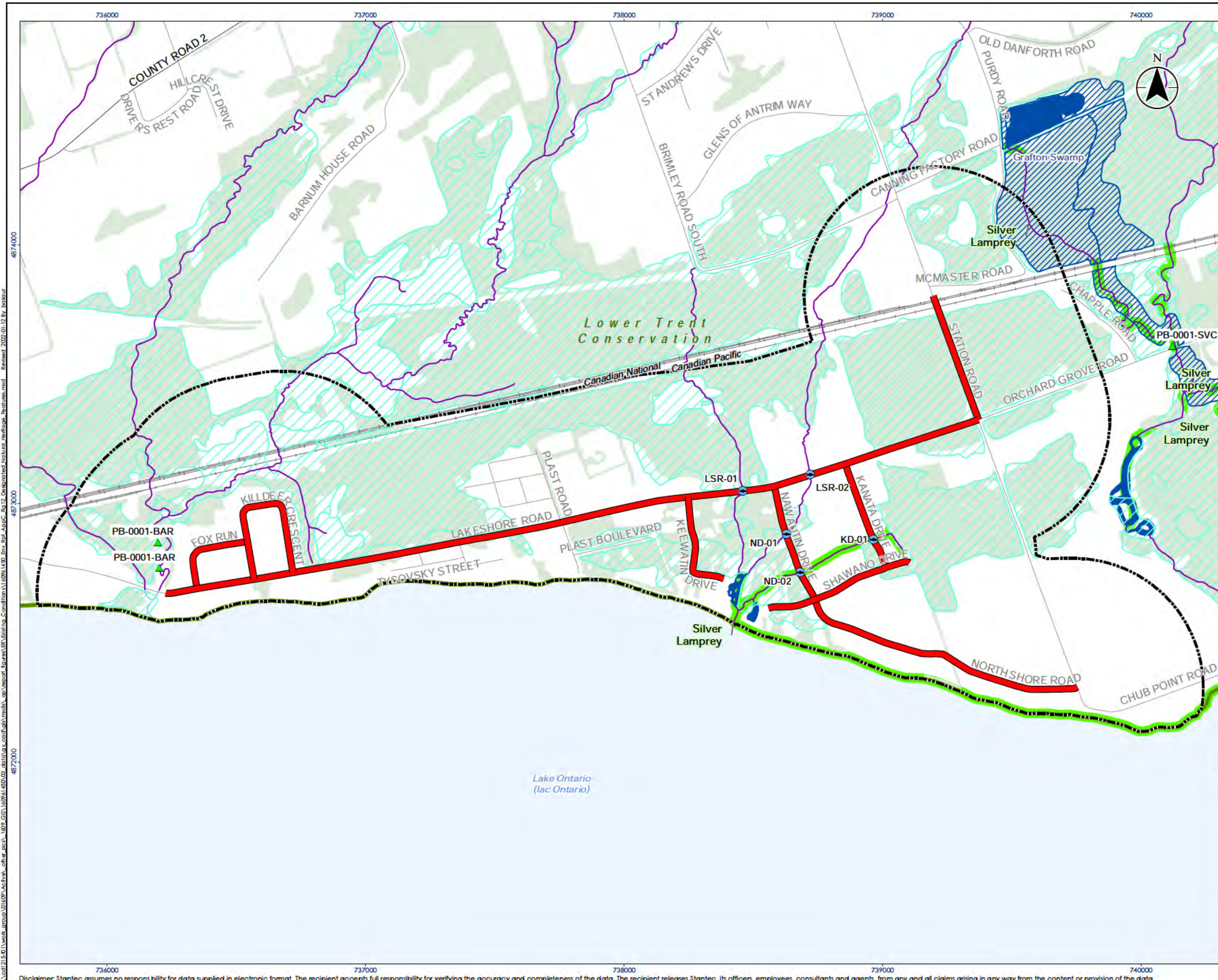


Project Location: 160961450 REVA
 County of: Northumberland
 Prepared by KB on 2022-01-12
 Technical Review by SE on 2021-11-10

Client/Project:
 ENBRIDGE GAS INC.
 HALDIMAND SHORES COMMUNITY EXPANSION
 PROJECT

Figure No.
10

Title
Proposed Watercourse Crossings



Legend

- Preferred Route
- Study Area
- Fish Survey Point (LIO - ARA)
- Watercourse Crossing Location
- Major Road
- Minor Road
- Railway
- Thermal Regime, Cold
- Watercourse (Intermittent)
- Watercourse (Permanent)
- DFO Aquatic Species at Risk - Fish
- Conservation Area Administrative Boundary
- Thermal Regime, Cold
- Waterbody
- Wetland, Provincially Significant
- Wetland, Not evaluated per OWES
- Wooded Area

0 250 500 m
1:15 000 (At original document size of 11x17)

- 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 2021



Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2022-01-12
Technical Review by SE on 2021-11-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

Figure No.
11

Title
Designated Natural Heritage Features

**APPENDIX D:
DRAFT STAGE 1 ARCHAEOLOGICAL
ASSESSMENT**



**Stage 1 Archaeological Assessment:
Haldimand Shores Community
Expansion Project**

Part of Lots 22 to 30, Concession A, and Lots
22 to 27, Concession B, Township of
Haldimand, Northumberland County, Ontario

November 24, 2021

Prepared for:

Norm Dumouchelle
Environmental Planner
Enbridge Gas Inc.
50 Keil Drive North
Chatham, Ontario N7M 5J5

Prepared by:

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

Licensee: Heather Kerr, M.A.
License Number: P1148
Project Information Form Number:
P1148-0013-2021
Project Number: 160961450

DRAFT ORIGINAL REPORT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Enbridge Gas Inc. (Enbridge Gas) to complete a Stage 1 archaeological assessment for the installation of new natural gas lines associated with the Haldimand Shores Community Expansion Project in the Township of Haldimand, near Grafton, Ontario (the Project). The study area for the Project comprises a portion of Lots 22 to 30, Concession A, and Lots 22 to 27, Concession B, Geographic Township of Haldimand, Northumberland County, Ontario and encompasses approximately 18.0 hectares. The project impact area will be confined to the Right of Way for the existing road, except for 104 m joining Nawautin Drive to North Shore Road. The Stage 1 archaeological assessment was triggered by Enbridge Gas' Archaeology Protocol and due diligence for repair and maintenance projects, which is informed by the Ontario Energy Board (OEB) and the *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (Ontario Energy Board 2016).

The Stage 1 archaeological assessment for the study area was conducted under Project Information Form number P1148-0013-2021 issued to Heather Kerr, MA, of Stantec by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI). The Stage 1 archaeological assessment was completed on October 18, 2021.

The Stage 1 background research and property inspection determined that portions of the study area exhibited potential for the identification and recovery of archaeological resources. In accordance with Section 1.3.2 and Section 7.7.4 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for the study area.**

Full and detailed recommendations are provided in the body of the report.

The MHSTCI is asked to review the results presented and to 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.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Project Context

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STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Project Context

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STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Project Context

PROJECT PERSONNEL

Project Manager:	Mark Knight, MA, MCIP, RPP
Licensed Archaeologist:	Heather Kerr, MA (P1148)
Licensed Field Director:	Heather Kerr, MA (P1148)
Mapping:	Baljeet Kaur, GIS Specialist
Report Writer:	Michael Moloney, Ph.D.
Licensee Review:	Heather Kerr, MA (P1148)
Quality Review:	Colin Varley, MA, RPA (P002)
Independent Review:	Tracie Carmichael, BA, B.Ed. (R140)

ACKNOWLEDGEMENTS

Enbridge Gas Inc.:	Norm Dumouchelle, Senior Environmental Analyst
Ministry of Heritage, Sport, Tourism and Culture Industries:	Robert von Bitter, Archaeological Data Coordinator



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Project Context
November 24, 2021

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Stantec Consulting Ltd. (Stantec) was retained by Enbridge Gas Inc. (Enbridge Gas) to complete a Stage 1 archaeological assessment for the installation of new natural gas lines associated with the Haldimand Shores Community Expansion Project in the Township of Haldimand, near Grafton, Ontario (the Project). The study area for the Project comprises a portion of Lots 22 to 30, Concession A, and Lots 22 to 27, Concession B, Geographic Township of Haldimand, Northumberland County, Ontario and encompasses approximately 18.0 hectares (Figure 1). The Stage 1 archaeological assessment was triggered by Enbridge Gas' Archaeology Protocol and due diligence for repair and maintenance projects, which is informed by the Ontario Energy Board (OEB) and the *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario* (Ontario Energy Board 2016).

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), 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.
- An examination of the *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- A property inspection to document areas of archaeological potential.

Permission to enter the study area to document and remove archaeological resources was provided by Enbridge Gas.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Project Context
November 24, 2021

1.2 HISTORICAL CONTEXT

1.2.1 Post-contact Indigenous Resources

“Contact” is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. Contact in what is now the province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016).

By the turn of the 16th century, the region of the study area appears to have been abandoned of permanent settlements. It has long been the understanding of archaeologists that prior to the 16th century the north shore of Lake Ontario was occupied by Iroquoian-speaking populations (Birch and Williamson 2013; Birch 2015; Dermarker et al. 2016). Recently, the direct correlation in Ontario between archaeology and ethnicity, and especially regional identity, has been questioned (cf. Fox 2015: 23; Gaudreau and Lesage 2016: 9-12; Ramsden 2016: 124). Recent considerations of Indigenous sources on culture history have led to the understanding that prior to the 16th century the north shore of Lake Ontario was co-habited by more mobile Anishnaabeg populations (Kapyrka 2018) who have not been represented in previous analyses of the archaeological record and who most likely have left a more ephemeral archaeological record than that of more densely populated agricultural settlements. The apparent void of permanent settlement along the north shore of Lake Ontario continued through the first half of the 17th century; however, this does not preclude the occupation of the region by mobile Anishnaabeg peoples.

The Mississauga traditional territory was located between two powerful confederacies, the Three Fires Confederacy (consisting of the Odawa, Ojibwa and Pottawatomi) located to the north and west, and the Haudenosaunee (Five Nations Iroquois) Confederacy on the south shore of Lake Ontario in present-day New York State. In this geo-political context, the Mississauga acted as peacekeepers among the various Indigenous nations, acting as negotiators and emissaries (Kapyrka 2018). In the 1640s the Five Nations began an aggressive campaign of territorial expansion, in particular between the north shore of Lake Ontario and what is now central Ontario. In 1649, raiding by the Seneca and Mohawk north of Lake Ontario, coinciding with wide-spread occurrence of infectious disease and famine among the Huron-Wendat, Tionontate (Petun) and Attiwandaron (Neutral) Nations resulted in the latter groups' dispersal from the region, and the Seneca establishing regional dominance (Heidenreich 1978).

At this time the semi-permanent settlements associated with the ancestral Huron-Wendat (the Huron) were abandoned and the Mississauga retreated from the area along the north shore of Lake Ontario into the hinterlands of their territory, waiting until the conflicts had ended and the political situation had stabilized before returning (Heidenreich 1990; Kapyrka 2018; Ramsden 1990). The Huron-Wendat permanently left the region, moving to the east in Quebec and to the southwest in the present-day United States. By 1690, Ojibwa (Anishinaabe) speaking people had begun moving south into the lower Great Lakes basin (Konrad 1981; Rogers 1978). Mississauga oral traditions, as told by Chief Robert Paudash and recorded in 1905, indicate that after the Mississauga defeat of the Mohawk Nation the Mohawk retreated to their homeland south of Lake Ontario and a peace treaty was negotiated between those groups around 1695 (Paudash 1905). Upon the Mississaugas' return they began to reestablish their role



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Project Context
November 24, 2021

as peacekeepers in the region, extending that to include the incoming Euro-Canadian settlers (Curve Lake First Nation n.d.; Migizi and Kapyrka 2015).

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. Based on Morris (1943), the study area falls within the boundaries of the Crawford's Purchases, Williams Treaty, and Rice Lake Treaty.

The Crawford's Purchases treaty areas (indicated by B1 and B2 on Figure 2) include two separate treaties. The first, negotiated in 1783 contained land that ran "...from the mouth of the Gananoque River to the mouth of the Trent River was purchased from the Mississauga[a]... [and] includes the southern portions of the Counties of Hastings, Lennox and Addington, and Frontenac" (Morris 1943:16-17. A second treaty, from 1787, added land "...from the mouth of the Trent River to [the] Toronto Purchase and back from Lake Ontario to Lake Simcoe and Rice Lake was purchased from the Mississauga[a]. [and] includes the County of Northumberland, excepting the northeast corner, Durham, the southern part of Ontario, and the east part of York" (Morris 1943:16-17). The 1787 treaty, sometimes known as the "Gunshot Treaty", was negotiated at Carrying Place.

The study area also falls within the territory of the seven Anishnaabeg First Nations which are signatories to the Williams Treaties. These include the Mississaugas of Alderville First Nation, Curve Lake First Nation, Hiawatha First Nation, Scugog Island First Nation, the Chippewas of Beausoleil First Nation, Georgina Island First Nation, and the Rama First Nation (Williams Treaties First Nations 2017).

The Williams Treaty (marked as AG on Figure 2) between the Crown and the Anishnaabeg First Nations in this area are part of "[t]hree separate and large parcels of land in southern and central Ontario...acquired by the Government of Canada in 1923" (Surtees 1986:1). This particular parcel includes:

parts of the Counties of Northumberland, Durham, Ontario and York...[c]ommencing at the point where the easterly limit of that portion of the lands said to have been ceded...[as part of Treaty Number 13] intersects the northerly shore of Lake Ontario; thence northerly along the said easterly and northerly limits of the confirmed tract to the Holland River; thence northerly along the Holland River and along the westerly shore of Lake Simcoe and Kempenfeldt Bay to the narrows between Lake Couchiching and Lake Simcoe; thence south easterly along the shores of Lake Simcoe to the Talbot River; thence easterly along the Talbot River to the boundary between the Counties of Victoria and Ontario; thence southerly along that boundary to the north west angle of the Township of Darlington; thence along the northern boundary of the Township of Darlington, Clarke, Hope and Hamilton to Rice Lake; thence along the southern shore of said Lake to River Trent, and along the River Trent to Bay of Quinte; thence westerly and southerly along the shore of the Bay of Quinte to the road leading to Carrying Place and Wellers Bay; then westerly along the northern shore of Lake Ontario to the place of beginning

(Morris 1943:62)

It is also worth noting that this area also "included substantial portions of land that had been the object of previous land cession treaties" (Surtees 1986:1).



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1.2.2 Euro-Canadian Resources

1.2.2.1 Northumberland County

The study area is situated within the Geographic Township of Haldimand, Northumberland County, Ontario. Northumberland County was originally surveyed in 1791, and included the townships of South Monaghan, Hamilton, Alnwick, Haldimand, Percy, Cramahe, Seymour, Brighton, and Murray. It is situated on the shore of Lake Ontario, and Rice Lake and the Trent River form much of its northern border. It was one of the original nineteen counties created by Lieutenant Governor John Graves Simcoe in 1792 and became part of the Home District in 1798. Major settlement of the county occurred in the late 18th century by United Empire Loyalists, primarily of Irish, but also English and Scottish, descent. An act of Parliament in 1800 stated that once Northumberland County and Durham County attained one thousand residents and had no less than six townships holding town meetings, the new Newcastle District would be formed (Stratow 1913). This occurred in 1802, and Northumberland was part of the Newcastle District until 1850, when it was administratively linked with Durham County to form the United Counties of Northumberland and Durham (Armstrong 2004). This larger county was subsequently dissolved in 1974 and the Township of Hope, which was originally part of Durham County, was transferred to Northumberland County, where it is now part of the Municipality of Port Hope.

1.2.2.2 Geographic Township of Haldimand

Historically, the Township of Haldimand was bounded on the north by the Township of Alnwick; on the west by the Township of Hamilton, on the south by Lake Ontario; and on the east by the Township of Cramahe. Surveying of the township began in 1791 by Augustus Jones, and later by Aaron Greeley in 1793 (Haldimand's History Committee 1997:16). Haldimand Township was named in honour of Sir Frederick Haldimand, a Swiss-born general of the British army who served as Governor-in-Chief of Canada between 1778 and 1786 (Haldimand's History Committee 1997:16). As early as 1804, the township was home to 356 Euro-Canadian settlers and by 1830 the population had grown to 1,699 (Haldimand's History Committee 1997:17). The growth of Haldimand Township continued throughout the 19th century and by 1855 the population of the township exceeded 4,600 (Dodds & Bro. 1880:332).

The map of Haldimand Township in the 1878 *Illustrated Historical Atlas of the Counties of Northumberland and Durham, Ont.* (Belden & Co. 1878) depicts a well-developed agricultural landscape with numerous farmsteads, homesteads, a local road and railway system, and a number of villages and hamlets, including Colborne, Grafton, Vernonville, Eddystone, Centreton, Burnley, and Fenella (Figure 3). Crafton Harbour is indicated just to the east of the study area. Table 1 summarizes applicable landowner information from the 1878 map of Haldimand Township.

Table 1: Landowner Summary from the 1878 Map of Haldimand Township

Lot	Concession	Landowner	Parcel	Comment
22	A	None listed	South quarter	Railway crosses lot in south portion, main road crosses in the north portion. Several structures along railway, one along western boundary, one along road
		T. Heenan	North $\frac{3}{4}$	



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				in the north portion, and one in the northwest corner. Church at corner of west boundary and north road.
23		J. Johnston	North half	Town of Grafton extends into northeast corner of lot. Structures grouped in northwest corner. Railway runs through south portion.
		J. White Estate	South half	
24		S. Clark Estate	North half	Structures in northwest corner of south portion and north boundary. Railway runs through south portion.
		W. McKinzie	South half	
25		William Webster	Surrounding portion	Railway runs through south portion. Structures in northeast corner, along east boundary, and within Midwest portion.
		W. Hird	Midwest portion	
		J. McCullough	South portion	
26		E. Barnum	North half	Railway and road run parallel in south portion. Structures along road in south portion.
		J. Russ	Southeast ¼	
		W. Stater	West ¾ of south half	
27		W. Stater	South half	Railway and road run parallel in south portion. Structure along road in northeast corner.
		E. Barnum	North half	
28		E. Barnum	North half	Railway and road run parallel in south portion. Mid portion of lot unowned. Road runs diagonally through north portion. Two structures along diagonal road in north portion. Structure at corner of diagonal road and west boundary labelled "M.P."
		Thos. Clark	North 2/3 of south half	
		J. Russ	South 1/3 of south half	
29		J.R. Clark Estate	North half	Railway and road run parallel in south portion. Structure along north boundary. Church in northeast corner.
		Thos. Clark	South half	
30		R. Hare	North 2/3	Railway and road run parallel in south portion. Two structures along road in south portion.
		Thos. Clark	South 1/3	
22		J. McMannis	Whole lot	Structure in center of lot.
23		J. White	Whole lot	Two structures along eastern boundary. Large estate home in northeast corner along. Roadway runs through north portion.
24	B	J. Monroe	Whole lot	Road runs through north portion. Structure along road in north portion.
25		J. McCollough	Whole lot	None indicated
26		W. Slater	West 2/3	None indicated
		J. Russ	East 1/3	
27		W. Slater	Whole lot	None indicated

When discussing late 19th century historical mapping it must be remembered that historical county atlases were produced primarily to identify factories, offices, residences, and landholdings of subscribers and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). As such, structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984). Review of historical mapping also has inherent accuracy difficulties due to potential



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error in geo-referencing. Geo-referencing is conducted by assigning spatial coordinates to fixed locations and using these points to spatially reference the remainder of the map. Due to changes in 'fixed' locations over time (e.g., road intersections, road alignments, watercourses, 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.

1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 The Natural Environment

The study area is situated within the Iroquois Plain physiographic region (Chapman and Putnam 1984:190-196). The Iroquois Plain is described as:

...The lowland bordering Lake Ontario, when the last Glacier was receding but still occupied the St. Lawrence Valley, was inundated with by a body of water known as Lake Iroquois which emptied eastward at Rome, New York State. Its old shorelines, including cliffs, bars, beaches, and boulder pavements are easily identifiable features.... The Iroquois plain extends around the western part of Lake Ontario, from the Niagara River to the Trent River..., its width varying from a few hundred meters to about eight miles.

(Chapman and Putnam, 1984:190)

Soils within the study area comprise Brighton, Colborne, Granby, and Tecumseth series soils (Hoffman and Acton 1974). Brighton soils are described as being calcareous sand of the Brown Forest Group, deposited on glacial outwash, comprising mostly medium sand. Soils of this type are not overly fertile but are suitable for agriculture, specifically tobacco and fruit. Colborne soils are described as being sandy loam surface horizons on high lime gravel, comprising Grey Brown Podzolic soils. Soils of this type do not hold moisture well but are still appropriate for agriculture, specifically wheat, grains, and corn. Granby soils are described as being poorly drained outwash soils associated with areas of depression near Brighton soils, typically comprising Humic Gleysols. Due to their poor drainage these soils are rarely used for cultivation, but rather may be used as pasture or grazing land. Tecumseth soils are described as being imperfectly drained soils developed from calcareous sand deposits, similar to Brighton soils. Due to variable drainage these soils are generally used as pasture or grazing land.

The closest water source to the study area is Lake Ontario, between 80 metres and 2 kilometres from various portions of the study area. There are also several small unnamed drainage systems that bisect the study area, flowing into Lake Ontario.

1.3.2 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



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are largely based on observed changes to formal lithic tools, and separated into the Early Paleo-Indian, Late Paleo-Indian, Early Archaic, Middle Archaic, Late Archaic, and Terminal 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 is summarized in Table 2, based on Ellis and Ferris (1990). The provided time periods are based on the “Common Era” calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

Table 2: Generalized Cultural Chronology of the Study Area

Period	Characteristics	Time Period	Comments
Early Paleo-Indian	Fluted Projectiles	9000 – 8400 BCE	Spruce parkland, caribou hunters
Late Paleo-Indian	Hi-Lo Projectiles	8400 – 8000 BCE	Smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000 – 6000 BCE	Slow population growth
Middle Archaic	Brewerton-like points	6000 – 2500 BCE	Environment similar to present
Late Archaic	Narrow Points	2500 – 1800 BCE	Increasing site size
	Broad Points	1800 – 1500 BCE	Large chipped lithic tools
	Small Points	1500 – 1100 BCE	Introduction of bow hunting
Terminal Archaic	Hind Points	1100 - 950 BCE	Emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 400 BCE	Introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 BCE – 500 CE	Increased sedentism
	Princess Point	550 – 900 CE	Introduction of corn
Late Woodland	Early Late Woodland	900 – 1300 CE	Emergence of agricultural villages
	Middle Late Woodland	1300 – 1400 CE	Long longhouses (100+ metres)
	Late Late Woodland	1400 – 1650 CE	Tribal warfare and displacement
Contact Indigenous	Various Algonkian Groups	1650 – 1875 CE	Early written records and treaties
Late Historic	Euro-Canadian	1796 CE – present	European settlement

Between 9000 and 8000 BCE, Indigenous populations were sustained by hunting, fishing, and foraging and lived a relatively mobile existence across an extensive geographic territory. Despite these wide territories, social ties were maintained between groups. One method of maintaining social ties was through gift exchange, evident through exotic lithic material documented on many sites (Ellis 2013:35-40).

By approximately 8000 BCE, evidence exists and becomes more common for the production of ground-stone tools such as axes, chisels, and adzes. These tools themselves are believed to be indicative specifically of woodworking. This evidence can be extended to indicate an increase in craft production and arguably craft specialization. This latter statement is also supported by evidence, dating to approximately 7000 BCE of ornately carved stone objects which would be laborious to produce and have explicit aesthetic qualities (Ellis 2013:41). This is indirectly indicative of changes in social organization which permitted individuals to devote time and effort to craft specialization. Since 8000 BCE, the Great



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Lakes basin experienced a low-water phase, with shorelines significantly below modern lake levels (Stewart 2013: Figure 1.1.C). It is presumed that the majority of human settlements would have been focused along these former shorelines. At approximately 6500 BCE the climate had warmed considerably since the recession of the glaciers and the environment had grown more similar to the present day. By approximately 4500 BCE, evidence exists from southern Ontario for the utilization of native copper (naturally occurring pure copper metal) (Ellis 2013:42). The known origin of this material along the north shore of Lake Superior indicates the existence of extensive exchange networks across the Great Lakes basin.

At approximately 3500 BCE, the isostatic rebound of the North American plate following the melt of the Laurentide glacier had reached a point which significantly affected the watershed of the Great Lakes basin. Prior to this, the Upper Great Lakes had drained down the Ottawa Valley via the French-Mattawa River valleys. Following this shift in the watershed, the drainage course of the Great Lakes basin had changed to its present course. This also prompted a significant increase in water-level to approximately modern levels (with a brief high-water period); this change in water levels is believed to have occurred catastrophically (Stewart 2013:28-30). This change in geography coincides with the earliest evidence for cemeteries (Ellis 2013:46). By 2500 BCE, the earliest evidence exists for the construction of fishing weirs (Ellis et al. 1990: Figure 4.1). Construction of these weirs would have required a large amount of communal labour and are indicative of the continued development of social organization and communal identity. The large-scale procurement of food at a single location also has significant implications for permanence of settlement within the landscape. This period is also marked by further population increase and by 1500 BCE evidence exists for substantial permanent structures (Ellis 2013:45-46).

By approximately 950 BCE, the earliest evidence exists for populations using ceramics. Populations are understood to have continued to seasonally exploit natural resources. This advent of ceramic technology correlated, however, with the intensive exploitation of seed foods such as goosefoot and knotweed as well as mast such as nuts (Williamson 2013:48). The use of ceramics implies changes in the social organization of food storage as well as in the cooking of food and changes in diet. Fish also continued to be an important facet of the economy at this time. Evidence continues to exist for the expansion of social organization (including hierarchy), group identity, ceremonialism (particularly in burial), interregional exchange throughout the Great Lakes basin and beyond, and craft production (Williamson 2013:48-54).

By approximately 550 CE, evidence emerges for the introduction of maize into southern Ontario. This crop would have initially only supplemented Indigenous people's diet and economy (Birch and Williamson 2013:13-14). Maize-based agriculture gradually became more important to societies and by approximately 900 CE permanent communities emerge which are primarily focused on agriculture and the storage of crops, with satellite locations oriented toward the procurement of other resources such as hunting, fishing, and foraging. By approximately 1250 CE, evidence exists for the common cultivation of historic Indigenous cultigens, including maize, beans, squash, sunflower, and tobacco. The extant archaeological record demonstrates many cultural traits similar to historical Indigenous nations (Williamson 2013:55).



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1.3.3 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 MHSTCI who maintain the *Ontario Archaeological Sites Database*. The study area is located within Borden block AIGm.

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 1990a). 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 MHSTCI 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 *Ontario Archaeological Sites Database* (Government of Ontario 2021a) has shown that there are five registered archaeological sites within one kilometre of the study area. Table 3 provides a summary of the registered archaeological sites; none are within 50 metres of the study area. A query of the *Ontario Public Register of Archaeological Reports* found no previous archaeological assessments within 50 metres of the study area (Government of Ontario 2021b).

Table 3: Registered Archaeological Sites within One Kilometre of the Study Area

Borden Number	Site Name	Site Type	Cultural Affiliation
AIGm-6	Barnum House	House	Euro-Canadian, Post-Contact
AIGm-7	Barnum Homestead	House, mill	Euro-Canadian, Post-Contact
AIGm-8	Barnum Mill and Distillery	Distillery, mill	Euro-Canadian, Post-Contact
AIGm-11	Purdy Road	Findspot	Euro-Canadian, Post-Contact
BaGm-9	Grafton	Hamlet	Indigenous, Late Woodland

1.4 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 MHSTCI (Government of Ontario 2011) to determine areas of archaeological potential within the study



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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 (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in Ontario have remained relatively stable over time, current proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site locations. 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 location and type to varying degrees. The MHSTCI categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks.
- Secondary water sources: intermittent streams and creeks, springs, marshes, and swamps.
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

Based on mapping, the study area is located close to potential water sources (see Section 1.3.1), including Lake Ontario and tributaries flowing into the lake. The proximity of these features meets the MHSTCI's defined characteristics for archaeological potential. The study area is also in the vicinity of registered archaeological sites. Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. As indicated previously, much of the natural soil within the study area is suitable for Indigenous agriculture.

For Euro-Canadian sites, 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 1990b) or property that local histories or informants have identified with possible historical events. The map of Haldimand Township in the 1878 *Illustrated Historical Atlas of the Counties of Northumberland and Durham, Ont.* (Belden & Co. 1878) demonstrates that the study area and its environs were widely occupied by Euro-Canadian inhabitants by the later 19th century.

When the above listed criteria are applied, the study area is considered to retain potential for Indigenous and Euro-Canadian archaeological resources. In accordance with Section 1.3.1 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), further archaeological assessment is required for any portion of the study area retaining archaeological potential.



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1.5 EXISTING CONDITIONS

The study area for the Project comprises 18.0 hectares on part of Lots 22 to 30, Concession A, and Lots 22 to 27, Concession B, Geographic Township of Haldimand, Northumberland County, Ontario (see Figure 1). The study area consists of scrubland, meadow, manicured lawn, forest, and existing road right of way.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Field Methods
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2.0 FIELD METHODS

The Stage 1 archaeological assessment compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on October 18, 2021, by Heather Kerr (P1148), under PIF number P1148-0013-2021 issued to Heather Kerr, MA, by the MHSTCI. Prior to the start of the Stage 1 property visit, the Client provided mapping which defined the limits of the study area. These files were then geo-referenced by Stantec's Geographic Information Services (GIS) team and a digital file (i.e., a shape file) was created of the Project's study area. The digital file was uploaded to handheld devices for use in the field. The development area is confined within the legal Right of Way for the existing road, ten metres either side of the existing road centre, and an area outside the ROW joining Nawautin Drive to North Shore Road.

The property inspection involved examining 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 MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). During the property inspection on October 18, 2021, the weather was sunny, and visibility of land features was excellent. Field, lighting, and weather conditions were not detrimental to the identification of features of archaeological potential.

The property inspection confirmed that the study area comprises approximately 6.3 hectares (35%) of disturbed area constituting the existing road, approximately 7.42 hectares (41.2%) of previous disturbance adjacent to the existing road (Photos 1 to 20) and approximately 4.28 hectares (23.8%) of areas retaining archaeological potential (Photos 21 to 32). The photography from the property inspection is presented in Section 8.1 and confirm 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 MHTSCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Figures 4.1 to 4.5 illustrates photo locations and the archaeological potential of the study area.



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Analysis and Conclusions
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3.0 ANALYSIS AND CONCLUSIONS

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by the MHSTCI (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. 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 (Government of Ontario 2011).

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 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 MHSTCI categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks.
- Secondary water sources: intermittent streams and creeks, springs, marshes and swamps.
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As detailed in Section 1.3.1, the study area is located in proximity to water sources, specifically Lake Ontario. Moreover, additional ancient and/or relic tributaries of the various primary and secondary water sources may have existed but are not identifiable today and are not indicated on historic mapping.

Further examination of the natural environment of the study area identified soil conditions suitable for Indigenous and Euro-Canadian agriculture. Five registered Indigenous archaeological sites (see Table 2) are located within one kilometre of the study area.

For Euro-Canadian sites, 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



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1990b) or property that local histories or informants have identified with possible historical events. The historic mapping reviewed during this assessment demonstrates that the study area and its environs were occupied by Euro-Canadian farmers by the mid-19th century. Moreover, the study area is adjacent to an early transportation route in the form of a major railway. Much of the established road and rail networks and agricultural settlement from that time is still visible today.

Thus, the Stage 1 archaeological assessment, aided by a property inspection, has determined that approximately 4.28 hectares (23.8%) of the study area retains archaeological potential and will require Stage 2 investigation, while approximately 13.72 hectares (76.2%) of the study area retains low to no archaeological potential as it has been subject to extensive disturbance and alteration throughout the 20th and 21st centuries. The results of the Stage 1 assessment are illustrated on Figures 4.1 to 4.5.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Recommendations
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4.0 RECOMMENDATIONS

The Stage 1 archaeological assessment, involving background research and a property inspection, resulted in the determination that portions of the study area exhibit potential for the identification and recovery of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is recommended for portions of the study area which have been identified as retaining archaeological potential (Figures 4.1 to 4.5).**

The objective of the Stage 2 archaeological assessment will be to document any 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 be conducted through test pit survey as outlined in Section 2.1.2 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MHSTCI standards require that each test pit be at least 30 centimeters in diameter, excavated to at least five centimeters into subsoil, and have all 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.

Should any additional areas of disturbance or features indicating that archaeological potential has been removed, including permanently wet areas, exposed bedrock and steep slopes, not previously identified during the Stage 1 property inspection be encountered during the Stage 2 archaeological assessment, they will be documented as outlined in Section 2.1.8 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

In addition to the above, the Stage 1 archaeological assessment determined that there are areas within the study area which retain low to no archaeological potential due to previous disturbance from road construction and ditching activities. In accordance with Section 1.3.2 and Section 7.7.4 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for portions of the study area which retain low to no archaeological potential (Figures 4.1 to 4.5).**

The MHSTCI is asked to review the results presented and accept this report into the Ontario Public Register of Archaeological Reports.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Advice on Compliance with Legislation
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5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

In accordance with Section 7.5.9 of the MHSTCI'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 verbatim from the MHSTCI's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries 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 1990b). The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, 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 1990b) 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 1990b).

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 1990b). 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 1990b).

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 of Government and Consumer Services is also immediately notified.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

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6.0 REFERENCES

- Armstrong, Frederick H. 2004. *Handbook of Upper Canadian Chronology*. Hamilton: Dundurn Press, Ltd.
- Belden, H.R. & Co. 1878. *Illustrated Historical Atlas of the Counties of Northumberland and Durham*. Toronto: Union Publishing Company.
- Birch, Jennifer. 2015. Current Research on the Historical Development of Northern Iroquoian Societies. *Journal of Archaeological Research* 22(4): 263-323.
- Birch, Jennifer and Ronald F. Williamson. 2013. *The Mantle Site: An Archaeological History of an Ancestral Huron Wendat Community*. Lanham: Altamira Press.
- Borden, Charles E. 1952. "A Uniform Site Designation Scheme for Canada." *Anthropology in British Columbia* 3:44-48.
- Caston, Wayne A. 1997. "Evolution in the Mapping of Southern Ontario and Wellington County." *Wellington County History* 10:91-106.
- Chapman, Lyman John and Donald F. Putnam. 1984. *The Physiography of Southern Ontario*. Third edition. Ontario Geological Survey Special Volume 2. Toronto: Ministry of Natural Resources.
- Dermarker, Susan, Jennifer Birch, Termeh Shafie, John P. Hart, and Ronald F. Williamson. 2016. St. Lawrence Iroquoians and Pan-Iroquoian Social Network Analysis. *Ontario Archaeology*, 96: 87-103.
- Dodds, E. E. & Bro. 1880. *Directory and book of reference for the west riding of the county of Northumberland and the county of Durham*. Port Hope, Ontario.
- Ellis, Christopher J. 2013. "Before Pottery: Paleoindian and Archaic Hunter-Gatherers." In *Before Ontario: The Archaeology of a Province*, edited by Marit K. Munson and Susan M. Jamieson, pp. 35-47. Montreal and Kingston: McGill-Queen's University Press.
- Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.
- Ellis, Chris J., Ian T. Kenyon, and Michael W. Spence. 1990. "The Archaic." In Ellis and Ferris 1990, pp. 65-124.
- Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson: University of Arizona Press.
- Fox, William. 2015. Ethnogenesis in the Lower Great Lakes and St Lawrence Region. *Ontario Archaeology*. Volume 95:21-32



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References

November 24, 2021

- Gaudreau, Mariane and Louis Lesage. 2016. Understanding Ethnicity and Cultural Affiliation: Huron-Wendat and Anthropological Perspectives. *Ontario Archaeology*. Volume 96: 6-16.
- Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.
- Government of Canada. 1905. *Indian Treaties and Surrenders from 1680 to 1890*. Two volumes. 1971 Coles reprint. Ottawa: Queen's Printer.
- Government of Ontario. 2021a. *Archaeological Sites Database Files*. Electronic document: <https://www.pastport.mtc.gov.on.ca/APSWeb/pif/projectSiteDataSearch.xhtml>. Last accessed September 3, 2021.
- Government of Ontario. 2021b. *Past Portal Report Database Files*. Electronic document: <https://www.pastport.mtc.gov.on.ca/APSWeb/report/reportSearch.xhtml>. Last accessed September 3, 2021.
- Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Heritage, Sport, Tourism and Culture Industries.
- Government of Ontario. 2002. *Funeral, Burial and Cremation Services Act, 2002*, S.O. 2002, CHAPTER 33. Electronic document: <https://www.ontario.ca/laws/statute/02f33>. Last accessed September 3, 2021.
- Government of Ontario. 1990a. *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, CHAPTER F.31. Electronic document: <https://www.ontario.ca/laws/statute/90f31>. Last accessed September 3, 2021.
- Government of Ontario. 1990b. *Ontario Heritage Act*, R.S.O. 1990, CHAPTER O.18. Last amendment: 2017, c. 34, Sched. 46, s. 37. Electronic document: <http://www.ontario.ca/laws/statute/90o18>. Last accessed September 3, 2021.
- Haldimand's History Committee. 1997. *Memories of Haldimand Township: When the Lakes Roared*. Erin, Ontario: Boston Mills Press.
- Harper, Russell. 1950. *The Early History of Haldimand County*. Caledonia: Grand River Sachem.
- Heidenreich, Conrad E. 1978. "Huron." In *Handbook of North American Indians, Volume 15, Northeast*, edited by Bruce G. Trigger, pp. 368-388. Washington: Smithsonian Institution Press.
- Heidenreich, Conrad E. 1990. History of the St. Lawrence-Great Lakes Area to A.D. 1650. In Ellis and Ferris 1990, pp. 475-492.
- Kapyrka, Julie. 2018. Remembering Original Relationships: Mississauga and Wendat. *Arch Notes*, 23(1): 5-7.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

References

November 24, 2021

- Kerfoot, Dave. 2013. Heroes of Zorra; Honouring Our Military. Electronic document: <http://www.heroesofzorrra.ca/index.php/about-the-project/2013-08-09-15-12-46/history-of-east-nissouri>. Last accessed December 20, 2016.
- Konrad, Victor. 1981. "An Iroquois Frontier: The North Shore of Lake Ontario during the Late Seventeenth Century." *Journal of Historical Geography* 7(2): 129-144.
- Loewen, Brad and Claude Chapdelaine (editors). 2016. *Contact in the 16th Century: Networks among Fishers, Foragers and Farmers*. Mercury Series Archaeology Paper 176. Ottawa: University of Ottawa Press.
- Mika, Nick and Helma Mika. 1983. *Places in Ontario: Their Name Origins and History, Part III N-Z*. Mika Publishing, Belleville.
- Mississaugas of the Credit First Nation. 2021. *Community Profile*. Electronic document: <http://mncfn.ca/about-mncfn/community-profile/>. Last accessed September 3, 2021.
- Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests, Government of Ontario.
- Ontario Energy Board. 2016. *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario*. 7th Edition. Electronic document: https://www.oeb.ca/oeb/Documents/Regulatory/Enviro_Guidelines_HydrocarbonPipelines_2016.pdf. Last accessed September 17, 2021.
- Paudash, Robert. 1905. *The Coming of the Mississaugas*. An oral history prepared by J. Hampden Burnham. Ontario Historical Society Papers and Records, Vol. VI. Ontario Historical Society, Toronto.
- Praxis Research Associates. n.d. *The History of the Mississaugas of the New Credit First Nation*. Hagersville: Lands, Research and Membership, Mississaugas of the New Credit First Nation.
- Ramsden, Peter G. 1990. The Hurons: Archaeology and Culture History. In Ellis and Ferris 1990, pp. 361-384.
- Ramsden, Peter. 2016. Becoming Wendat: Negotiating a New Identity around Balsam Lake in the Late Sixteenth Century. *Ontario Archaeology*. Volume 96: 121-132.
- Rogers, E.S. 1978. "Southeastern Ojibwa." In *Handbook of North American Indians, Volume 15, Northeast*, edited by Bruce G. Trigger, pp. 760-771. Washington: Smithsonian Institution Press.
- Schmalz, Peter S. 1991. *The Ojibwa of Southern Ontario*. Toronto: University of Toronto Press.
- Six Nations Lands & Resources Department. 2018. *Land Rights: A Global Solution for the Six Nations of the Grand River*. Ohsweken: Six Nations Lands & Resources Department. Electronic



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References

November 24, 2021

- document: <http://www.sixnations.ca/LandsResources/index.htm>. Last accessed September 3, 2021.
- Stewart, A.M. 2013. "Water and Land." In *Before Ontario: The Archaeology of a Province*, edited by Marit K. Munson and Susan M. Jamieson, pp. 24-34. Montreal and Kingston: McGill-Queen's University Press.
- Stratow, Barry. 1913. Northumberland County. In *The Stories of the Counties of Ontario*. Edited by Emily P. Weaver. Kingston, Ontario.
- Surtees, Robert J. 1986. Treaty Research Report: the Williams Treaties. Ottawa: Treaties and Historical Research Centre, Indian and Northern Affairs Canada.
- Tremaine, George C. 1857. *Tremaine's Map of Oxford County, Canada West*. George C. Tremaine, Kingston, Ontario.
- Walker and Miles. 1876. *Illustrated Historical Atlas of Oxford County, Ontario*. Reprinted 1972, Mika Sil Screening, Belleville, Ontario.
- Warrick, Gary. 2013. "The Aboriginal Population of Ontario in Late Prehistory." In *Before Ontario: The Archaeology of a Province*, edited by Marit K. Munson and Susan M. Jamieson, pp. 62-76. Montreal and Kingston: McGill-Queen's University Press.
- Weaver, Sally M. 1978. "Six Nations of the Grand River, Ontario." In *Handbook of North American Indians, Volume 15, Northeast*, edited by Bruce G. Trigger, pp. 525-536. Washington: Smithsonian Institution Press.
- White, Marian. 1978. "Neutral and Wenro." In *Handbook of North American Indians, Volume 15, Northeast*, edited by Bruce Trigger, pp. 407-411. Washington: Smithsonian Institution Press.
- Wicklund, R.E, and N.R. Richards. 1961. *The Soil Survey of Oxford County*. Report No. 28 of the Ontario Soil Survey. Research Branch, Canada Department of Agriculture and the Ontario Agricultural College.
- Williams Treaties First Nations. 2017. About Williams Treaties First Nations. Electronic document: <http://www.williamstreatiesfirstnations.ca/about/>. Last accessed November 4, 2021.
- Williamson, Ronald F. 2013. "The Woodland Period, 900 BCE to 1700 CE." In *Before Ontario: The Archaeology of a Province*, edited by Marit K. Munson and Susan M. Jamieson, pp. 48-61. Montreal and Kingston: McGill-Queen's University Press.



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Images

November 24, 2021

7.0 IMAGES

7.1 PHOTOGRAPHS

Photo 1: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking east



Photo 2: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking south



Photo 3: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking west



Photo 4: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking east



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Images

November 24, 2021

Photo 5: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking south



Photo 6: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking east



Photo 7: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking north



Photo 8: Previously disturbed right of way associated with the road construction, looking east



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Images

November 24, 2021

Photo 9: Previously disturbed right of way associated with the road construction, looking east



Photo 10: Previously disturbed right of way associated with the road construction, looking north



Photo 11: Previously disturbed right of way associated with the road construction, looking east



Photo 12: Previously disturbed right of way associated with the road construction at right and woodlot at left, looking west



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Images

November 24, 2021

Photo 13: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking west



Photo 14: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking south



Photo 15: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking south



Photo 16: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking west



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Images

November 24, 2021

Photo 17: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking south



Photo 18: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking west



Photo 19: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking southeast



Photo 20: Previously disturbed right of way associated with the road construction and ditching along shoulders, looking east



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Images

November 24, 2021

Photo 21: Scrubland and meadow, area of archaeological potential along proposed pipeline, looking east



Photo 22: Scrubland and forest, area of archaeological potential along proposed pipeline, looking north



Photo 23: Forested land, area of archaeological potential along proposed pipeline, looking east



Photo 24: Forest and scrubland adjacent to roadway, area of archaeological potential along proposed pipeline, looking north



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Images

November 24, 2021

Photo 25: Meadow and scrubland park, area of archaeological potential along proposed pipeline, looking west



Photo 26: Manicured lawn adjacent to roadway, area of archaeological potential along proposed pipeline, looking east



Photo 27: Scrubland and meadow adjacent to roadway, area of archaeological potential along proposed pipeline, looking west



Photo 28: Previously disturbed paved cul-de-sac and forested area adjacent to roadway, area of archaeological potential along proposed pipeline, looking west



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Images

November 24, 2021

Photo 29: Meadow and hedgerow in foreground, agricultural field in background, area of archaeological potential along proposed pipeline, looking east



Photo 30: Agricultural fields adjacent to roadway, area of archaeological potential along proposed pipeline, looking north



Photo 31: Forested land adjacent to roadway, area of archaeological potential along proposed pipeline, looking north



Photo 32: Scrubland and meadow adjacent to roadway, area of archaeological potential along proposed pipeline, looking north



STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

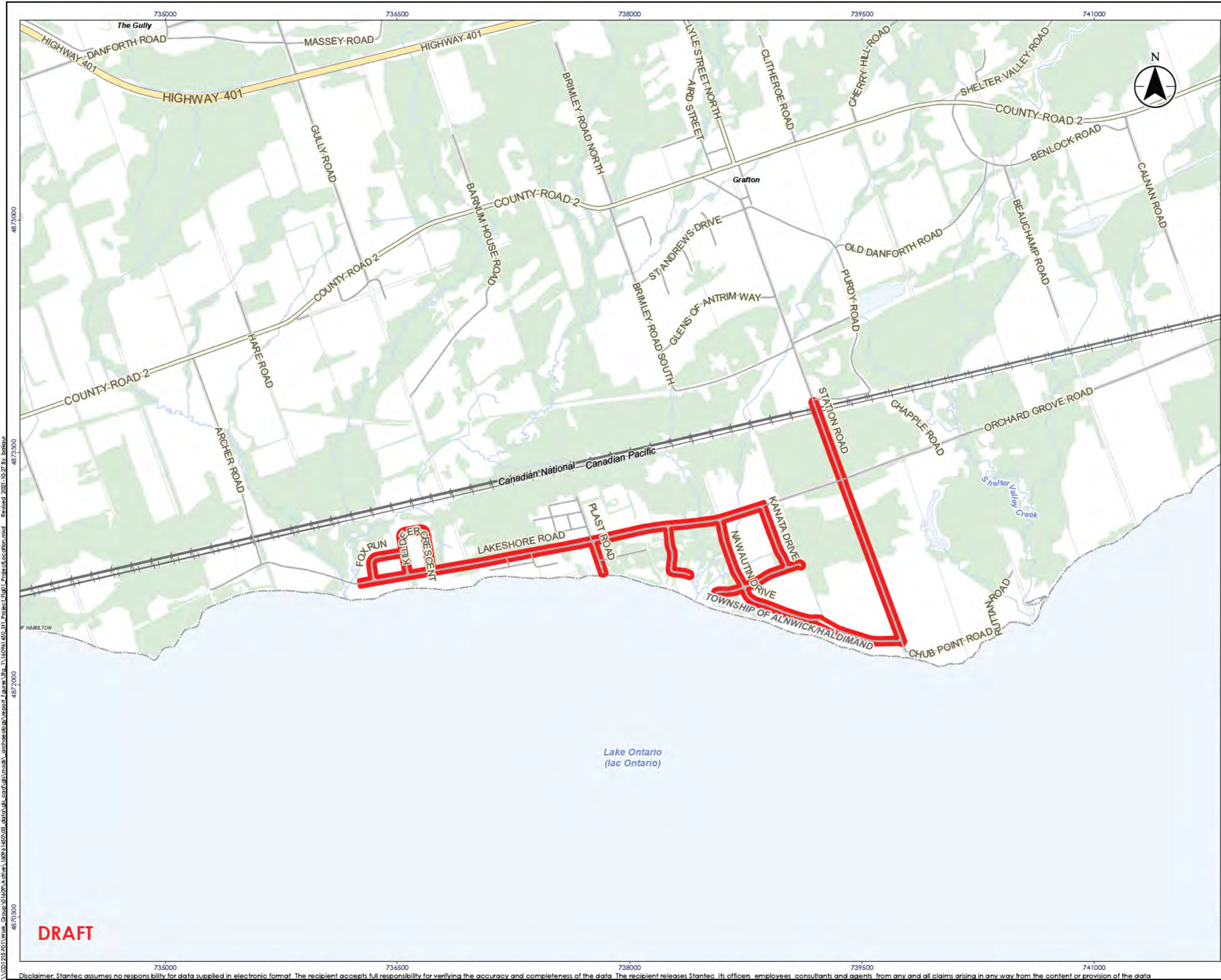
Maps

November 24, 2021

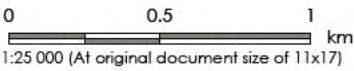
8.0 MAPS

Maps of the study area will follow on succeeding pages.





- Legend
- Study Area
 - Highway
 - Major Road
 - Minor Road
 - Minor Road
 - Railway
 - Watercourse
 - Lot/Concession Boundary
 - Municipal Boundary, Lower
 - Waterbody
 - Wooded Area



- 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 2021



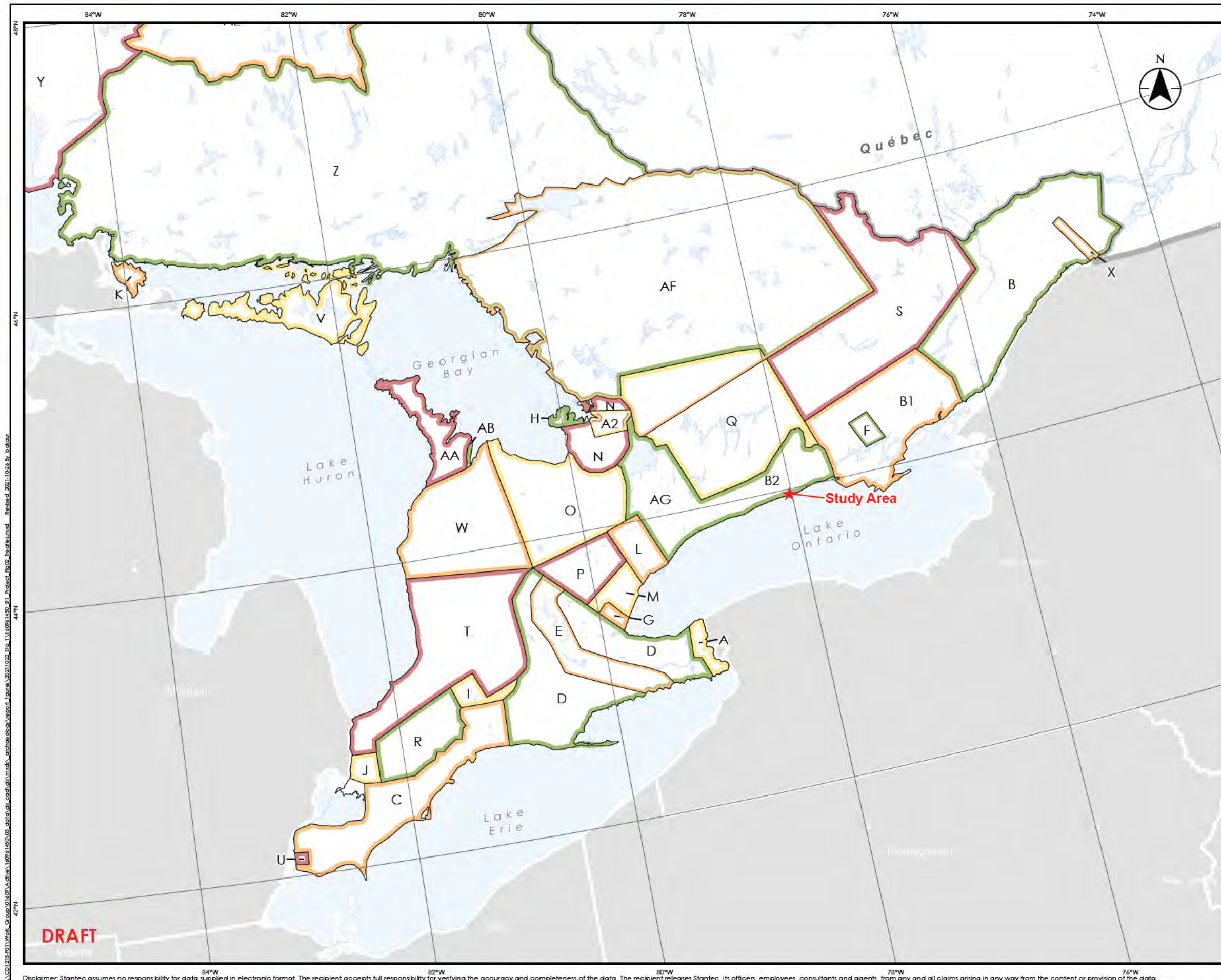
Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2021-10-27
Technical Review by SE on 2021-10-25

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT -
HALDIMAND SHORES COMMUNITY EXPANSION


Figure No. 1
Title Project Location


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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)
 - AJ 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, Potawatomi, and Huron)
 - D Treaty No. 3, December 2nd, 1792 (Mississauga)
 - E Haldimand Tract: from the Crown to the Mohawk,
 - F Tyendinaga: from the Crown to the Mohawk, 1793
 - G Treaty No. 3 3/4: from the Crown to Joseph Brant, October 24th,
 - 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. 27 1/2, April 25th, 1825 (Ojibwa and
 - U Treaty No. 35, August 13th, 1833 (Wyandot or
 - V Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
 - W Treaty No. 45 1/2, 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)

0 50 100 Km
1:3 000 000 (At original document size of 11x17)

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 2021
3 Treaty boundaries adapted from Morris 1943 (1964 reprint) For cartographic
representation only

Project Location	160961450 REVA
County of	Prepared by KB on 2021-10-26
Northumberland	Technical Review by SE on 2021-10-25

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT
HALDIMAND SHORES COMMUNITY EXPANSION

Figure No. **2** **DRAFT**

Title
**Treaties and Purchases (Adapted from
Morris 1943)**

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DRAFT



Legend

Figure Not to Scale

Notes
1. Illustrated Historical Atlas of the Counties of Northumberland and Durham Ont
(Beldon & Co 1878)



Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2021-10-27
Technical Review by SE on 2021-10-27

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT -
HALDIMAND SHORES COMMUNITY EXPANSION

Figure No. 3

DRAFT

Portion of the 1878 Historical Map of
Haldimand Township

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Legend

Photo Location and Direction

Proposed Pipeline

Study Area

Assessment Method

Area of Archaeological Potential - Further Archaeological Work Required (Stage 1)

Previously Disturbed, Low to No Archaeological Potential - No Further Archaeological Work Required

0 50 100
Metres
1:4 500 (At original document size of 11x17)

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 2021
- 3. Orthoimagery © First Base Solutions 2021 Imagery Date 2008



Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2021-11-22
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STAGE 1 ARCHAEOLOGICAL ASSESSMENT -
HALDIMAND SHORES COMMUNITY EXPANSION

Figure 4.2
Title
Stage 1 Methods and Results

DRAFT



Legend

Photo Location and Direction

Proposed Pipeline

Study Area

Assessment Method

Area of Archaeological Potential - Further Archaeological Work Required (Stage 1)
Previously Disturbed, Low to No Archaeological Potential - No Further Archaeological Work Required

0 50 100 Metres
1:4 500 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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3. Orthoimagery © First Base Solutions 2021 Imagery Date 2008



Figure 4.3

Project Location 160961450 REVA
County of Northumberland Prepared by KB on 2021-11-22
Technical Review by SE on 2021-10-27

Client/Project
STAGE 1 ARCHAEOLOGICAL ASSESSMENT -
HALDIMAND SHORES COMMUNITY EXPANSION

Figure No. 4.3
Title Stage 1 Methods and Results
DRAFT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Closure

November 24, 2021

9.0 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 DRAFT

Colin Varley – Senior Associate, Senior Archaeologist

Independent Review DRAFT

Tracie Carmichael – Managing Principal, Environmental Services



**STAGE 1 ARCHAEOLOGICAL ASSESSMENT: HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT**

November 24, 2021

APPENDIX A

Michi Saagiig Historical/Background Context



Michi Saagiig Historical/Background context:

The traditional homelands of the Michi Saagiig (Mississauga Anishinaabeg) encompass a vast area of what is now known as southern Ontario. The Michi Saagiig are known as “the people of the big river mouths” and were also known as the “Salmon People” who occupied and fished the north shore of Lake Ontario where the various tributaries emptied into the lake. Their territories extended north into and beyond the Kawarthas as winter hunting grounds on which they would break off into smaller social groups for the season, hunting and trapping on these lands, then returning to the lakeshore in spring for the summer months.

The Michi Saagiig were a highly mobile people, travelling vast distances to procure subsistence for their people. They were also known as the “Peacekeepers” among Indigenous nations. The Michi Saagiig homelands were located directly between two very powerful Confederacies: The Three Fires Confederacy to the north and the Haudenosaunee Confederacy to the south. The Michi Saagiig were the negotiators, the messengers, the diplomats, and they successfully mediated peace throughout this area of Ontario for countless generations.

Michi Saagiig oral histories speak to their people being in this area of Ontario for thousands of years. These stories recount the “Old Ones” who spoke an ancient Algonquian dialect. The histories explain that the current Ojibwa phonology is the 5th transformation of this language, demonstrating a linguistic connection that spans back into deep time. The Michi Saagiig of today are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo-Indian periods. They are the original inhabitants of southern Ontario, and they are still here today.

The traditional territories of the Michi Saagiig span from Gananoque in the east, all along the north shore of Lake Ontario, west to the north shore of Lake Erie at Long Point. The territory spreads as far north as the tributaries that flow into these lakes, from Bancroft and north of the Haliburton highlands. This also includes all the tributaries that flow from the height of land north of Toronto like the Oak Ridges Moraine, and all of the rivers that flow into Lake Ontario (the Rideau, the Salmon, the Ganaraska, the Moira, the Trent, the Don, the Rouge, the Etobicoke, the Humber, and the Credit, as well as Wilmot and 16 Mile Creeks) through Burlington Bay and the Niagara region including the Welland and Niagara Rivers, and beyond. The western side of the Michi Saagiig Nation was located around the Grand River which was used as a portage route as the Niagara portage was too dangerous. The Michi Saagiig would portage from present-day Burlington to the Grand River and travel south to the open water on Lake Erie.

Michi Saagiig oral histories also speak to the occurrence of people coming into their territories sometime between 500-1000 A.D. seeking to establish villages and a corn growing economy – these newcomers included peoples that would later be known as the Huron-Wendat, Neutral, Petun/Tobacco Nations. The Michi Saagiig made Treaties with these newcomers and granted them permission to stay with the understanding that they were visitors in these lands. Wampum was made to record these contracts, ceremonies would have bound each nation to their respective responsibilities within the political relationship, and these contracts would have been renewed annually (see Gitiga Migizi and Kapyrka 2015). These visitors were extremely successful as their corn economy grew as well as their populations. However, it was understood by all nations involved that this area of Ontario were the homeland territories of the Michi Saagiig.

The Odawa Nation worked with the Michi Saagiig to meet with the Huron-Wendat, the Petun, and Neutral Nations to continue the amicable political and economic relationship that existed – a symbiotic relationship that was mainly policed and enforced by the Odawa people.

Problems arose for the Michi Saagiig in the 1600s when the European way of life was introduced into southern Ontario. Also, around the same time, the Haudenosaunee were given firearms by the colonial governments in New York and Albany which ultimately made an expansion possible for them into Michi Saagiig territories. There began skirmishes with the various nations living in Ontario at the time. The Haudenosaunee engaged in fighting with the Huron-Wendat and between that and the onslaught of European diseases, the Iroquoian speaking peoples in Ontario were decimated.

The onset of colonial settlement and missionary involvement severely disrupted the original relationships between these Indigenous nations. Disease and warfare had a devastating impact upon the Indigenous peoples of Ontario, especially the large sedentary villages, which mostly included Iroquoian speaking peoples. The Michi Saagiig were largely able to avoid the devastation caused by these processes by retreating to their wintering grounds to the north, essentially waiting for the smoke to clear.

Michi Saagiig Elder Gitiga Migizi (2017) recounts:

“We weren’t affected as much as the larger villages because we learned to paddle away for several years until everything settled down. And we came back and tried to bury the bones of the Huron but it was overwhelming, it was all over, there were bones all over – that is our story.

There is a misnomer here, that this area of Ontario is not our traditional territory and that we came in here after the Huron-Wendat left or were defeated, but that is not true. That is a big misconception of our history that needs to be corrected. We are the traditional people, we are the ones that signed treaties with the Crown. We are recognized as the ones who signed these treaties and we are the ones to be dealt with officially in any matters concerning territory in southern Ontario.

We had peacemakers go to the Haudenosaunee and live amongst them in order to change their ways. We had also diplomatically dealt with some of the strong chiefs to the north and tried to make peace as much as possible. So we are very important in terms of keeping the balance of relationships in harmony.

Some of the old leaders recognized that it became increasingly difficult to keep the peace after the Europeans introduced guns. But we still continued to meet, and we still continued to have some wampum, which doesn’t mean we negated our territory or gave up our territory – we did not do that. We still consider ourselves a sovereign nation despite legal challenges against that. We still view ourselves as a nation and the government must negotiate from that basis.”

Often times, southern Ontario is described as being “vacant” after the dispersal of the Huron-Wendat peoples in 1649 (who fled east to Quebec and south to the United States). This is misleading as these territories remained the homelands of the Michi Saagiig Nation.

The Michi Saagiig participated in eighteen treaties from 1781 to 1923 to allow the growing number of European settlers to establish in Ontario. Pressures from increased settlement forced the Michi Saagiig to slowly move into small family groups around the present day communities: Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Scugog Island First Nation, New Credit First Nation, and Mississauga First Nation.

The Michi Saagiig have been in Ontario for thousands of years, and they remain here to this day.

****This historical context was prepared by Gitiga Migizi, a respected Elder and Knowledge Keeper of the Michi Saagiig Nation.****

Publication reference:

Gitiga Migizi and Julie Kapyrka

2015 Before, During, and After: Mississauga Presence in the Kawarthas. In *Peterborough Archaeology*, Dirk Verhulst, editor, pp.127-136. Peterborough, Ontario: Peterborough Chapter of the Ontario Archaeological Society.

APPENDIX E: CULTURAL HERITAGE CHECKLIST

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes

A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Haldimand Shores Community Expansion

Project or Property Location (upper and lower or single tier municipality)

Township of Alnwick/Haldimand, County of Northumberland

Proponent Name

Norm Dumouchelle

Proponent Contact Information

norm.dumouchelle@enbridge.com

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. a National Historic Site (or part of)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
 - [Ontario Heritage Trust](#)
 - local land registry office (for a title search)
-

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
 - municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
 - local land registry office (for a title search)
-

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
 - municipal heritage planning staff
 - municipal heritage committee
-

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
 - [Ontario Heritage Trust](#)
-

- v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

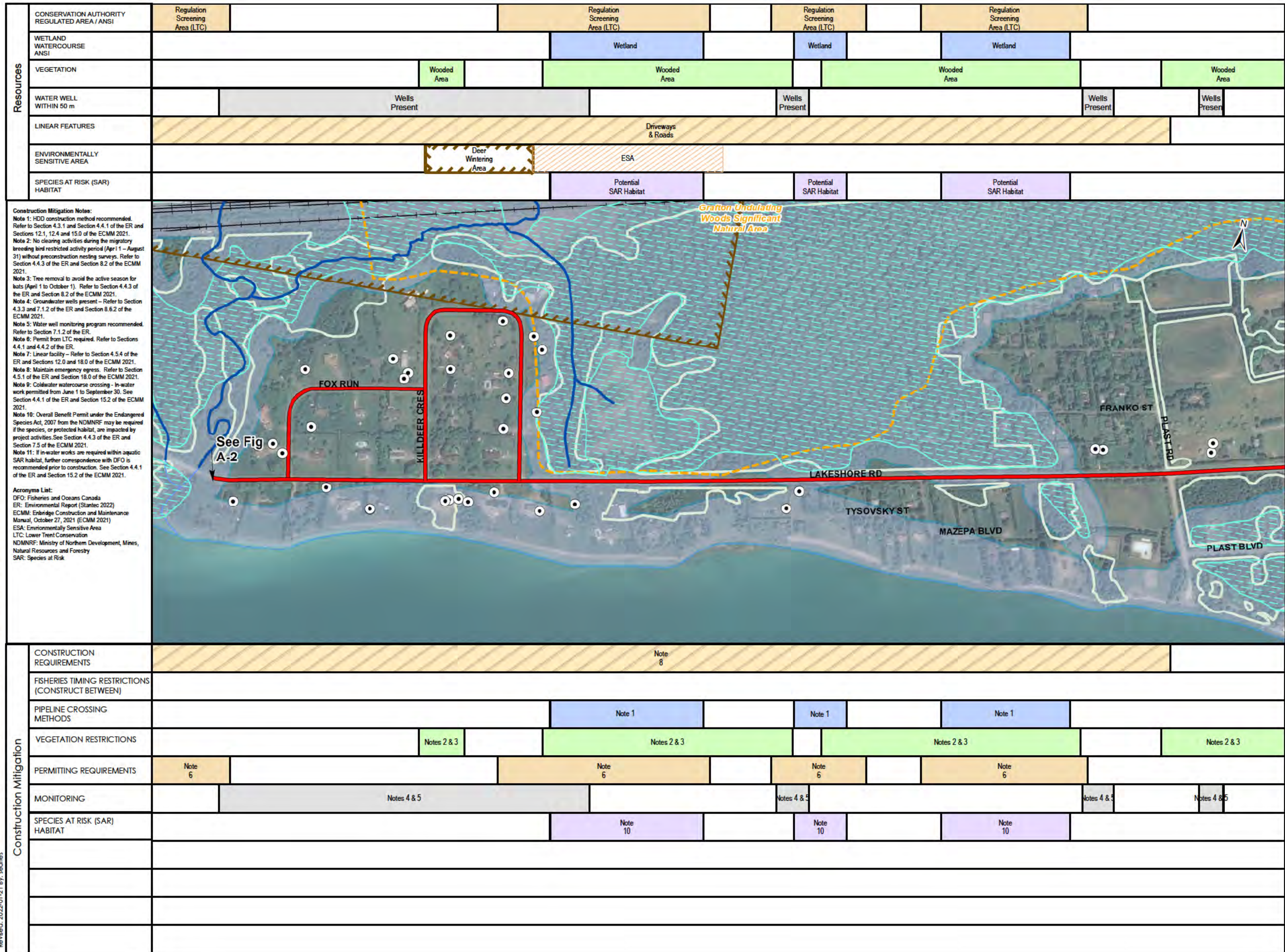
An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

APPENDIX F: ALIGNMENT SHEETS

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Revised: 2022-01-21 By: searles



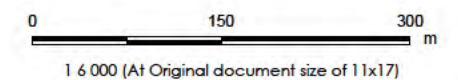
Legend

- Enbridge Gas Features**
- Preferred Route (Segment Evaluated)
 - Preferred Route (Segment not Evaluated on this page)
- Base / Environmental Features**
- Water Well (MECP)
 - Cold Water Thermal Regime
 - Railway - Operational
 - Watercourse
 - Environmentally Sensitive Area
 - Regulation Screening Area (LTC)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wintering Yard (Deer)
 - Wooded Area



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, 2021
- 3 Orthoimagery © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS. Date of Imagery unknown
- 4 MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2021
- 5 Lower Trent Conservation (LTC) data provided under data sharing agreement with LTC



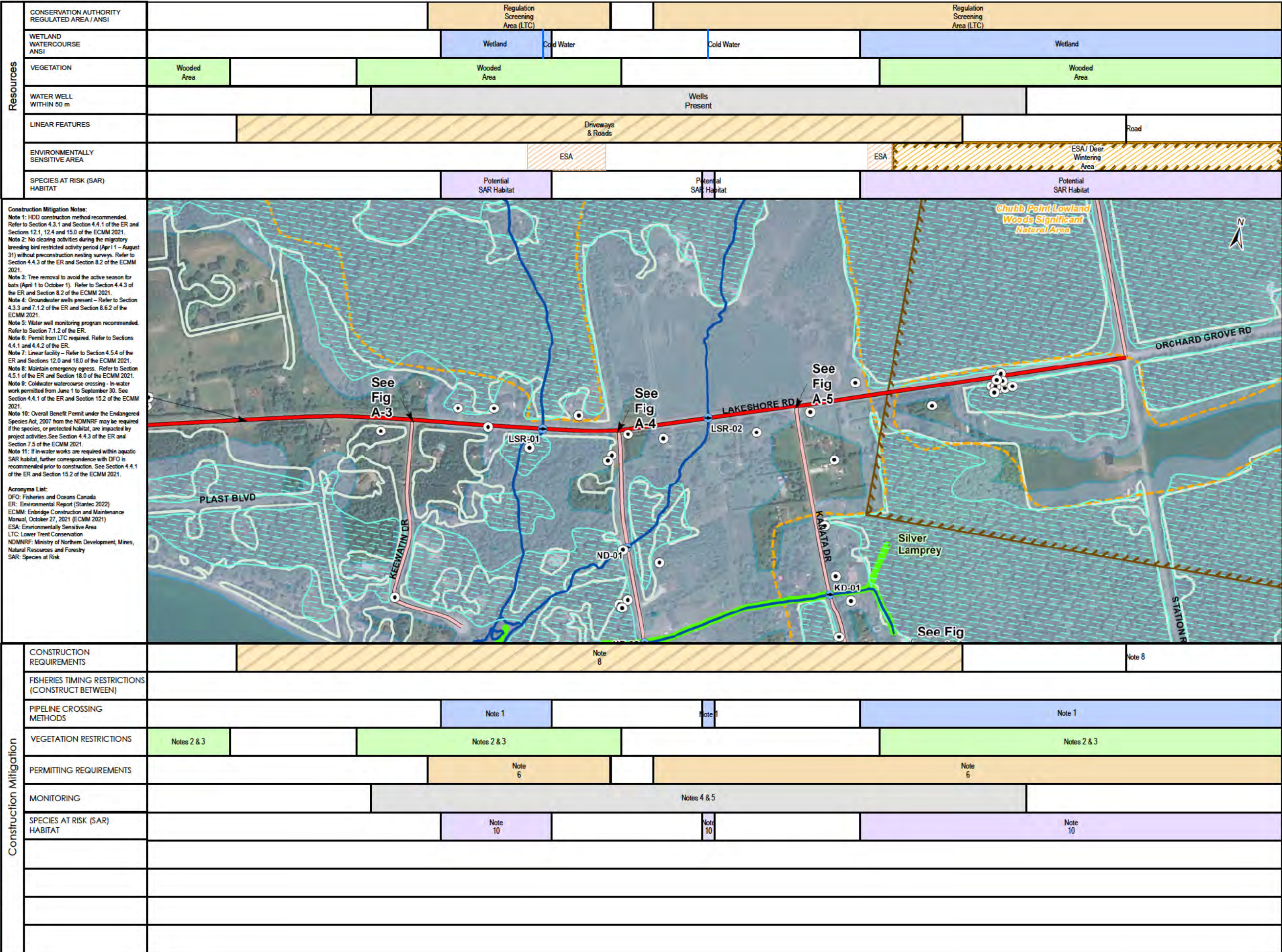
Project Location: 160961450
County of Northumberland Prepared by SPE on 2022-01-21
Technical Review by BCC on 2021-12-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

Figure No.
A-1

Title
**Environmental Alignment
Sheets - Map 1**

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Revised: 2022-01-21 By: searles



Legend

Enbridge Gas Features

- Preferred Route (Segment Evaluated)
- Preferred Route (Segment not Evaluated on this page)

Base / Environmental Features

- Water Well (MECP)
- Watercourse Crossing Location
- Cold Water Thermal Regime
- Railway - Operational
- Watercourse
- DFO Aquatic Species at Risk - Fish
- Environmentally Sensitive Area
- Regulation Screening Area (LTC)
- Unevaluated Wetland (per OWES)
- Waterbody
- Wintering Yard (Deer)
- Wooded Area

KEY MAP

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, 2021
- Orthoimagery © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS. Date of Imagery unknown
- MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2021
- Lower Trent Conservation (LTC) data provided under data sharing agreement with LTC

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1:6 000 (At Original document size of 11x17)

Project Location: 160961450
County of Northumberland Prepared by SPE on 2022-01-21
Technical Review by BCC on 2021-12-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Figure No.
A-2

Title
Environmental Alignment Sheets - Map 2

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Revised: 2022-01-21 By: searies

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI			Regulation Screening Area (LTC)	
	WETLAND WATERCOURSE ANSI			Wetland	
	VEGETATION		Wooded Area	Wooded Area	
	WATER WELL WITHIN 50 m		Well Present	Well Present	
	LINEAR FEATURES			Driveways & Roads	
	ENVIRONMENTALLY SENSITIVE AREA				
	SPECIES AT RISK (SAR) HABITAT			Potential SAR Habitat	

Construction Mitigation Notes:
Note 1: HDD construction method recommended. Refer to Section 4.3.1 and Section 4.4.1 of the ER and Sections 12.1, 12.4 and 15.0 of the ECMM 2021.
Note 2: No clearing activities during the migratory breeding bird restricted activity period (April 1 – August 31) without preconstruction nesting surveys. Refer to Section 4.4.3 of the ER and Section 8.2 of the ECMM 2021.
Note 3: Tree removal to avoid the active season for bats (April 1 to October 1). Refer to Section 4.4.3 of the ER and Section 8.2 of the ECMM 2021.
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 2021.
Note 5: Water well monitoring program recommended. Refer to Section 7.1.2 of the ER.
Note 6: Permit from LTC required. Refer to Sections 4.4.1 and 4.4.2 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 2021.
Note 8: Maintain emergency egress. Refer to Section 4.5.1 of the ER and Section 18.0 of the ECMM 2021.
Note 9: Coldwater watercourse crossing - In-water work permitted from June 1 to September 30. See Section 4.4.1 of the ER and Section 15.2 of the ECMM 2021.
Note 10: Overall Benefit Permit under the Endangered Species Act, 2007 from the NDMNRF may be required if the species, or protected habitat, are impacted by project activities. See Section 4.4.3 of the ER and Section 7.5 of the ECMM 2021.
Note 11: If in-water works are required within aquatic SAR habitat, further correspondence with DFO is recommended prior to construction. See Section 4.4.1 of the ER and Section 15.2 of the ECMM 2021.

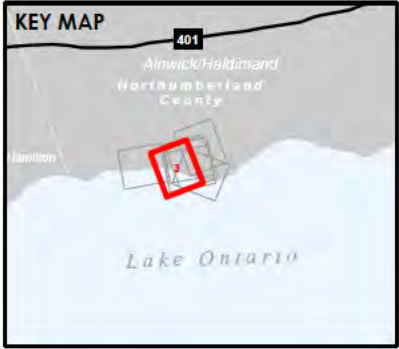
Acronyms List:
DFO: Fisheries and Oceans Canada
ER: Environmental Report (Stantec 2022)
ECMM: Enbridge Construction and Maintenance Manual, October 27, 2021 (ECMM 2021)
ESA: Environmentally Sensitive Area
LTC: Lower Trent Conservation
NDMNR: Ministry of Northern Development, Mines, Natural Resources and Forestry
SAR: Species at Risk



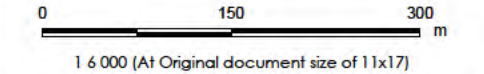
Construction Mitigation	CONSTRUCTION REQUIREMENTS			Note 8	
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)				
	PIPELINE CROSSING METHODS			Note 1	
	VEGETATION RESTRICTIONS	Notes 2 & 3		Notes 2 & 3	
	PERMITTING REQUIREMENTS			Note 6	
	MONITORING	Notes 4 & 5		Notes 4 & 5	
	SPECIES AT RISK (SAR) HABITAT			Note 10	



- Legend
- Enbridge Gas Features
- Preferred Route (Segment Evaluated)
 - Preferred Route (Segment not Evaluated on this page)
- Base / Environmental Features
- Water Well (MECP)
 - Watercourse Crossing Location
 - Cold Water Thermal Regime
 - Railway - Operational
 - Watercourse
 - DFO Aquatic Species at Risk - Fish
 - Environmentally Sensitive Area
 - Regulation Screening Area (LTC)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wintering Yard (Deer)
 - Wooded Area



- 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 2021
 - 3 Orthoimagery © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS Date of Imagery unknown
 - 4 MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario 2021
 - 5 Lower Trent Conservation (LTC) data provided under data sharing agreement with LTC



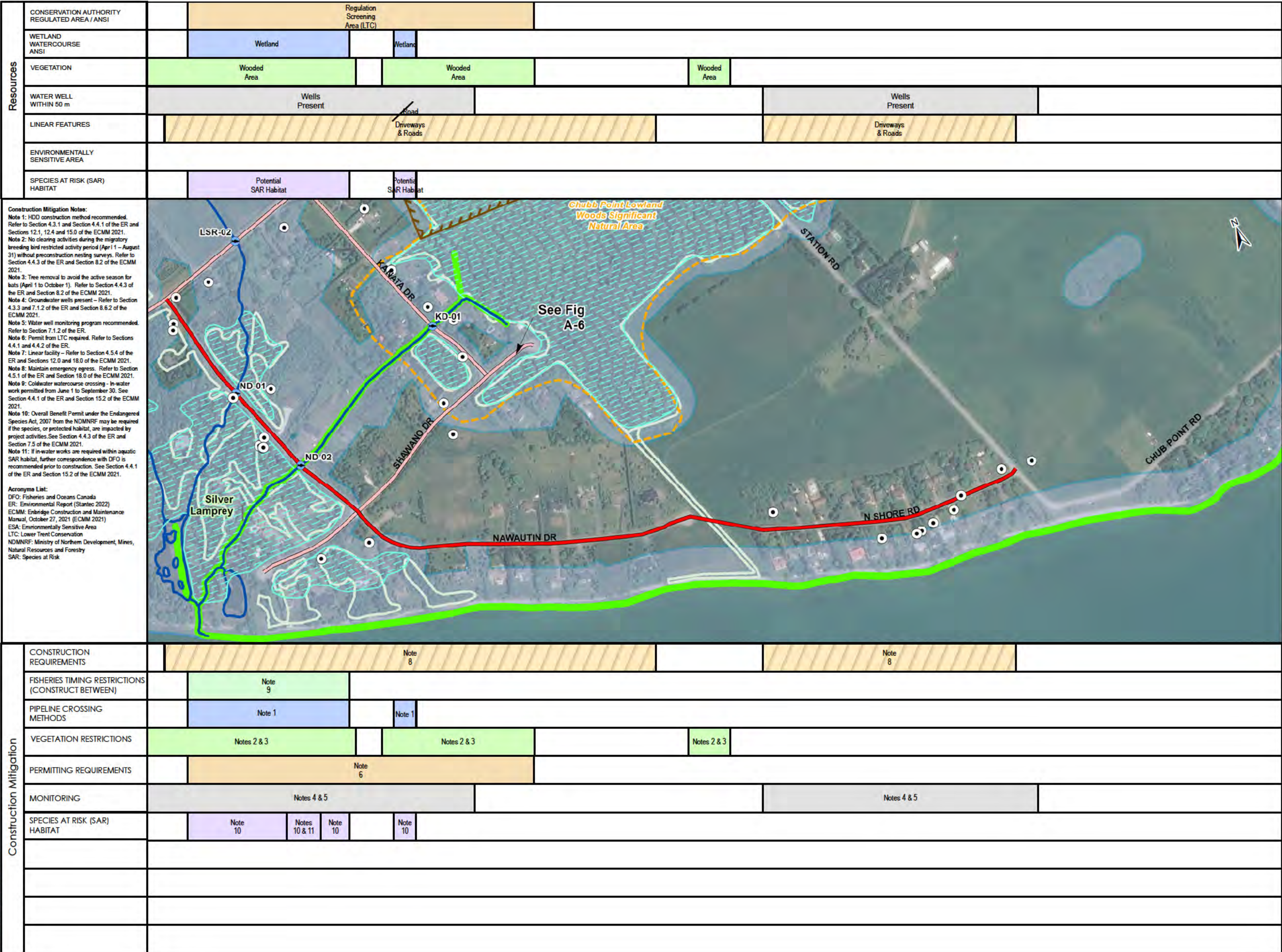
Project Location 160961450
County of Northumberland Prepared by SPE on 2022-01-21
Technical Review by BCC on 2021-12-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

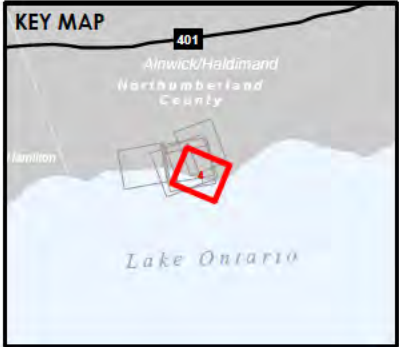
Figure No.
A-3

Title
Environmental Alignment
Sheets - Map 3

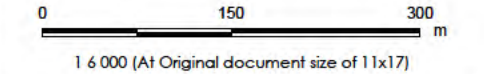
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Revised: 2022-01-21 By: seeries



- Legend**
- Enbridge Gas Features**
- Preferred Route (Segment Evaluated)
 - Preferred Route (Segment not Evaluated on this page)
- Base / Environmental Features**
- Water Well (MECP)
 - Watercourse Crossing Location
 - Cold Water Thermal Regime
 - Watercourse
 - DFO Aquatic Species at Risk - Fish
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 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wintering Yard (Deer)
 - Wooded Area



- Notes**
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Project Location: 160961450
County of Northumberland Prepared by SPE on 2022-01-21
Technical Review by BCC on 2021-12-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION
PROJECT

Figure No.
A-4

Title
**Environmental Alignment
Sheets - Map 4**

\\CD1215401\Work_Group\01609\Active\other\pct\1609_GIS\160961450\03_data\gis_cad\gis\160961450_ER_Environment\SheetMapbook.mxd
Revised: 2022-01-21 By: searies

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI	Conservation Screening Area (LTC)		Regulation Screening Area (LTC)		
	WETLAND WATERCOURSE ANSI				Wetland	
	VEGETATION			Wooded Area	Wooded Area	
	WATER WELL WITHIN 50 m			Wells Present		
	LINEAR FEATURES			Driveways & Roads		
	ENVIRONMENTALLY SENSITIVE AREA			ESA		
	SPECIES AT RISK (SAR) HABITAT				Potential SAR Habitat	
<p>Construction Mitigation Notes:</p> <p>Note 1: HDD construction method recommended. Refer to Section 4.3.1 and Section 4.4.1 of the ER and Sections 12.1, 12.4 and 15.0 of the ECMM 2021.</p> <p>Note 2: No clearing activities during the migratory breeding bird restricted activity period (April 1 – August 31) without preconstruction nesting surveys. Refer to Section 4.4.3 of the ER and Section 8.2 of the ECMM 2021.</p> <p>Note 3: Tree removal to avoid the active season for bats (April 1 to October 1). Refer to Section 4.4.3 of the ER and Section 8.2 of the ECMM 2021.</p> <p>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 2021.</p> <p>Note 5: Water well monitoring program recommended. Refer to Section 7.1.2 of the ER.</p> <p>Note 6: Permit from LTC required. Refer to Sections 4.4.1 and 4.4.2 of the ER.</p> <p>Note 7: Linear facility – Refer to Section 4.5.4 of the ER and Sections 12.0 and 18.0 of the ECMM 2021.</p> <p>Note 8: Maintain emergency egress. Refer to Section 4.5.1 of the ER and Section 18.0 of the ECMM 2021.</p> <p>Note 9: Coldwater watercourse crossing - In-water work permitted from June 1 to September 30. See Section 4.4.1 of the ER and Section 15.2 of the ECMM 2021.</p> <p>Note 10: Overall Benefit Permit under the Endangered Species Act, 2007 from the NDMNRF may be required if the species, or protected habitat, are impacted by project activities. See Section 4.4.3 of the ER and Section 7.5 of the ECMM 2021.</p> <p>Note 11: If in-water works are required within aquatic SAR habitat, further correspondence with DFO is recommended prior to construction. See Section 4.4.1 of the ER and Section 15.2 of the ECMM 2021.</p> <p>Acronyms List:</p> <p>DFO: Fisheries and Oceans Canada ER: Environmental Report (Stantec 2022) ECMM: Enbridge Construction and Maintenance Manual, October 27, 2021 (ECMM 2021) ESA: Environmentally Sensitive Area LTC: Lower Trent Conservation NDMNRF: Ministry of Northern Development, Mines, Natural Resources and Forestry SAR: Species at Risk</p> 						
Construction Mitigation	CONSTRUCTION REQUIREMENTS			Note 8		
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)				Note 9	
	PIPELINE CROSSING METHODS				Note 1	
	VEGETATION RESTRICTIONS	Notes 2 & 3		Notes 2 & 3		
	PERMITTING REQUIREMENTS	Note 6	Note 6			
	MONITORING	Notes 4 & 5				
	SPECIES AT RISK (SAR) HABITAT				Notes 10 & 11	Note 10



Legend

Enbridge Gas Features

- Preferred Route (Segment Evaluated)
- Preferred Route (Segment not Evaluated on this page)

Base / Environmental Features

- Water Well (MECP)
- Watercourse Crossing Location
- Cold Water Thermal Regime
- Railway - Operational
- Watercourse
- DFO Aquatic Species at Risk - Fish
- Environmentally Sensitive Area
- Regulation Screening Area (LTC)
- Unevaluated Wetland (per OWES)
- Waterbody
- Wintering Yard (Deer)
- Wooded Area



Notes

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0 150 300 m

1:6 000 (At Original document size of 11x17)

Project Location: 160961450
County of Northumberland Prepared by SPE on 2022-01-21
Technical Review by BCC on 2021-12-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Figure No.
A-5

Title
**Environmental Alignment
Sheets - Map 5**

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Revised: 2022-01-21 By: searles

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI		Regulation Screening Area (LTC)		Regulation Screening Area (LTC)	
	WETLAND WATERCOURSE ANSI		Wetland		Wetland	
	VEGETATION		Wooded Area		Wooded Area	
	WATER WELL WITHIN 50 m		Wells Present		Wells Present	
	LINEAR FEATURES		Driveways & Roads			
	ENVIRONMENTALLY SENSITIVE AREA				ESA	
	SPECIES AT RISK (SAR) HABITAT		Potential SAR Habitat		Potential SAR Habitat	
<div>Construction Mitigation Notes:</div> <div>Note 1: HDD construction method recommended. Refer to Section 4.3.1 and Section 4.4.1 of the ER and Sections 12.1, 12.4 and 15.0 of the ECMM 2021.</div> <div>Note 2: No clearing activities during the migratory breeding bird restricted activity period (April 1 – August 31) without preconstruction nesting surveys. Refer to Section 4.4.3 of the ER and Section 8.2 of the ECMM 2021.</div> <div>Note 3: Tree removal to avoid the active season for bats (April 1 to October 1). Refer to Section 4.4.3 of the ER and Section 8.2 of the ECMM 2021.</div> <div>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 2021.</div> <div>Note 5: Water well monitoring program recommended. Refer to Section 7.1.2 of the ER.</div> <div>Note 6: Permit from LTC required. Refer to Sections 4.4.1 and 4.4.2 of the ER.</div> <div>Note 7: Linear facility – Refer to Section 4.5.4 of the ER and Sections 12.0 and 18.0 of the ECMM 2021.</div> <div>Note 8: Maintain emergency egress. Refer to Section 4.5.1 of the ER and Section 18.0 of the ECMM 2021.</div> <div>Note 9: Coldwater watercourse crossing - In-water work permitted from June 1 to September 30. See Section 4.4.1 of the ER and Section 15.2 of the ECMM 2021.</div> <div>Note 10: Overall Benefit Permit under the Endangered Species Act, 2007 from the NDMNRF may be required if the species, or protected habitat, are impacted by project activities. See Section 4.4.3 of the ER and Section 7.5 of the ECMM 2021.</div> <div>Note 11: If in-water works are required within aquatic SAR habitat, further correspondence with DFO is recommended prior to construction. See Section 4.4.1 of the ER and Section 15.2 of the ECMM 2021.</div> <div>Acronyms List:</div> <div>DFO: Fisheries and Oceans Canada</div> <div>ER: Environmental Report (Stantec 2022)</div> <div>ECMM: Enbridge Construction and Maintenance Manual, October 27, 2021 (ECMM 2021)</div> <div>ESA: Environmentally Sensitive Area</div> <div>LTC: Lower Trent Conservation</div> <div>NDMNR: Ministry of Northern Development, Mines, Natural Resources and Forestry</div> <div>SAR: Species at Risk</div>						
Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8			
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)					
	PIPELINE CROSSING METHODS		Note 1		Note 1	
	VEGETATION RESTRICTIONS		Notes 2 & 3		Notes 2 & 3	
	PERMITTING REQUIREMENTS		Note 6		Note 6	
	MONITORING		Notes 4 & 5		Notes 4 & 5	
	SPECIES AT RISK (SAR) HABITAT		Note 10		Note 10	



- Legend
- Enbridge Gas Features

Preferred Route (Segment Evaluated)

Preferred Route (Segment not Evaluated on this page)

Base / Environmental Features

Water Well (MECP)

Watercourse Crossing Location

Cold Water Thermal Regime

Watercourse

DFO Aquatic Species at Risk - Fish

Environmentally Sensitive Area

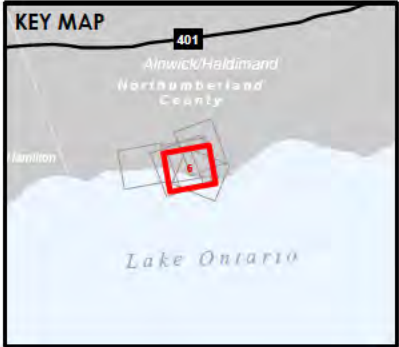
Regulation Screening Area (LTC)

Unevaluated Wetland (per OWES)

Waterbody

Wintering Yard (Deer)

Wooded Area



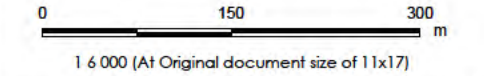
- Notes
- 1 Coordinate System: NAD 1983 UTM Zone 17N

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Project Location

County of Northumberland

160961450

Prepared by SPE on 2022-01-21

Technical Review by BCC on 2021-12-10

Client/Project

ENBRIDGE GAS INC.

HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

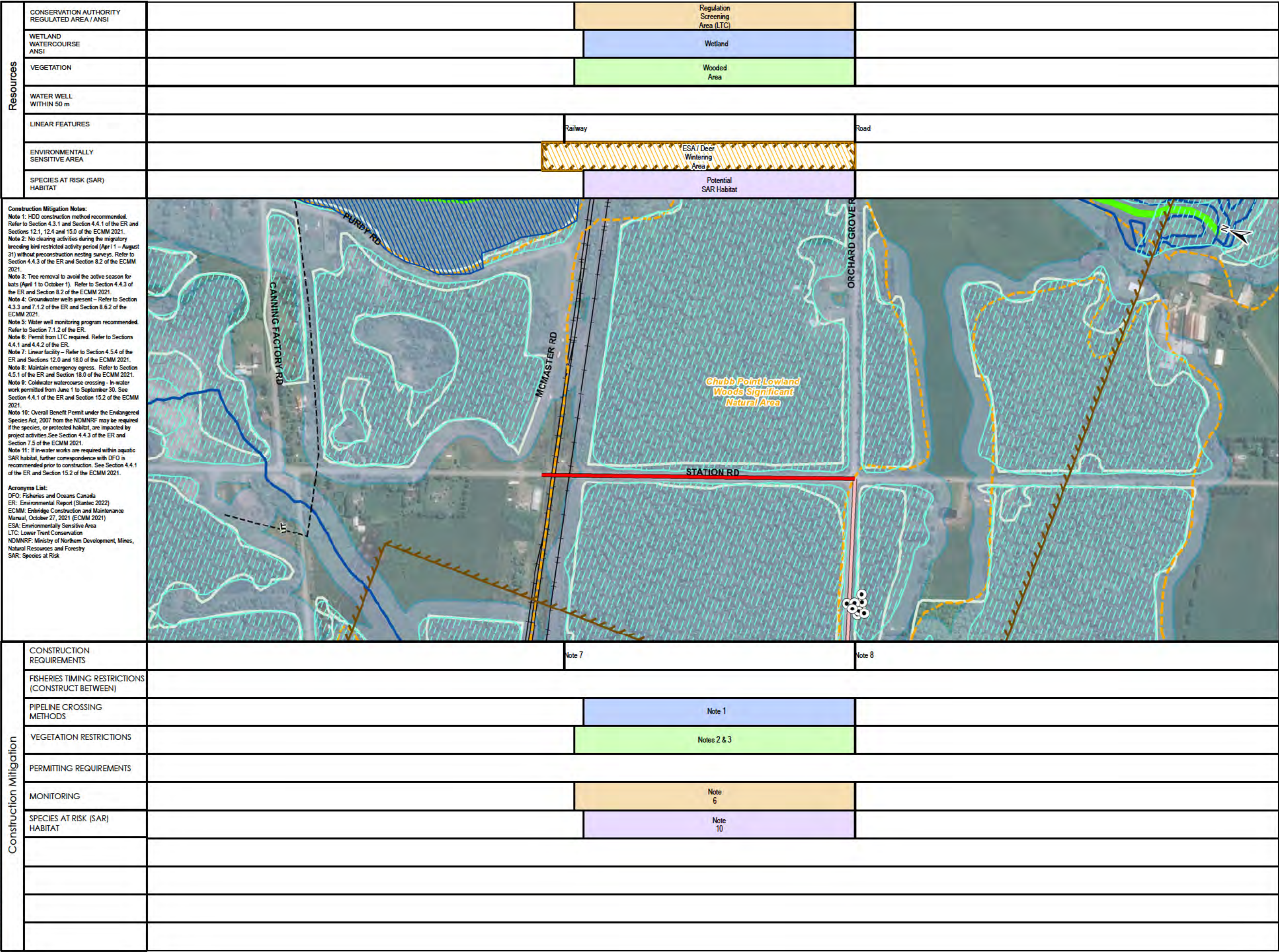
Figure No.

A-6

Title

Environmental Alignment Sheets - Map 6

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Revised: 2022-01-21 By: searies



Legend

Enbridge Gas Features

- Preferred Route (Segment Evaluated)
- Preferred Route (Segment not Evaluated on this page)

Base / Environmental Features

- Water Well (MECP)
- Watercourse Crossing Location
- Cold Water Thermal Regime
- Utility Transmission Corridor
- Railway - Operational
- Watercourse
- DFO Aquatic Species at Risk - Fish
- Environmentally Sensitive Area
- Regulation Screening Area (LTC)
- Provincially Significant Wetland
- Unevaluated Wetland (per OWES)
- Waterbody
- Wintering Yard (Deer)
- Wooded Area

KEY MAP

Notes

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1:6 000 (At Original document size of 11x17)

Project Location: 160961450
County of Northumberland Prepared by SPE on 2022-01-21
Technical Review by BCC on 2021-12-10

Client/Project
ENBRIDGE GAS INC.
HALDIMAND SHORES COMMUNITY EXPANSION PROJECT

Figure No.
A-7

Title
**Environmental Alignment
Sheets - Map 7**