

#### Neustadt Community Expansion Project: Environmental Report

FINAL REPORT

August 23, 2023

Prepared for: Enbridge Gas Inc. 500 Consumers Road North York, ON M2J 1P8

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Project Number: 160951366

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# **Executive Summary**

Enbridge Gas Inc. (Enbridge) is proposing to construct the Neustadt Community Expansion Project to supply the community of Neustadt with affordable natural gas (the Project). The Project includes approximately 13.0 km of polyethylene (PE) natural gas main pipeline ranging from Nominal Pipe Size 2" to 6". Wherever possible, the proposed pipeline will be located within existing road allowance. In addition, approximately 1 km of 6" PE reinforcement pipeline is required to be installed in Hanover, also within the road allowance.

The Preferred Route (PR) will connect to the existing 4" steel pipeline south of Hanover, along 10th Avenue near the intersection of Grey Road 10 and Knappville Road, running south along Grey Road 10 from the tie-in point to the intersection with Queen Street. The proposed distribution network will run along Queen Street, Stephana Street, Adam Street, Barbara Street, Enoch Street, Forler Street, Jacob Street, William Street, Mill Street, and John Street, all within the boundaries of the community of Neustadt, Ontario. The reinforcement section will be installed along 1st Street, 14th Avenue, and 2nd Street in Hanover. Refer to **Appendix A** for figures of the Project components within the Study Area.

Enbridge 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, 8th Edition* (2023a) (OEB Environmental Guidelines).

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

The route evaluation process was undertaken as per the OEB Environmental Guidelines, which identifies the environmental and socio-economic features to take into consideration and the principles to be considered during the route evaluation.

A consultation and engagement program was conducted for the Project with Indigenous communities, federal and provincial agencies, conservation authorities, municipal personnel and elected officials, utility owners and operators, special interest groups, the general public, and residents and businesses in the proximity of the Study Area were engaged. The consultation and engagement program included development and maintenance of various Project Contact Lists which were used to distribute the required notices, newspaper advertisements, In-person and Virtual Open Houses (information sessions), and provision of feedback to those members of the public who had questions, issues, concerns or positive feedback about the Project. Enbridge is committed to ongoing consultation and engagement with interested and potentially



affected parties through detailed design and construction and will respond to stakeholder concerns throughout the life of the Project.

The potential effects and impacts of the Project on physical, biophysical, and socioeconomic 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 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 through ongoing consultation, appropriate mitigation and protective measures are implemented, potential cumulative effects will be of low probability and magnitude, short duration (2-3 months), reversible and positive and are, therefore, not anticipated to be significant.

The environmental study investigated data on the physical, biophysical, and socioeconomic environment within the Study Area. In the opinion of Stantec, the recommended program of supplemental field studies in spring/summer 2024, Saugeen Valley Conservation Authority (SVCA) permitting requirements, 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 the ER, ongoing communication and consultation, adherence to permit, regulatory, and legislative requirements, potential adverse residual environmental and socio-economic impacts of this Project are not anticipated to be significant.

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# Acronyms / Abbreviations

AA	Archaeological Assessment
AAFC	Agriculture and Agri-Food Canada
ANSI	Areas of Natural and Scientific Interest
AR	Alternative Route
BAO	Bereavement Authority of Ontario
BGS	Below ground surface
CaCO <sub>3</sub>	Calcium Carbonate
CAO	Chief Administrative Officer
CEA	Cumulative effects assessment
CER	Canada Energy Regulator
CHECPIA	Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment
CHR	Cultural Heritage Report
CHSR	Cultural Heritage Screening Report
CHVI	Cultural Heritage Value or Interest
CLI	Canada Land Inventory
cm	Centimetres
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
DFO	Fisheries and Oceans Canada
EA	Environmental Assessment

EASR	Environmental Activity and Sector Registry
ECCC	Environment and Climate Change Canada
EI	Environmental Inspector
EIS	Environmental Impact Study
ELC	Ecological Land Classification
Enbridge	Enbridge Gas Inc.
END	Endangered
EO	Enhanced Fujita scale
EP	Environmental Protection
EPP	Environmental Protection Plan
ER	Environmental Report
ESA	Endangered Species Act, 2007
ESC	Erosion and Sediment Control
GIS	Geographic Information System
ha	Hectares
HADD	The Harmful Alteration, Disruption or Destruction of Fish Habitat
HDD	Horizontal Directional Drill
HR	Hamlet Residential
Hydro One Networks Inc.	Hydro One
IAAC	Impact Assessment Agency of Canada
IO	Infrastructure Ontario
ЮН	In-Person Open House
km	Kilometre(s)

km <sup>2</sup>	Kilometre(s) squared
km/hr	Kilometre(s) per hour
LIO	Land Information Ontario
L/day	Litres per day
LTC	Leave to Construct
m	Metre(s)
MBCA	Migratory Birds Convention Act, 1994
MBR	Migratory Birds Regulation, 2022
MCM	Ministry of Citizenship and Multiculturalism
MECP	Ministry of the Environment, Conservation and Parks
MENDM	Ministry of Energy, Northern Development and Mines
MNO	Metis Nation of Ontario
MOE	Ministry of Energy
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
MNRF	Ministry of Natural Resources and Forestry
MTCS	Ministry of Tourism Culture and Sport
МТО	Ministry of Transportation
NHIC	Natural Heritage Information Centre
NPS	Nominal Pipe Size
OBA	Ontario Butterfly Atlas
OBBA	Ontario Breeding Bird Atlas
OEB	Ontario Energy Board

OEB Environmental Guidelines	Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 8 <sup>th</sup> Edition (2023)		
OGS	Ontario Geological Survey		
OHA	Ontario Heritage Act		
OP	Official Plan		
OPCC	Ontario Pipeline Coordinating Committee		
O. Reg.	Ontario Regulation		
ORAA	Ontario Reptile and Amphibian Atlas		
OWES	Ontario Wetland Evaluation System		
PE	Polyethylene		
%	Percentage		
PPR	Preliminary Preferred Route		
PR	Preferred Route		
PTTW	Permit to Take Water		
PSW	Provincially Significant Wetland		
RIT	Resource Information Technician		
ROW	Right-of-Way		
SAR	Species at Risk		
SARA	Species at Risk Act		
SARB	Species at Risk Branch		
SARO	Species at Risk Ontario		
SGRA	Significant Groundwater Recharge Area		
SMART	Saugeen Mobility and Regional Transit		

SOCC	Species of Conservation Concern
SC	Special Concern
SCN	Soybean Cyst Nematode
SPA	Source Protection Area
SPS	Source Protection Section
Stantec	Stantec Consulting Ltd.
SVCA	Saugeen Valley Conservation Authority
SWH	Significant Wildlife Habitat
тс	Transport Canada
The Checklist	Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes
The Project	Neustadt Community Expansion Project
THR	Threatened
TSSA	Technical Standards and Safety Authority
TWS	Temporary Workspace
UNESCO	United Nations Educational, Scientific and Cultural Organization
USDA	United States Department of Agriculture
VOH	Virtual Open House
WWR	Water Well Record(s)

# 1 Introduction

## 1.1 **Project Description**

Enbridge Gas Inc. (Enbridge) is proposing to construct the Neustadt Community Expansion Project to supply the community of Neustadt with affordable natural gas (the "Project"). The Project is located in the Municipality of West Grey, Ontario and will involve the installation of approximately 13.0 kilometres (km) of polyethylene (PE) natural gas main pipeline ranging from Nominal Pipe Size (NPS) 2" to 6". In addition, approximately 1 km of 6" PE reinforcement is required to be installed along 1st Street, 14th Avenue, and 2nd Street in Hanover, all within the road allowance.

The Project's Study Area is comprised of the Preliminary Preferred Route (PPR), the Alternative Route (AR), the distribution network and the reinforcement section study areas (see section 3.1). The proposed pipeline will be located in existing road allowance wherever possible.

Enbridge 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, 8th Edition (2023a)* (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 provided environmental support and engineering expertise throughout the study. The environmental study was completed in accordance with the OEB Environmental Guidelines, 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. To meet this objective, the environmental study was prepared to:

- Identify the Preferred Route (PR) that reduces potential environmental impacts.
- Complete a detailed review of environmental features along the PR and assess the potential environmental impacts of the project on these features.
- Establish mitigation and protective measures that may be used to reduce or eliminate potential environmental impacts of the project.

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- Undertake a route evaluation process.
- Develop a consultation program to receive input from interested and potentially affected parties.
- Identify any necessary supplemental studies, monitoring and contingency plans.

#### 1.2.2 Process

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

- **Phase I:** Inventory and mapping of existing conditions within the Study Area (see Section 3.1).
- Phase II: The route evaluation and selection process.
- **Phase III:** Confirmation of the route, development of mitigation and protective measures and preparation of this Environmental Report (ER).

The maps produced during the route evaluation and selection process are located in **Appendix A** and the maps of existing conditions are located in **Appendix C**.

The following is a description of the steps involved in the various Project phases and provides background on the consultation and engagement program and engineering design carried out by Enbridge to determine the pipeline Study Area that is the subject of this ER.

# 1.2.2.1 Phase I: Inventory and Mapping of Existing Conditions within the Study Area

The environmental study began by identifying the PPR. The PPR was determined by Enbridge based on their engineering and tie-in location considerations, maximizing potential servicing locations as well as consideration of environmental constraints as identified by Stantec. As will be discussed in Section 3.1, a 500 metre (m) buffer around the centre line for each individual portion of the Study Area (PPR, AR, distribution network and reinforcement section) was considered for the Project Study Area. The Study Area was delineated, and Indigenous communities, relevant federal and provincial agencies and authorities, municipal personnel, and special interest groups were identified and notified. Environmental features and conditions in the Study Area 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 and municipalities provided information essential for compiling the existing conditions inventory and mapping.

#### 1.2.2.2 Phase II: Route Evaluation and Selection Process

A Notice of Commencement, Virtual Open House (VOH), and In-person Open House (IOH) advertisement, including a map and description of the PPR, was published in the main local newspaper, the Hanover Post, on March 2, 2023, and March 9, 2023. The same information was distributed to the Project's Contact List and mailed through Canada Post's unaddressed Admail to residents and business owners in proximity to the Project.

A VOH was made available from March 13 to March 27, 2023, to provide interested and potentially affected parties and stakeholders with an opportunity to review the proposed Project and provide comments via an online questionnaire; material communicated through the VOH is presented in **Appendix B5**. In addition to the VOH, the same information was presented in an IOH, held on March 16, 2023, at the Neustadt Community Centre located at 183 Enoch Street in the community of Neustadt, Municipality of West Grey, Ontario. The IOH presented an opportunity for interested and potentially affected stakeholders to engage with Enbridge and Stantec staff, review the proposed Project, share their comments, and provide additional feedback via an exit questionnaire. The same questionnaire was used for the VOH and IOH format.

Feedback received from stakeholders following the newspaper publications, VOH, and IOH did not identify potential issues or concerns that required revisions to the PPR. Feedback received through the consultation and engagement program (**Appendix B6**) was acknowledged, reviewed, and incorporated into the ER and route evaluation and supported the overall confirmation of the PR.

#### 1.2.2.3 Phase III: Confirmation of the Preferred Route; Environmental Report

Based on feedback received during the consultation and engagement program, and the data collected for the environmental and socio-economic environment in the Study Area, the PPR was confirmed to be the PR for the Project. 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 any potential impacts.

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

#### 1.2.3 The Environmental Report

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

The ER is organized into the following sections:

- 1. Introduction: provides a description of the Project and the environmental study.
- 2. Consultation and Engagement Program: provides a description of the consultation activities conducted for the Project.
- 3. Existing Conditions: describes the existing conditions within the Study Area for the PR.
- 4. Route Evaluation and Selection: provides an overview of the pipeline route evaluation and selection process.
- 5. Potential Impacts, Mitigation, and Protective Measures: predicts potential effects and impacts the Project may have upon the existing conditions; describes, the mitigation and protective measures to eliminate or reduce the potential effects and impacts of the Project on physical, biophysical, and socio-economic features that have been assessed in the Study Area; recommends supplemental studies where necessary and predicts the net impacts anticipated for the Project.
- 6. Cumulative Effects Assessment: provides an analysis of potential cumulative effects associated with the proposed Project.
- 7. Monitoring and Contingency Plans: describes monitoring and contingency plans to address potential environmental impacts of the proposed Project.
- 8. 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, 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 Project webpage for the public and landowners to review. The ER will accompany a future Enbridge '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 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 of Approval to projects it authorizes to proceed. Enbridge must comply with these Conditions of Approval at all stages of the Project, including during construction, site restoration and operation.

#### 1.2.5 Additional Regulatory Processes

Enbridge 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 Requirement

Permit/Approval	Administering Agency	Description
Federal Permits and Approvals		
Clearing of vegetation in accordance with the Migratory Birds Convention Act, 1994 (MBCA) and Migratory Birds Regulation 2022 (MBR)	Environment and Climate Change Canada (ECCC)	ECCC does not require a permit to be issued for vegetation clear taken so that breeding birds or their nests are not harmed or des because of construction of the Project.
		Avoid vegetation clearing during the bird nesting season, (e.g., <i>b</i> bird nests. Nest sweeps may be implemented in simple habitats the active season per ECCC (2022). Nest sweeps are recommeremoval with the risk of incidental take increasing with habitat co
Species at Risk Act (SARA)	Fisheries and Oceans Canada (DFO)	Permits are required by those persons conducting activities that of the SARA as extirpated, endangered, or threatened and whic habitat prohibitions. DFO can administer permits for activities af risk.
Review and authorization under the Fisheries Act,1985 (amended in August 2019)	DFO	At detailed design, proposed work at locations that provide fish I potential for the project to result in the death of fish or the harmf (HADD) of fish habitat. The review process will follow the Water Annex 1 of the 2022 DFO and Enbridge Gas Inc. Agreement Re Pipeline Construction and Maintenance in Ontario (the Agreement meet the criteria of the Agreement, may need review by DFO un included in <b>Appendix H</b> .
Provincial Permits and Approvals		•
Approval under the Ministry of Infrastructure Public Work Class Environmental Assessment (Class EA)	Infrastructure Ontario (IO)	Required to obtain an easement on IO owned and/or managed I detailed design.
Development Permits under Ontario Regulation 169/06 for Saugeen Valley Conservation Authority (SVCA) Applications to Alter a Watercourse and Regulated Area, as per the Conservation Authorities Act, 1990 (amended in January 2023)	SVCA	Required for works within SVCA Regulated Areas.
Permit to Take Water (PTTW) or Environmental Activity and Sector Registry (EASR) (surface and groundwater) under the Ontario Water Resources Act (1990) (amended in June 2021)	Ministry of the Environment, Conservation and Parks (MECP)	Under Ontario Regulation (O. Reg.) 64/16 and O. Reg. 63/16, the in excess of 400,000 L/day, and an EASR for dewatering between include trench dewatering and taking water for hydrostatic testin exceptions for surface water takings where active or passive sur- water taken is returned to within another portion of the same sur-
Permitting or registration under the Endangered Species Act (ESA) (2007) (amended in October 2021)	MECP	An ESA permit or Registration is required for activities that could ESA. Consultation will occur with the MECP to determine ESA p As indicated in Section 9 (1) a of the ESA (2007), "No person sh living member of a species that is listed on the Species at Risk i endangered or threatened species."

aring, however, precautions need to be stroyed during the bird nesting season

April 1 to August 31) to reduce impacts to s (e.g., hedgerows, urban parks) during ended a maximum of seven days prior to omplexity and time between surveys.

t may affect species listed on Schedule 1 ch contravene the Act's general or critical ffecting a Schedule 1 aquatic species at

habitat will be reviewed to determine the ful alteration, disruption, or destruction recourse Crossing Review Process in elated to Watercourse Crossings for ent). Activities in fish habitat that do not nder the Fisheries Act. The Agreement is

lands. This will be determined during

he MECP requires a PTTW for dewatering een 50,000 and 400,000 L/day. This can ng from a pond, lake, etc. There are some irface water diversions occur such that all rface water feature.

d impact species protected under the permitting requirements.

hall kill, harm, harass, capture or take a in Ontario List as an extirpated,

Permit/Approval	Administering Agency	Description
		As indicated in Section 17 (1), "the Minister may issue a permit specified in the permit that is listed on the Species at Risk in Or threatened species, authorizes the person to engage in an activ otherwise be prohibited by Section 9 or 10."
Archaeological clearance under the Ontario Heritage Act (OHA)	Ministry of Citizenship and Multiculturalism (MCM)	An Archaeological Assessment (AA) is required for areas of arc concerns have not been addressed until MCM's letter has been been entered into the Ontario Public Register of Archaeological that: the archaeological assessment of the project area is comp by the assessment are either of no further cultural heritage valu OHA) or that mitigation of impacts has been accomplished throu protection strategy.
Review of Built Heritage and Cultural Heritage Landscapes under the OHA	MCM	The MCM Criteria for Evaluating Potential Built Heritage Resou (Checklist) was completed to determine the presence or absend and identify if further work is required ( <b>Appendix F1</b> ). The Check Screening Report (CHSR) ( <b>Appendix F2</b> ) determined the poter a defined Study Area and a Cultural Heritage Report: Existing C Assessment (CHECPIA / CHR) was recommended. A CHR will during the detailed design stage of the Project and prior to comp CHR will be shared for review to Indigenous communities and o
Crossing Approval	Hydro One Networks Inc. (Hydro One)	Required for crossing Hydro One's electric transmission corrido design.
Municipal Permits/Approvals		•
Noise By-law No. 55-2016 Exemption Permit	Municipality of West Grey	An exemption request will be required if construction activities v outlined in the by-law.
Forest Management By-law No. 4341-06 Building Permit	Grey County	Permit required if tree clearing is required for construction.
Encroachment Permit	Grey County, Bruce County, Municipality of Brockton	Required for any installation or stockpile or other work upon, ov road's right-of-way (ROW); gas pipelines are considered an end
Noise and Sound Control By-law No. 3067-19 Exemption Permit	Town of Hanover	An exemption request will be required if construction activities v outlined in the by-law.
Forest Conservation By-law No, 4071 Building Permit	Bruce County	Permit required if tree clearing is required for construction.
Temporary Road Closure Permit under By-law No. 2013-024	Bruce County	Under, an application from the local municipality (Brockton and completed. Once submitted to the local municipality for approva County Engineer for County Approval.
Noise By-law No. 2014-024 Exemption Permit	Municipality of Brockton	An exemption request will be required if construction activities v outlined in the by-law.
Road Occupancy Permit under By-law No. 2021-59	Municipality of South Bruce	Required for any construction work completed within the Munici

to a person that, with respect to a species ntario List as an extirpated, endangered or vity specified in the permit that would

chaeological potential. Archaeological n received indicating that all reports have I Reports and those reports recommend olete, and all archaeological sites identified ue or interest (as per Section 48(3) of the ugh an excavation or avoidance and

rces and Cultural Heritage Landscapes ce of heritage resources in the Study Area cklist and the supporting Cultural Heritage ntial for cultural heritage resources within Conditions and Preliminary Impact II be undertaken as early as possible mencing construction. If requested, the other interested groups.

r. This will be determined during detailed

will occur during the prohibited times

ver or under, or within the limits of a county croachment.

vill occur during the prohibited times

South Bruce) should be obtained and al, the form will be forwarded to the Bruce

will occur during the prohibited times

ipality of South Bruce ROWs.

# 2 Consultation and Engagement Program

#### 2.1 Objectives

Consultation is an important component of the OEB Environmental Guidelines; consultation is the process of identifying interested and potentially affected parties and informing them about a 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. With this considered, the Project activities began after the onset of the 8th Edition of the OEB Environmental Guidelines. Thus, a full implementation of the changes within the new guidelines was not feasible, in particular those related to the early engagement Stage 1 described in Section 1.3.2 of the Guidelines, as this was not part of the Guidelines when the PPR and AR were first identified.

Stantec and Enbridge believe 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 rights-holders, interested, and potentially affected parties early in the process.
- Understand potentially impacted Aboriginal or treaty rights associated with the proposed Project:
  - 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.

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A consultation program was undertaken for the Project, including development and maintenance of an Indigenous communities and stakeholder Contact List, which was used to distribute the required notices, newspaper advertisements, agency meetings, one VOH, one IOH, and provision of feedback to those who had questions, issues, or concerns or positive feedback about the Project. The communication and consultation activities are described in Sections 2.2 -2.4 below.

### 2.2 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.

#### 2.2.1 Identifying Indigenous Communities

Engagement with Indigenous communities was guided by the OEB Environmental Guidelines, as noted above, but also by the Enbridge's Indigenous Peoples Policy.

Indigenous engagement commenced with the submission of a Project description to the Ministry of Energy (MOE), formerly the Ministry of Energy, Northern Development and Mines (MENDM). 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 December 30, 2022 (**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:

- Saugeen First Nation (collectively known as Saugeen Ojibway Nation with Chippewas of Nawash Unceded First Nation).
- Chippewas of Nawash Unceded First Nation (collectively known as Saugeen Ojibway Nation with Saugeen First Nation).
- Georgian Bay Historic Metis Community (Represented by the Metis Nation of Ontario (MNO) Region 7).

#### 2.2.2 Identifying Interested and Potentially Affected Parties

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

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

- 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 Lists also included adding directly impacted or surrounding landowners who had received the Notice of Study Commencement, and/or reviewed the VOH, and/or attended the IOH, as well as individuals who contacted the Project Team. The Indigenous and Stakeholder Contacts Lists for the Project are provided in **Appendix B2**.

#### 2.3 Communication Methods

#### 2.3.1 Newspaper Notices

A Notice of Study Commencement, VOH, and IOH was published in the Hanover Post on March 2 and 9, 2023. The Notice introduced and described the Project, provided a map of the Study Area, noted the format and dates of the VOH and IOH, and listed Project contact information.

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

#### 2.3.2 Letters and Emails

#### 2.3.2.1 Notice of Study Commencement, Virtual Open House, and In-person Open House

Letters to provide information on the Project, and details for the VOH and the IOH were sent via email to the Indigenous Contact List on February 9, 2023, Municipal Contact List on February 13, 2023, and the OPCC and Agency Contact List on March 2, 2023. Appended to these letters was a map of the Study Area with the components of the Project. The newspaper ad, with the embedded study area map, was mailed to landowners and business owners located within proximity to the Project via Canada Post unaddressed admail on March 3, 2023.

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

#### 2.3.3 In-Person and Virtual Open House – Presentation Slides, Interactive Map and Questionnaire

Presentation slides and display boards were developed for both the VOH and the IOH, respectively. 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 VOH.

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 VOH Project webpage (as described below). The exit questionnaire requested feedback on potential impacts, important features along the PPR, and the content of the VOH. 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 waterbodies, wetlands, and wooded areas.

Copies of the VOH presentation slides, presentation script, and exit questionnaire are provided in **Appendix B5**. Copies of completed questionnaires and Stantec's response to completed questionaries are provided in **Appendix B6**.

#### 2.3.4 Project Webpage

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

The first webpage, referred to in this ER as the VOH webpage, was developed using the ArcGIS StoryMaps platform to host the VOH presentation. This webpage was active from March 13 to 27 and 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 and hosted by Enbridge (<u>https://www.enbridgegas.com/neustadt</u>) to provide information on the Project and a link to the VOH. Once the VOH was complete, copies of the presentation slides, the exit questionnaire and the presentation voiceover script were made available. Upon completion of this ER, this information will be posted on this website.

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The Project webpages were communicated to interested and potentially affected parties in the newspaper notices, letters, emails, VOH presentation and IOH boards.

#### 2.4 Consultation Events

#### 2.4.1 Meetings

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

On December 2, 2022, Enbridge representatives met with the Municipality of West Grey. The purpose of the meeting was to provide Mayor Kevin Eccles, Deputy Mayor Tom Hutchinson and Chief Administrative Office (CAO) Laura Johnston with an overview of the proposed system expansion project and answer any questions/address any concerns. The overview included the project scope, a verbal description of the proposed Study Area and preliminary project timelines. On February 2, 2023, a Stantec representative met with Kodey Hewlett, the Corporate and Community Initiatives Officer for the Municipality of West Grey to present the Project overview and coordinate the IOH to be held in the community of Neustadt, as well as the distribution of the physical materials within the community to reach most of the stakeholders.

Enbridge will continue to update the Municipality of West Grey on the Project planning as information becomes available and answer any further questions they may have regarding the Project.

#### 2.4.2 In-Person and Virtual Open Houses

Both IOH and VOH's were hosted for the Project to reach as many stakeholders as possible. The IOH took place on March 16, 2023, from 5pm-8pm at the Neustadt Community Centre (183 Enoch Street, Neustadt, ON N0G 2M0). Parties attending the IOH were offered an opportunity to register their attendance, a total of 58 individuals registered their attendance at the IOH. Attendees included members of the public, and municipal staff from West Grey and Hanover.

The VOH was hosted online and accessible from March 13, 2023, to March 27, 2023. 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 their input. The VOH received 60 visits to the ArcGIS StoryMaps webpage, with 19 visits to the presentation; of those that visited the webpage, 40 were from Ontario.

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A Project email address and phone number were provided as part of the consultation material for attendees to ask questions and leave their comments; details of the Public Input are discussed in Section 2.5.2. Redacted copies of all the completed exit questionnaires are included in **Appendix B6**.

#### 2.5 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 is provided in **Appendix B6**.

As per the OEB Regulatory process, the draft ER was circulated to the OPCC, municipalities and indigenous communities for their review and comment - the comment-response summary tables and copies of all written comments and responses is provided in **Appendix B7**.

#### 2.5.1 Indigenous Input

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

Prior to and throughout the environmental study, Enbridge and Indigenous communities engaged in discussions on the proposed Project via email, virtual meetings, and phone conversations. Communication between Enbridge and Indigenous communities was tracked by Communica. The Indigenous consultation log and original copies of consultation between Enbridge and Indigenous communities provided in **Appendix B6** have been prepared and provided by Communica.

As recorded in **Appendix B6**, consultation and engagement began after the initial Project kick off meeting on September 19, 2022, with the MOE Letter of Delegation received on December 30, 2022.

On February 9, 2023, Enbridge provided the Chippewas of Nawash Unceded First Nation, Saugeen First Nation, and MNO project overview email and a formal Notice of Study Commencement, VOH, and IOH letter.

The following comments from Indigenous communities have been received following the formal Notice:

• Enbridge received an email from Chippewas of Nawash Chief on February 9, 2023, acknowledging receipt of notification and noting that information will be



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forwarded to Saugeen Ojibway Nation (SON) Environment office as they engage on energy projects on behalf of Chippewas of Nawash and Saugeen Nation.

- On May 8, 2023, Enbridge followed up with SON Environment to confirm Chippewas of Nawash Chief had forwarded project information. SON Environment had not received the information from Chippewas of Nawash.
- On May 9, 2023, Enbridge sent the NoC information to SON Environment with understanding that all further correspondence will be sent to SON Environment directly as they have been delegated to engage with Enbridge on energy-related projects.

Enbridge 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 representatives will provide an overview of the Project, respond to questions and concerns, and address any interests or concerns expressed by Indigenous communities to appropriately mitigate any Project-related impacts. Enbridge will continue to work with Indigenous communities following the distribution of the ER to check the mitigation measures provided in the ER will adequately address concerns and limit impacts. Discussion on the Project and the ER will also help determine potential impacts on Indigenous interests.

To accurately document Indigenous engagement activities and check that 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 by Enbridge with the filing of the LTC application for the proposed Project.

#### 2.5.2 Public Input

Public input received, as of April 18, 2023, included 34 completed questionnaires, one email, and one telephone conversation regarding the Project. The main areas of comment include:

- Confirmation that individual homes will have access to the natural gas distribution as part of the Project's coverage within the community.
- Project timelines for both construction and service operations.
- Importance of the Project in the community to switch from existing sources of energy and reducing energy costs.
- Process and costs associated to the connection of individual homes to the gas main line.
- Considerations related to natural features (rivers, trees and wildlife) that could potentially be affected during construction.

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#### 2.5.3 Agency Input

As of April 18, 2023, comments and confirmation of receipt of the Consultation materials include 18 e-mails from federal and provincial agencies. These federal and provincial comments were considered in the preparation of this ER. A summary of the main comments is provided below.

#### **Federal Agencies**

- The MOE provided Enbridge with a Letter of Delegation detailing the Indigenous communities who's Aboriginal and treaty rights may be impacted by the Project.
- The ECCC responded that they would not be attending the IOH, provided a Letter of Advice from the Canadian Wildlife Service Ontario Region, indicating that the Project has the potential to result in disturbance of migratory birds nesting at the site; thus, the Project must comply with the MBCA and associated MBR.
- The Impact Assessment Agency of Canada (IACC) indicated that based on the information provided, the Project does not appear to include physical activities that are described in their regulations.
- Transport Canada (TC) indicated that they do not require receipt of all individual or class Environmental Assessment (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.

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

- The MECP's Source Protection Section (SPS) indicated that natural gas pipelines are not identified as a threat to drinking water sources under the *Clean Water Act, 2006*; however, certain activities related to the construction of pipelines may pose a risk to sources of drinking water. The MECP SPS also advised that if the Project's scope were to change, this should be communicated.
- The MECP's Species at Risk Branch (SARB) indicated that the Project's information is being reviewed by branch staff and provided general steps in case ESA permits are triggered.
- The MECP's South West Regional Office recommended that the ER for the Project include enough information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the study area, and that measures be included in the planning and design process to check that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the Project.

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- The SVCA informed that Madeline McFadden is the SVCA Regulations Officer who reviews proposals in the Neustadt area. The SVCA also indicated that the database indicates that a file has not been initiated for the proposed works and has included SVCA's Resource Information Technician (RIT) – Vivian Nolan in the communications. SVCA provided general steps to follow when the Project is ready to engage the CA and start an application.
- The Technical Standards and Safety Authority (TSSA) indicated that an application needs to be filled and submitted for the review of this Project by TSSA as part of OPCC; Enbridge submitted this application on April 6, 2023. TSSA acknowledged the receipt of the application on May 8, 2023, and requested additional project information, which Enbridge provided on May 12, 2023.
- The Ministry of Natural Resources and Forestry (MNRF) Southern Region noted that they have not completed a screening of natural heritage or other resource values for the Project at this time. Provided information to guide identifying and assessing natural features and resources as required by applicable policies and legislation, as well as engaging with the Ministry for advice as needed. Indicated that if no MNRF's interests listed are mapped, there is no need to circulate any subsequent notices to them.
- The MCM provided a Letter of Advice for the Project, noting that the responsibility for administration of the OHA and matters related to cultural heritage have been transferred from the Ministry of Tourism, Culture and Sport (MTCS) and Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) to the MCM; individual staff roles and contact information remain unchanged; thus, please continue to send any notices, report and/or documentation to both Karla Barboza and Joseph Harvey throughout the Project.

#### 2.5.4 Municipal Input

Three comments were received at the time of writing this ER:

- During the meeting with the Municipality of West Grey on December 2, 2022, the representatives did not express any project specific concerns and expressed their support for the natural gas expansion Project.
- On February 13, 2023, indicated that the Mayor, Manager of Public Work, Corporate and Community Initiatives Officer, Clerk, and CAO Laura Johnston would participate in the IOH.
- The Municipality of West Grey confirmed receipt of the Notice of Commencement, IOH and VOH information on February 14, 2023.

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

One comment was received from third-party/utility owners/operators at the time of writing this ER:

 On March 15, 2023, Hydro One indicated that from a preliminary assessment, existing distribution assets were identified within the study area but were unable to comment on the potential resulting impacts from the available information. Requested that Enbridge consult with Hydro One during all stages of the Project via email to: <a href="mailto:secondarylanduse@hydroone.com">secondarylanduse@hydroone.com</a>

#### 2.6 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. Given that no comments or concerns were received to cause a change in the components of the Project and the PPR, no refinements were required and the PPR was confirmed to be the PR.

Enbridge 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. See Section 4.0 'Route Evaluation and Preferred Route Selection' for further discussion on routing decisions.

# 3 Existing Conditions

#### 3.1 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 this environmental report, the Study Area for the Project incorporates the PPR, AR, distribution network, and reinforcement section of the Project. Individual study areas are comprised of a 500 m buffer applied around the centreline of each pipeline portion to consider interactions with the socio-economic and natural environments. The Study Area itself spans into various Counties, Municipalities, and Towns such as Grey and Bruce County, the Municipality of West Grey, the Municipality of Brockton, the Municipality of South Bruce, and the Town of Hanover (see **Figure A-2 (Appendix A**).

The PPR will connect to the existing 4" steel pipeline south of Hanover, along 10<sup>th</sup> Avenue near the intersection of Grey Road 10 and Knappville Road. The pipeline run south along Grey Road 10 from the tie-in point to the intersection with Queen Street.

The AR proposes shifting the tie-in point to the crossing of 7th Avenue and 2nd Street, running south along 7th Avenue, following Concession 2 Side Road until it crosses Side Road 30 S, following this road south until it crosses Concession Road 10, and running east towards Queen St at the boundary of the community of Neustadt.

The proposed pipeline distribution network will run along Queen Street, Stephana Street, Adam Street, Barbara Street, Enoch Street, Forler Street, Jacob Street, William Street, Mill Street, and John Street, all within the boundaries of the community of Neustadt, Ontario, all within the boundaries of the community of Neustadt.

The reinforcement section will be required to be installed along 1st Street, 14th Avenue, and 2nd Street, all within existing road allowances in Hanover.

## 3.2 Data Resources

The existing conditions maps (**Appendix C**) have been generated from data obtained from Ontario GeoHub, formerly known as Land Information Ontario (LIO) (MNRF 2023a) and the Conservation Authority regulated area data obtained from SVCA (2023). 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 included in **Appendix C** are identified on the respective maps, and in the references.

For the socio-economic elements of the assessment, the most recent economy and employment statistics were extracted from the 2021 Census of Population (Statistics Canada 2023a). The selected census divisions included Ontario, Grey County, and the Municipality of West Grey. These census divisions were selected to consider the County as a whole, which includes statistics for all nine of the lower-tier municipalities in the County, including the Municipality of West Grey.

#### 3.3 Physical Features

#### 3.3.1 Bedrock Geology and Drift Thickness

The bedrock geology in the Study Area consists of the Bass Islands Formation and Salina Formation. The Bass Islands Formation consists of dark brown to light grey-tan, very fine to fine crystalline, variably laminated, mottled, argillaceous or bituminous, very fine to fine crystalline and sucrosic dolostones (Armstrong and Dodge 2007). The Salina Formation consists of thin-bedded, argillaceous dolostones and shales, with beds and nodules of gypsum in the near-surface and thick salt beds in the deep subsurface (Armstrong and Dodge 2007).

To determine the drift thickness in the Study Area, general depth from the soil surface to the bedrock was reviewed. In the Study Area, drift thickness is within the range of 32.75 m to 131 m (Ministry of Mines 2022). A review of available Water Well Records (WWRs) confirms these results, 430 WWRs were identified to be within the Study Area with bedrock depth ranging from 2.74 m to 136.6 m (MECP 2021).

#### 3.3.2 Physiography and Surficial Geology

Various types of physiographic regions are in the Study Area including Spillways, Kame Moraines, and Till Plains (Drumlinized) (Ministry of Mines 2022). Chapman and Putnam (1984) note that Spillways are glacial meltwater drainage channels that are broad troughs, floored wholly or in part by gravel beds. Kame Moraines are an extended ridge consisting of kames (knobby hills of irregularly stratified sand and gravel, formed at the edge of a melting glacier) and outwash (Chapman and Putnam 1984). Drumlinized Till Plains refers to the presence of drumlins (oval hills of glacial till with smooth convex contours) on the surface of a till (heterogeneous mixture of clay, sand, pebbles and boulders deposited by a glacier) plain (Chapman and Putnam 1984; Nawrin 2021).

The Study Area consists of the following surficial geology (Ministry of Mines 2022):

- Paleozoic bedrock.
- Till that is clay to silt-textured (derived from glaciolacustrine deposits or shale).
- Till that is stone-poor, sandy silt to silty sand-textured till on Paleozoic terrain.



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- Ice-contact stratified deposits which consists of sand and gravel, minor silt, clay and till.
- Glaciofluvial deposits which consists of river deposits and delta topset facies.
- Glaciofluvial deposits that are sandy in nature and consists of river deposits, delta topset facies.
- Fine-textured glaciolacustrine deposits which consists of silt and clay, minor sand and gravel that are massive to well laminated.
- Coarse-textured glaciolacustrine deposits (Foreshore and basinal deposits) which consists of sand, gravel, minor silt and clay.
- Older alluvial deposits which consist of clay, silt, sand, gravel that may contain organic remains.
- Modern alluvial deposits which consist of clay, silt, sand, gravel that may contain organic remains.
- Organic deposits which consist of peat, muck, and marl.

#### 3.3.3 Groundwater

The Study Area is a part of the Saugeen Valley Source Protection Area (SPA), which was established under the *Clean Water Act by Ontario Regulation (O.Reg 284/07)* for the sole purpose of protecting drinking water sources by developing watershed based Source Protection Plans (Saugeen Valley Source Protection Area 2015a). Source protection is part of Ontario's multi-barrier approach to collectively prevent or reduce the contamination of drinking water from source to tap to reduce risks to public health (Government of Ontario, 2023c). The SVCA sits as the Source Protection Authority in the Saugeen Valley SPA, approximately 90,000 people live in the approximately 4,632 kilometres squared (km<sup>2</sup>) area, which covers. The Saugeen River flows through the Study Area, this river is the major watershed in the Saugeen River, Beatty Saugeen River, South Saugeen River, and Teeswater River. The Saugeen River drains westwards into Lake Huron (Saugeen Valley Source Protection Area 2015b).

According to the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region Vulnerable Areas Mapping Application (2023), there are no Wellhead Protection Areas or Intake Protection Zones located within the Study Area. There are Significant Groundwater Recharge Areas (SGRAs) on the PPR and AR study areas (Conservation Ontario n.d.). Both the PPR and the AR study areas intersect with Highly Vulnerable Aquifers (HVAs) with a vulnerability score of 6 (MECP, 2023). August 23, 2023

In the Study Area, most residents rely on private wells for domestic water supply. MECP WWRs document 178 records within the Study Area with the following usage:

- 107 are designated as domestic.
- 20 are designated as livestock.
- 11 are designated as monitoring.
- 11 are designated as not used.
- 15 are designated as not identified.
- 2 are designated as industrial.
- 3 are designated as public.
- 1 are designated a municipal.
- 8 are designated as commercial.

Private wells are not regulated under the Safe Drinking Water Act.

#### 3.3.4 Aggregates and Petroleum Resources

There are no active aggregate or petroleum resources identified in the PPR study area. However, in the AR study area, there is an active aggregate site which is being operated as a pit and owned by a client named Matt Haack Enterprises Inc. located at the intersection of Sideroad 30 North (N) and Concession Road 10 (Ontario GeoHub 2023a). An inactive aggregate site designated as "surrendered", is located approximately 3 km east of the PPR study area close to the intersection of Sideroad 10 and Concession 16 (Ontario GeoHub 2023b). The site was a pit and owned by Gordon Klages (Ontario GeoHub 2023b).

No petroleum wells are located within the Study Area; however the closest petroleum well to the Study Area is located approximately 2 km southeast of the reinforcement section of the Study Area and is an abandoned well (stratigraphic test) that was operated by Golder Associates (Ontario GeoHub 2022a).

Aggregate and petroleum resources surrounding and within the Study Area are identified in **Figure C-1**, **Appendix C**.

#### 3.3.5 Soil and Soil Capability

The soil types present in the Study Area include Listowel Silt Loam, Harriston Silt Loam, Bottom Land, Brookston Clay Loam, Gilford Loam, Burford Loam, Brady Sandy Loam, Sullivan Sand, Waterloo Sandy Loam, Urban, Harrison Loam, Muck, Listowel Loam, Fox Sandy Loam, and Parkhill Loam. August 23, 2023

Agriculture and Agri-Food Canada (AAFC) provides the following regarding the soil profile for each soil type present in the Study Area. To maintain these descriptions for each soil type, the following text has been copied almost directly from each soil subpage of the AAFC's Soils of Ontario website (AAFC 2019):

**Listowel Silt Loam** is classified as a gleyed gray brown luvisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains imperfectly. For the parent materials involving this soil type, the mode of deposition for this soil type includes morainal material (till) deposited by glacial ice: a mixture of boulders, sand, silt, and clay; the texture is Medium as classified by the United States Department of Agriculture (USDA) texture class; and has chemical properties that are Moderately/ Very Strongly Calcareous (6-40 Calcium Carbonate (CaCO<sub>3</sub>) equivalent %).

**Harriston Silt Loam** is classified as a brunisolic gray brown luvisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains well. For the parent materials involving this soil type, the mode of deposition for this soil type includes morainal till that was deposited by glacial ice: a mixture of boulders, sand, silt and clay; the texture is Medium as classified by the USDA texture class; and has chemical properties that are Moderately/Very Strongly Calcareous (6-40% CaCO<sub>3</sub> equivalent %).

**Bottom Land** is classified as a gleyed melanic brunisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains imperfectly. For the parent materials involving this soil type, the mode of deposition if fluvial whereby the sediments generally consist of gravel and sand with a minor fraction of silt and rarely of clay. The gravels itself are typically rounded and contain interstitial sand; the texture is Medium as classified by the USDA texture class; and has chemical properties that are Weakly Calcareous (<6 CaCO<sub>3</sub> equivalent %).

**Brookston Clay Loam** is classified as an orthic humic gleysol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present during an unspecified period, the growth of plants roots is not restricted by any soil layer, and the soil drains poorly. For the parent materials involving this soil type, the mode of deposition involves morainal material (till) deposited by glacial ice: a mixture of boulders, sand, silt, and clay; the texture if Moderately Fine as classified by the USDA texture class; and has chemical properties that are Moderately/Very Strongly Calcareous (6-40 CaCO<sub>3</sub> equivalent (%).

**Gilford Loam** is classified as an orthic humic gleysol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of the plants is not restricted by any soil layer, and the soil drains poorly. For the parent materials involving this soil type, the mode of deposition is glaciofluvial whereby the material was moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice. The deposits are stratified and may occur in the form of outwash plains, deltas, kames, eskers, and kame terraces; the texture is Very Coarse as classified by the USDA texture class; and the has chemical properties that are Moderately/ Very Strongly Calcareous (6-40 CaCO<sub>3</sub> equivalent %).

**Burford Loam** is classified as an orthic gray brown luvisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains well. For the parent materials involving this soil type, the mode of deposition is glaciofluvial whereby the material was moved by glaciers and subsequently sorted and deposited by streams flowing from the melting ice; the texture is Very Coarse as classified by the USDA texture class; and has chemical properties that are Moderately / Very Strongly Calcareous (6-40 CaCO<sub>3</sub> equivalent %).

**Brady Sandy Loam** is classified as a gleyed gray brown luvisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains imperfectly. For the parent materials involving this soil type, the mode of deposition is glaciolacustrine whereby lacustrine materials were deposited in contact with glacial ice; the texture is Very Coarse as classified by the USDA texture class; and has chemical properties that are Moderately/Very Strongly Calcareous (6-40 CaCO<sub>3</sub>%).

**Sullivan Sand** is classified as an orthic melanic brunisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of the plant roots is not restricted by any soil layer, and the soil drains well. For the parent materials involving this soil type, the mode of deposition is fluvial whereby the sediments generally consist of gravel and sand with a minor fraction of silt and rarely of clay. The gravels itself are typically rounded and contain interstitial sand; the texture is Very Coarse as classified by the USDA texture class; and has chemical properties that are Weakly Calcareous (< 6 CaCO<sub>3</sub> equivalent %).
**Waterloo Sandy Loam** is classified as a brunisolic graybrown luvisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains well. For the parent materials involving this soil type, the mode of deposition is fluvial whereby the sediments generally consist of gravel and sand with a minor fraction of silt and rarely of clay. The gravels itself are typically rounded and contain interstitial sand; the texture is Very Coarse as classified by the USDA texture class; and has chemical properties that are Moderately/ Very Strongly Calcareous (6-40 CaCO<sub>3</sub> equivalent %).

**Urban soils** are noted for being undisturbed by agriculture, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and drainage is not applicable due to the built-up environment.

**Harriston loam** is classified as a brunisolic gray brown luvisol soil. The soil has bene disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of the plant roots is not restricted by any soil layer, and the soil drains well. For the parent materials involving this soil type, the mode of deposition for this soil type includes morainal material (till) deposited by glacial ice: a mixture of boulders, sand, silt, and clay; the texture is Medium as classified by the USDA texture class; and has chemical properties that are Moderately / Very Strongly Calcareous (6-40 CaCO<sub>3</sub> equivalent %).

**Muck** is classified as a terric humisol soil. The soil is in native condition (undisturbed by agriculture), composed of organic particles, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains poorly. For the parent materials involving this soil type, the mode of deposition is undifferentiated organic; the texture is humic; and the chemical properties are medium acid to neutral (ph ranges from 5.6-7.4).

**Listowel Loam** is classified as a gleyed gray brown luvisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil is drains imperfectly. For the parent materials involving this soil type, the mode of deposition for this soil type includes morainal material (till) deposited by glacial ice: a mixture of boulders, sand, silt, and clay; the texture is Medium as classified by the USDA texture class; and has chemical properties that are Moderately / Very Strongly Calcareous (6-40 CaCO<sub>3</sub> equivalent %). **Fox Sandy Loam** is classified as a brunisolic gray brown luvisol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains well. For the parent materials involving this soil type, the mode of deposition is glaciolacustrine whereby lacustrine materials were deposited in contact with glacial ice; the texture is Very Coarse as classified by the USDA texture class; and has chemical properties that are Moderately/Very Strongly Calcareous (6-40 CaCO<sub>3</sub> %).

**Parkhill Loam** is classified as an orthic humic gleysol soil. The soil has been disturbed by agriculture, composed of mineral particles, the water table is present in the soil during an unspecified period, the growth of plant roots is not restricted by any soil layer, and the soil drains poorly. For the parent materials involving this soil type, the mode of deposition includes morainal material (till) deposited by glacial ice: a mixture of boulders, sand, silt, and clay; the texture is Medium as classified by the USDA texture class; and has chemical properties that are Moderately/ Very Strongly Calcareous (6-40 Calcium Carbonate (CaCO<sub>3</sub>) equivalent %).

Based on the Canada Land Inventory (CLI) system (AAFC 2013), the AAFC identifies seven (7) classes for soil capability which explains different limitations each class of soil has. In the Study Area, five (5) of these soil capability classes were identified. These included Soil Capability Classes, 1,2,3,4 and 5. Additionally, even though it is not included in the main seven (7) soil capability classes identified by the CLI system, a Class O is located in the AR study area.

The following consists of a description for each soil capability class (AAFC 2013):

- Class 1- soils have no significant limitations in use for crops.
- Class 2- soils have moderate limitations that restrict the range of crops or require moderate conservation practices.
- Class 3- soils have moderately severe limitations that restrict the range of crops or require special conservation practices.
- Class 4- soils have severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible.
- Class 5- soils have very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible.
- Class O- Organic Soils.

# 3.3.6 Soybean Cyst Nematode

Soybean cyst nematode (SCN) (*Heterodera glycines*) is a soil borne parasite that can significantly impact soybean yields by causing 30 percent yield loss in affected soybean fields. SCN can be spread in many ways such as wind, animals, or in topsoil stuck to machinery as the machinery passes from an impacted field to a non-impacted field. Once a field has been infested, there is significant potential for soybean crop yield reductions (Olechowski 1990). SCN is migrating across Ontario and showing up outside the traditional southwestern Ontario infection areas and into Huron, Bruce and Simcoe Counties (all adjacent to Grey County) (Glenney 2021). As there are agricultural fields in the Study Area, there is potential for SCN to be present in the Study Area (i.e., if the temporary workspace extends into agricultural land).

# 3.3.7 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 is an occurrence of a Random Tile Drainage Type in the PPR study area, and there are occurrences of both Random and Systematic Tile Drainage Types in the AR study area (Ontario GeoHub 2023c). A random tile system means that the tiles have been installed where needed (e.g. to drain a wet spot in a field), and a systematic tile system refers to an area that has been cross hatched in a regular pattern (Land Information Ontario 2019). In the AR study area, three mapped constructed drains are present east of Sideroad 30 N (MNRF 2023c). Each constitutes part of Poechman-Oberle Municipal Drain 2003 and are closed tile drains with no surface feature visible (**Figure C-2, Appendix C**).

# 3.3.8 Natural Hazards and Regulated Area

Potential natural hazards are possible in the Study Area and would likely include the flooding of local watercourses, seismic activity, and tornadoes. The Study Area lies in the Southern Great Lakes Seismic Zone (Natural Resources Canada 2021). This zone has a low to moderate level of seismicity when compared to the more active seismic zones to the east, such as the Western Quebec Seismic Zone which captures the area along the Ottawa River and Quebec. According to data from Natural Resources Canada (2021), over the last 30 years, on average, 2 to 3 magnitude 2.5 or larger earthquakes have been recorded in the Southern Great Lakes Seismic Zone. By comparison, over the same time period, the smaller zone of Western Quebec experienced 15 magnitude 2.5 or greater earthquakes per year. Three moderately sized (magnitude 5) events have occurred in the past 250 years of European settlement in the Southern Great Lakes Seismic Zone region, with all of them being 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.

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In October 2020, Environment Canada reported a tornado that hit the Thornbury area which is situated northeast of the Study Area (CTV News 2020). The tornado was categorized as a Enhanced Fujita (EF) scale 0 rated twister which had winds speeds up to 130 kilometres per hour (km/hr) and damaged trees, power poles, and streetlamps (CTV News 2020).

The Grey County Official Plan (OP) (2019), Municipality of West Grey OP (2023a), the Town of Hanover OP (2016), and Bruce County OP (2010), all describe hazard lands as those lands that can be unsafe for development due to being impacted by flooding, erosion, poor drainage and other physical conditions. Different types of hazard lands include floodplains, steep or erosion prone slopes, organic or unstable soils, and poorly drained areas (Grey County OP 2019). Hazard lands are located in the, PPR, AR, distribution network and reinforcement section study areas.

The SVCA is a community-based organization, dedicated to protecting, restoring, and managing the natural resources of the Saugeen watershed (SVCA 2023). SVCA's mandate is to build climate resilient communities throughout the Saugeen Watershed by protecting people and property from natural and human-made flooding hazards; and foster connections with the natural environment (SVCA 2023). SVCA regulated areas are present in the Study Area. Consultation must occur with the SVCA and other appropriate stakeholders if work is to happen on hazard lands which are regulated by the conservation authority.

# 3.4 **Biophysical Features**

## 3.4.1 Aquatic Resources

#### 3.4.1.1 Methods

#### 3.4.1.1.1 Background Data Review

A background data review was conducted to determine locations and characteristics (e.g., flow regime, thermal regime, drain classification) of potential surface water features in the Study Area. Data were gathered by accessing the following online databases and sources:

- MNRF's LIO digital mapping of natural heritage features (MNRF 2023a).
- MNRF's Natural Heritage Information Centre (NHIC) database (MNRF 2023b).
- MNRF's Constructed Drains digital dataset (MNRF 2023c).
- DFO Aquatic Species at Risk (SAR) mapping (DFO 2023).

To inform the site investigations, potential watercourse crossings and drainage features were identified through a review of available maps (MNRF 2023a, MNRF 2023c) and aerial photographs of the Study Area.

#### 3.4.1.1.2 Site Investigations

Site investigations were completed on September 30, 2022, for the distribution network, reinforcement section, and PPR study areas. Site investigations were completed on April 13, 2023, for the AR study area. The purpose of the site investigations was to:

- Document existing aquatic habitat conditions within watercourse crossings within the Study Areas.
- Determine if there are additional watercourse crossings along the PPR or AR, other than those identified in the background review.

#### 3.4.1.2 Results

#### 3.4.1.2.1 Fish and Fish Habitat

The background review identified a total of fifteen (15) watercourses and three constructed drains within the Study Area (MNRF 2023a, MNRF 2023c). The watercourse crossing locations and constructed drains are shown in **Figure C-3** (**Appendix C**). **Table 3.1** below provides a summary of available background data for the mapped watercourses (fish community data, SAR records, thermal regime, and flow regime). The three constructed drains are closed tile drains; therefore, are not included in **Table 3.1**. Watercourse habitat descriptions are provided below for each Study Area.

Watercourse Crossing ID	Watercourse Name <sup>1</sup> (where applicable)	Pipeline Section / Study Area	Thermal Regime <sup>1</sup>	Flow Regime <sup>1,2</sup>	Fish Species (from MNRF data points within 1 km) <sup>1</sup>	Aquatic SAR/SOCC? <sup>2,3</sup>
WST-01	Tributary to Meux Creek	Distribution	Unknown	Permanent	Blacknose Dace ( <i>Rhinichthys obtusus</i> ), Brook Stickleback ( <i>Culaea inconstans</i> ), Brook Trout ( <i>Salvelinus fontinalis</i> ), Creek Chub ( <i>Semotilus</i> <i>atromaculatus</i> )	Contributes to Redside Dace ( <i>Clinostomus</i> <i>elongatus</i> ) habitat* (Endangered)
MST-01	Tributary to Meux Creek	Distribution	Unknown	Permanent	Blacknose Dace, Brook Stickleback, Brook Trout, Creek Chub	Contributes to Redside Dace habitat* (Endangered)
QST-01	Meux Creek	Distribution	Cold	Permanent	Blacknose Dace, Blackside Darter ( <i>Percina maculata</i> ), Bluntnose Minnow ( <i>Pimephales notatus</i> ), Brook Trout, Central Mudminnow ( <i>Umbra limi</i> ), Central Stoneroller ( <i>Campostoma anomalum</i> ), Common Shiner ( <i>Luxilus cornatus</i> ), Creek Chub, Fantail Darter ( <i>Etheostoma flabellare</i> ), Hornyhead Chub ( <i>Nocomis biguttatus</i> ), Iowa Darter ( <i>Etheostoma exile</i> ), Johnny Darter ( <i>Ethostoma nigrum</i> ), Longnose Dace ( <i>Rhinichthys cataractae</i> ), Northern Hog Sucker ( <i>Hypentelium nigricans</i> ), Northern Pearl Dace ( <i>Margariscus nachtriebi</i> ), Northern Pike ( <i>Esox lucius</i> ), Northern Redbelly Dace ( <i>Chrosomus eos</i> ), Pumpkinseed ( <i>Lepomis gibbosus</i> ), Rainbow Trout ( <i>Oncorhynchus mykiss</i> ), Rainbow Darter ( <i>Etheostoma caeruleum</i> ), River Chub ( <i>Nocomis micropogon</i> ), Rock Bass ( <i>Ambloplites rupestris</i> ), Smallmouth Bass ( <i>Micropterus dolomieu</i> ), Stonecat ( <i>Noturus flavus</i> ), White Sucker ( <i>Catostomus commersonii</i> )	Redside Dace (Endangered)
QST-02	Tributary to Meux Creek	Distribution	Unknown	Permanent	Blacknose Dace, Brook Stickleback, Brook Trout, Creek Chub	Contributes to Redside Dace habitat* (Endangered)
DWP-02	Unmapped Tributary to Meux Creek	Preferred Preliminary	Unknown	Unknown	Not Applicable (N/A)	Contributes to Redside Dace habitat* (Endangered)
DWP-01	Tributary to Meux Creek	Preferred Preliminary	Unknown	Permanent	Blacknose Dace, Brook Stickleback, Brook Trout, Creek Chub	Contributes to Redside Dace habitat* (Endangered)

# Table 3.1: Aquatic Background Data for Proposed Crossing Locations Within the Study Areas

Watercourse Crossing ID	Watercourse Name <sup>1</sup> (where applicable)	Pipeline Section / Study Area	Thermal Regime <sup>1</sup>	Flow Regime <sup>1,2</sup>	Fish Species (from MNRE data points within 1 km) <sup>1</sup>	Aquatic SAR/SOCC? <sup>2,3</sup>
GRD-01	Tributary to Meux Creek	Preferred Preliminary	Unknown	West of Grey Road <u>10:</u> Permanent <u>East of Grey Road 10:</u> Intermittent	Blacknose Dace, Brook Stickleback, Brook Trout, Creek Chub	No
GRD-02	South Saugeen River	Preferred Preliminary	Cool	Permanent	Blacknose Dace, Blacknose Shiner ( <i>Notropis</i> <i>heterolepis</i> ), Blackside Darter, Bluntnose Minnow, Brook Stickleback, Brook Trout, Central Mudminnow, Central Stoneroller, Chinook Salmon ( <i>Oncorhynchus</i> <i>tshawytscha</i> ), Coho Salmon ( <i>Oncorhynchus kisutch</i> ), Common Shiner, Creek Chub, Fantail Darter, Fathead Minnow ( <i>Pimephales promelas</i> ), Finescale Dace ( <i>Chrosomus neogaeus</i> ), Golden Shiner ( <i>Notemigonus</i> <i>crysoleucas</i> ), Hornyhead Chub, Iowa Darter, Johnny Darter, Least Darter ( <i>Etheostoma microperca</i> ), Longnose Dace, Northern Hog Sucker, Northern Pearl Dace, Northern Pike, Northern Redbelly Dace, Pumpkinseed, Rainbow Darter, Rainbow Trout, River Chub, River Darter ( <i>Percina shumardi</i> ), Rock Bass, Rosyface Shiner ( <i>Notropis rubellus</i> ), Smallmouth Bass, Stonecat, White Sucker	Rainbow Mussel (Special Concern)
GRD-03	Beatty Saugeen River	Preferred Preliminary	Cold	Permanent	American Brook Lamprey ( <i>Lampetra appendix</i> ), Blackchin Shiner ( <i>Notropis heterodon</i> ), Blacknose Dace, Blacknose Shiner, Blackside Darter, Bluntnose Minnow, Brook Stickleback, Brook Trout, Brown Bullhead ( <i>Ameiurus nebulosus</i> ), Brown Trout ( <i>Salmo trutta</i> ), Central Mudminnow, Chinook Salmon, Coho Salmon, Common Shiner, Creek Chub, Emerald Shiner ( <i>Notropis atherinoides</i> ), Fantail Darter, Fathead Minnow, Finescale Dace, Hornyhead Chub, Iowa Darter, Johnny Darter, Least Darter, Longnose Dace, Mottled Sculpin ( <i>Cottus bairdii</i> ), Northern Brook Lamprey ( <i>Ichthyomyzon fossor</i> ), Northern Pearl Dace, Northern Pike, Northern Redbelly Dace, Pumpkinseed, Rainbow Darter, Rainbow Trout, River Chub, River Darter ( <i>Percina shumardi</i> ) Rock Bass, Rosyface Shiner, Sea Lamprey ( <i>Petromyzon marinus</i> ), Smallmouth Bass, Spottail Shiner ( <i>Notropis hudsonius</i> ), Stonecat, White Sucker	Northern Brook Lamprey (Special Concern) River Darter (Endangered)

Watercourse Crossing ID	Watercourse Name <sup>1</sup> (where applicable)	Pipeline Section / Study Area	Thermal Regime <sup>1</sup>	Flow Regime <sup>1,2</sup>	Fish Species (from MNRF data points within 1 km) <sup>1</sup>	Aquatic SAR/SOCC? <sup>2,3</sup>
CR10E-01	Carrick Creek	Alternate	Cold	Permanent	Blacknose Dace, Blackside Darter, Brassy Minnow ( <i>Hybognathus hankinsoni</i> ), Brook Trout, Brown Trout, Central Mudminnow, Common Shiner, Creek Chub, Fantail Darter, Hornyhead Chub, Johnny Darter, Longnose Dace, Mooneyes ( <i>Hiodon</i> sp.), Northern Redbelly Dace, Rainbow Darter, River Chub, Rosyface Shiner, Walleye ( <i>Sander vitreus</i> ), White Sucker	No
SR30N-01	Tributary to Carrick Creek	Alternate	Unknown	Intermittent	N/A	No
SR30N-02	Tributary to Carrick Creek	Alternate	Unknown	Unknown	N/A	No
SR30N-03	Tributary to Carrick Creek	Alternate	Unknown	Unknown	N/A	No
C2SRD-01	Tributary to South Saugeen River	Alternate	Cold	Permanent	Brook Trout, Central Mudminnow	No
C2SRD-02	South Saugeen River	Alternate	Cool	Permanent	Blacknose Dace, Blacknose Shiner, Blackside Darter, Bluntnose Minnow, Brook Stickleback, Brook Trout, Central Mudminnow, Central Stoneroller, Chinook Salmon, Coho Salmon, Common Shiner, Creek Chub, Fantail Darter, Fathead Minnow, Finescale Dace, Golden Shiner, Hornyhead Chub, Iowa Darter, Johnny Darter, Least Darter, Longnose Dace, Northern Hog Sucker, Northern Pearl Dace, Northern Pike, Northern Redbelly Dace, Pumpkinseed, Rainbow Darter, Rainbow Trout, River Chub, River Darter, Rock Bass, Rosyface Shiner, Smallmouth Bass, Stonecat, White Sucker	No

NOTES:

<sup>1</sup> MNRF 2023a

<sup>2</sup> MNRF 2023b

<sup>3</sup> DFO 2023

\*As per Ontario Regulation 293/11, watercourses that augment the baseflow of Redside Dace habitat are regulated under the ESA

#### **Preliminary Preferred Route Study Area**

Proposed crossing DWP-01 is located on a Tributary to Meux Creek that has a permanent flow regime, unknown thermal regime, and records of fish within 1 km of DWP-01 (MNRF 2023a). At the time of the field investigation, fish were not observed, which may have been attributable to the low flow and shallow water (the average depth was less than 1 centimetre (cm)). Seasonal use by fish is possible during periods of high flow, such as spring freshet or periods of high precipitation. Additional field investigations would be required to determine fish habitat suitability under higher flow conditions and to confirm habitat use by fish.

Proposed crossing DWP-02 located on an unmapped Tributary to Meux Creek that flows into the Tributary to Meux Creek associated with DWP-01 (MNRF 2023a). At the time of the field investigation, the watercourse at DWP-02 was dry with limited definition. The tributary at proposed crossing DWP-02 is unlikely to directly support fish habitat.

Proposed crossing GRD-01 is a mapped, fish-bearing unnamed Tributary to Meux Creek. The watercourse has a permanent flow regime on the west side of Grey Road 10 and an intermittent flow regime on the east side of Grey Road 10 (MNRF 2023a), there are records of fish within 1 km of the crossing location. At the time of the field investigation, GRD-01 was dry throughout the Study Area, with no visible channel on the east side of Grey Road 10 and a poorly defined swale drainage on the west side. The Tributary to Meux Creek at GRD-01 likely conveys water during the spring freshet and is unlikely to directly support fish habitat.

The South Saugeen River (GRD-02) is a permanent, cool-water river that supports a diverse fish community (MNRF 2023a). At the proposed crossing location, the South Saugeen River has primarily riffle morphology, with some runs and pools. Wetted width was approximately 16 m, with a bankfull width of 18 m, depth ranges from 0.1 m to 0.6 m. Substrates is dominated by cobbles, with lesser amounts of gravel, silt, and clay. Bank stability is variable and consists of sections protected by boulders and riparian vegetation, vulnerable to erosion, and with some active erosion. Cobbles and overhead woody debris provide abundant fish cover. No barriers to fish passage were observed. The South Saugeen River directly supports fish habitat.

The Beatty Saugeen River (GRD-03) is a permanent, cold-water river that supports a diverse fish community (MNRF 2023a). At the proposed crossing location, the Beatty Saugeen River has primarily riffle morphology with a small pool. Wetted width is approximately 13 m, with a bankfull width of 14 m, depth ranges from 0.1 m to 0.5 m. Substrates are dominated by cobbles, with a small amount of sand. Bank stability is variable and consists of sections protected by boulders and riparian vegetation, vulnerable to erosion, with some active erosion. Cobbles and undercut banks provide limited fish cover. No barriers to fish passage were observed. The Beatty Saugeen River directly supports fish habitat.

#### Alternate Route Study Area

Carrick Creek (CR10E-01) has a permanent flow regime, cold-water thermal regime, and supports a diverse fish community (MNRF 2023a). At the proposed crossing location, Carrick Creek has primarily run morphology with some riffles and a pool. Wetted width ranges from 6 m to 10 m, with a mean bankfull width of 8 m, and depth ranging from 0.2 m to 2 m. Substrates are dominated by gravel, with lesser amounts of clay, cobble, silt, and sand. Banks are primarily undergoing active erosion, with some areas vulnerable to erosion. Fish cover is provided by cobbles, undercut banks, and woody debris. South of Concession 10 E, Carrick Creek flows through a pasture where livestock can access and cross the creek, likely contributing to erosion of the banks. No barriers to fish passage were observed. Carrick Creek directly supports fish habitat.

Crossing SR30N-01 is a located on a mapped, intermittent Tributary to Carrick Creek with no known thermal regime (MNRF 2023a). At the proposed crossing location, the watercourse has primarily riffle morphology, with some pools and runs. Wetted width ranges from 0.4 m to 0.5 m, with a mean bankfull width of 1 m, and depths ranged from 0.05-0.3 m. Substrates were dominated by cobble, with lesser amounts of silt, clay, and gravel. Banks were primarily eroding along the agricultural field edges, with some areas vulnerable to erosion and some areas containing depositional sediments. Cover for fish cover was provided by cobbles, watercress (*Nasturtium* sp.), woody debris, and undercut banks. Watercress is an indicator of groundwater inputs into the watercourse. No permanent barriers to fish passage were observed. This Tributary to Carrick Creek may provide seasonal fish habitat.

Crossing SR30N-02 is located on an unmapped, channelized feature that flows south into the Tributary to Carrick Creek at SR30N-01. Interstitial flow was observed within the channel, and watercress was observed west of Sideroad 30 N, indicating groundwater inputs. This feature is unlikely to directly support fish habitat.

Crossing SR30N-03 is an unmapped, channelized feature originating from a constructed pond west of Sideroad 30 N, which flows along the Concession 12 E ditchline into Carrick Creek. A small amount of surface flow (~1 cm deep) was present within the ditchline. Additional field investigations would be required to determine if this surface water features supports fish and fish habitat.

Crossing C2SRD-01 is a Tributary to the South Saugeen River with a permanent flow regime and a cold-water thermal regime (MNRF 2023a). At the proposed crossing location, the tributary had primarily run morphology with a small pool. Wetted width ranged from 0.7-1.5 m, with a bankfull width of 1.8 m, and depths ranged from 0.15-0.4 m. Substrates were dominated by gravel and silt, with lesser amounts of cobble and clay. Banks were primarily vulnerable to erosion, with some sections undergoing active erosion. Cover for fish cover was provided by vegetation (watercress), woody debris, and undercut banks. Watercress is an indicator of groundwater inputs into the watercourse. The culvert outlet north of Concession 2 Sideroad East was perched by 30

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cm, which may act as a barrier to fish passage during low flow. No fish were observed; however, habitat north of Concession 2 Sideroad E is suitable to support fish. A constructed pond is present west of the watercourse and may be connected during periods of high flow.

The South Saugeen River (C2SRD-02) is a permanent, cool-water river that supports a diverse fish community (MNRF 2023a). At the proposed crossing location, the South Saugeen River has a run morphology. Wetted width was approximately 20 m, which is the approximate bankfull width. Flows were too high during the field investigation to accurately assess depths, substrates, and fish cover. Banks were primarily vulnerable to erosion and actively eroding, with some small sections protected by riparian vegetation. The South Saugeen River directly supports fish habitat.

Three mapped constructed drains are present east of Sideroad 30 N (MNRF 2023c). Each constitutes part of Poechman-Oberle Municipal Drain 2003 and are closed tile drains with no surface feature visible.

#### **Distribution Network Study Area**

Within the community of Neustadt, three crossings of unnamed tributaries to Meux Creek are proposed: WST-01, MST-01, and QST-02. The three tributaries have a permanent flow regime, unknown thermal regime, and fish collection records within 1 km of the proposed crossing location (MNRF 2023a).

Based on the site investigation, Crossing WST-01 consists of underground storm drainage and is unlikely to directly support fish habitat. Crossing MST-01 similarly consists of underground storm drainage and is unlikely to directly support fish habitat. Each of these crossings are located on the same unnamed tributary to Meux Creek and provide indirect fish habitat (i.e., downstream flow and nutrient inputs) to habitat located downstream in Meux Creek. Crossing QST-02 consists of channelized, open drainage through the community of Neustadt. At the time of the site investigation, flow was low and impeded by abundant vegetation throughout the channel. Creek Chub (Semotilus atromaculatus) were observed. The unnamed tributary to Meux Creek at QST-02 directly supports fish habitat.

Meux Creek (QST-01) has a permanent flow regime, cold-water thermal regime, and supports a diverse fish community (MNRF 2023a). At the proposed crossing location, the feature has primarily run morphology, with some riffles and a small pool. Wetted width ranges from 7 m to 8 m, with a bankfull width of 9 m, and depths ranging from 0.2 m to 0.5 m. Substrates are dominated by cobbles, with lesser amounts of gravel, boulders, sand, silt, and clay. Banks are primarily protected with large boulders and gabion baskets. Cobbles and boulders provided abundant fish cover. No barriers to fish passage were observed. Cyprinids (minnows) were observed. Based on Stantec's site investigation, Meux Creek directly supports fish habitat.

#### **Reinforcement Section Study Area**

Based on the background data review and Stantec's site visit, there are no watercourses within the reinforcement section study area.

#### 3.4.1.2.2 Aquatic Species at Risk

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

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

Activities that may impact a provincially protected species or its habitat require the prior issuance of a permit from the MECP, unless the activities are exempt under Regulation. The current O. Reg. 242/08 identifies activities which are exempt from the permitting requirements of the ESA subject to rigorous controls outside the permit process including registration of the activity and preparation of a mitigation plan. Activities that are not exempt under O. Reg. 242/08 require a complete permit application process.

#### **Preferred Preliminary Route Study Area**

Tributaries to Meux Creek at proposed crossings DWP-01 and DWP-02 contribute to Redside Dace habitat in Meux Creek (DFO 2023, MNRF 2023b).

There are DFO records (2023) of Rainbow Mussel (*Villosa iris*) in the South Saugeen River at proposed crossing GRD-02, however there are no records of Rainbow Mussel in NHIC (MNRF 2023b). Rainbow Mussel (*Villosa iris*) is a species of special concern both federally and provincially.

Northern Brook Lamprey (*Ichthyomyzon fossor*), a species of special concern both federally and provincially, have been recorded within the Beaty Saugeen River (GRD-03) (MNRF 2023a); however, there are no DFO records (2023). Additionally, within the Beatty Saugeen River near the Study Area is a record of River Darter



(*Percina shumardi*) (MNRF 2023a), an endangered species both federally and provincially; however, the Great Lakes – Upper St. Lawrence population is only known to occur within Lake St. Clair, the Sydenham River, and the Thames River (COSEWIC 2016, COSSARO 2016).

#### Alternate Route Study Area

There are no records of federally or provincially regulated aquatic SAR or species of special concern within the Alternate Route Study Area.

#### **Distribution Network Study Area**

There are records of Redside Dace (*Clinostomus elongatus*) in Meux Creek (proposed crossing QST-01) (DFO 2023; MNRF 2023b). Redside Dace is an endangered species both federally and provincially. Tributaries to Meux Creek at proposed crossings WST-01, MST-01, and QST-02 contribute to Redside Dace habitat in Meux Creek. Redside Dace and their habitat are protected under SARA and the ESA. Contributing habitat is protected under the ESA.

#### **Reinforcement Section Study Area**

There are no records of federally or provincially regulated aquatic SAR or species of special concern within the reinforcement section study area.

#### 3.4.2 Terrestrial Features

#### 3.4.2.1 Methods

#### 3.4.2.1.1 Background Data Review

The following background documents and information sources were reviewed to identify natural heritage features and existing wildlife records within the Study Area:

- Grey County OP (2019) (PPR, reinforcement section, distribution network).
- Bruce County OP (2010) (AR only).
- MNRF's LIO digital mapping of natural heritage features (MNRF 2023a).
- NHIC database (MNRF 2023b).
- Species at Risk Ontario (SARO) List (MNRF 2023d).
- SARA, Schedule 1 (Government of Canada 2002).
- Ontario Breeding Bird Atlas (OBBA) (Cadman et al. 2007).
- Ontario Reptile and Amphibian Atlas (ORAA) (Ontario Nature 2020).
- Ontario Mammal Atlas (Dobbyn 1994).

- Ontario Butterfly Atlas (OBA) (Toronto Entomologists' Association 2022).
- eBird (eBird 2022).
- iNaturalist (iNaturalist 2022).
- Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and Committee on the Status of Species at Risk in Ontario (COSSARO) Status Reports.

#### 3.4.2.1.2 Site Investigation

A roadside survey was conducted for the PPR, distribution network and reinforcement section on September 30, 2022, and for the AR on April 13, 2023, to confirm, where possible, results of the background review and document existing conditions within the Study Area. Preliminary vegetation classification was completed using Ecological Land Classification (ELC) (Lee et al., 1998, with 2008 updates) to identify significant habitat features that may have potential to support SAR, Species of Conservation Concern (SOCC), and significant wildlife habitat (SWH). Roadside searches for plant SAR documented in the background review were completed with incidental observation of wildlife also recorded.

#### 3.4.2.2 Results

#### 3.4.2.2.1 Natural and Designated Features

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

- Significant woodlands.
- West Neustadt Wetland Complex (Evaluated wetland).
- Unevaluated wetlands.
- Other woodlands.
- Significant Valleylands.
- Linkage.
- No Areas of Natural and Scientific Interest (ANSIs), or core areas were identified in the Study Area.

Designated natural features, where online data is available, are mapped on **Figure C-2** (Appendix C).



#### 3.4.2.2.2 Forest and Vegetation Cover

The Project Study Area falls within Rowe's (1972) Huron-Ontario, Great Lakes-St. Lawrence Forest Region where the vegetation is known to be relatively diverse. Hardwood forests may be dominated by sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), white ash (*Fraxinus americana*), eastern hemlock (*Tsuga Canadensis*), with numerous other species found where substrates are well developed on upland sites. Lowlands, including rich floodplain forests, contain green ash (*Fraxinus pennsylvanica*), silver maple (*Acer saccharinum*), red maple (*Acer rubrum*), eastern white cedar (*Thuja occidentalis*), yellow birch (*Betula alleghaniensis*), balsam fir (*Abies balsamea*), and black ash (*Fraxinus nigra*) (Crins, 2009).

#### **Vegetation Communities**

ELC vegetation communities were determined in the field on September 30, 2022, and April 13, 2023, using ELC for Southern Ontario (Lee et al, 1998; updated 2008). Significant woodlands are identified on Appendix B of the Grey County OP (2019). This includes woodlands equal to or greater than 40 hectares (ha) outside of settlement areas, or greater than or equal to 4 ha within settlement boundaries. A woodland failing to meet criteria for size outside of settlement areas may still be considered significant if any two of the three following are met:

- If a woodland is within 30 m from another significant woodland.
- It overlaps with the boundaries of a Provincially Significant Wetland (PSW), Significant Coastal Wetland, Core Area, Significant Valleyland or Area of Natural and Scientific Interest (ANSI).
- Interior habitat of 8 ha or greater, within a hundred-meter buffer on all sides.

Seven significant woodlands were identified in the PPR study area. Two significant woodlands were identified in the AR study area and three in the distribution network study area as shown on **Figure C-2 (Appendix C)**. There were no significant woodlands identified in the reinforcement section study area.

The Bruce County OP (2010) does not map significant woodlands, which applies to the AR study area. However, Section 4.3.2.6 of the OP indicates that for ... *Townships with less than 30% forest cover, wood lots of 40 ha or greater are considered significant.* However, they do not provide a definition of woodlot significance for townships with greater than 30% forest cover.

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#### Wetlands

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

A review of LIO (2023a) natural heritage mapping indicated that wetlands identified within the PPR study area includes 7 unevaluated wetlands. The AR study area has 2 evaluated wetlands including the West Neustadt Complex and an additional 13 unevaluated wetlands. The distribution network study area also overlapped with 2 unevaluated wetlands as shown on Figure C-2 (Appendix C). There were no wetlands within the reinforcement section study area.

#### Valleylands

Significant Valleylands are identified in Grey County as 200 m wide corridors identified by participating conservation authorities and are included as part of the County's natural heritage system.

As outlined in Section 7.7 of Grey County's Official Plan, detailed delineations should be evaluated on a site-specific basis using the following criteria:

- The valley must be ≥100 metres wide and ≥2 kilometres long.
- The valley banks must be ≥3 metres in height (extrapolated from 5 metre contours at 1:10,000 or better information where available).
- Where valley slope is 3:1 on one side with no slope on the opposite side of the watercourse, the opposite valley limit is delineated using either 100m from centreline of the watercourse or the limit of the floodplain to create a continuous valley feature.
- Where 3:1 valley slopes occur on both sides of the river, but they are not continuous, the floodplain limit (or contour information and professional judgment) is used to delineate a continuous valley feature.

Grey County designates two (2) Significant Valleylands on Appendix B (Map 3) of their OP (2019) that cross the PPR study area. These are associated with the Beatty Saugeen River and South Saugeen River, which are discussed in Section 3.4.1. There were no Significant Valleylands crossing the AR study area as Bruce County does not map them in their OP (2010).



## 3.4.2.2.3 Significant Wildlife Habitat

Wildlife habitat is defined as an area where plants, animals and other organisms live, including areas where species concentrate at a vulnerable point in their life cycle and that are important to migratory and non-migratory species (MNR, 2010). Wildlife habitat is considered significant if it is ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or Natural Heritage System (MNR 2010).

Significant Wildlife Habitat (SWH) are grouped into four categories:

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

The presence of SWH in the Study Area was determined in two ways. First, publicly available NHIC data was reviewed for SWH (MNRF 2023b) as were the Grey and Bruce County OPs. Second, candidate SWH was identified by comparing the Significant Wildlife Habitat Criteria Schedules for Ecoregion 6E (MNRF 2015a) to aerial photography and results of the habitat assessments conducted in 2022 and 2023.

NHIC identified colonial nesting bird habitat for mixed wader birds as SWH in the background review in the Study Area while Bruce and Grey County OPs do not map SWH.

Details of the SWH assessment can be found in **Appendix D** and summarized below.

#### 3.4.2.3 Seasonal Concentration Areas

Seasonal Concentration Areas are sites where large numbers of a species gather at one time of the year, or where several species congregate. Only the best examples of these concentration areas are typically designated as SWH. Review of the NHIC (MNRF 2023b) database identified colonial nesting bird habitat for mixed wader birds (tree/shrub) in the Study Area. SWH for colonial nesting birds was documented in approximately 9 - 1 x 1 km squares that overlap with the Study Area.

As detailed in **Appendix D**, candidate habitat for Bat Maternity Colonies, Turtle Wintering Areas, and Reptile Hibernacula may occur in the Study Areas.

#### 3.4.2.4 Rare Vegetation Communities or Specialized Habitats

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

As detailed in **Appendix D**, rare vegetation communities do not occur in the Study Area. Candidate specialized habitat for Woodland Raptor Nesting Habitat, Amphibian Breeding Habitat (Woodland or Wetland), and Woodland Area-sensitive Bird Breeding Habitat may occur in the Study Areas.

#### 3.4.2.5 Habitat for Species of Conservation Concern

There are four types of SOCC: those which are rare, those whose populations are significantly declining, those which have been identified as being at risk from certain common activities and those with relatively large populations in Ontario compared to the remainder of the globe. The Significant Wildlife Habitat Criteria Schedule for Ecoregion 6E (MNRF, 2015a) identifies marsh, open country and shrub/early successional bird breeding habitat and special concern and rare wildlife species in this category.

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

As detailed in **Appendix D**, candidate habitat for SOCC does not occur in the Study Area.

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

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

Results of the background review identified nine (9) SOCC that may occur in the Study Area. Exact locations of species occurrences are not available from the background sources (e.g., NHIC database, wildlifeatlases) and the potential for species to be present is limited by habitat suitability and availability. Therefore, the identified species recorded from these databases may not occur in the Study Area.

Table 3.2 below provides a summary of the SOCC identified during the background review and whether potential habitat for these species is present in the Study Area based on air photos and field studies.

Common Name	Scientific Name	S RANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the PPR and/or distribution study areas? (Y/N)	Potential Habitat in the AR and/or reinforcement study areas? (Y/N)
Birds	-	•		•			
Wood Thrush	Hylocichla mustelina	S4B	SC	THR	eBird	Y – Mixed and deciduous forests present.	<b>Y –</b> Mixed and deciduous forests present.
Barn Swallow	Hirundo rustica	S4B	SC	THR	eBird	Y – Barns bridges and other structures present.	<ul> <li>Y – Barns bridges and other structures present.</li> </ul>
Eastern Wood-Pewee	Contopus virens	S4B	SC	SC	eBird	<b>Y</b> – Deciduous and mixed forest present.	<b>Y</b> – Deciduous and mixed forest present.
Reptiles		·	•	·		·	
Snapping Turtle	Chelydra serpentina	S3	SC	SC	ORRA	<b>Y –</b> Ponds, wetland, rivers present.	<b>Y –</b> Ponds, wetlands, rivers present.
Midland Painted Turtle	Chrysemys picta marginata	S5	N/A	SC	ORRA	<b>Y –</b> Ponds, wetlands present. Saugeen River has adequate basking habitat.	<b>Y –</b> Ponds, wetlands present. Saugeen River has adequate basking habitat.
Eastern Milksnake	Lampropeltis triangulum	S3	N/A	SC	ORRA	<b>Y</b> – Barns, outbuildings, pastures, hayfields, and forests present.	<b>Y –</b> Barns, outbuildings, pastures, hayfields, and forests present.
Eastern Ribbonsnake	Thamnophis sauritus	S3	SC	SC	ORRA	<b>Y –</b> Forest habitat next to Saugeen River.	<b>Y –</b> Forest habitat next to Saugeen River.
Insects		·	•	·		·	
Monarch	Danaus plexippus	S4B, S2N	SC	SC	TEA	Y – Meadows present.	<b>Y –</b> Meadows present.
Yellow Banded Bumble Bee	Bombus terricola	S5	SC	SC	NHIC	<b>Y –</b> Meadows, wetlands, farmland, forests present.	<b>Y –</b> Meadows, wetlands, farmland, forests present

NOTES:

Y: Yes

N: No

AMO: Atlas of the Mammals of Ontario

END: Endangered - a species facing imminent extinction or extirpation

NHIC: Natural Heritage Information Centre

OBBA: Ontario Breeding Bird Atlas

ORAA: Ontario Reptile and Amphibian Atlas

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- COSSARO: Committee on the Status of Species at Risk in Ontario
- COSEWIC: Committee on the Status of Endangered Wildlife in Canada
- TEA: Toronto Entomologists' Association
- THR: Threatened a species that is at risk of becoming endangered
- SC: Special Concern a species with characteristics that make it sensitive to human activities or natural events
- S1: Critically Imperiled Critically imperiled in the province (often 5 or fewer occurrences)
- S2: Imperiled Imperiled in the province, few populations (often 20 or fewer)
- S3: Vulnerable Vulnerable in the province, relatively few populations (often 80 or fewer)
- S4: Apparently Secure Uncommon but not rare
- S?: Rank Uncertain
- SH: Possibly Extirpated (Historical)
- S#B: Breeding status rank
- NS: No schedule not yet on a Species at Risk Act schedule

#### 3.4.2.6 Animal Movement Corridors

The Grey County OP designates a Corridor (200 m) on Schedule C of their OP. According to the OP:

Linkages are identified to provide connectivity between Core Areas and establish a connected natural environmental system. They support natural processes that are necessary to maintain biological and geological diversity, natural functions, viable populations of indigenous species, and ecosystems. Linkages are identified based on several factors including using the areas of greatest natural cover (terrestrial and/or aquatic, as well as areas of deep interior habitat), while focusing on the shortest distance between Core Areas.

For SWH, animal movement corridors are elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another (MNR 2000). Rivers, creeks, and drains may be used as amphibian movement corridors to/from breeding habitat while forested cover may be used by deer moving to/from wintering habitat. Hedgerows may also serve as small linkages (MNR 2000).

As detailed in **Appendix D**, candidate habitat for Amphibian Movement Corridors may occur in the Study Area.

#### 3.4.2.7 Species at Risk

SAR are those species given status rankings by the COSEWIC and/or COSSARO as threatened or endangered. Endangered and threatened species receive protection under the ESA 2007. Special concern species are not afforded habitat protection and have been summarized as SOCC above.

Based on the results of the background review, 10 threatened and endangered species have ranges that overlap the Study Area, including 2 species of plants, 4 species of breeding birds and 4 species of mammals as shown in **Table 3.3**.

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

Table 3.3:	<b>Terrestrial Species at Risk Potentiall</b>	y Occurring in the Study Area

Common Name	Scientific Name	S RANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the PPR and/or distribution study areas? (Y/N)	Potential Habitat in the AR and/or reinforcement study areas? (Y/N)
Plants						·	
Butternut	Juglans cinerea	S2?	END	END	COSSARO 2017, MNRF	<b>Y –</b> Mixed deciduous forests present. Not identified during surveys.	<b>Y –</b> Mixed deciduous forests present. Not identified during surveys.
Black Ash	Fraxinus nigra	S4	END	THR	COSSARO 2017, MNRF	<b>Y</b> – Potentially present in Study Area in wet areas or along river. Not identified during surveys.	Y – Potentially present in Study Area in wet areas or along river. Not identified during surveys.
Birds	·	•	·	·	·	·	•
Bobolink	Dolichonyx oryzivorus	S4B	THR	THR	NHIC	<b>Y</b> – Grassy pastures and hayfields present.	<b>Y</b> – Grassy pastures and hayfields present.
Eastern Meadowlark	Sturnella magna	S4B	THR	THR	NHIC	<b>Y –</b> Grassy pastures, meadows and hayfields present.	<b>Y –</b> Observed during field studies in 2023.
Bank Swallow	Riparia riparia	S4B	THR	THR	eBird	<b>N</b> – Banks and cliffs not identified during field survey.	<b>Y</b> – Open gravel pit with large banks identified during field survey.
Chimney Swift	Chaetura pelagica	S4B, S4N	THR	THR	eBird	<b>Y</b> – Chimneys of buildings in Neustadt and Hanover present for roosting.	<b>Y</b> – Chimneys of buildings in Neustadt present for roosting.
Mammals							
Little Brown Myotis	Myotis lucifugus	S4	END	END	AMO, COSEWIC*	<b>Y</b> – Barns, buildings, and cavity trees present to potentially support maternity roosts.	<b>Y</b> – Barns, buildings, and cavity trees present to potentially support maternity roosts.
Northern Myotis	Myotis septentrionalis	S3?	END	END	AMO, COSEWIC*	<b>Y</b> – Barns, buildings, and cavity trees present to potentially support maternity roosts.	<b>Y</b> – Barns, buildings, and cavity trees present to potentially support maternity roosts.
Eastern Small Footed Myotis	Myotis leibii	S2/S3	END	Not listed	AMO, COSEWIC*	N – Rocky outcrops absent.	N – Rocky outcrops absent.

Common Name	Scientific Name	S RANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the PPR and/or distribution study areas? (Y/N)	Potential Habitat in the AR and/or reinforcement study areas? (Y/N)
Tri-coloured Bat	Perimyotis subflavus	S3	END	END	AMO, COSEWIC*	<b>Y</b> – Forested areas with cavity trees and leaf clusters present to potentially support maternity roosts.	<b>Y</b> – Forested areas with cavity trees and leaf clusters present to potentially support maternity roosts

NOTES:

Y: Yes

N: No

AMO: Atlas of the Mammals of Ontario

END: Endangered - a species facing imminent extinction or extirpation

NHIC: Natural Heritage Information Centre

OBBA: Ontario Breeding Bird Atlas

ORAA: Ontario Reptile and Amphibian Atlas

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

COSEWIC: Committee on the Status of Endangered Wildlife in Canada

MECP: Ministry of Environment, Conservation and Parks correspondence October 25, 2021

\*COSEWIC Assessment and Status Report on the Little Brown Myotis, Northern Myotis, and Tri-colored Bat in Canada

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

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

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

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

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

S4: Apparently Secure - Uncommon but not rare

S5: Secure - Common, widespread, and abundant in the province

S?: Rank Uncertain

SH: Possibly Extirpated (Historical)

S#B: Breeding status rank

NS: No schedule – not yet on a Species at Risk Act schedule

Preliminary investigations within the Study Area identified an Eastern Meadowlark (Sturnella magna) along the AR. As detailed in **Table 3.3** above, this species is designated as threatened both provincially and federally. It is afforded general habitat protection under the ESA 2007. The potential exists for additional Eastern Meadowlark to be present within the Study Area along both the PPR and AR and is expected to be present along with Bobolink (Dolichonyx oryzivorus). Presence/absence surveys are recommended to confirm where these species occur within the Study Area and may be impacted by the Project. Consultation with the MECP is recommended to confirm requirements under the ESA for the Project.

#### 3.5 Socio-Economic Environment

#### 3.5.1 **Demographics**

As mentioned in Section 3.1, the Study Area consists of the PPR, AR, distribution network and reinforcement section study areas; thus, the Study Area lies within both Grey and Bruce County, the Town of Hanover, the Municipality of Brockton, the Municipality of South Bruce, the Municipality of West Grey, and the community of Neustadt. For the socio-economic elements of the assessment, the most recent economy and employment statistics were extracted from 2021 Census Population (Statistics Canada 2023a).

Despite the Study Area extending throughout the different counties, municipalities/towns, and community mentioned above, the selected census divisions will be Ontario, Grey County, and the Municipality of West Grey. These census divisions were selected to consider Grey County as a whole, which includes all nine of the lowertier municipalities such as the City of Owen Sound, Municipality of Grey Highlands, Municipality of Meaford, Town of Hanover, Town of The Blue Mountains, Township of Chatsworth, Township of Georgian Bluffs, Township of Southgate, and the Municipality of West Grey (Grey County 2023. The Municipality of West Grey was specifically chosen for the socio-economic assessment as the community of Neustadt is located within it and is the main community for where the natural gas is being distributed to. However, the community itself is not an established entity and therefore receives all its services from the Municipality of West Grey (Municipality of West Grey 2023b). Accordingly, there are some references in the socio-economic assessment for how certain services (e.g., hospitals, temporary accommodations,) relate in proximity to other portions of the Study Area where other Counties and Municipalities are located as these services are not located in the community of Neustadt.

The Municipality of West Grey has a population of 13,131 residents (Statistics Canada 2023a), while the community of Neustadt (located approximately 8 km south of Hanover, on Grey Road 10 within the Municipality of West Grey) has a smaller population of 546 (Statistics Canada 2023b).

The population breakdown of the upper- and lower-tier municipality in 2021 in which the Study Area occurs is presented in **Table 3.4** below.

Location	Total Population	Land Area (km²)	Population Density per (km²)
Ontario	14,223,942	892,411.76	15.9
Grey (County)	100,905	4,497.93	22.4
West Grey (Municipality)	13,131	875.21	15.0

#### Table 3.4: Population, 2021

Source: Statistics Canada (2023a).

Between 2016 and 2021, the Municipality of West Grey and Grey County saw an increase in population. In this five-year period, the Municipality of West Grey experienced a population growth change of 4.9% (Statistics Canada 2023a). As shown in **Table 3.5**, during this five-year period, the Municipality's population increased from 12,518 to 13,131, while the County's population increased from 93,830 to 100,905 (7.5% increase) (Statistics Canada 2023a). The Province of Ontario saw a population growth of 5.8% as the population increased from 13,448,494 to 14,223,942 in the five-year period (Statistics Canada 2023a). The Municipality's population growth was less than both the County's and Province's. As noted in Grey County's "Trends and Analysis Summary: County of Grey Housing and Homelessness Plan 2014-2024", population growth was considerably lower in the County and places such as the Municipality of West Grey in comparison to Province of Ontario mainly due to the in-migration of older age-group groups coming in and looking for affordable, small-town, or rural communities in which to retire (Grey County 2014).

#### Table 3.5: Population Percentage Change (%) from 2016-2021

Location	Total Population 2016	Total Population 2021	Population Percentage Change (%)
Ontario	13,448,494	14,223,942	5.8
Grey (County)	93,830	100,905	7.5
West Grey (Municipality)	12,518	13,131	4.9

Source: Statistics Canada (2023a).



## 3.5.2 Employment and Business

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

 Table 3.6:
 Labour Characteristics for Persons > 15 years, 2021<sup>1</sup>

Location	Total Population 15 years and Over	Labour Force	Employed	Participation Rate (%)	Employment Rate (%)	Unemployment Rate (%)
Ontario	11,782,820	7,399,200	6,492,895	62.8	55.1	12.2
Grey (County)	83,765	48,135	43,695	57.5	52.2	9.2
West Grey (Municipality)	10,920	6,555	6,040	60.0	55.3	7.8

Source: Statistics Canada (2023a).

As shown in **Table 3.6**, in 2016, the Municipality of West Grey had a higher employment rate and lower unemployment rate compared to the Province of Ontario and Grey County (Statistics Canada 2023a).

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

#### Table 3.7:Median Income, 2020

Location	Median Total Income of Households (\$)	Median Total Income of Individuals (\$)
Ontario	\$91,000	\$41,200
Grey (County)	\$78,000	\$39,200
West Grey (Municipality)	\$77,500	\$37,200

Source: Statistics Canada (2023a).

<sup>&</sup>lt;sup>1</sup> Table 3.6 data for Total – Population aged 15 years and over by labour force status was 25% sampled data. The data also refers to whether a person aged 15 years and over was employed, unemployed or not in the labour force during the week of Sunday, May 2 to Saturday, May 8, 2021.

For information on the comparability of the 2021 Census labour force status data with those of the Labour Force Survey, see Appendix 2.11 of the Dictionary, Census of Population, 2021.

Median income of households in Grey County and the Municipality of West Grey were less than the provincial median by \$13,000 and \$13,500 respectively (Statistics Canada 2023). Median income of individuals in Grey County and the Municipality of West Grey were less than the provincial median by \$2,000 and \$4,000 (Statistics Canada 2023a).

The top three occupation classifications in Grey County in 2021 were sales and service occupations (23.6%), trades, transport and equipment operators and related occupations (22.3%), and business, finance, and administration occupations (13.6%) (Statistics Canada 2023a). Similar to Grey County but not in the same order, the top three occupation classifications in the Municipality of West Grey in 2021 were trades, transport and equipment operators and related occupations (26.0%), Sales and service occupations (21.1%), and business, finance and administration occupations (12.5%) (Statistics Canada 2023). Similar to the Province of Ontario, the County and Municipality have the same top three occupation classifications in 2021.

The Municipality of West Grey is committed to economic development initiatives that will attract new businesses to the area and aid in growing the community (Municipality of West Grey 2023b. The Municipality of West Grey has partnered with organizations/entities such as neighbouring municipalities, Grey County, Durham BIA, Saugeen Connects, Saugeen Economic Development Corporation, and the South Grey Chamber of Commerce to promote growth in various sectors (e.g. local business, commercial, and service) and bolster regional economic development (same source as above). These initiatives involve supporting youth retention and integrating efforts to leverage immigrant attraction to the area as residents, workers, entrepreneurs, business owners, operators, and investors (Saugeen connects 2023). Saugeen Economic Development Corporation also strives to deliver professional business services which includes Business Training, Workshops and Business Loans up to \$300,000 (Saugeen Economic Development Corporation 2023).

The top six industries in Grey County include Health Care, Retail, Accommodation & Food, Construction, Agriculture, and Manufacturing (Grey County 2023). As Grey County is witnessing an increase in the tourism, manufacturing and digital media sectors, the County provides an opportunity to empower entrepreneurs with connections, knowledge, and space to take their business to the next level (FEDDEV 2021). On July 26, 2021, the Federal Government announced an \$845,0000-non-repayable FedDev Ontario contribution for Grey County, in partnership with Catapult Grey Bruce, to enhance service offering and business programming (e.g. new maker and device lab space, 3D printers) at the Sydenham Campus Regional Skills Training, Trades and Innovation Centre in Owen Sound (FEDDEV 2021). The investment itself will support 75 businesses, produce 10 new products and services, create 50 new jobs, create an additional \$1.8 million in private investment for the region, and make the Sydenham campus become a hub in integrating new technologies and commercializing certain products (FEDDEV 2021).



## 3.5.3 Community Services & Municipal Infrastructure

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

In 2021, there were 42,310 occupied private dwellings in Grey County with most homes being single-detached houses (32,775) and the average household size was 2.3 persons, with most occupants being owners (78.1%) and not renters (Statistics Canada 2023a)<sup>2</sup>.

In the Municipality of West Grey, there were 5,285 occupied private dwellings with most homes being single-detached homes (4,640) and the average household size was 2.5 persons, with most occupants being owners (85.9%) and not renters (Statistics Canada 2023a)<sup>3</sup>.

The Municipality of West Grey is in the Provincial Tourism Region 7 (Bruce Peninsula, Southern Georgian Bay and Lake Simcoe) (MHSTCI 2022). The commercial accommodations in this Region are mostly dominated by Recreational Vehicle (RV) Parks and Campgrounds, Motels, Hotels, Housekeeping Cottages and Cabins, and Resorts (MTCS 2022). Between 2008 to 2021, the occupancy rate for hotels has decreased from 54.6% to 48.4%; however, occupancy rates for short-term rentals have increased from 46.4% in 2019 to 45.4% in 2021 (MHSTCI 2022). Approximately 8.5 km north of the community of Neustadt in the Town of Hanover, there is the Travellers Inn Hanover (244 7<sup>th</sup> Avenue), Grey Rose Suites (394 Tenth Street), and 10<sup>th</sup> Avenue Guest House & Suites (540 10<sup>th</sup> Avenue). Other accommodations include the Best Western Plus Walkerton Hotel and Conference Centre (10 Eastridge Road) located approximately 12 km northwest from the community of Neustadt in the Town of Walkerton, and also the Lighthouse Motel (1864 ON-9) which is also located 12 km

<sup>&</sup>lt;sup>2</sup> Tenure refers to whether the household owns or rents their private dwelling. The private dwelling may be situated on rented or leased land or be part of a condominium. A household is considered to own their dwelling if some member of the household owns the dwelling even if it is not fully paid for, for example if there is a mortgage or some other claim on it. A household is considered to rent their dwelling if no member of the household owns the dwelling. A household is considered to rent that dwelling even if the dwelling is provided without cash rent or at a reduced rent, or if the dwelling is part of a cooperative.

For historical and statutory reasons, shelter occupancy on Indian reserves or settlements does not lend itself to the usual classification by standard tenure categories. Therefore, a special category, 'dwelling provided by the local government, First Nation or Indian band,' has been created for census purposes.

<sup>&</sup>lt;sup>3</sup> Tenure refers to whether the household owns or rents their private dwelling. The private dwelling may be situated on rented or leased land or be part of a condominium. A household is considered to own their dwelling if some member of the household owns the dwelling even if it is not fully paid for, for example if there is a mortgage or some other claim on it. A household is considered to rent their dwelling if no member of the household owns the dwelling. A household is considered to rent that dwelling even if the dwelling is provided without cash rent or at a reduced rent, or if the dwelling is part of a cooperative.

northwest from the community of Neustadt in the Town of Walkerton (south of the Best Western).

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**

Garbage and recycling services for the community of Neustadt are provided by the Municipality of West Grey (Municipality of West Grey 2023b). Garbage and recycling is picked up on Thursdays (Municipality of West Grey 2023b). The Municipality of West Grey operates two landfills: the Bentick Landfill at 114079 Grey Road 3 which accepts nearly all types of waste (e.g., household garbage, recycling, large appliances, steel, construction waste and tires) except for household hazardous waste; and the Durham landfill at 590 Park Street which only accepts household waste such as household garbage and recycling (Municipality of West Grey 2023b).

The Municipality of West Grey operates water and sewer systems in Durham and Neustadt where rates are based on volume of water used plus a minimum flat rate (Municipality of West Grey 2023b). Water systems in the Municipality of West Grey operate under the Quality Management Policy (provided by Veolia Canada Inc.) where its sole purpose is to supply a safe, consistent drinking water supply (e.g., using a management system, risk-based treatment process) (Municipality of West Grey 2023b). In relation to installing a new sewage system or replacing an existing sewage system in the Municipality of West Grey, a building permit is required along with clearance from the SVCA if the system will be built in a regulated area (Municipality of West Grey 2023b).

The Grey Transit Route was launched by Grey County in 2020 and has bus route designated from Owen Sound to Guelph with a stop in Durham, Ontario (Municipality of West Grey 2023b). Another type of transit provided in the vicinity of the Study Area includes the Saugeen Mobility and Regional Transit (SMART) which is a specialized public transit service that provides transportation solutions (e.g., accommodations for mentally or physically challenged people) for residents in eight municipalities in Grey and Bruce County (Municipality of West Grey 2023b).

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

The Hanover District Hospital at 90 7<sup>th</sup> Avenue in the Town of Hanover is located within the AR study area (**Figure C-1**, **Appendix C**). The South Bruce Grey Health Centre in Walkerton at 21 McGivern Street West is located approximately 7 km west of the Study Area, a second South Bruce Grey Health Centre is located 16 km east of the Study Area in Durham (320 College Street North). The Saugeen Physiotherapy & Allied Health

Centre is located at 570 1<sup>st</sup> Street in the Town of Hanover within the reinforcement section study area.

Dawnview Public School, 149 12<sup>th</sup> Street, Town of Hanover, is located within the reinforcement section study area along with the John Diefenbaker Senior School at 201 18<sup>th</sup> Avenue, which is also located in the Town of Hanover. A third school, Holy Family School, 334 10<sup>th</sup> Avenue, Town of Hanover, is located close to but outside of the reinforcement section study area.

#### Roads, Highways and Culverts

The Municipality of West Grey's public works department maintains more than 700 km of roads and sidewalks. The PPR study area follows the alignment of Grey Road 10, the distribution network study area follows the alignment of local streets in the community of Neustadt, and the reinforcement section study area follows the alignment of local streets in the southern part of the Town of Hanover (see **Figures A-1 and A-2**; **Appendix A**).

#### Policing, Fire and Emergency Response Services

Policing services in the Municipality of West Grey are provided by the West Grey Police Service, 153 George Street West, Durham, Ontario. Fire services are provided by the West Grey Fire Department and can be contacted at 519-369-2505 (West Grey Police 2020). The Neustadt Fire Station at 319 David Winkler Parkway is located within the PPR study area. The location of these facilities is shown in **Figure C-1** (**Appendix C**).

As the Study Area is mainly located in Grey County, the Grey County Paramedic Services (PS) provides emergency ambulance services to all Grey County (Grey County 2023). Grey County PS covers an area of 454,000 ha and responds to more than 23,000 calls for service annually (Grey County 2023). The Municipality of West Grey has created a Community Emergency Response Plan which looks at possible emergencies the Municipality could face (e.g., natural disasters, floods, terrorism, or a health crisis) and provides guidance on the necessary steps that an emergency response team should take through a crisis (Municipality of West Grey 2023b). The community emergency management co-ordinator will make sure the plan is properly implemented to keep the community safe and critical services operational (Municipality of West Grey 2023b). The emergency response team includes the mayor and chief administrative officer of the Municipality of West Grey, the chiefs of the West Grey Police Service and the West Grey Fire Department, and other members of staff at the Municipality of West Grey (Municipality of West Grey 2023b).

## 3.5.4 Infrastructure

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



#### **MTO Network Roads**

No MTO networks roads are in the Study Area (Bruce County 2010; Grey County 2019). The MTO confirmed no concerns with the proposed Project as the PPR follows the municipal road system and has no impact on the provincial highway system.

#### Railways

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

#### Utilities

A variety of buried and overhead utilities (e.g., telephone, low-voltage hydroelectric) are located in road allowances throughout Study Area. An unknown pipeline is located within the western portion of the distribution network study area (Ontario GeoHub 2022b).

During consultation and engagement, select utility owners and operators were provided with a Notice of Study Commencement and Virtual Information Session. On March 15, 2023, Hydro One provided a response to the Notice indicating the utility company has distribution assets within the Study Area; Hydro One requested Enbridge continue to consult with the utility company through to Project construction. An Esso gas station is also located within the reinforcement section study area close to the intersection of 2nd Street and 11th Avenue in the Town of Hanover.

## 3.5.5 Culture, Tourism and Recreational Facilities

Different places for where people can go to shop and eat in the distribution network of the Study Area include Granny's General Store (410 Mill Street), Neustadt Vendor's Market (500 Mill Street), the Neustadt Springs Brewery (456 Jacob Street), and Noah's Inn Fish & Chips (527 Mill Street). Other places also located within the distribution network of the Study Area include places of worship such as St. Paul's Lutheran Church (379 Adam Street) and the Neustadt Baptist Church (169 Barbara Street), the Neustadt Lions Park (located southeast of the John Street and Grey Road 10 intersection), the Neustadt Community Hall/Neustadt Community Centre and Arena (183 Enoch Street) and the Neustadt Arena Ball Diamond (193 Enoch Street) for recreational purposes and social gatherings.

The Hanover Raceway at 265 5<sup>th</sup> Street and the New Heights Fitness & Wellness at 19 16<sup>th</sup> Avenue in the Town of Hanover are located in the proximity of the reinforcement section study area. Adjacent to the AR study area, at the intersection of Sideroad 30 North and Concession 14, there are two churches: Mercy Hill Christina Fellowship (220 Concession Road 14) and St. Francis Xavier Catholic Church (233 Concession Road 14).



The location of these cultural, tourism and recreational facilities are shown in **Figure C-1** (**Appendix C**).

# 3.5.6 Air Quality and Noise

The landscape of the Study Area is a rural, residential community that is comprised of some agricultural land 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 2021), 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 PPR, distribution network, and reinforcement section study areas. 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.

# 3.5.7 Indigenous Land Use and Traditional Knowledge

Stantec respectfully acknowledges that the Study Area is in the Treaty 45½, Saugeen Tract Agreement, signed in Manitowaning by representatives of the Crown and certain Anishinaabe peoples on August 9, 1836 (Ministry of Indigenous Affairs 2022). 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.

# 3.5.8 Land Use

Municipal land uses, policies, and practices are governed by the Municipality of West Grey OP (2023a), Grey County OP (2019), Town of Hanover OP (2016), Bruce County OP (2010), Municipality of Brockton- Walkerton Community OP (2017), Municipality of South Bruce OP (2023), The Corporation of the Municipality of Brockton By-Law No. 2013-26 (2016), The Corporation of The Municipality of South Bruce By-Law No. 2011-63 (2017).

The following breakdown provides different types of land uses present for each OP and By-Law. To maintain the intent of the policies which apply to these designations, the following text has been copied almost directly from the OP or By-Law number:

#### Municipality of West Grey OP (2023a)

Throughout the Municipality of West Grey, there are many designations that are present in the PPR, AR and distribution network study areas, particularly in the community of Neustadt and along Grey Road 10 which include "Significant Woodlands", "Regulated Area", "Residential", "Downtown Commercial", "Future Development", "Environmental Protection (EP)", "Industrial", and "Highway Commercial".

For woodlands to be considered significant within a settlement area, the woodland must be greater than, or equal to four (4) ha in size. The Municipality and/or the SVCA may require the proponent to submit an environmental impact study (EIS) for any development or site alteration within significant woodlands, indicating that there will be no negative impacts on the natural features, their ecological functions, or adjacent lands. The adjacent lands are defined as lands within 120 m of the significant woodland.

A regulated area includes lands within the EP designation, the flood fringe, valley slopes, areas abutting these features, and all watercourses. The extent of these areas is demonstrated in Schedule "B" relating to Neustadt. All new development within the regulated area requires permission from the SVCA under Ontario regulation 169/06.

The predominant use of land within the residential designation shall be residential dwelling units. The types of residential units permitted shall include low-density housing such as detached dwellings, semi-detached dwellings and duplexes, medium density housing such as triplexes, quadraplexes and townhouses and high-density housing such as apartments.

Permitted uses for the downtown commercial designation include, but not limited to: Retail stores, restaurants, business and professional offices, financial institutions, government offices, medical offices and clinics, personal service shops (excluding body rub parlours), hotels, inns, bed and breakfast establishments, places of entertainment, fitness centres, private and commercial schools, places of worship and other institutional uses, funeral homes, and accessory residential dwelling units.

Lands within the future development designation shall only be used for agriculture, forestry, and conservation, provided no new buildings or structures are erected. This policy notwithstanding, a detached dwelling on an existing lot of record may be erected provided municipal water and sanitary sewers service the dwelling unit.

The predominant use of land within the EP designation shall be conservation, forestry, and passive recreational uses. No buildings or structures shall be permitted except where such are intended for flood or erosion control or where a

structure is required for watercourse protection works or bank stabilization projects, or where such are for public utilities, or accessory structures to a permitted passive outdoor recreational use.

The predominant use of the land within the Industrial designation shall be the manufacturing, fabricating, processing, assembling, repairing, and storing of goods, materials, and commodities. Complimentary uses such as wholesale outlets, training facilities, showrooms accessory to industrial operations, research and development facilities, recreational facilities oriented to physical fitness, and commercial uses which directly service the industries or employees shall also be permitted.

The predominant use of the lands within the highway commercial designation shall be those uses which are not compatible with the compact nature of the downtown areas due to space and parking demands. Permitted uses shall include, but are not limited to, automotive uses, restaurants, motels, garden centres, building supplies, home improvement stores, retail stores and grocery stores.

#### Grey County OP (2019)

Throughout Grey County, there are many designations that are present in the distribution network, PPR, and reinforcement section study areas, particularly in the community of Neustadt, along Grey Road 10, and the Town of Hanover which include "Significant Woodland", "Significant Valleylands", "Hazard Lands", "Agricultural", "Special Agricultural", "Linkages", "Future Secondary Plan Area", and "Regulated Area".

To be considered significant, a woodland shall be either greater than or equal to forty (40) ha in size outside of settlement areas, or greater than or equal to four (4) ha in size within settlement area boundaries. If a woodland fails to meet the size criteria outside a settlement area, a woodland can also be significant if it meets any two of the following three criteria: Proximity to other woodlands i.e. if a woodland was within 30 m of another significant woodland; overlap with the boundaries of a Provincially Significant Wetland and Significant Coastal Wetlands, Core Area, Significant Valleylands, or a Significant Areas of Natural and Scientific Interest; or Interior habitat of greater than or equal to eight (8) ha, with a 100 m interior buffer on all sides. No development or site alteration may occur within Significant Woodlands or their adjacent lands unless it has been demonstrated through an EIS that there will be no negative impacts on the natural features or their ecological functions (120 m).

Significant Valleylands should be evaluated on a site specific basis through an environmental impact study using the following criteria: The valley must be  $\geq$ 100 m wide and  $\geq$ 2 kilometres long; The valley banks must be  $\geq$ 3 m in height (extrapolated from 5 metre contours at 1:10,000 or better information where

available); Where valley slope is 3:1 on one side with no slope on the opposite side of the watercourse, the opposite valley limit is delineated using either 100m from centreline of the watercourse or the limit of the floodplain to create a continuous valley feature; and Where 3:1 valley slopes occur on both sides of the river, but they are not continuous, the floodplain limit (or contour information and professional judgment) is used to delineate a continuous valley feature. No development or site alteration may occur within Significant Valleylands or their adjacent lands unless it has been demonstrated through an environmental impact study that there will be no negative impacts on the natural features or their ecological functions.

Primary Settlement Areas (community of Neustadt and The Town of Hanover) are larger settlements with full municipal servicing, and a wide range of uses, services, and amenities which are intended to be the primary target for residential and non-residential growth.

Hazard Lands include floodplains, steep or erosion prone slopes, organic or unstable soils, poorly drained areas, and lands along the Georgian Bay shoreline. These lands can be impacted by flooding, erosion, and/or dynamic beach hazards or have poor drainage, or any other physical condition that is severe enough to pose a risk for the occupant, property damage, or social disruption if developed. While these lands are intended to be regulated so as to avoid natural hazards, they also contribute to the natural environment within the County. New development shall generally be directed away from Hazard lands. Permitted uses in the Hazard Lands land use type are forestry and uses connected with the conservation of water, soil, wildlife and other natural resources. Other uses also permitted are agriculture, passive public parks, public utilities and resource based recreational uses. The aforementioned uses will only be permitted where site conditions are suitable and where the relevant hazard impacts have been reviewed.

Agricultural Land Use Type means those areas where prime agricultural lands predominate. This includes areas of prime agricultural lands and associated Canada Land Inventory Class 4 through 7 lands, and additional areas where there this is a local concentration of farms which exhibit characteristics of ongoing agriculture. Prime agricultural areas have been identified by the County in partnership with the Ontario Ministry of Agriculture, Food and Rural Affairs, through a study completed in the 1990's. Any new or revised mapping of prime agricultural areas shall be in accordance with Provincial guidelines, through an alternative agricultural land evaluation system approved by the Province.
Special Agricultural Land Use Type means areas designated using guidelines established by the Province, as amended from time to time, where specialty crops such as tender fruits (peaches, cherries, plums), grapes, other fruit crops (apples), vegetable crops, greenhouse crops, and crops from agriculturally developed organic soil lands are predominantly grown, usually resulting from: Soils that have suitability to produce specialty crops, or lands that are subject to special climatic conditions, or a combination of both; Farmers skilled in the production of specialty crops; and A long-term investment of capital in areas such as crops, drainage, infrastructure and related facilities and services to produce, store or process specialty crops.

Linkages are designed to provide movement corridors for both plants and animals between Core Areas and provide and protect biodiversity and the longterm viability of ecological systems.

With respect to the Future Secondary Plan Area, the underlying land use type applies (hazard lands and primary settlement area), until the Plan is amended to take the lands out of the Future Secondary Plan Area. Lands identified as Future Secondary Plan Area shall be utilized primarily for uses existing as of the date of adoption of OP Amendment No. 80 the Grey County OP (March 3, 2009). Limited infilling between existing uses on the existing lots may be permitted where the infill development would not contribute to future municipal servicing problems or would not prejudice future development.

Development and site alteration within the floodway, flood fringe, or Regulated Area requires the approval of the conservation authority, in addition to any other applicable approvals.

#### Town of Hanover OP (2016)

Throughout the Town of Hanover, there are many designations that are present in the reinforcement section study area, which include "Industrial", "Residential", "Special Policy Area 3", "Regulated Area", "Hazard", and "Significant Woodlands".

The predominant use of land within the Industrial designation shall be the manufacturing, fabricating, processing, assembling, repairing and storing of goods, materials, commodities. The cultivation and processing of medical marihuana shall be permitted. Complementary uses such as wholesale outlets, training facilities, showrooms accessory to industrial operations, research and development facilities, recreational facilities oriented to physical fitness, limited retail sales of products manufactured on site and commercial uses which directly serve the industries or employees shall also be permitted. The predominant use of land within the Residential designation shall be residential dwelling units. The types of dwelling unit permitted shall include low density housing such as detached dwellings, semi-detached dwellings and duplexes, medium density housing such as triplexes, quadraplexes and townhouses and high density housing such as apartments. Residential uses shall not be permitted on Industrial lands except in the case of temporary accommodation units to be utilized by staff of the business wherein the unit is located. The temporary dwelling unit shall contain a maximum of 100 square metres of floor area.

Lands designated Special Policy Area 3 will be used in accordance with the Future Development polices of this OP. When considering an Official Plan Amendment in accordance with these policies, the overall development of Special Policy Area 3 will achieve the following: 50% of the lands will be used for Residential purposes; and 50% of the lands will be used for Industrial purposes.

Regulated Area includes lands within the Hazard designation as well as valley slopes, wetlands, watercourses, and areas adjacent to these features. New development or site alteration shall not proceed without permission first being obtained from the SVCA for work within the Regulated Area.

The permitted uses within the Hazard designation shall be conservation, forestry and passive recreational uses but not including new golf courses. No buildings or structures shall be permitted in the Hazard designation except where such are intended for approved flood or erosion control projects, natural habitat enhancement, public utilities where no alternative location is available, or structures accessory to a permitted passive outdoor recreational use.

Policies for significant woodlands include the following: In order to be considered significant within a settlement area, the woodland must be greater than or equal to four (4) ha in size; No development or site alteration shall occur within Significant Woodlands or their adjacent lands (120 m) unless it has been demonstrated through an Environmental Impact Study, that there will be no negative impacts on the natural features or their ecological functions; projects undertaken by the County, Town or the SVCA may be exempt from the EIS requirements provided said project is a public work or conservation project; tree cutting and forestry will be permitted in accordance with the County Forest Management By-law; and fragmentation of significant woodlands is generally discouraged.

#### Bruce County OP (2010)

Throughout Bruce County, there are many designations that are present in the AR study area, which include "Rural Area", "Agricultural Area", "Hamlet Community", and "Hazard Land Area".

The Rural Designation covers those lands that are for the most part undeveloped by urban type uses; the rural areas of the County are often appreciated for their pastoral sense of open space. However, the Rural designation in fact contains a mix of land uses and economic activities which include natural resource uses such as farming, forestry and aggregate extraction and tourism-based activities such as nature appreciation and outdoor recreational uses. Permitted uses for the Rural designation include: Agricultural uses in accordance with the Bruce County OP; Farm Related Commercial and Industrial Uses in accordance with the Bruce County OP; Institutional Uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Industrial uses in accordance with the Bruce County OP; Rural Commercial Uses in accordance with the Bruce County OP; Non-Farm Residential use, including Additional Residential Units in accordance with the Bruce County OP; and Seasonal Residential Use.

The purpose of the Agricultural Areas policies is to protect and strengthen the agricultural Community, which is recognized as a major economic component of the County. The policies protect Agricultural Areas from the intrusion of land uses that are not compatible with agricultural operations. Agricultural areas shall permit agriculture uses as defined by the Provincial Policy Statement which include but are not limited to agriculture, aquaculture, and agro-forestry; Agriculture related uses, as defined by the Provincial Policy Statement and Bruce County OP which include commercial or industrial uses; Limited farm diversified uses, as defined by the Provincial Policy Statement which include bed and breakfast establishments, farm vacations, and occasional agricultural demonstration events; Wayside pits and portable asphalt plants; Schools, churches and cemeteries that service the immediate rural community relying on horse-drawn vehicles as the primary means of transportation; and a Temporary Garden Suite and/or Additional Residential Unit are permitted on the same lot as part of the farm unit. Forestry, public conservation, public open space and passive recreation are also permitted in the agricultural area.

Hamlet communities' main roles are to act as a local service centre accommodating a more limited range of residential, economic and social services and facilities than those provided by the Primary or Secondary Urban Communities. Permitted uses for Hamlet Communities shall include Detached, semi-detached and duplex residential uses; additional residential units and garden units in accordance with the Bruce County OP; Home occupations: Community facilities in accordance with the Bruce County OP; Publicly owned conservation and/or open space; Publicly owned facilities; Dry industrial uses; and Commercial Uses limited to those serving the day-to-day needs of the residents of the Hamlet Community and the immediate surrounding area; and those serving the surrounding agricultural community and rural residents such as farm implement dealerships, veterinary clinics and other similar uses directly related to and supportive of agriculture; and, tourism related commercial uses such as 'country inns'.

Hazard Land Areas generally identify lands that pose a risk if developed, due to the inherent site conditions, but these areas may also include important environmental features. Specifically, Hazard Land Areas include flood and erosion susceptibility areas, steep slopes, organic soils, or other physical conditions which are severe enough to cause property damage or potential loss of life if the lands were to be developed. Municipalities, Conservation Authorities and the appropriate approval authority shall be encouraged to undertake floodplain and other mapping to define more precisely hazard lands and other EP areas. The Hazard Land Areas shall be restricted to conservation, forestry, wildlife areas, passive recreation but not including golf courses, public parks, non-intensive agriculture, horticulture, and hydroelectric power facilities. Buildings and structures are generally not permitted. Only those uses which do not impair ecological processes and the environmental features so identified will be permitted.

# Municipality of Brockton- Walkerton Community OP (2017) and The Corporation of The Municipality of Brockton By-Law No. 2013-26 (2016)

Throughout the Municipality of Brockton, there are many designations that are present in the AR study area, which include "General Agriculture", "Environmental Protection", and "Rural-Institutional".

No person shall within the 'General Agriculture (A1)' zone use any lot or erect, alter or use any building or structure for any purpose except one or more of the following uses: Non-Farm lots which include Dwelling, Non-Farm on an existing lot of record, Kennel; Home Occupation – Domestic and Professional Uses, Home Occupation – Home Occupation – Bed & Breakfast Establishment, Home Industry, and Accessory Buildings & Structures. For Agriculture Lots permitted uses include: Agritainment, Agriculture General, Livestock Facility, Kennel, Dwelling Accessory Detached, Forestry/Silvaculture, Greenhouse, Home Occupation – Domestic and Professional Use, Home Occupation – Bed & Breakfast Establishment, Home Industry, Wayside Pit, Wayside Quarry, Portable Asphalt Plant or Portable Concrete Plant, Riding Stable/Equestrian Centre, Home Child Care, and Unlicensed Child Care. EP refers to lands designated as "Hazard Lands" in the Bruce County OP (as mentioned above). EP lands also relate to what is described in the Municipality of Brockton-Walkerton Community OP, whereby they have inherent environmental hazards such as flood susceptibility, erosion susceptibility, instability and other physical conditions which pose a risk to occupants of loss of life, property damage and social disruption. Permitted Uses as outlined in the Municipality of Brockton-Walkerton Community OP shall be limited to essential flood, erosion and sediment control structures undertaken by a public authority, and open space uses not requiring closed buildings or major alterations to the landscape such as non-intensive conservation, outdoor recreation, public parks, and essential municipal services. Those uses which could be adversely affected by, or which could increase the potential risk associated with the inherent physical hazards, shall be prohibited. Approval of the SVCA shall be obtained for any permitted use, where required by SVCA Regulations.

Rural Institutional zone designation shall generally apply to institutional development located in rural areas of the Municipality. No person shall within a Institutional Rural zone designation use any lot or erect, alter or use any building or structure for any purpose except for the following: Dwelling Accessory Apartment, Dwelling Accessory Detached, Assembly Hall, Cemetery, Public Park, and Accessory Buildings and Structures.

# Municipality of South Bruce OP (2023), and The Corporation of The Municipality of South Bruce By-Law No. 2011-63 (2017)

Throughout the Municipality of South Bruce, there are many designations that are present in the AR study area, which include "General Agriculture", "Hamlet Residential", "Environmental Protection", "Extractive Industrial", "Hamlet Commercial", "Agriculture Commercial Industrial", and "Future Development".

No person shall within a "General Agriculture" zone use any lot or erect, alter or use any building or structure for any purpose except one or more of the following uses: Non-Farm Lots which include Dwelling, Non-Farm, Group Home, Home Occupation – Domestic and Professional Uses, Home Occupation – Bed & Breakfast Establishment, Home Industry, Kennel, Accessory Buildings & Structures, Home Child Care, and Unlicensed Child Care. Permitted uses for Agriculture Lots include Agritainment, General Agriculture, Conservation Area, Dwelling- Accessory Detached, Group Home, Home Occupation – Domestic and Professional Use, Home Occupation – Bed & Breakfast Establishment, Home Industry, Livestock Facility, Kennel, Wayside Pit, Wayside Quarry or Portable Asphalt Plant, Home Child Care in a Dwelling – Accessory Detached, and Unlicensed Child Care in a Dwelling – Accessory Detached. Some designations throughout the AR study area have specific designations which can be referred to in the The Corporation of The Municipality of South Bruce By-Law Number 2011-63.

The provisions of the Hamlet Residential (HR) zone shall generally apply to lands designated 'Hamlet' on Schedule 'A' Land Use in the County of Bruce Official Plan. No person shall within a "Hamlet Residential" zone use any lot or erect, alter or use any building or structure for any purpose except for the following: Dwelling, Duplex, Dwelling, Semi-Detached, Dwelling, Single Detached, Group Home (in a Dwelling, Single Detached Only), Home Occupation – Domestic and Professional Uses (in a Dwelling, Single Detached only), Home Occupation- Bed & Breakfast Establishment (in a Dwelling, Single Detached only), Public Park, Home Child Care, and Unlicensed Child Care.

EP refers to lands designated as "Hazard Lands" in the Bruce County OP (as mentioned above). EP lands also relate to what is described in the Municipality of for the Urban Areas of Mildmay Formosa and Tesswater, whereby the predominant use shall be conservation, forestry and passive recreational uses. No buildings or structures shall be permitted except where such are intended for flood or erosion control or where a structure is required for water course protection works or bank stabilization projects, or where such are for public utilities, or accessory structures to a permitted passive outdoor recreational use. No person shall within an 'EP' zone use any lot or erect, alter or use any building or structure, for any purpose except the following: Agriculture, General, Boat Launching & Docking, Conservation Area, Public Park, and Snowmobile Club.

Extractive Industrial apply to pits and quarries as identified in the Bruce County OP. No person shall within the Extractive Industrial zone use any lot or erect, alter or use any building or structure for any purpose except one or more of the following uses: Residential uses that are Prohibited; and Non-Residential Uses such as Agriculture, General, Pit, Portable Asphalt Plant, Portable Concrete Plant, Quarry, Buildings, structures and uses accessory to a permitted used (ie. open storage, scales, pump buildings, administration, equipment storage, and fuel pumps), and processing of natural materials extracted from the site including screening, sorting, washing, crushing, storing, portable ready mix/concrete, asphalt plant, and other similar operation allied to a "Pit" or "Quarry" operation.

The Hamlet Commercial zone designation shall generally apply to lands designated as "Hamlet" in the Bruce County OP. No person shall within a "Hamlet Commercial" zone use any lot or erect, alter or use any building or structure for any purpose except the following: Residential Uses such as Dwelling, Accessory Apartment, Dwelling, Single Detached, Home Occupation – Domestic and Professional Uses, Home Occupation – Bed & Breakfast Establishment, Home Child Care (in a Dwelling, single detached only), and Unlicensed Child Care (in a Dwelling, single detached only). Non-Residential Uses include (but not limited to) Assembly Hall, Automobile Gas Bar, Business or Professional Office, Hotel/Motel, Restaurant, Veterinary Clinic.

The Agriculture Commercial Industrial zone designation shall apply on lands designated as Agriculture or Rural in the Bruce County OP. No person shall within the Agriculture Commercial Industrial zone designated use any lot or erect, alter or use any building or structure for any purpose except one or more of the following uses: Residential Uses such as Dwelling, Accessory Apartment or Dwelling, Accessory Detached. A Dwelling, Accessory Apartment or a Dwelling, Accessory Detached shall not be permitted in association with an Abattoir or Livestock Assembly Yard. Permitted uses for Non-Residential Uses for Abattoir, Bulk Sales Establishment- Agricultural, Farm Implement Establishment, Food Processing, Primary, Feed Mill & Elevator, Greenhouse, Commercial, Livestock Assembly Yard, Livestock Auction Barn, Portable Asphalt Plant, Portable Concrete Plant, Veterinarian Clinic, Wayside Pit or Wayside Quarry, and Accessory Buildings & Structures.

The Future Development Zone designation shall generally apply to lands designated as Future Development in the OP for the Formosa, Mildmay, and Teeswater Settlement Areas. In reference to the Municipality of South Bruce By-Law Number 2011-63, No person shall within a Future Development zone us any lot or erect, alter or use any building or structure, for any purpose except the following: Dwelling, Agriculture-General, Legal uses, buildings and structures, Conservation Area, Home Occupation – Domestic and Professional, Home Occupation – Bed & Breakfast Establishment, Group Home- Type 1, Public Park, and Accessory Buildings & Structures.

There are no policies in the OPs and By-laws mentioned above that indicate that the development of natural gas pipelines is not permitted in the Study Area. In summary, all applicable OPs and By-laws in the Study Area encourage the development of oil and gas pipelines for present and future community needs, and do not prevent them from being constructed. For a pipeline to be developed in the Study Area they are considered to be a permitted use under certain conditions such as avoiding natural heritage corridors; and conducting best management practices if features or areas that consist of natural heritage corridors, cultural heritage, PSWs, SWH and endangered species cannot be avoided (Municipality of West Grey OP (2023); Grey County OP (2019); Town of Hanover OP (2016); Bruce County OP (2010); Municipality of Brockton-Walkerton Community OP (2017) and The Corporation of the Municipality of Brockton By-Law No. 2013-26 (2016); and the Municipality of South Bruce OP (2023) and The Corporation of The Municipality of South Bruce By-Law No. 2011-63 (2017)).

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### 3.5.9 Landfills and Contaminated Sites

#### Landfills

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 was determined by reviewing the Grey County OP (2019), Municipality of West Grey OP (2023), Town of Hanover OP (2016), Bruce County OP (2010), Municipality of Brockton- Walkerton Community OP (2017), Municipality of South Bruce OP (2023), The Corporation of the Municipality of Brockton By-law No. 2013-26 (2016), and The Corporation of the Municipality of South Bruce Bylaw No. 2011-63 (2017), and the MECP's Small and Large Landfill Sites listed on the MECP website (2022a; 2022b), and aerial mapping. No landfills were identified within 500m of the Study Area.

#### **Contaminated Sites**

The Study Area occurs on agricultural and rural lands, and in residential areas. The Treasury Board of Canada Secretariat's Federal Contaminated Sites Inventory (2011 noted there are no Federal Contaminated Sites in the Study Area. The MECP Record of Site Condition Registry (2018) noted that there are no registered properties in the Study Area, the closest being 1 km northwest of the reinforcement section study area.

#### 3.5.10 Archaeological Resources

A Stage 1 AA was undertaken by Stantec of the Project's Study Area (under Project Information Form number P422-0035-2023). Stage 1 AAs are conducted in compliance with the provincial standards and guidelines set out by the MCM in the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). A Stage 1 AA provides information about a study area's geography, history, previous archaeological assessments, and includes a property inspection by a licensed archaeologist to assist in the evaluation of a study area's archaeological potential. Its purpose is to identify areas of archaeological potential and recommend further AA as necessary (i.e., Stage 2). A property inspection was completed by a licensed Stantec archaeologist on April 14, 2023.

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



An examination of the *Ontario Archaeological Sites Database* (Government of Ontario 2023a) has shown that there are no previously registered archaeological sites within, or adjacent to (within 50 m) the Project Study Area. A query of the *Ontario Public Register of Archaeological Reports* (Government of Ontario 2023b) indicates there are at least five previous AAs overlapping with the Project's Study Area, mainly associated with the commercial lands in the eastern portion of the reinforcement section study area. There are three known cemeteries within or adjacent to the Project's Study Area. The Hanover Cemetery and Old Hanover Cemetery (also known as the Crispen-Hanover Cemetery) is within the AR study area, while the St. Peter's Lutheran Cemetery is within the PPR study area and St. Paul's Lutheran Cemetery within the distribution network study area. Due to the unknown limits of the cemeteries and the potential for unknown graves to be located outside the cemetery limits, once the Project's detailed design is completed, consultation with the MCM and the Bereavement Authority of Ontario (BAO) regarding the need for a Stage 3 cemetery investigation is recommended prior to any proposed ground disturbance for these areas.

The Stage 1 property inspection determined that portions of the Project Study Area have been subject to extensive land disturbance. These portions of the Project Study Area retain low to no potential for archaeological resources. These portions include areas of modern disturbance and much of the municipal road ROWs, including existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads and ditching, gravel and paved driveways/laneways, buried utilities and municipal infrastructure (e.g., sewers, pipelines, telecommunication cables, etc.), disturbance from existing commercial and residential buildings and frontages, as well as additional disturbance from existing construction activities and grading.

The remaining portions of the Project Study Area were identified as retaining archaeological potential. These areas are generally outside the municipal ROWs and include manicured lawns, scrubland, wooded areas, agricultural fields, pasture, and the Hanover Cemetery/Old Hanover Cemetery and their adjacent lands. These areas are considered to retain archaeological potential based on their proximity to water sources (Beatty Saugeen River, Carrick Creek, Meux Creek, South Saugeen River, and associated tributaries), and their proximity to historical transportation routes and structures.

It should also be noted that in Ontario, projects that have components which may impact below the high-water mark of significant and navigable waterways should determine the marine archaeological potential of the project limits prior to any in-water disturbance. Portions of the Project Study Area overlap with significant, navigable, and/or historical waterways, which includes the Beatty Saugeen River, the South Saugeen River, and a portion of Meux Creek adjacent to the Neustadt Brewery. If there are any proposed in-water impacts to the portions of these waterways within the Project Study Area, Enbridge should complete the Criteria for Evaluating Marine Archaeological Potential checklist (Government of Ontario 2016) to determine if a marine AA is August 23, 2023

required; Marine AAs must be conducted by a qualified marine/underwater archaeologist under a Marine Licence acquired from the MCM. Note that horizontal directional drilling (HDD) approximately five metres below a waterway or deeper, is not considered an impact and a marine AA may not be required after discussion with the MCM.

In summary, the Stage 1 AA involving background research and a property inspection, determined that portions of the Project Study Area retain potential for archaeological resources and a Stage 2 AA is recommended. A Stage 2 AA is not recommended for portions of the Project Study Area that were identified as low to no archaeological potential. Any further recommended AA will be undertaken as early as possible during the detailed design stage of the Project and prior to commencing construction.

Stantec's Stage 1 AA report for this Project is included in **Appendix E**.

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

The need to consider previously identified and potential built heritage resources and cultural heritage landscapes is defined by Section 5.4 of the OEB Environmental Guidelines. To determine the potential for previously identified built heritage resources and cultural heritage landscapes, the MCM 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 potential and previously identified built heritage resources and cultural heritage landscapes and make recommendations for future work, as appropriate. The Checklist completed for the Project identified three indicators of cultural heritage value or interest (CHVI) for the Study Area.

The results of the Checklist are included in Table 3.8 and the completed checklist is included in Appendix F1, with the supporting CHSR presented in Appendix F2.

#### Screening for Potential or Previously Identified CHVI According to **Table 3.8:** MCM Checklist

Indicators of Cultural Heritage Value or Interest (CHVI)	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 Heritage Railway Stations Protections Act	Not Identified
Designated under the Heritage Lighthouse Protection Act	Not Identified
Identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office	Not Identified

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Indicators of Cultural Heritage Value or Interest (CHVI)	Identified within the Study Area
Located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site	Not Identified
Is the 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	Identified
Is in a Canadian Heritage River watershed	Not Identified
Contains buildings or structures that are 40 or more years old	Identified
Local or Aboriginal knowledge that the property is considered a landmark in the local community or contains structures or sites that are important in defining the character of the area	Identified
Local or Aboriginal knowledge that the property has a special association with a community, person, or historical event	Not Identified
Local or Aboriginal knowledge that the property contains or is part of a cultural heritage landscape	Not Identified

The Study Area was determined to contain the Hanover Cemetery at 95 7<sup>th</sup> Avenue, Hanover, St. Paul's Lutheran Cemetery on Tower Street, and be adjacent to the St. Peter's Lutheran Cemetery on Cemetery Road. The Study Area also contains many examples of structures that are more than 40 years old. Many of these structures are farmsteads and agricultural properties that likely date to the settlement of the area during the mid-19<sup>th</sup> to late 19<sup>th</sup> century. In addition, the community of Neustadt contains a network of underground tunnels that are important to the character of the community of Neustadt. These tunnels originated at the present-day Neustadt Spring Brewery at 456 Jacob Street, Neustadt.

Based on correspondence with the owners of the Neustadt Spring Brewery, one tunnel ran northeast of the brewery towards a former mill. The tunnel then continued to a former inn and terminated near present-day 410 Mill Street. Tunnels are also located near the front of the brewery and across the street from the brewery. According to Mr. Weber, approximately 30 years ago much of the tunnel network was filled in when a municipal sewer was installed.

#### 3.5.12 Indigenous Interests

The Study Area for this project is in the Treaty 45 1/2, Saugeen Tract Purchase (Ministry of Indigenous Affairs 2022). Treaty 45 ½ was signed by representatives of the Crown and certain Anishnabbe peoples on August 9, 1836, in Manitowaning during an annual gift exchange for Indigenous peoples. The territory outlined in the treaty covers approximately 1.5 million acres of land, and was a part of the Bond Head Purchases, along with Treaty 45 for Manitoulin Island (Ministry of Indigenous Affairs 2022).

Ontario, as the Crown, has a legal duty to consult with Indigenous peoples regarding projects or decisions that may adversely impact constitutionally protected Aboriginal or treaty rights. As noted in Section 2 of the ER, Indigenous communities who were identified through provision of a Project Summary to the MOE on December 30, 2022 (see **Appendix B1**) are as follows:

- Saugeen First Nation.
- Chippewas of Nawash Unceded First Nation.
- Georgian Bay Historic Metis Community (Represented by MNO Region 7).

# 4 Route Evaluation and Preferred Route Selection

## 4.1 The Process

The route evaluation process was undertaken as per the OEB Environmental Guidelines, which identify the environmental and socio-economic features to take into consideration and the principles to be considered during the route evaluation. The PR for the proposed Project was confirmed through a five-step process, as illustrated in Figure 4.1.



#### Figure 4.1: Route Evaluation Methodology

### 4.2 Study Area

The Study Area used for the route evaluation process is depicted on **Figure A-1** (**Appendix A1**), consists of approximately 1105 ha and is described in Section 3.1 It is within this Study Area that desktop information on socio-economic and environmental features have been collected for the purpose of assessing the potential impacts of the Project.

The PPR extends south along Regional Road 10 from the tie-in point to the intersection with Queen Street. The Study Area is considered rural in nature consisting of agricultural lands, and residential and commercial properties.

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The AR required a shift of the tie-in point to the crossing of 7th Avenue and 2nd Street, extending south along Durham Road, following Concession 2 South Durham Road until crossing Side Road 30, following Side Road 30 south until crossing Concession Road 10, and running east towards Queen St at the boundary of the community of Neustadt.

Both the reinforcement section and distribution network study areas depicted Figure A-2 (Appendix A) were unaltered due to the route evaluation process.

#### **Step 1: Determine Route Criteria** 4.3

#### **Routing Objectives** 4.3.1

The routing methodology is influenced by the utilization of existing municipal road allowance to locate the proposed pipelines (Figure A-2, Appendix A). Stantec's role was to determine through gualitative and guantitative assessment the PR for the proposed pipeline from an environmental and socio-economic perspective.

The process of developing alternative routes commenced with the identification of routing objectives. These include:

- 1. Routes should follow a reasonably direct path between end-points to reduce length; in general, a shorter route will help eliminate or reduce the extent of most potential environmental and socio-economic impacts.
- Routes should avoid sensitive environmental and socio-economic features wherever practicable; where such features cannot be avoided, routes should be located to reduce potential impacts.
- Existing natural gas infrastructure in the study area, as the Project's infrastructure requires attachment to the existing natural gas network. This will in turn have the capacity to support the proposed distribution system.
- 4. If road allowance cannot be followed, existing linear infrastructure should be utilized to the greatest extent possible to reduce effects to previously undisturbed land and/or constrain future land development.
- 5. Where new easements are required, existing lot and property lines should be followed to the extent possible within the Study Area.

# 4.3.2 Environmental and Socio-Economic Opportunities and Constraints

The route selection process was completed with consideration of the OEB Environmental Guidelines. Chapter 4 of the OEB Environmental Guidelines, 'Route or Site Selection', outlines the environmental and socio-economic features that should be considered during route evaluation. Features in the study area were considered as either pipeline routing opportunities or constraints.

Pipeline routing opportunities are existing features, such as road allowance, property lines or existing linear infrastructure, which provide a potential location for the alignment of a pipeline to avoid or reduce unnecessary environmental or socio-economic impacts. Pipeline routing constraints are existing features that meet the following criteria:

- The feature would require site-specific mitigation measures to reduce potential effects.
- The feature has been selected or designated for protection (e.g., wetlands).
- The feature has been recognized through local, regional, provincial, or federal policy, plan, or statute, or is otherwise valued as an environmental or socio-economic resource.

Constraints and opportunities were mapped in a Geographic Information System (GIS) database from existing government databases, including base data and environmental data provided through the MNRF's LIO data warehouse. LIO is the province's central repository for authoritative digital data, from the MNRF itself as well as other governmental departments and agencies.

After creating a GIS database of pipeline corridor opportunities and constraints, windshield surveys were undertaken by Stantec on September 30, 2022 (PPR) and April 13, 2023 (AR). These windshield surveys both verified the features that had been mapped and considered whether there were any additional features that were not identified in the records review but that nonetheless required mapping.

Thus, existing features were identified using relevant published literature, maps and digital data, and discussions with agencies and municipalities and were confirmed through field visits. The location and extent of environmental and socio-economic features are outlined in Section 3 of this ER and illustrated in **Appendix C**.

In the Study Area, two pipeline routing opportunities (PPR and AR as defined above) are present. In the Study Area, a variety of pipeline routing constraints (as defined above) are present: developed areas (communities, homes, agricultural operations), topography (i.e., slope), roads and environmental features such as watercourses, wetlands and wooded areas.

## 4.4 Step 2: Generate Route Alternatives

Route alternatives were screened based on the existing natural gas infrastructure, and careful consideration of the routing objectives, the Study Area, and environmental and socio-economic constraints and opportunities identified in Step 1. The PPR and AR were generated by staff from Stantec and Enbridge using aerial photography interpretation and mapping of existing environmental and socio-economic constraints and opportunities. The PPR and AR both increase the use of road allowance which provides an opportunity to reduce potential environmental and socio-economic impacts.

The PPR and AR were considered to be economically feasible by Enbridge, supported by the community of Neustadt and increase community service hook-ups; therefore, no additional alternative routes were considered for evaluation.

The distribution network was defined considering the natural gas demand within the community of Neustadt, maximising the feasible service hook-ups; the final network is subject to further alterations, all within the Study Area. The location of the reinforcement section within Hanover was based on an analysis of the existing natural gas infrastructure - capacity and pressures - and the impacts that this Project would have on that system.

# 4.5 Step 3: Route Evaluation

The route identification and confirmation process was undertaken in accordance with the OEB *Environmental Guidelines* (2023). The OEB *Environmental Guidelines* (2023) identify the environmental and socio-economic features to take into consideration and the routing principles to be considered.

The study areas for both the PPR and AR contain similar environmental and socioeconomic characteristics. The AR study area and PPR study area are each capable of hosting a pipeline route that is constructable from an engineering design perspective, since they both are located within the road allowance in order to reduce environmental and socio-economic impacts.

The PPR is 4.4 km shorter in length, which results in less potential environmental and socio-economic impacts. In addition, despite being shorter in length, the PPR has a greater number of potential customer attachments than the AR.

In addition, the AR also presents the following unique routing constraints that are not presented on the PPR:

 The AR crosses the Beatty Saugeen River at a steep slope, which complicates the watercourse crossing methodology, requiring an increased work area (increased disturbance).



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- The AR passes in close proximity to the Hanover and Old Hanover Cemetery, which are areas of high archaeological potential. Due to the unknown limits of the historical portion of the cemeteries, as well as the potential for unknown graves to be located outside the current cemetery limits, a Stage 3 cemetery investigation would be required.
- The AR, generally, passes through areas that retain archaeological potential, which require Stage 2 AA prior to any ground disturbance activities.
- The AR crosses the Beatty Saugeen River, a significant and navigable waterway, and may require a marine AA prior to any proposed in-water impacts.
- The AR passes next to the Hanover & District Hospital, which poses construction restraints due to the permanent accessibility needed to the facility.
- While there are no records of aquatic SAR within the AR compared to two watercourses that provide contributing habitat to Redside Dace within the PPR, Enbridge will attempt to perform all pipeline installations near watercourses via HDD as per the DFO-Enbridge Agreement (Appendix H). By doing so, it is anticipated that there will be no impacts to aquatic SAR, fish, or fish habitat.
- Based on IOH feedback, the AR crossing of Meux Creek along Queen Street poses difficulties to cross via HDD; previous town infrastructure struggled crossing at this location and required trenching.

Based on the criteria stated above the PPR is recommended to be the PR. The location of the Study Area, the Route Alternatives and the PR are shown in **Figures A-1 to A-3** (**Appendix A**).

# 4.6 Step 4: Input on the Preliminary Preferred Route

Input on the PPR, the AR as well as the distribution network and the reinforcement section was sought through consultation during the VOH, IOH and communicated to stakeholders through emails notices and landowner mailouts (see Section 2.3).

Comments received were generally positive, as most of the public, notably landowners in the Township, demonstrated an interest in receiving natural gas service as a result of this Project. Social and environmental comments and concerns shared by landowners during the consultation process were minimal, focusing on considering the watercourse crossing as part of the environmental assessment, one stakeholder preferring the AR over the PPR due to proximity to their home, and the potential of using the unopened road allowance adjacent to the AR Study Area. A single landowner noted his general displeasure with natural gas projects and the environmental impact of fossil fuels.

Based on the constraints identified in Section 4.5 above, and receiving no comments that would cause a change in the PPR, the PPR was confirmed as the PR (**Figure A-3**, **Appendix A**).



# 4.7 Step 5: Confirmation of the Preferred Route

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 will undertake detailed design to determine the final location of the running line, temporary land use requirements, and road crossing method. Stantec reviewed comments from the consultation program, aerial mapping along the PR, and provided advice on environmental constraints. It is understood that Enbridge will consider the above advice during detailed design as well as the other recommendations made in the ER. Detailed design will also be influenced by supplemental studies and site-specific requests from landowners and agencies.

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

# 5.1 Methodology

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

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

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

- Comments expressed during the consultation program.
- Information available from published and unpublished literature.
- Maps and digital data.
- Mitigation guidance documents.
- The pipeline development experience of Enbridge 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; this information was discussed in Section 3.2 'Data Resources'.

The information collected assisted in identifying environmental features and constraints located in the Study Area, the potential presence of SAR and their habitat, predicting effects and potential impacts, and developing mitigation and protective measures.

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

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

#### 5.1.1 Construction

The pipeline construction process includes various activities as described below and will be undertaken in accordance with all applicable procedures outlined in the Enbridge Construction and Maintenance Manual (Enbridge 2022a):

**Site Preparation and Clearing:** The first activity is typically the survey and staking, which delineate the boundaries of the ROW and temporary work areas. Next, the ROW and temporary work areas are cleared of brush and trees. Safety fence is installed at the edge of the construction ROW where public safety considerations are required, and aspects of the Traffic Management Plan are implemented (i.e., signs, vehicle access). Silt fence is installed at required locations.

**Pipeline Installation:** Following site preparation and clearing, the pipeline will be installed using both of the following methods:

- 1. HDD: This trenchless pipeline installation method involves creating entry and exit 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.

**Hydrostatic/Pressure Testing:** The pipeline is pressure tested by filling the pipe with 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 specifications for pressure testing.

**Clean-Up and Restoration:** Clean-up is the restoration of the ROW and other work areas. In natural areas, clean-up will include restoring disturbed areas (road embankment) to pre-existing conditions and re-seeding of the ROW. Watercourse crossings and wetlands (if disturbed) will be restored and stabilized. Erosion and sediment controls (ESC) installed during construction may be removed if necessary. Clean-up will also include landscaping, and/or laneways and driveway rehabilitation.

#### 5.1.2 Operation and Maintenance

Upon completion of the Project, the Project components will be transferred to Enbridge's Operations group and be included in the existing Pipeline Integrity Program. Enbridge has procedures in place to inspect and maintain the pipelines, including continuous monitoring of the network and regular field surveys for leak detection. Enbridge's Pipeline Integrity team has extensive technical, operational, and industry knowledge, and whose members remain current with industry practices. Detailed procedures and programs will be modified to include the new pipelines and to check that the operation and maintenance activities for the Project comply with applicable provincial and federal legislation, regulations and guidelines.

Pipeline operation consists of monitoring and regulating the gas flowing through or being stored in the pipelines. Valves will serve to shut off and isolate the pipelines for maintenance and security purposes. Above-ground facilities along the pipeline, at the tie in or end point may include stations that will regulate the pressure of the gas in the pipelines.

# 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	
			Physical Features	
Bedrock Geology and Drift Thickness Section 3.3.1	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 shallowest depth to bedrock in the Study Area which is 2.74 m Below Ground Surface (BGS); according to MECP WWR's, bedrock is not likely to be encountered. If bedrock is encountered during trenching, a hoe-ram will break up the rock to the required trench depth and width. Potential impacts may include fly rock damage, increased noise, increase in water turbidity and potential disturbance to fisheries. If bedrock is encountered during HDD, planning is required to avoid inadvertent drilling fluid returns.	• • • •	Immediately after hoe-ramming, any fly rock dispersed should be collected from the area surrounding the work site and stockpiled. If a significant quantity of bedrock has been removed, the material should be temporarily stockpiled and later transported to a local aggregate producer for reduction to crushed stone. Additionally, the material may be offered to interested landowners and businesses in the vicinity of the Project. Where hoe-ramming is undertaken, the addition of water to reduce dust should be considered where appropriate. If hoe-ramming is required in a watercourse, it will be completed in dry conditions as expeditiously as possible to reduce duration of potential impacts to aquatic species. Enbridge should consider informing surrounding landowners of the timing of bedrock removal, given the potential for nuisance noise. If HDD is used, pressure relief pits can be considered for implementation in the design on either side of the features being crossed 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 HDD design to address impacts to bedrock.	With prote resid are a

## Net Impacts

the implementation of the mitigation and ective measures, no significant adverse dual impacts as a result of bedrock removal anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
Feature(s) Physiography & Surficial Geology Section 3.3.2	Potential impact(s) Due to the undulating topography and presence of a variety of soil textures, there are potential erosion impacts to surficial deposits that may result in surface soil erosion and/or watercourse sedimentation during construction.	<ul> <li>Mitigation and Protective Measures</li> <li>Slope stabilization and erosion controls for slopes should be installed, particularly in those areas proximal to watercourses, wetlands, or other drainage features. In addition to mitigation measures outlined in the Enbridge Construction and Maintenance Manual (Enbridge 2022a) standard ESC measures are discussed below, in row Section 3.3.5 'Soil and Soil Capability', and ESCs specific to protecting watercourses, wetlands, etc. from sedimentation resulting from rainfall events during construction are discussed in row Section 3.4.1 'Aquatic Resources'.</li> <li>Surface soil erosion can occur in the absence of vegetative cover. Where there is potential for soil erosion, the need for and location of ESC measures should be determined by an inspector with appropriate qualifications and installed prior to the commencement of work in the area.</li> <li>When land is exposed, the exposure should be kept to the shortest practical period. Natural features should be preserved to the extent practical. Temporary vegetation and mulching should be used to protect areas as appropriate. Where required, natural vegetation should be re-established as soon as practical.</li> <li>The contractor must obtain adequate quantities of materials to control erosion. Additional supplies should be maintained in a readily accessible location for maintenance and contingency purposes. ESC structures should be monitored to maintain their effectiveness throughout the life of construction and post-construction rehabilitation.</li> <li>Even with ESC measures, extreme precipitation events could result in collapse of silt fencing, overflow or bypass of barriers, and other situations which could lead to erosion. When situations which could lead to erosion. When situations permit, permanent protection measures should be installed on erosion</li> </ul>
		<ul> <li>Permits obtained under O. Reg. 169/06 from the SVCA may contain conditions pertaining to ESC.</li> </ul>

#### Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts are anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
Groundwater Section 3.3.3	<ul> <li><u>Hydrostatic Testing and Dewatering</u></li> <li>The pipeline may 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 source, the applicable municipalities/counties will be contacted to confirm the maximum rate of withdrawal.</li> <li>Where trenches encounter shallow groundwater conditions or following a large precipitation event, removing water from the trench (known as dewatering) may be necessary. During trench dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination. Other potential effects of uncontrolled discharge may include introduction of hazardous materials or pollutants to soils or bodies of water.</li> <li><u>Private Water Wells</u></li> <li>In the Study Area, most, if not all, residents rely on private wells for domestic water supply uses. There are approximately 178 water wells in the Study Area, 107 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. Municipal Water Supply</li> <li>SGRAs are located within the Study Area with vulnerability scores of 2, 4 and 6 (Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Region n.d.).</li> </ul>	<ul> <li>Hydrostatic Testing and Dewatering</li> <li>For groundwater dewatering, the MECP allows registration under the EASR for construction dewatering projects where groundwater takings will be greater than 50,000 Litre per day (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.</li> <li>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. For water takings from a natural water source, an assessment of the capacity of the source to provide the required water, without impacting the ecosystem, should be conducted.</li> <li>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 monitored to make sure that no erosion or flooding occurs.</li> <li>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 consulted to determine what testing is necessary for the discharge water.</li> </ul>

#### Net Impacts

With the implementation of the mitigation and protective measures, no significant adverse residual impacts on groundwater are anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		• Before the withdrawal of water from a municipal source, the municipality should be contacted to confirm the maximum rate of withdrawal. An MECP approved licensed waste hauler may be utilized for disposal of hydrostatic test water.
		Private Water Wells
		• 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 supply should be provided, and the water well should be repaired or restored as required.
		Municipal Water Supply
		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:
		<ul> <li>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.</li> <li>To reduce the impact of potential contaminant spills, the</li> </ul>
		<ul> <li>contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan.</li> <li>Work should be limited or stopped during and immediately following significant precipitation events (i.e., 100-year storm event) at the discretion of on-site environmental.</li> </ul>
		personnel.

# Net Impacts

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
		<ul> <li>Bulk fuel trucks, service vehicles and pick-up trucks equipped with box mounted fuel tanks shall carry spill prevention, containment and clean up materials that are suitable for the volume of fuels or oils carried. Spill contingency material carried on bulk fuel and service vehicles shall be suitable for use on land and water.</li> <li>Employ the following measures to reduce the risk of fuel spills:         <ul> <li>All containers, hoses, nozzles are free of leaks.</li> <li>All fuel nozzles are equipped with automatic shut-offs.</li> <li>Always have operators stationed at both ends of the hose during fueling.</li> </ul> </li> <li>Inspect hydraulic, fuel and lubrication systems of equipment so that systems are in good working condition and free of leaks. Equipment to be used in or adjacent to a watercourse or waterbody during emergency response during an HDD will be clean or otherwise free of external grease, oil or other fluids, mud, soil, and vegetation.</li> </ul> <li>An impervious tarp shall be in place underneath equipment/vehicles when servicing equipment/vehicles with the potential for accidental spills (e.g., oil changes, servicing of hydraulic systems, etc.) in accordance with regulatory conditions.</li> <li>The contractor shall prepare a Spill Response Plan prior to construction.</li>	
Aggregates and Petroleum Resources <i>Section 3.3.4</i>	No active aggregate or petroleum resources were identified in the PPR study area.	Stantec recommends that Enbridge consult with local pit owners and operators in the proximity of the Study Area to better determine if any constraints on development exist.	With sign antio How shou inter no n
Soil and Soil Capability <i>Section 3.3.5</i>	The Project will be largely confined to the road allowance. Pipeline construction will impact a limited amount of agricultural land, primarily where temporary workspace is required on lands adjacent to the road allowance. Depending on the location, temporary workspace has the potential to impact agricultural soils. Excessive passes with heavy equipment can damage topsoil to the point of greatly diminished productivity. Soil characteristics relating to the potential for damage include moisture content, texture, organic matter content.	<ul> <li>In addition to the soil erosion mitigation measures outlined in the Enbridge Construction and Maintenance Manual (Enbridge 2022a), the following measures are recommended.</li> <li>To avoid loss of soil, topsoil from lands directly affected by construction of the pipeline should be stripped. That topsoil should be stripped during dry soil conditions and stockpiled for use during clean-up and rehabilitation. Identification of the topsoil and subsoil interface should be carefully monitored to check that all topsoil with limited</li> </ul>	With prote Cons 2022 soil d

#### Net Impacts

h the selection of the PPR as the PR, no hificant adverse residual impacts are cipated.

vever, consultation with local pit operators uld occur to reduce the potential for project ractions; provided no impacts are anticipated, net impacts will occur.

h the implementation of the mitigation and tective measures in accordance to Enbridge's nstruction and Maintenance Manual (Enbridge 2a), no significant adverse residual impacts on or soil capability are anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
	Sandy soils are more resilient, but clay soils can be susceptible to severe rutting and compaction which can greatly reduce agricultural productivity. Construction in wet conditions can increase the susceptibility to compaction damage. Additionally, improper topsoil stripping, topsoil storage and topsoil replacement can result in mixing of topsoil and subsoil that can also reduce soil productivity. 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 a number of 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. Excess soil may be generated on-site from construction activities that will require off-site management.	<ul> <li>subsoil is stripped from the ROW. To reduce construction impacts associated with wet climatic conditions, the other components of the construction are recommended to occur during dry soil conditions. If construction cannot be completed during the drier summer months when evapotranspiration is greatest, strict adherence to an Environmental Protection Plan (EPP) is recommended.</li> <li>As an initial stage of construction, standard ESC measures should be implemented on all active areas. ESC features should be regularly inspected and maintained. Additionally, ESC features should be improved or added to in areas requiring more protection.</li> <li>In locations prone to erosion, soil stockpiles should be protected with silt fencing. Soil piles should be separated by at least 1 m to avoid mixing topsoil with subsoil. On agricultural lands, subsoil should be stored on lands stripped of topsoil (subsoil on subsoil).</li> <li>Following periods of excessive rainfall or saturated soil conditions, construction activities on agricultural lands should be suspended. During wet soil conditions heavy tracked and rubber-tired vehicles should be restricted from movement on agricultural soils. Usually, construction may continue from gravel or existing roadside work surfaces during wet soil conditions.</li> <li>To the extent feasible, construction activities 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.</li> <li>If a situation develops that necessitates construction during wet soil conditions, soil protection measures should be implemented, such as: confining construction activity to the narrowest area practical, installing surface protection</li> </ul>

# Net Impacts

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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures
		<ul> <li>During construction activities, weather should be monitored to identify the potential onset of high wind conditions which can cause wind erosion. If high winds occur, protective measures such as the following will be implemented:</li> </ul>
		<ul> <li>Suspend earth moving operations.</li> <li>Apply dust suppressants.</li> <li>Protect soil stockpiles with a cover, barrier, or windscreen.</li> </ul>
		<ul> <li>In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use as required.</li> </ul>
		<ul> <li>Topsoil stripping should be sufficiently wide to allow for topsoil to be stockpiled on topsoil and subsoil to be stockpiled on subsoil. Inspection staff should check separation between topsoil storage piles and subsoil storage piles is maintained to reduce potential for soil mixing. If topsoil is required to be imported, it should be from an approved sources to check that it is not contaminated.</li> </ul>
		• Where agricultural land adjacent to the ROW is typically accessed by crossing the ROW alternate access to the fields will be provided for the farm operator for the short period of time during construction that access across the ROW is not possible.
		• If clean-up is not practical during the construction year, it should be undertaken in the year following construction, starting in May or June once the soils have sufficiently dried. Interim soil protection measures should be undertaken in sensitive areas to stabilize the ROW for over-wintering.

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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
Soybean Cyst Nematode <i>Section 3.3.6</i>	On agricultural fields, the potential exists for SCN to be spread from an impacted field to a non-impacted field by contaminated machinery, wind, contaminated boots, water erosion, etc. To reduce the risk of spreading SCN to non-impacted fields, mitigation and protective measures have been established. Since the construction will impact very little agricultural soil, the potential for the spread of SCN onto adjacent fields is negligible. Nevertheless, Stantec recommends testing for SCN on all southern Ontario linear corridor projects which impact	Landowners of agricultural properties should be contacted by an Enbridge Lands representative to discuss if the landowner would like to participate in the SCN sampling program. In general, soil sampling for SCN is recommended where construction activity in the Temporary Workspace (TWS) is planned on agricultural lands adjacent to the existing municipal road allowance and as requested by the landowner. If SCN sampling is requested, the following mitigation measures should be considered:	With prote resic resu
	agricultural soils.	<ul> <li>To the extent feasible restrict construction activity to the non-agricultural pipeline construction area.</li> <li>All properties impacted with SCN should be recorded and communicated to the Contractor and landowner/farm operator. Stantec will help develop best practices protocol to handle SCN.</li> <li>If the PR or an adjacent farm field has SCN, advise the farm operator to remove soil from equipment before moving to the area that has not been impacted by SCN. This may involve thorough washing of equipment before moving equipment from an impacted field to non- impacted field.</li> <li>If topsoil is required to be imported, it should be from approved sources to avoid it being contaminated.</li> </ul>	
Agricultural Tile Drains <i>Section 3.3.7</i>	The preferred pipeline will be constructed in existing road allowance with some agricultural lands, outside of the road allowance, being required for temporary workspace. Where temporary workspace is required impacts to agricultural lands may occur. Where there is interaction with agricultural land, construction activities, including trenching and the movement of heavy machinery, have the potential to crush and/or sever agricultural tile drains. The location of the pipeline within road allowance significantly reduces the potential for the proposed pipeline to impact agricultural tile drains.	<ul> <li>Enbridge should consult with landowners of compacted agricultural lands to confirm the presence of random or systematic tile drainage. If tile drainage is present, Enbridge should undertake standard mitigation during trenching, including:</li> <li>Develop site specific tile plans with an independent tile contractor.</li> <li>Conduct pre-tiling, and install header tile to maintain tile system function.</li> <li>Excavate the pipeline trench to a depth that allows clearance between the top of the pipeline and the bottom of existing drainage systems.</li> <li>Record and flag severed or crushed tile drains.</li> <li>If a main drain, header drain, or large diameter drain is severed, maintain field drainage and prevent flooding of the work area and adjacent lands through temporary repairs.</li> </ul>	With prote resid antic

#### Net Impacts

h the implementation of the mitigation and tective measures, no significant adverse idual impacts on soil or soil capability as a ult of SCN are anticipated.

h the implementation of the mitigation and tective measures, no significant adverse dual impacts on agricultural tile drains are cipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
		<ul> <li>Cap the downstream side of severed drains that cross the trench to prevent the entry of soil, debris and rodents, as required.</li> <li>Repair damaged and severed drains following construction.</li> <li>After repair and before backfilling, invite the landowner to inspect and approve the repair</li> </ul>	
Natural Hazards and Regulated Areas <i>Section 3.3.8</i>	The probability of significant seismic activity in the Study Area is low; therefore, no potential impacts are anticipated. 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.	<ul> <li>If flooding necessitates a change in the construction schedule, affected landowners and regulatory agencies should be notified and construction should continue at non-affected locations.</li> <li>Temporary workspace should be located above the floodplain to the extent practical, unless necessary for watercourse crossings.</li> <li>All work in the floodplain will be subject to a permit under O. Reg. 169/06 from SVCA.</li> </ul>	With prote cons signit haza
		Biophysical Features	
Fish Habitat and Aquatic Species at Risk Section 3.4.1	The Study Area contains multiple watercourses with variable thermal regimes, flow regimes, and fish community assemblages. The provincially and federally Endangered Redside Dace is known to occur within Meux Creek and its tributaries. In-water works have the potential to result in the death of fish and the HADD of fish habitat which is a contravention of the <i>Fisheries Act.</i> In-water works (i.e., work below the high-water mark) must occur during specific timing windows set by MNRF, which are based on fish species and intended to provide protection during sensitive life stages (e.g., spawning). Changes to the standard timing windows require review by the MNRF and DFO.	It is Stantec's understanding that all construction activities in or near water will be completed using HDD techniques as per the DFO-Enbridge Agreement ( <b>Appendix H</b> ). The agreement states that "If the project requires Horizontal Directional Drilling in areas with aquatic Species at Risk AND you can meet all of the conditions outlined in the DFO-Enbridge Standard for Horizontal Directional Drill [] submission to DFO is not required." At Meux Creek, work should occur outside of the provincially regulated habitat for Redside Dace (i.e., the meander belt width + 30 m) per Ontario Regulation 832/21. Habitat in watercourses that contribute to occupied Redside Dace habitat and have a bankfull width of 7.5 m or less are also regulated under the ESA. Within the Study Area, this applies to the following crossing locations: • Distribution: WST-01, MST-01, QST-01, QST-02 • PR: DWP-01, DWP-02	With Enbr antic cond imple spec By co regul and i to aq

the implementation of the mitigation and ective measures and on-going sultation/permitting with SVCA occurs, no ificant adverse residual impacts from natural ards or to the regulated areas are anticipated.

n successful implementation of the DFOridge Agreement (**Appendix H**) there are no cipated impacts to fish and fish habitat. If the ditions on the Agreement cannot be emented fully, Enbridge will seek a projectcific review from the DFO.

constructing from outside of provincially ulated habitat for Redside Dace at Meux Creek its tributaries, there are no anticipated impacts quatic SAR or their habitat.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
Forest and Vegetation Cover Section 3.4.2.2.2	Vegetative cover within 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 agricultural lands, forests and wetlands with scattered rural residential properties. Mature hedgerows are common along the roadside adjacent to these properties. Vegetation removal may be required in these areas in order to accommodate pipeline construction. 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. Filling, excavation, grading or trenching in the root area of a tree has the potential to cause irreversible damage. Tree clearing should be scheduled to occur outside of the breeding bird window (i.e. not occur between April 1 and August 31) to comply with the MBCA and MBR. Where limited tree clearing is required during this window, a nest sweep maybe completed to identify evidence of nesting and areas to be avoided. Refer to row "Wildlife, Wildlife Habitat and Species at Risk Section 3.4.4" below for associated wildlife mitigation measures.	<ul> <li>The following mitigation measures, or equivalent, should be implemented to reduce impacts on forests and vegetation cover:</li> <li>Municipal requirements or permits for tree cutting will be determined prior to construction.</li> <li>If ornamental trees along the PR need to be removed, staff from Grey County should be contacted to determine a tree replacement strategy prior to removal.</li> <li>Limits of the workspace should be clearly marked to reduce encroachment into adjacent wooded areas and avoid unnecessary tree removal.</li> <li>Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain.</li> <li>Trees or other vegetation to be retained should be surrounded by temporary protective fencing or other measures before clearing or grading occurs, and maintained until all construction work is completed in that area and the site is restored. Barriers should be large enough to encompass the essential root zone of the vegetation to be protected.</li> <li>Construction traffic should be preserved through topsoil salvage and separation (see row "Soil and Soil Capability Section 3.3.5" above).</li> <li>High-traffic or erosion-prone areas of the road allowance should be revegetated with suitable protective cover during and post-construction.</li> <li>Reclamation in residential/commercial land areas traversed by the road allowance should involve seeding (or sodding) the disturbed areas and replacement of ornamental trees and shrubs.</li> <li>The following criteria are recommended to be taken into consideration when selecting a seed mix for use in natural vegetation areas:</li> <li>Site specific conditions such as climate, soil types and terrain should be considered.</li> </ul>	Ve ed roa na ec as of ec rec Wi me res an

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egetation removal may be required along the lges of rural roads. Removal will be restricted to ad allowance communities and the edge of atural heritage features that are currently sposed to road traffic and maintenance activities. Is vegetation removals are restricted to the edge natural heritage features, impacts on the cological function of these features will be duced.

ith effective implementation of the mitigation easures recommended, no significant adverse sidual impacts to forest and vegetation cover are nticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
		<ul> <li>A fast-growing seed mixture requiring little, or no maintenance should be selected.</li> <li>Seed mixture should be consistent with the land use of the area.</li> <li>If there is no suitable local native seed mix available, but seeding is deemed desirable to promote rapid revegetation of an area, a non-invasive annual nurse crop such as annual ryegrass should be used instead.</li> <li>Purchased seed should be certified free of weeds.</li> </ul>	
Wetlands Section 3.4.2.2.2	The potential impacts on wetlands during construction include accidental contaminant release, sedimentation and turbidity from surface runoff, introduction of invasive species and temporary lowering of the water table during trench dewatering. Clean-up and restoration activities to contain or remove contaminant and sediment releases can cause more damage to sensitive wetland ecology than the initial impact of the release. Therefore, it is important to institute appropriate mitigation measures to reduce interactions with adjacent wetlands. As construction is planned within the previously disturbed road allowance, no adverse interactions are expected to occur with wetlands along the PR. However, to protect these features, construction activities undertaken in proximity should include the following mitigation measures.	<ul> <li>Wetlands encroaching the road allowance may be crossed by HDD. Mitigation measures for HDD are discussed in row "Fish Habitat and Aquatic Species at Risk" above and will apply for wetland crossings. In addition to these mitigation measures, the following are recommended:</li> <li>Limits of the work space should be clearly marked to reduce encroachment into adjacent wetlands and avoid unnecessary encroachment.</li> <li>Construction material, excess material, construction debris and empty containers should be stored away from adjacent wetlands.</li> <li>Temporary workspace width should be reduced when working within 30 m of wetlands, where practical.</li> <li>Staging areas should be located at least 30 m away from the edge of wetlands.</li> <li>A screening field program of wetlands and riparian areas should be undertaken prior to construction, to determine where precautionary measures (e.g., equipment washing before site access) may be necessary to mitigate for the spread of non-native species.</li> <li>Construction dewatering should be discharged to sediment removal basins if discharge to a well-vegetated dry area is not feasible. The sediment removal basin should be located to increase the distance to the nearest surface water feature and reduce the slope of the surrounding buffer area. The basin should consist of a temporary enclosure constructed with hay bales, silt fence or both.</li> <li>Construction activities, including equipment maintenance and refueling, should be controlled to prevent entry of petroleum products or other deleterious substances, including any debris, waste, rubble, or concrete material, into a wetland.</li> </ul>	With mition weth

#### Net Impacts

th the implementation of HDD crossings and the igation and protective measures recommended, significant adverse residual impacts on tlands are anticipated.

<ul> <li>In the unlikely event of a spill, spills containment and</li> </ul>
clean-up procedures should be implemented immediately. Enbridge will contact the MECP Spills Action Centre if adverse effects are observed. The MECP Spills Action Centre is the first point of contact for spills at the provincial and federal level.
Recommended sediment and erosion control measures specific to wetlands should include the following:
<ul> <li>Surface runoff should be directed as overland flow with sufficient drainage structures to dissipate hydraulic energy.</li> <li>Soil transport should be prevented by diversion of site runoff through shallow vegetated channels, placement of straw bales or sediment control fencing.</li> <li>Sediment barriers should be installed along the edge of the road allowance to contain spoil within the road allowance, where required.</li> <li>Natural drainage spacing should be provided around spoil piles.</li> <li>Topsoil and subsurface soil should be stockpiled in separate piles with adequate spacing between the piles.</li> <li>Temporary erosion/silt control structures (i.e., straw bales, sediment fencing) should be used down gradient of spoil stockpiles, as necessary.</li> <li>Temporary sediment barriers should be maintained until soils have been stabilized.</li> <li>Vegetation clearing should not be conducted within 30 m of a wetland unless required for site construction activity (i.e., within the road allowance).</li> <li>In the event that vegetation regeneration is unlikely immediately following construction (i.e., outside the growing season), slopes adjacent to wetlands should be stabilized using geogrids or weed-free mulch for a minimum of 30 m from the wetland.</li> <li>Erosion control measures in both active and non-active construction areas should be regularly inspected until the site has been adequately stabilized to prevent erosion.</li> </ul>

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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	L
Wildlife, Wildlife Habitat and Species at Risk Sections 3.4.2.2.3 to 3.4.2.7	Pipeline construction impacts on wildlife populations are associated with vibration and compaction of the shoulder as well as direct mortality from animal-vehicle collisions because of increased construction traffic, temporary avoidance behavior due to the presence of humans and equipment and direct loss of habitat (e.g., destruction of nests or alteration of habitat). No new lands or natural areas are anticipated to be assumed for this Project. Given that PR will be installed primarily within existing road allowance, mitigation will be targeted at SOCC and ESA 2007 protected species that are known to occur in the area such as turtles, bats, and birds. The preferred habitat for SOCC and ESA 2007 protected species is generally not present in the road allowance; however, mitigation measures are detailed with regulatory requirements (if any) for SAR to be determined by the MECP.	<ul> <li>The mitigation measures below, or equivalent, are recommended to reduce potential impacts of the Project on wildlife and wildlife habitat:</li> <li><u>SOCC and ESA 2007 Protected Species</u></li> <li>Prior to construction activities, a worker awareness program should be implemented that includes SAR identification and habitat or nesting characteristics.</li> <li>Detailed design of the PR should be reviewed to avoid and reduce the likelihood of impact upon wildlife habitat to the extent possible, and habitats of endangered, threatened, special concern and rare species.</li> <li>Equipment and vehicles should yield the ROW to wildlife.</li> <li>Trench operations should be followed as closely as practical with backfill operations, to facilitate the movement of wildlife across the trench.</li> <li>Gaps in stockpiles should be created, in consultation with a biologist, to allow for the potential movement of wildlife across the ROW.</li> <li>Fencing should be erected around deep excavations to prevent wildlife intrapment.</li> <li>The contractor should inform their personnel to not threaten, harass or injure wildlife.</li> <li>If wildlife is encountered during construction, personnel are required to move away from the animal and wait for the animal to move off the construction site.</li> <li>ESA 2007 protected species cannot be handled unless authorized by MECP and MNRF.</li> <li>A Wildlife Scientific Collector's Permit (MNRF authorization) will be required to handle wildlife.</li> <li>Turtles SOCC are known to occur within the Study Area, including in wetlands, watercourses, and identified ponds. Recommended mitigation measures for turtle SOCC are outlined below.</li> <li>Implement erosion and sediment control measures detailed in row 'Soil and Soil Capability Section 3.3.5" above to protect turtle habitat (wetlands, ponds).</li> <li>Exclusion fencing (e.g., silt fence) should be erected on both sides of the road prior to activities occurring in areas identified as having turtles or as being high potential, such</li></ul>	( Frii Far Fbe V ar aat

#### Net Impacts

Consultation with MECP regarding ESA 2007 protected species, appropriate protection measures for wildlife and wildlife habitat are intended to be used in the planning and scheduling phase of Project activities to assist in avoidance and exclusion of SAR. A permit under ESA 2007 may be required at the discretion of the MECP, particularly for Eastern Meadowlark, Bobolink, and bat SAR, which are the most likely species to be encountered in the Project footprint.

With the effective implementation of the mitigation and protective measures, no significant adverse residual impacts on sensitive habitats are anticipated. Therefore, the PR is anticipated to avoid adverse environmental effects with respect to wildlife or wildlife habitat.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
		<ul> <li>Exclusion fencing should be installed prior to the sensitive nesting season (May 1 and June 30) if activities are anticipated to occur throughout this period to prevent turtles from entering and/or nesting; or pre-screening can be completed to avoid nests if work must begin during nesting season.</li> <li>No heavy machinery should be permitted on the shoulder of the road past the exclusion fencing to prevent compaction and prevent destruction of nests and habitat.</li> <li>Where possible, restrict construction activities within 30 m of a nesting site.</li> <li>Elirds</li> <li>Construction activities with the potential to remove migratory bird habitat, such as vegetation clearing, should be avoided during the breeding season which is generally from April 1- August 31 in southern Ontario (Environment Canada, 2017).</li> <li>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 (Government of Canada, 2018). This program should include preventative and mitigation measures but may also include avoidance of clearing during key sensitive periods and in key locations.</li> <li>Bobolink and Eastern Meadowlark are expected to occur within meadows, pastures, and hayfields that may overlap the Project location. Avoidance of work within these areas between May 1 and July 31 are recommended to avoid impacts to these species. Consultation with MECP is recommended.</li> <li>Bats</li> <li>Tree removal should be limited to the extent possible and should avoid the active season for bats (March 15 – September 30).</li> <li>Mitigation recommendations for SAR bats will be prepared upon consultation with MECP.</li> <li>Amphibians</li> <li>Where practical, avoid construction in the vicinity of areas that may provide habitat for amphibians during the amphibian breeding season (March 1 – June 30).</li> </ul>	

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Environmental Feature(s)	Potential Impact(s)		Mitigation and Protective Measures	
		So	cio-Economic Environment	
Demographics Section 3.5.1	According to population projections, population of the Municipality of West Grey will continue to grow below the provincial average, although the population in the Study Area is anticipated to grow modestly. To accommodate the growth, rural portions of the Municipality 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. 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. During pipeline construction residents and business 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.	•	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. During construction, motorized construction equipment should be equipped with mufflers and silencers. 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 local by-laws (e.g. tree and noise by-laws). Where pipeline installation will take an extended period to complete, such as watercourse and road crossings, an assessment should be undertaken to determine the suitability and effectiveness of temporary noise barriers adjacent to residential or business properties. 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. 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' (Environment Canada, 2005), which may include: • maintaining equipment in compliance with regulatory requirements • protecting stockpiles of friable material with a barrier or windscreen in the event of dry conditions and dust • dust suppression of source areas • covering loads of friable materials during transport. 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.	With prote- residu

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the implementation of the mitigation and ective measures, no significant adverse lual impacts on residents are anticipated.
Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
		<ul> <li>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.</li> <li>Access to driveways and roads should be maintained as practical during the construction period. The pipeline, once constructed, will not restrict access.</li> <li>The Contractor 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.</li> <li>Safety fence should be installed at the edge of the construction area where public safety considerations are required.</li> <li>The contractor should implement a Traffic Management Plan for all roads affected by construction, which at a minimum outlines measures to: <ul> <li>Control the movement of materials and personnel to and from the construction site.</li> <li>Post signs to warn oncoming motorists of construction activity.</li> <li>Control traffic at road crossings.</li> <li>Reduce on-road disturbance and land closures.</li> <li>Store equipment as far from the edge of the road as practical.</li> </ul> </li> </ul>	
Employment and Business <i>Section 3.5.2</i>	<ul> <li>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:</li> <li>Direct employment: labour that is hired directly for the Project.</li> <li>Indirect employment: labour hired by companies in order to produce and provide goods and services needed for the Project.</li> </ul>	<ul> <li>It is expected that the Project will generally result in positive effects on employment by employing local and Indigenous people, and by reducing the unemployment rate in the region. These positive effects do not require mitigation, but Enbridge should identify and implement various mechanisms to enhance project benefits:</li> <li>The potential effects of the Project as a result of purchasing labour, goods, and services is expected to be positive during construction and operation, so no mitigation will be required. However, Enbridge 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</li> </ul>	With loca is ar emp inclu thro emp Proj sup the Con add

#### Net Impacts

th the aforementioned initiatives to encourage al and Indigenous participation on the Project, it anticipated that the effects from project on ployment and business will be positive, luding creating positive economic activity bugh new direct, indirect, and induced ployment.

ject expenditures on local businesses and pliers also have the potential to positively affect local economies.

nsultation with residents and businesses will ress any concerns to their operations.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
	<ul> <li>Induced employment: labour hired by industries that produce and provide consumer items and services purchased by people who are directly or indirectly employed by the Project.</li> <li>Labour conditions will be affected by direct, indirect, and induced employment during all project phases.</li> <li>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.</li> </ul>	<ul> <li>encourage further local and Indigenous content on the Project is to post Project purchasing requirements in advance, so that businesses can position themselves to effectively bid to supply goods and services needed for construction and operation. Increased participation of local and Indigenous businesses will enhance positive local economic effects.</li> <li>With respect to potential adverse effects on local businesses, the following mitigation and protective measures should be followed:</li> <li>Enbridge should engage with landowners, businesses, and the Municipality to address access to the Study Area and any portion of land that will be altered as part of site preparation, and long-term changes.</li> </ul>	With prote resic antic
Community Services and Municipal Infrastructure Section 3.5.3	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 the Study Area, it is anticipated that non-local project workers will stay in accommodations located in Walkerton and Owen Sound. Non-local Project workers may 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. 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.	<ul> <li>Project employees might require medical attention while staying in the area. The contractor and Enbridge 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.</li> <li>Environmental mitigation will be in place to reduce the likelihood of emergency events and to prepare for the management of emergency events on site. If an emergency incident were to occur, it is anticipated that the comprehensive mitigation, contingency plans, and safety strategies will result in a localized and low-intensity response.</li> <li>A Traffic Management Plan will be in place for all roads affected by construction, see row "Demographics Section 3.5.1".</li> <li>The capacity of waste disposal sites will be considered and if Project needs are not easily accommodated, alternative disposal locations will be considered.</li> <li>Enbridge 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</li> </ul>	Corr have increating from direct Adve of th curred com the i meation c infra

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h the implementation of the mitigation and tective measures, no significant adverse dual impacts on employment and business are cipated.

nmunity services and infrastructure appear to e additional capacity to absorb potential eased temporary demands that may result in the Project, if not within the Study Area ectly then in Walkerton and Owen Sound. verse effects on traffic will be minimal because he rural nature in the Study Area where roads rently have low levels of traffic and alternative tes are readily accessible.

en the available capacity of the local munity services and infrastructure, along with implementation of the mitigation and protective asures, no significant adverse residual impacts community services and municipal astructure are anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
		<ul> <li>construction commencement to discuss potential specific impacts to the property or business. Contact information for a designated Enbridge representative should be available to address questions and concerns during construction. Consultation has been initiated and should continue with municipal personnel.</li> <li>Approvals should be obtained from the municipalities for all road crossings. The contractor must adhere to Enbridge's requirements for road crossings as outlined in the Enbridge Construction and Maintenance Manual (Enbridge 2022a).</li> </ul>	
Infrastructure Section 3.5.4	A variety of buried and overhead utilities (e.g., telephone, fiber optic) 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 with roads, hydrocarbon pipelines, and buried and overhead utilities.	<ul> <li>Prior to the commencement of construction, Enbridge 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 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 (Enbridge 2022a).</li> </ul>	/ith rote ∍sid
Culture, Tourism and Recreational Facilities Section 3.5.5	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.	<ul> <li>Construction barricades should be erected at all areas of construction activity where recreational users may be present.</li> <li>Other mitigation and protective measures for noise, dust and equipment exhaust, aesthetics and safety are outlined in row 'Demographics Section 3.5.1' and row 'Community Services and Municipal Infrastructure Section 3.5.3'.</li> </ul>	ultu tud ntic nple neas n cu ocat s th ntic
Air Quality and Noise Section 3.5.6	Residential, agricultural, 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> <li>During construction, motorized construction equipment should be equipped with appropriate mufflers and silencers as available. Company and construction personnel should avoid excessive idling of vehicles; vehicles and equipment should be turned off when not in use unless required for operation. To the greatest extent practical, activities that could create noise should be restricted to daylight hours and adhere to local noise by- laws. Sources of continuous noise, such as portable</li> </ul>	/ith rote ∍sid ntici

#### Net Impacts

the implementation of the mitigation and ective measures, no significant adverse lual impacts on infrastructure are anticipated.

ural, tourism, and reactional facilities in the ly Area are limited. As such, impacts are not cipated to be significant. Additionally, with the ementation of the mitigation and protective sures, no significant adverse residual impacts ultural, tourism, and recreational facilities ted immediately outside the Study Area, such he nearby churches, parks, and trails are not cipated to be impacted.

the implementation of the mitigation and ective measures, no significant adverse lual impacts from air quality and noise are sipated.

Potential Impact(s)	Mitigation and Protective Measures	
	<ul> <li>generators, should be shielded or located to reduce disturbance to residents and businesses.</li> <li>The contractor should implement site practices during construction that are in line with the Environment Canada document 'Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities' (Cheminfo Services Inc. 2005), which may include: <ul> <li>Maintaining equipment in compliance with regulatory requirements</li> <li>Covering loads of friable materials during transport</li> <li>Dust suppression of source areas</li> <li>Watering for dust control must not result in the formation of puddles, rutting by equipment or vehicles, the tracking of mud onto roads or the siltation of</li> </ul> </li> </ul>	
Impacts on Indigenous Land Use, Traditional Knowledge, and Ind for the review and comment. Upon their review, Enbridge will worl	ligenous interests are still being determined. The Environmental F k with Indigenous communities to better understand potential imp	Report acts a
Natural gas pipelines and their associated facilities/structures are permitted land uses, and there are no proposed changes to land use. Therefore, no impacts are anticipated.	<ul> <li>The Project does not propose to change or alter the designated land use. As no change in the proposed land use will occur, and thus, no impacts to land use will occur, no mitigation or protective measures are recommended.</li> <li>Where work is to occur within conservation authority regulated areas, Enbridge will apply to the SVCA for permits as per O. Reg 169/06.</li> </ul>	As n occu
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. The Normanby Landfill is located northeast of the Study Area, and the Walkerton-Hanover Landfill is located northwest of the reinforcement section study area. Assumptions on the potential for landfill gas to impact the Project, as outlined in the D-4 Guideline, are made by assessing available information including proven soil-gas concentrations.	<ul> <li>All construction wastes should be disposed of in accordance with the Enbridge Construction and Maintenance Manual (September 28, 2022). Additionally, Enbridge 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:         <ul> <li>Waste materials, sanitary waste, and recycling transported off-site by private waste contractors licensed by the MECP.</li> </ul> </li> </ul>	With place cont that Hand and mitig
	Potential Impact(s)         Impacts on Indigenous Land Use, Traditional Knowledge, and Indifor the review and comment. Upon their review, Enbridge will word for the review and comment. Upon their review, Enbridge will word are permitted land uses, and there are no proposed changes to land use. Therefore, no impacts are anticipated.         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.         The Normanby Landfill is located northeast of the Study Area, and the Walkerton-Hanover Landfill gas to impact the Project, as outlined in the D-4 Guideline, are made by assessing available information including proven soil-gas concentrations.	Potential impact(s)         Mitigation and Protective Measures           generators, should be shielded or located to reduce disturbance to residents and businesses.         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:           • Maintaining equipment in compliance with regulatory requirements         • Maintaining equipment in compliance with regulatory requirements           • Outs 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 silitation of watercourses.           Impacts on Indigenous Land Use, Traditional Knowledge, and Indigenous interests are still being determined. The Environmental I for the review and comment. Upon their review, Enbridge will work with Indigenous communities to better understand potential imp for the review and comment. Upon their review, Enbridge will work with Indigenous communities to better understand potential imp for the review and comment. Upon their review, Enbridge ville work with Indigenous communities to better understand potential imp for the review and courses and of the constructions and their associated facilities/structures are permitted land uses, and there are no proposed changes to land use. Therefore, no impacts are anticipated.         • The Project does not propose to change or alter the designated land uses. As no change in the proposed land use will occur, no thus cost must on ubtority regulated areas, Enoring will apply to the SVCA for permits as per O. Reg 169/06.           Improper disposal of waste material gener

#### Net Impacts

t will be provided to Indigenous communities and associated mitigation measures.

no impacts are anticipated, no net impacts will ur.

h the recommended mitigation measures in ce to properly test, treat, and dispose of ataminated water/soils, Stantec is of the opinion t impacts of the Normanby and Walkertonnover Landfills on the Project are unexpected, I if they do occur can be managed through the gation measures listed.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
		<ul> <li>Labelling and storage of hazardous and liquid wastes in a secure area that would contain material in the event of a spill.</li> <li>Implementation of a waste management program</li> </ul>	
		consisting of reduction, reuse, and recycling of materials.	
		<ul> <li>Should contaminated soils be encountered during construction, Enbridge should implement their Suspect Soils Program (see Enbridge Construction and Maintenance Manual (Enbridge 2022) for further details).</li> </ul>	
		<ul> <li>Soils that cannot be reused on site may be reused off- site in accordance with O. Reg. 406/19.</li> </ul>	
		<ul> <li>A Phase I Environmental Site Assessment (ESA), and Phase II ESA (if recommended as part of the Phase I ESA) should be considered for any property that will be acquired by Enbridge and a site-specific evaluation of PSOCs should be completed. If building demolition will be required, designated substance surveys should be completed for buildings or structures prior to demolition</li> </ul>	
		<ul> <li>During construction, if evidence of potential contamination is found that was not highlighted in the Report (such as buried tanks, drums, oil residue or gaseous odour), construction will cease, and the Enbridge Suspect Soil Program will be implemented. Should excess soil be generated on-site during construction activities that will require off-site management, representative soil samples should be collected in accordance with O. Reg. 406 /19 and submitted for chemical analysis to determine management options and appropriate handling and health and safety guidelines.</li> </ul>	
		<ul> <li>Should excess soil be generated on-site during construction activities that will require off-site management, or if contaminated soils are suspected (e.g., if observed material contains anthropogenic substances, petroleum hydrocarbons odours/staining, and debris/waste), representative soil samples should be collected in accordance with O. Reg. 406 /19 and submitted for chemical analysis to determine management options and appropriate handling and health and safety guidelines.</li> </ul>	

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Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
Archaeological Resources <i>Section 3.5.10</i>	The Stage 1 AA identified areas of the Project's Study Area that retain archaeological potential. Construction and construction related activities have the potential to impact areas that retain archaeological potential and unidentified cultural resources. CHVI of any Based on the Guidelines for Ontario 2017 mitigation, o required.	Prior to construction, a Stage 2 AA will be conducted for portions of the Project's construction footprint that may impact areas of archaeological potential.	\ a s
		If cultural resources are identified during the Stage 2AA, the CHVI of any identified cultural resources will be evaluated. Based on the CHVI and the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), additional archaeological assessment, mitigation, or avoidance and protection measures may be required.	r t
		The recommendations of the Stage 1 archaeological assessment (AA) and any subsequent recommended AA (e.g., Stage 2-4) will be followed. Should previously unknown archaeological resources be uncovered or suspected of being uncovered during construction, they may be a new archaeological site and therefore subject to Section 48(1) of the OHA, and ground disturbance in the find location should cease immediately and a licensed consultant archaeologist will be engaged to develop a site-specific response plan, in compliance with Section 48(1) of the OHA.	
		If human remains are uncovered or suspected of being uncovered during ground disturbance, the Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with O.Reg. 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the MCM should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the OHA.	
		If there are any proposed in-water impacts, other than HDD, to the Beatty Saugeen River, South Saugeen River, or the portion of Meux Creek adjacent to the Neustadt Brewery, the Criteria for Evaluating Marine Archaeological Potential checklist (Government of Ontario 2016) should be completed to determine if a marine AA is required.	

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With the Stage 2AA, marine archaeological assessments (if required), and implementation of subsequent mitigation and protective measures, if necessary, no significant adverse residual impacts to archaeological resources are anticipated.

Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	
Built Heritage Resources and Cultural Heritage Landscapes Section 3.5.11	The completion of the Checklist included the identification of three indicators of CHVI. Given the findings of the Checklist and CHSR (see <b>Appendix F</b> ), it is recommended that additional technical studies are required. Specifically, a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHR) is completed prior to the Project construction.	Prior to construction, a CHR will be undertaken and submitted to the MCM for their review and comment. The CHR will contain mitigation measures for potential impacts, if required.	With prote resic cultu
Indigenous Interests Section 3.5.12	The proposed Project may impact Treaty and Aboriginal rights and traditional uses, including aboriginal archaeological resources. As r Land Use, Traditional Knowledge, and Indigenous interests are still being determined. The Environmental Report will be provided to In comment. Upon their review, Enbridge will work with Indigenous communities to better understand potential impacts and associated m		As not to Indig ed mitig

#### Net Impacts

h the implementation of the mitigation and tective measures, no significant adverse dual impacts on built heritage resources or ural heritage landscapes are anticipated.

igenous communities for the review and igation measures.

# 6 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 notes that cumulative effects should be identified and discussed in the ER.

Building upon the intent of the OEB Environmental Guidelines, 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 (CEA) describes the potential cumulative effects resulting from the interaction of residual effects of constructing and operating the proposed pipeline with the effects of other unrelated projects. The other projects assessed are those that are either existing or approved and that have a high likelihood of proceeding.

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

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

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

- Existing infrastructure, facilities, and activities as determined from available data sets.
- The proposed 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 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 2023.
- 2. Construction Q2 of 2024.
- 3. Operation and Maintenance 2025 to 2075.\*

\*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: Q2 of 2024 to Q1 of 2025 and 2030. The years 2024 and 2025 were selected to represent the construction period, and the year 2030 was selected to represent the operation and maintenance period. Forecasting beyond 2030 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:



#### Neustadt Community Expansion Project: Environmental Report 6 Cumulative Effects Assessment

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- 2023 Budget and financial statements for the Municipality of West Grey (Municipality of West Grey 2023b).
- 2023 Budget Documents for Grey County (Grey County 2023).
- Canadian Energy Regulator (CER), Major Facilities Applications (CER 2023).
- Government of Ontario, Renewable Energy Projects (Government of Ontario 2022a).
- Government of Ontario, Environmental Assessment Projects by Category (Government of Ontario 2022b).
- IAAC, Canadian Impact Assessment Registry (IAAC 2023).
- IO, IO Projects Interactive Map (Government of Ontario 2023).
- Ministry of Transportation (MTO), Ontario's Highways Program Interactive Map (MTO 2023).
- OEB Applications Currently Before the Board (facilities applications only) (OEB 2023b).

Based on the review of publicly available resources, no projects have been identified for the project inclusion list. However, it is assumed that on-going improvements, upgrades, and maintenance to municipal infrastructure such as bridges, culverts, drains, electrical utilities, municipal developments, or roads may occur within the spatial and temporal study boundaries outlined above.

## 6.4 Analysis of Cumulative Effects

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

#### 6.4.1 Construction – Q2 2024 / Q1 2025

Residual project impacts which may occur during project construction outlined in **Table 5-1** to consider the additive and interactive effects at their maximum intensity, the CEA assumes that construction of other unrelated projects and the proposed pipeline construction may also occur concurrently.

Potential cumulative effects resulting from the proposed pipeline construction and the concurrent projects listed in Section 6.3 may contribute to additive effects on both the biophysical features and the socio-economic environment. Although these are major projects, given their distance from the PR, these developments are not anticipated to have a cumulative impact or interaction with project construction.

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

#### 6.4.2 Operation and Maintenance – Year 2025 to 2030

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

• Capital Projects (projects related to new assets or rehabilitating existing ones, including roads, sewers, parks, storm water management infrastructure, and equipment replacements) and Operating Projects (day-to-day operations related to municipal services and programs such as snow removal, sewer maintenance, fire protection services, by-law enforcement, economic development, road maintenance and repair, and parks and recreation programming). Each year, the Municipality of West Grey and Grey County identify areas of roadways in their annual budget that require maintenance and/or new projects that will be completed or are in the planning stages. A description of the Municipality of West Grey and Grey County's maintenance, paving and other construction projects that are taking place each year and the corresponding schedule are posted on the Municipality's 's webpage at:

https://www.westgrey.com/en/government/budget-and-financial-statements.aspx and on the County's webpage at: https://www.grey.ca/government/budgetfinances-purchasing/annual-budget#toc-2023-budget-documents.

Pipeline construction and maintenance: Future pipeline construction and maintenance of existing hydrocarbon pipelines in the Study Area.

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, or station maintenance be necessary, this shall be the only anticipated instance when the Project would have potential temporary impacts during its operation.

No other municipal road, sewer or watermain works, Grey County, Municipality of West Grey and the Community of Neustadt projects are scheduled to take place during the timeframe of the construction and operation of the pipeline. Consultation will continue with municipal staff, developers and other utilities that intersect with the proposed pipeline to identify new projects that may occur concurrently with the proposed pipeline operation. These could include Grey County's roads and infrastructure upgrades and maintenance programs including other utility operation and maintenance activities. There is the potential that cumulative effects may occur for residual impacts as outlined in the ER related to accidental spills, erosion and sediment control and residents.

Any operation and maintenance activities undertaken by Enbridge will be completed in co-ordination of the Enbridge 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 cumulative effects during operation and maintenance 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 may begin during construction or that may begin sometime in the future.

The study boundary for the Project was used to assess the potential for additive and interactive effects of the Project and other developments on environmental and socioeconomic features. As such, the cumulative effects assessment determined that, provided through ongoing consultation, appropriate mitigation and protective measures are implemented, potential cumulative effects will be of low probability and magnitude, short duration (2- 3 months), reversible and positive, and are, therefore, not anticipated to be significant.

# 7 Monitoring and Contingency Plans

## 7.1 Monitoring

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

Previous pipeline construction experience, and a review of post-construction monitoring reports from other projects, indicates that impacts from pipeline construction are for the most part temporary. The mitigation and protective measures to eliminate or reduce impacts are well known and have been shown to be effective. Enbridge 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 should implement an orientation program for inspectors and contractor personnel to provide information regarding Enbridge's environmental program and commitments, as well as safety measures.
- The conditions within the DFO-Enbridge Agreement (2022) will be followed to successfully mitigate impacts to aquatic species or their habitat.
- Construction techniques, procedures and contract provisions that will be applied by the contractor during construction to mitigate negative impacts should be included in the ER. Agency notification requirements, permits required during the construction phase, and monitoring program descriptions- including samplingshould be discussed in the ER. Section 6.0 in the OEB Environmental Guidelines outlines specific mitigation that can be implemented for different environmental and social concerns.
- An 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's on-site inspection team and the Environmental Inspector (EI).

#### 7.1.2 Water Wells

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

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

Landowner complaints regarding well interference received during or after the construction period, whether the landowner is a participant in the Water Well Monitoring Program or not, should be investigated individually as described in Section 7.2.2.

#### 7.1.3 Watercourse and Wetland Crossings

An El should be on-site during sensitive watercourse and wetland crossings to monitor adherence to specifications, site plans, and the DFO-Enbridge Agreement. In particular, the El 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 El should be responsible for monitoring weather forecasts prior to the crossing to check that 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 revegetation program, to check bank and slope stability and that 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 EI should monitor the limits of clearing so as not to damage adjacent vegetation. The EI should identify trees that pose a potential hazard and may require removal. Clear trees between October 1 and March 15 to avoid impacts to bat SAR and breeding birds. If clearing is to be completed during the bird nesting season (April 1 – August 31), nest sweeps in simple habitats may be appropriate and should be completed no later than seven days prior to clearing activities. Timing restrictions and/or other measures may be required by MECP to comply with the ESA for bat and bird SAR.

Establishment of vegetative cover should be monitored. Sediment control fencing and other protective measures should be retained in place until cover is fully established. Should new trees be planted as part of compensation plans, a year following construction, planted trees should be inspected for survival. In areas of severe dieback or in areas serving important environmental functions (e.g., riparian or slope cover), dead and diseased trees should be replaced. Enbridge's inspection program should include annual monitoring until the new plantings are healthy and established.

#### 7.1.5 Wildlife

The exact nature of construction monitoring for SAR that occur within the Study Area will be determined in consultation with the MECP.

## 7.1.6 Residents, Recreational Facilities and Businesses

Construction activities may impact directly affected landowners and surrounding residents and businesses. During construction, a designated Enbridge 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 representative.

Enbridge'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 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 should contact residents and businesses along the easement to continue ongoing communications where necessary. During the first 15 months particular attention should be paid to monitoring and documenting impacts associated with construction of the Project.

#### 7.1.7 Municipal Roads

Roads affected by pipeline construction should be restored to their pre-construction conditions to the satisfaction of the appropriate authorities' engineers or public works representative; 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 check that no road subsidence or major rutting has occurred and that the drainage system is functioning properly.

#### 7.1.8 Cultural Heritage Resources

Based on the results of the Checklist (**Appendix F1**) and the CHSR (**Appendix F2**), a CHR will be required for the Project. The CHR 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 complaint, contaminated sites, watercourse sedimentation, inadvertent returns during HDD, accidental spills, and unexpected finds.

Although unexpected problems are not anticipated to occur during construction, Enbridge and the pipeline contractor should be prepared to act. Construction personnel should be made aware of and know how to implement contingency measures prior to starting any activities on the field. Neustadt Community Expansion Project: Environmental Report 7 Monitoring and Contingency Plans

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#### 7.2.1 Private Water Well Complaint

Enbridge'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 and the well owner.

In the event a resident registers a complaint with Enbridge regarding a reduction of well water quality and/or quantity, Enbridge 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 will also offer to have a qualified hydrogeologist complete a well inspection, subject to the well owner granting permission. The hydrogeologist will visit the site to discuss the complaint with the resident and inspect the well and related complaint to the extent possible. The hydrogeologist will then provide advice to Enbridge on further assessment if required, or advice on possible remedial options should they determine that the complaint may be related to the Project's 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 if other unknown areas of potential contamination may exist.

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

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

- Enbridge's Environment Department.
- Enbridge's designated EI.

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#### 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 ineffective 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 occur during construction, an inadvertent return contingency plan should be implemented. Specifics of the contingency plan will be detailed in the project specific EPP and should consider the presence of Redside Dace at Meux Creek.

#### 7.2.5 Accidental Spills

During construction, there is always a potential for an accidental spill to occur. The impact 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 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's EI and Environment Department. If necessary, the MECP Spills Action Center should be notified at 1-800-268-6060, the local/regional municipality, community, and/or the SVCA (if required). 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**

The recommendations of the Stage 1 AA, any subsequent recommended AA (e.g., Stage 2-4) and the CHR will be followed.

Should previously unknown archaeological or heritage resources be uncovered or suspected of being uncovered during construction, they may be a new archaeological site and therefore subject to Section 48(1) of the OHA, and ground disturbance in the find location should cease immediately. Enbridge's Environment Department, the MCM and an archaeologist licensed in the Province of Ontario as well as affected Indigenous communities should be notified immediately. A site-specific response plan should then be employed following further investigation of the specific find. The response plan would indicate what additional archaeological work is required, if any, and under which conditions the ground disturbance activity in the vicinity of the find location may resume.

In the event that human remains are uncovered or suspected of being uncovered during ground disturbance, the Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering human remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with O.Reg. 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act related to burial sites. In situations where human remains are associated with archaeological resources, the MCM should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the OHA.

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

# 8 Conclusion

The environmental study investigated data on the physical, biophysical, and socioeconomic environment along the PR. In the opinion of Stantec, the recommended program of supplemental field studies in spring/summer 2024, SVCA permitting requirements, mitigation and protective measures, and contingency measures are considered appropriate to protect the features encountered. Monitoring will assess whether mitigation and protective measures were effective in both the short and long term.

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

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# Appendices

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Appendix A Figures
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# Appendix B Consultation
### B.1 Letter of Delegation

Ministry of Energy

Ministère de l'Énergie

et des Politiques Autochtones

77 Rue Grenville, 6<sup>e</sup> Étage Toronto, ON M7A 67C

Tel: (416) 315-8641

Politique Énergétique Autochtones

Direction Générale des Réseaux Énergétiques

Energy Networks and Indigenous Policy Branch

**Indigenous Energy Policy** 

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

December 30, 2022

**VIA EMAIL** 

Ontario 🕅

Eric VanRuymbeke Enbridge Gas Incorporated P. O. Box 2001 50 Keil Drive North Chatham, ON N7M 5M1

#### **Re: NEUSTADT COMMUNITY EXPANSION PROJECT**

Dear Eric VanRuymbeke:

Thank you for your email dated September 12, 2022, notifying the Ministry of Energy (Energy) of Enbridge Gas Inc.'s (Enbridge) intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for the Neustadt Community Expansion Project (the Project).

I understand that Enbridge is planning to construct approximately 14 km of natural gas pipeline in the Municipality of West Grey and Town of Hanover, in Grey County and the Municipality of South Bruce, in Bruce County. The pipeline is intended to provide access to gas distribution services to the community of Neustadt and is proposed to tie into the existing 420 kPa system along 10th Avenue, Hanover, ON. I further understand that the proposed facilities will provide access to natural gas to a total of 219 forecasted customers.

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

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

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

I am writing to advise you that on behalf of the Crown, Energy is delegating the procedural aspects of consultation in respect of the Project to Enbridge (Proponent) through this letter. Energy expects that the Proponent will undertake the procedural aspects of consultation with respect to any regulated requirements for the proposed Project. The Crown and/or its agents 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		
	6493 Hwy 21		
Saugeen First Nation *	Saugeen First Nation # 29, ON		
	N0H 2L0		
	135 Lakeshore Blvd,		
Chippewas of Nawash Unceded First Nation *	Neyaashiinigmiing, ON		
	N0H 2T0		
	Initial notifications should be sent		
	electronically to the MNO Lands,		
Goorgian Bay Historic Mátis Community	Resources and Consultations Branch at		
(Pepresented by the MNO Pegien 7)	consultations@metisnation.org with a		
(Represented by the wind Region 7)	copy to David Dusome, MNO Regional		
	Councillor, Region 7 at		
	DavidD@metisnation.org		

\*Collectively known as Saugeen Ojibway Nation

Energy's preliminary assessment has determined, based on currently available information about the nature of the project's anticipated impacts, that for all the communities above, the Saugeen First Nation and Chippewas of Nawash Unceded First Nation (collectively known as the Saugeen Ojibway Nation); and the Georgian Bay Historic Métis Community, consultation is owed at the low end of the consultation spectrum. As such, Energy requires Enbridge to at a minimum notify the community of the project; share information about the project and provide an opportunity for the community to comment. Any issues raised by the community should be discussed and considered in light of the potential to impact rights, with mitigation or other forms of accommodation identified where appropriate. Enbridge's initial notice of the project to the community could include a request to confirm whether the community believes the project will impact their rights and accordingly whether they are interested in being consulted. Should no response be received, Enbridge should continue to provide high-level notifications in accordance with project stage milestones.

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 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 Farrah Ali-Khan, Senior Advisor, Indigenous Energy Policy (<u>farrah.ali-khan@Ontario.ca</u>).

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

Sincerely,

Samir Adkar Date: 2022.12.30 11:32:33

Samir Adkar, Director Energy Networks and Indigenous Policy Branch

c: Ontario Pipeline Coordinating Committee (OPCC)

### APPENDIX: PROCEDURAL CONSULTATION

#### Roles and Responsibilities Delegated to the Proponent

Please refer to the letter above for specific guidance on this project. 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;
  - o changing the timing of proposed activities;
  - o minimizing or altering the site footprint or location of the proposed activity;
  - avoiding impacts to the Aboriginal interest;
  - environmental monitoring; and
  - o 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.

### B.2 Project Contact List

### Appendix B2 Contact List – Agencies Contact List

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Elected Of	ficials										·
Rick	Byers	Elected Officials	Province of Ontario	Bruce-Grey-Owen Sound	Member of Provincial Parliament	100-920 1st Avenue West	Owen Sound	ON	N4K 4K5	519-371-2421	rick.byers@pc.ola.org
Alex	Ruff	Elected Officials	Government of Canada	Bruce-Grey-Owen Sound	Member of Parliament	1101-2nd Avenue East	Owen Sound	ON	N4K 2J1	519-371-1059	alex.ruff@parl.gc.ca
Federal Ag	encies										
Wesley	Plant	Federal Agencies	Environment and Climate Change Canada	Environmental Protection Operations - Ontario	Manager, Environmental Assessment Section	4905 Dufferin Street, 2nd Floor	Toronto	ON	M3H 5T4	416-739-4272	wesley.plant@ec.gc.ca
Anjala	Puvananathan	Federal Agencies	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
Stephanie	Barbeau	Federal Agencies	Crown-Indigenous Relations and Northern Affairs Canada	Treaties and Aboriginal Government	Correspodence and Briefing Coordination Officer	10 Wellington Street	Gatineau	QC	K1A 0H4	819-664-3798	<u>stephanie.barbeau@rcaanc-</u> <u>cirnac.gc.ca</u>
Caroline	Ladanowski	Federal Agencies	Environment and Climate Change Canada	Wildlife Management and Regulatory Affairs	Director, Wildlife Management and Regulatory Affairs	351 Saint-Joseph Boul.	Gatineau	QC	K1A 0H3	613-297-1458	caroline.ladanowski@ec.gc.ca
To whom it	may concern		Transport Canada			4900 Yonge Street	North York	ON	M2N 6A5		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@dfo-mpo.gc.ca
Ontario Pi	peline Coordinati	ion Committee									·
Zora	Crnojacki	Ontario Pipeline Coordinating Committee	Ontario Energy Board	OPCC	Senior Advisor, OPCC Chair	2300 Younge Street, 26th Floor, PO Box 2319	Toronto	ON	M4P 1E4	416-440-8104	<u>zora.crnojacki@oeb.ca</u>
Helma	Geerts	Ontario Pipeline Coordinating Committee	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	Policy Advisor	1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	519-546-7423	helma.geerts@ontario.ca
Joseph	Harvey	Ontario Pipeline Coordinating Committee	Ministry of Citizenship and Multiculturalism	Inclusion and Heritage Division	Heritage Planner	400 University Avenue, 5th Floor	Toronto	ON	M7A 2R9	613-242-3743	joseph.harvey@ontario.ca
Tony	Difabio	Ontario Pipeline Coordinating Committee	Ministry of Transportation	Corridor Management	Team Lead	301 St. Paul Street, 2nd Floor	St. Catharines	ON	L2R 7R4	905-704-2656	tony.difabio@ontario.ca
Gary	Highfield	Ontario Pipeline Coordinating Committee	Technical Standards and Safety Authority	Fuel Safety Program	Engineering Manager	345 Carlingview Drive	Toronto	ON	M9W 6N9	877-682-8772	ghighfield@tssa.org
Keith	Johnston	Ontario Pipeline Coordinating Committee	Ministry of Natural Resources and Forestry	Strategic and Indigenous Policy Branch	Environmental Planning Team Lead (Acting)	300 Water Street, 3rd Floor S	Peterborough	ON	K9J 3C7	705-313-6960	keith.johnston@ontario.ca

1	416-739-4272	wesley.plant@ec.gc.ca
,	416-952-1575	anjala.puvananathan@canada.ca
ļ	819-664-3798	<u>stephanie.barbeau@rcaanc-</u> <u>cirnac.gc.ca</u>
3	613-297-1458	<u>caroline.ladanowski@ec.gc.ca</u>
5		EnviroOnt@tc.gc.ca
	1-855-852- 8320	FisheriesProtection@dfo-mpo.gc.ca

1	416-440-8104	<u>zora.crnojacki@oeb.ca</u>
2	519-546-7423	<u>helma.geerts@ontario.ca</u>
9	613-242-3743	joseph.harvey@ontario.ca
	905-704-2656	tony.difabio@ontario.ca
9	877-682-8772	ghighfield@tssa.org
	705-313-6960	keith.johnston@ontario.ca

# Appendix B2 Contact List – Agencies Contact List

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Erick	Boyd	Ontario Pipeline Coordinating Committee	Ministry of Municipal Affairs and Housing	Community Planning and Development - Western Unit	Manager	659 Exeter Road, 2nd Floor	London	ON	N6E 1L3	226-688-9058	erick.boyd@ontario.ca
Nick	Colella	Ontario Pipeline Coordinating Committee	Ministry of Environment, Conservation and Parks	Environmental Assessment Branch	Manager (Acting)	135 St Clair Avenue West, 1st Floor	Toronto	ON	M4V 1P5	416-358-9934	nick.colella@ontario.ca
Cory	Ostrowka	Ontario Pipeline Coordinating Committee	Infrastructure Ontario	Environmental Management	Environmental Specialist	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 2L5	641-264-3331	cory.ostrowka@infrastructureontar io.ca
Angelune	Des Lauriers	Ontario Pipeline Coordinating Committee	Ministry of Environment, Conservation and Parks	Source Protection Section	Program Analyst	40 St. Clair Avenue West, 14th Floor	Toronto	ON	M4V 1M2	905-521-7705	angelune.deslauriers@ontario.ca
Amy	Gibson	Ontario Pipeline Coordinating Committee	Ministry of Energy	Indigenous Energy Policy	Manager	77 Grenville Street, 6th Floor	Toronto	ON	M7A 1B3	416-315-8641	amy.gibson@ontario.ca
Provincial	Agencies						-				
Andrew	Evers	Provincial Agencies	Ministry of Environment, Conservation and Parks	Environment Assessment Services	Manager (Acting)	135 St. Clair Avenue West	Toronto	ON	M4V 1P5	647-961-4850	andrew.evers@ontario.ca
To whom it	may concern	Provincial Agencies	Ministry of Environment, Conservation and Parks	Species at Risk Branch		40 St. Clair Avenue West, 14th Floor	Toronto, ON	ON	M4V 1M2		SAROntario@ontario.ca
To whom it	may concern	Provincial Agencies	Ministry of Environment, Conservation and Parks	Owen Sound MECP District		101 17th Street East	Owen Sound	ON	N4K 0A5	519-371-2901	-
To whom it	may concern	Provincial Agencies	Ministry of Environment, Conservation and Parks	South West Regional Office				ON			eanotification.swregion@ontario.ca
Mark	Badali	Provincial Agencies	Ministry of Environment, Conservation and Parks	Environmental Assessmental Branch	Environmental Resource Planner & EA Coordinator	135 St. Clair Ave W	Toronto	ON	M4V 1P5	416-457-2155	mark.badali1@ontario.ca
James	Hamilton	Provincial Agencies	Ministry of Citizenship and Multiculturalism	Heritage Planning Unit	Manager	400 University Avenue, 5th Floor	Toronto	ON	M7A 2R9	416-995-8404	james.hamilton@ontario.ca
Karla	Barboza	Provincial Agencies	Ministry of Citizenship and Multiculturalism	Heritage Planning Unit	Team Lead- Heritage	400 University Ave, 5th Floor	Toronto	ON	M7A 2R9	416-660-1027	Karla.Barboza@ontario.ca

# Appendix B2 Contact List – Agencies Contact List

First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Farrah	Ali-Khan	Provincial Agencies	Ministry of Energy	Indigenous Energy Policy	Senior Advisor (Acting)	77 Grenville Street, 6th Floor	Toronto	ON	M7A 1B3	705-313-3658	farrah.ali-khan@ontario.ca
Dawn	Palin Rokosh	Provincial Agencies	Ministry of Infrastructure	Transit Oriented Communities Policy and Delivery Branch	Director (Acting)	777 Bay Street, 4th Floor, Suite 425	Toronto	ON	M5G 2E5	416-277-7291	<u>dawn.palin.rokosh@ontario.ca</u>
Ainsley	Davidson	Provincial Agencies	Ministry of Infrastructure	Developmental Planning	Director, Land Use Planning (Acting)	1 Dundas Street West, Suite 2000	Toronto	ON	M5G 1Z3	647-264-3605	ainsley.davidson@infrastructureont ario.ca
To whom it	may concern	Provincial Agencies	Ministry of Agriculture, Food and Rural Affairs								omafra.eanotices@ontario.ca
Michele	Doncaster	Provincial Agencies	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	Manager	1 Stone Road West, Ontario Government Building 3rd Floor SE	Guelph	ON	N1G 4Y2	519-826-3117	michele.doncaster@ontario.ca
David	Mariott	Provincial Agencies	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	Rural Planner	1 Stone Road West, Ontario Government Building	Guelph	ON	N1G 4Y2	519-766-5990	david.marriott@ontario.ca
Geddes	Mahabir	Provincial Agencies	Ministry of Transportation	Design and Engineering Branch	Manager Highway Operations	659 Exeter Road, 2nd Floor	London	ON	N6E 1L3	519-873-4222	geddes.mahabir@ontario.ca
Sarah	Conway	Provincial Agencies	Ministry of Transportation	Policy, Planning and Agency Relations	Manager (Acting)	777 Bay Street, College Park 30th Floor, Suite 3000	Toronto	ON	M7A 2J8		<u>sarah.conway@ontario.ca</u>
To whom it	may concern	Provincial Agencies	Hydro One Networks Inc.								SecondaryLandUse@HydroOne.co m
Karina	Cerniavskaja	Provincial Agencies	Ministry of Natural Resources and Forestry	Southern Region	District Planner	300 Water St., 4th Flr S	Peterborough	ON	K9J 3C7	519-200-2276	karina.cerniavskaja@ontario.ca
Meaghan	Klassen	Provincial Agencies	Ontario Provincial Police	Research and Program Evaluation Unit	Administrator	777 Memorial Avenue, 1st Floor	Orillia	ON	L3V 7V3	705-329-6256	meaghan.klassen@opp.ca
Governme	nt Review Team	For Aboriginal Inform	ation	·			·			·	
Lise	Chabot	Government Review Team	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
Conservat	ion Authority										·
Erik	Downing	Conservation Authority	Saugeen Conservation Authority	Planning and Regulations	Manager, Environmental Planning and Regulations	1078 Bruce Road 12, Box 150	Formosa	ON	N0G 1W0	519-364-1255 ext. 241	e.downing@svca.on.ca
Darren	Kenny	Conservation Authority	Saugeen Conservation Authority	Planning and Regulations	Regulations Officer	1078 Bruce Road 12, Box 150	Formosa	ON	NOG 1W0	519-364-1255 ext. 224	d.kenny@svca.on.ca

### Appendix B2 Contact List – Municipal Contact List

First Name	Surname	Position	Organization	Department	Address	City/Tow n	Provinc e	Postal Code	Telephone	E-Mail
Kevin	Eccles	Mayor	Municipality of West Grey	Municipal Council	402813 Grey Road 4	Durham	ON	N0G 1R0	519-369-2200 ext. 232	mayor@westgrey.com
Tom	Hutchinson	Deputy Mayor	Municipality of West Grey	Municipal Council	402813 Grey Road 4	Durham	ON	N0G 1R0	226-338-9799	deputymayor@westgrey.c om
Geoff	Aitken	Manager	Municipality of West Grey	Public Works	402813 Grey Road 4	Durham	ON	N0G 1R0		publicworks@westgrey.co m
Kodey	Hewlett	Corporate and Community Initiatives Officer	Municipality of West Grey	Community Services and Recreation	402813 Grey Road 4	Durham	ON	N0G 1R0	519-369-2200 ext. 240	khewlett@westgrey.com
Jamie	Eckenswiller	Clerk	Municipality of West Grey		402813 Grey Road 4	Durham	ON	N0G 1R0	519-369-2200 ext. 229	clerk@westgrey.com
Sue	Paterson	Mayor	Town of Hanover	Municipal Council	341 10th Street	Hanover	ON	N4N 1P5	519-364-2780 ext. 1230	spaterson@hanover.ca
Sherri	Walden	Chief Administrative Officer	Town of Hanover	Municipal Council	341 10th Street	Hanover	ON	N4N 1P5	519-364-2780 ext. 1228	swalden@hanover.ca
Vicki	McDonald	Clerk	Town of Hanover		341 10th Street	Hanover	ON	N4N 1P5	519-364-2780 ext. 1231	vmcdonald@hanover.ca

# Appendix B2 Contact List – Indigenous Contact List

Title	First Name	Surname	First Nation	Position	Phone	Address	City	Provi nce	Postal Code	E-Mail
Chief	Conrad	Ritchie	Saugeen First Nation	Chief	(519) 797-2781	6 Cameron Drive	Southampto n	ON	N0H 2L0	critchie@saugeenfirstnation.ca
Chief	Ogimaakwe Veronica	Smith	Chippewas of Nawash Unceded First Nation	Chief	(519) 378-5409	135 Lakeshore Blvd.	Neyaashiinig miing	ON	N0H 2T0	chief.veronica@nawash.ca
To whom it may concern			Saugeen Ojibway Nation	-		10129 Highway 6	Georgian Bluffs	ON	N0H 2T0	environmentoffice@saugeenojibwa ynation.ca
Mr.	Adam	McLaren	Saugeen Ojibway Nation	Environment Office Support	-	10129 Highway 6	Georgian Bluffs	ON	N0H 2T0	eo.support@saugeenojibwaynation. ca
To whom it may concern			Georgian Bay Historic Métis Community (Represented by the MNO Region 7)	MNO Lands, Resources and Consultations Branch	(613) 798-1488	66 Slater Street - Suite 1100	Ottawa	ON	K1P 5H1	consultations@metisnation.org
MNO Regional Councillor (Region 7)	David	Dusome	Georgian Bay Historic Métis Community (Represented by the MNO Region 7)	MNO Lands, Resources and Consultations Branch	-	66 Slater Street - Suite 1100	Ottawa	ON	K1P 5H1	DavidD@metisnation.org

### Appendix B2 Contact List – Landowner-Stakeholder Contact List

Stakeholder Group	Stakeholder Name(S)	Address	City/Town	Province	Postal Code	E-Mail	Telephone
Surrounding landowner		N/A	Hanover	ON	N4N 3B8	-	
Directly affected landowner / Interested citizen			Neustadt	ON	N0G 2M0	@gmail.com	
Former councillor			Durham	ON		@yahoo.com	
Resident interested in gas conversion / Interested citizen			Neustadt	ON	N0G 2M0	-	
Resident interested in gas conversion / Interested citizen			Neustadt	ON	N0G 2M0	@yahoo.com	
Interested citizen			Neustadt	ON	N0G 2M0	@gmail.com	
Directly affected landowner / Resident interested in gas conversion / Interested citizen			Neustadt	ON	NOG 2M0	@hotmail.com	
Directly affected landowner / Resident interested in gas conversion			Neustadt	ON	N0G 2M0	@wightman.ca	
Business owner / Resident interested in gas conversion / Interested citizen			Neustadt	ON	N0G 2M0	@icloud.com	
Directly affected landowner / Resident interested in natural gas conversion			Neustadt	ON	N0G 2M0	-	
Resident interested in natural gas conversion			Neustadt	ON	N0G 2M0	@wightman.ca	
Directly affected landowner			Neustadt	ON	N0G 2M0	@hotmail.com	
Resident interested in gas conversion			Neustadt	ON	N0G 2M0	@eastlink.ca	
Directly affected homeowner			Neustadt	ON	N0G 2M0	@gmail.com	
Directly affected homeowner			Neustadt	ON	N0G 2M0	@hotmail.com	
Interested citizen			Neustadt	ON	N0G 2M0	@gmail.com	
Directly affected landowner			Neustadt	ON	N0G 2M0	@wightman.ca	-
Resident in natural gas conversion			Neustadt	ON	N0G 2M0	-	
Resident in natural gas conversion			Neustadt	ON	N0G 2M0	@gmail.com	
Resident interested in natural gas conversion			Neustadt	ON	N0G 2M0	@gmail.com	
Business owner			Hanover	ON	N4N 3B8	-	
Directly affected landowner			Neustadt	ON	N0G 2M0	@wightman.ca	
Business owner			Neustadt	ON	N0G 2M0	@wightmen.ca	
Resident interested in natural gas conversion			Neustadt	ON	NOG 2M0	@gmail.com	
Business owners			Hanover	ON	N4N 3B8	@mapleleaf.com / @mapleleaf.com	
Surrounding landowner / Interested citizen		-	-	-	-	@gmail.com	-

### Appendix B2 Contact List – Landowner-Stakeholder Contact List

Stakeholder Group	Stakeholder Name(S)	Address	City/Town	Province	Postal Code	
Surrounding landowners / Residents interested in natural gas conversion			Neustadt	ON	NOG 2M0	
Residents interested in natural gas conversion			Neustadt	ON	NOG 2M0	-
Residents interested in natural gas conversion			Neustadt	ON	N0G 2M0	@
Resident interested in natural gas conversion			Neustadt	ON	NOG 2M0	
Surrounding landowners / Residents interested in natural gas conversion			Neustadt	ON	N0G 2M0	
Resident interested in natural gas conversion			Neustadt	ON	N0G 2M0	
Directly affected landowner			Hanover	ON	N4N 3B8	0
Directly affected landowner / Resident interested in natural gas conversion			Hanover	ON	N4N 3B8	



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

### Enbridge Gas Inc. Notice of Study Commencement, In-person and Virtual Open Houses **Neustadt Community Expansion Project**

Enbridge Gas Inc. (Enbridge) is proposing to construct the Neustadt Community Expansion Project to supply the community of Neustadt with affordable natural gas (the "Project"). The Project is located in the Municipality of West Grey.

The Project will connect to the existing 4" steel pipeline south of Hanover, along 10th Avenue near the intersection of Regional Road 10 and Knappville Road. The distribution portion of the Project includes approximately 12.2 km of polyethylene (PE) natural gas main pipeline ranging from Nominal Pipe Size 2" to 6".

The Project is planned to be located within the existing municipal Right-of-Way (RoW) with the potential for permanent easements, Temporary Working Space (TWS) and laydown areas.

#### The preliminary preferred or alternative

routes and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts and do not represent the final project scope/design that will provide access to natural gas to end-use customers.

As part of the planning process, Enbridge 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 May 2023, after which Enbridge may file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. Construction is currently anticipated to begin in Q2 of 2024.

Consultation and engagement with Indigenous communities, landowners, government agencies, and other interested persons is an integral component of the planning process. For this Project, both In-person and Virtual Open Houses will be held.

#### The In-person Open House will be held at the Neustadt Community Centre (183 Enoch Street, Neustadt, ON N0G 2M0) on March 16, 2023, from 5:00 - 8:00 PM.

The Virtual Open House will be available for two weeks, starting on March 13, 2023, and finishing on March 27, 2023, at https://www.solutions.ca/NeustadtEA/

If you are unable to attend the In-person Open House or log onto the Virtual Open House between March 13 to March 27, hard copies of the Open House materials will be available for in-person viewing at the following locations:

- The Municipality of West Grey, 402813 Grey County Road 4, R.R.2, Durham (Municipal Office)
- West Grey Public Library, Neustadt Branch, 511 Mill Street, Neustadt (Public Library)
- Hanover Public Library, 451 10th Avenue, Hanover (Public Library)

For any guestions or comments regarding the proposed Neustadt Community Expansion Project, please reach out to:

Fernando Gomez-Sanchez Environmental Consultant, Lead Planner Stantec Consulting Ltd. Telephone: (226) 789-4883 Email: NeustadtEA@stantec.com



Or visit the project website at: https://www.enbridgegas.com/Neustadt



#### **DURHAM LEGION HAPPENINGS**

support a veteran. Any Canadian or citizen of an allied nation 18 years of age or older is welcome to join and help the Legion help Canada's veterans.

You can join/renew membership online at legion.ca/join-us or stop by (Thursdays and Fridays) and pick up your application form.

Your membership can help you save with MemberPerks, you can shop online or in store at local and national stores and service providers and save thousands of dollars every year. It's a great way to support the Legion, local businesses and your wallet.

The Clubroom is open Thursdays and Fridays at 4 p.m. Please help maintain COVID-19 safety guidelines as posted at the door upon entry.

#### UPCOMING EVENTS

Legion Community Indoor Walking Club: Every Wednesday from 9:30-11 a.m. Admission by donation. Everyone is welcome.

**Community Exercise Class with** Martina: Every Thursday at 10 a.m. Admission by donation. Evervone is welcome.

Darts: Every Thursday at 7 p.m., only \$2 admission. It has to be one of the cheapest enjoyable nights out around, everyone is welcome - members and non-members

– whether you're a pro or just a beginner.

**Euchre:** Every Friday at 2 p.m. on the hall side. Cost to play is \$2. Everyone is welcome.

Pool Table: Friday Night Pool League will not be playing until further notice.

Grace2, Tragically Hip Tribute **Band:** March 4. Tickets are \$30 per person, available online at eventbrite.com. Still some tickets left.

Meat Roll: March 11 at 3 p.m. and karaoke with Carolyn. Come out for an afternoon of fun.

General Meeting: March 15 at 7:30

Quiz Night: March 16 at 7:30 p.m.

You don't have to be a veteran to Free admission. Winners get bragging rights for the evening. St. Patrick's Dance: March 17, doors open at 7:30 p.m. Admission is \$15 per person. Tickets are available at the bar Thursdays and Fridays and at the Crazy Dollar Store. Music by Carolyn (DJ). A light Irish lunch will be provided. Prizes for best Irish costumes and much more, come out for some great Irish music and lots of fun. **Military Service Recognition Book:** Deadline for submissions is May 15. This is a free publication to honour veterans. both male and female, living and deceased. Please consider submitting information. Visit the link for guidance on how to do so www.on.legion. ca/remembrance/military-service-recognition-book.

Reminder: Pay your dues - \$55 can be paid online or come into the branch Thursdays or Fridays. If those aren't options that suit, you can mail to Royal Canadian Legion, Br. 308, Box 448, Durham, NOG 1R0, Attn.: Laurie Paylor.

**Hall Rentals:** The hall is booking up fast. If you are wanting to book the hall for an event, contact the Durham Legion and leave a message at 519-369-2239.

Volunteers are needed: The people that take care of the Durham Legion, the people behind the bar, the people in the kitchen, are all Durham Legion members and volunteers. In order to be able to open the doors, more volunteers are needed. Volunteers with Smart Serve are needed for behind the bar. Still looking for volunteers to help with bingo. If you would like to help call Sarah at 519-377-6779 or Angela at 519-477-3377.

**Facebook page:** Durham Legion's Facebook page is kept up to date. Please continue to check the page for the latest events.

Don't forget: Everyone 18+ is invited and welcome to become a Legion member. Join todav.

"The gratitude that veterans deserve can't be expressed with words. But still, thank you."

# Durham Legion happenings

You don't have to be a veteran to support a veteran. Any Canadian or citizen of an allied nation 18 years of age or older is welcome to join and help the Legion help Canada's veterans.

You can join/renew membership online at legion.ca/join-us or stop by (Thursdays and Fridays) and pick up your application form.

Your membership can help you save with MemberPerks, you can shop online or in store at local and national stores and service providers and save thousands of dollars every year. It's a great way to support the Legion, local businesses and your wallet.

The Clubroom is open Thursdays and Fridays at 4 p.m. Please help maintain COVID-19 safety guidelines as posted at the door upon entry.

#### UPCOMING EVENTS

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**Buddy Check Coffee:** March 20 at 10 a.m. This month will also feature breakfast. Please let Brian Carr know if you are planning to attend by calling 519-369-4846.

**Military Service Recognition Book:** Deadline for submissions is May 15. This is a free publication to honour veterans, both male and female, living and deceased. Please consider submitting information. Visit the link for guidance on how to do so www.on.legion.ca/remembrance/military-service-recognition-book.

**Reminder:** Pay your dues – \$55 can be paid online or come into the branch Thursdays or Fridays. If those aren't options that suit, you can mail to Royal Canadian Legion, Br. 308, Box 448, Durham, NOG 1R0, Attn.: Laurie Paylor. **Hall Rentals:** The hall is booking up fast. If you are wanting to book the hall for an event, contact the Durham Legion and leave a message at 519-369-2239.

**Volunteers are needed:** The people that take care of the Durham Legion, the people behind the bar, the people in the kitchen, are all Durham Legion members and volunteers. In order to be able to open the doors, more volunteers are needed. Volunteers with Smart Serve are needed for behind the bar. Still looking for volunteers to help with bingo. If you would like to help call Sarah at 519-377-6779 or Angela at 519-477-3377.

**Facebook page:** Durham Legion's Facebook page is kept up to date. Please continue to check the page for the latest events.

**Don't forget:** Everyone 18+ is invited and welcome to become a Legion member. Join today.

"This is our legacy, this is our charge – when our nation needs us, we will be ready." – General Lawson.

### Enbridge Gas Inc. Notice of Study Commencement, In-person and Virtual Open Houses Neustadt Community Expansion Project

Enbridge Gas Inc. (Enbridge) is proposing to construct the Neustadt Community Expansion Project to supply the community of Neustadt with affordable natural gas (the "Project"). The Project is located in the Municipality of West Grey.

The Project will connect to the existing 4" steel pipeline south of Hanover, along 10th Avenue near the intersection of Regional Road 10 and Knappville Road. The distribution portion of the Project includes approximately 12.2 km of polyethylene (PE) natural gas main pipeline ranging from Nominal Pipe Size 2" to 6".

The Project is planned to be located within the existing municipal Right-of-Way (RoW) with the potential for permanent easements, Temporary Working Space (TWS) and laydown areas.



#### The preliminary preferred or alternative

routes and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts and do not represent the final project scope/design that will provide access to natural gas to end-use customers.

As part of the planning process, Enbridge 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 May 2023, after which Enbridge may file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. Construction is currently anticipated to begin in Q2 of 2024.

Consultation and engagement with Indigenous communities, landowners, government agencies, and other interested persons is an integral component of the planning process. For this Project, both In-person and Virtual Open Houses will be held.

The In-person Open House will be held at the Neustadt Community Centre (183 Enoch Street, Neustadt, ON NOG 2M0) on March 16, 2023, from 5:00 – 8:00 PM.

The Virtual Open House will be available for two weeks, starting on March 13, 2023, and finishing on March 27, 2023, at <u>https://www.solutions.ca/NeustadtEA/</u>

If you are unable to attend the In-person Open House or log onto the Virtual Open House between March 13 to March 27, hard copies of the Open House materials will be available for in-person viewing at the following locations:

- The Municipality of West Grey, 402813 Grey County Road 4, R.R.2, Durham (Municipal Office)
- West Grey Public Library, Neustadt Branch, 511 Mill Street, Neustadt (Public Library)
- Hanover Public Library, 451 10th Avenue, Hanover (Public Library)

For any questions or comments regarding the proposed Neustadt Community Expansion Project, please reach out to:

Fernando Gomez-Sanchez Environmental Consultant, Lead Planner Stantec Consulting Ltd. **Telephone:** (226) 789-4883 **Email:** NeustadtEA@stantec.com



THE POST

Or visit the project website at: https://www.enbridgegas.com/Neustadt

**Neustadt Community Expansion Project: Environmental Report Appendix B Consultation** August 23, 2023

### **B.4** Notification Letter Templates and Ad-mail Notice

### Enbridge Gas Inc. Notice of Study Commencement, In-person and Virtual Open Houses Neustadt Community Expansion Project

Enbridge Gas Inc. (Enbridge) is proposing to construct the Neustadt Community Expansion Project to supply the community of Neustadt with affordable natural gas (the "Project"). The Project is located in the Municipality of West Grey.

The Project will connect to the existing 4" steel pipeline south of Hanover, along 10th Avenue near the intersection of Regional Road 10 and Knappville Road. The distribution portion of the Project includes approximately 12.2 km of polyethylene (PE) natural gas main pipeline ranging from Nominal Pipe Size 2" to 6".

The Project is planned to be located within the existing municipal Right-of-Way (RoW) with the potential for permanent easements, Temporary Working Space (TWS) and laydown areas.

The preliminary preferred or alternative



routes and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts and do not represent the final project scope/design that will provide access to natural gas to end-use customers.

As part of the planning process, Enbridge 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 May 2023, after which Enbridge may file an application for the Project to the OEB. The OEB's review and approval is required before the proposed Project can proceed. Construction is currently anticipated to begin in Q2 of 2024.

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# The Virtual Open House will be available for two weeks, starting on March 13, 2023, and finishing on March 27, 2023, at <a href="https://www.solutions.ca/NeustadtEA/">https://www.solutions.ca/NeustadtEA/</a>

If you are unable to attend the In-person Open House or log onto the Virtual Open House between March 13 to March 27, hard copies of the Open House materials will be available for in-person viewing at the following locations:

- The Municipality of West Grey, 402813 Grey County Road 4, R.R.2, Durham (Municipal Office)
- West Grey Public Library, Neustadt Branch, 511 Mill Street, Neustadt (Public Library)
- Hanover Public Library, 451 10th Avenue, Hanover (Public Library)

# For any questions or comments regarding the proposed Neustadt Community Expansion Project, please reach out to:

Fernando Gomez-Sanchez Environmental Consultant, Lead Planner Stantec Consulting Ltd. **Telephone:** (226) 789-4883 **Email:** NeustadtEA@stantec.com



Or visit the project website at: https://www.enbridgegas.com/Neustadt



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



February 27, 2023

**«FIRST\_NAME» «SURNAME», «POSITION»** «ORGANIZATION» «DEPARTMENT» «ADDRESS» «CITYTOWN», «PROVINCE» «POSTAL\_CODE» «EMail»

SENT VIA E-MAIL

Dear «FIRST\_NAME» «SURNAME»

#### Reference: Enbridge Gas Inc. – Neustadt Community Expansion Project, Notice of Study Commencement, and In-person and Virtual Open Houses

Enbridge Gas Inc. (Enbridge) is proposing to construct the Neustadt Community Expansion Project to supply the community of Neustadt with affordable natural gas (the "Project"). The Project is located in the Municipality of West Grey.

The Project will connect to the existing 4" steel pipeline south of Hanover, along 10<sup>th</sup> Avenue near the intersection of Regional Road 10 and Knappville Road. The proposed pipeline will run south along Regional Road 10 from the tie-in point to the intersection with Queen Street, turning west on Queen Street and then south on Mill Street (which becomes Jacob Street) before terminating at the intersection of Jacob Street and William Street. The proposed distribution pipeline will run along Bruce Road 16, Stephana Street, Adam Street, Barbara Street, Enoch Street, Forler Street, Jacob Street, Grey Road 16, and Grey Road 9, all within the boundaries of the community of Neustadt. An alternate route proposes shifting the tie-in point to the crossing of 7<sup>th</sup> Avenue and 2<sup>nd</sup> Street, running south along Durham Road, following Concession 2 South Durham Road until it crosses Side Road 30, following this road south until it crosses Concession Road 10, and running east towards Queen St at the community of Neustadt. For further details, please refer to the attached map.

The distribution portion of the Project includes approximately 12.2 km of polyethylene (PE) natural gas main pipeline ranging from Nominal Pipe Size 2" to 6". Wherever possible, the proposed pipeline will be located within existing road allowances. In addition, approximately 1 km of 6" PE reinforcement pipeline will be required to be installed along 1<sup>st</sup> Street, 14<sup>th</sup> Avenue, and 2<sup>nd</sup> Street in road allowances. Permanent easement and temporary working space and laydown areas may be required outside the boundaries of the road allowance.

As part of the planning process, Enbridge 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)*".

February 27, 2023 «FIRST\_NAME» «SURNAME», «POSITION» Page 2 of 3

### Reference: Enbridge Gas Inc. – Neustadt Community Expansion Project, Notice of Study Commencement, and In-person and Virtual Open Houses

An Environmental Report, summarizing the results of the Environmental Study, will accompany Enbridge's application to the OEB as part of the application requesting leave to construct (LTC). It is anticipated that the Environmental Report for the study will be completed in May 2023, after which Enbridge may file an LTC application. Construction is currently anticipated to begin in Q2 2024.

As an agency with jurisdiction or 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 the routing, construction and/or operation of the proposed Project. Stantec is also seeking the collection of primary and secondary data to help compile an environmental and socio-economic inventory. Enbridge has also retained Stantec to complete a Stage 1 Archaeological Assessment, a Cultural Heritage Checklist, and a Windshield Survey, which will contribute to the environmental and socio-economic inventory presented in the Environmental Report.

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.** 

Consultation with Indigenous communities and engagement with landowners, government agencies, the public, and other interested persons is an integral component of the planning process. For this Project, both In-person and Virtual Open Houses will be held, and print copies of the Open House materials will be made available for an in-person review. Input received will be used to inform the selection of the Preferred Route and to develop site-specific environmental protection or mitigation measures for this Project.

The In-person Open House will be held at the Neustadt Community Centre (183 Enoch Street, Neustadt, ON N0G 2M0) on **March 16, 2023**, from 5:00 – 8:00 PM.

The Virtual Open House will be available for two weeks starting on **March 13, 2023** and finishing on **March 27, 2023** at <u>https://www.solutions.ca/NeustadtEA</u>

Print copies of the Open House materials will be available for in-person review at the following locations:

- The Municipality of West Grey, 402813 Grey County Road 4, R.R.2, Durham (Municipal Office)
- Hanover Public Library, 451 10th Avenue, Hanover (Public Library)
- West Grey Public Library, Neustadt Branch, 511 Mill Street, Neustadt (Public Library)

A questionnaire will be available as part of the In-person and Virtual Open Houses, and you will have the ability to submit comments and/or questions about the proposed Project. In addition, a copy of the Open House storyboards will be available on the Enbridge project website at: <a href="https://www.enbridgegas.com/Neustadt">https://www.enbridgegas.com/Neustadt</a>

We kindly request that any initial input and comments regarding the Project are provided by your agency by April 12, 2023. Please let us know if you are unable to respond by this date but are interested in participating in the consultation process for the Project.

February 27, 2023 «FIRST\_NAME» «SURNAME», «POSITION» Page 3 of 3

Reference: Enbridge Gas Inc. – Neustadt Community Expansion Project, Notice of Study Commencement, and In-person and Virtual Open Houses

If you have questions or concerns regarding the Neustadt Community Expansion Project, please do not hesitate to email the Project team at <u>NeustadtEA@stantec.com</u> or contact the undersigned.

Regards,

**Fernando Gomez-Sanchez** MBA, HBSc. Environmental Consultant, Lead Planner Assessment and Permitting Mobile: (226) 789-4883

Attachments: Figure 1 – Study Area

cc. Greg Asmussen, Environmental Advisor, Enbridge Gas Inc. Rooly Georgopoulos, Senior Advisor, Stantec Consulting Ltd.





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



February 6, 2023

### Attention: «FIRST\_NAME» «SURNAME», «POSITION»

«ORGANIZATION» «DEPARTMENT» «ADDRESS» «CITYTOWN», «PROVINCE» «POSTAL\_CODE» «EMAIL»

Dear «FIRST\_NAME» «SURNAME»,

#### Reference: Enbridge Gas Inc. – Neustadt Community Expansion Project, Notice of Study Commencement, and In-person and Virtual Open Houses

Enbridge Gas Inc. (Enbridge) is proposing to construct the Neustadt Community Expansion Project to supply the community of Neustadt with affordable natural gas (the "Project"). The Project is located in the Municipality of West Grey.

The Project will connect to the existing 4" steel pipeline south of Hanover, along 10<sup>th</sup> Avenue near the intersection of Regional Road 10 and Knappville Road. The proposed pipeline will run south along Regional Road 10 from the tie-in point to the intersection with Queen Street, turning west on Queen Street and then south on Mill Street (which becomes Jacob Street) before terminating at the intersection of Jacob Street and William Street. The proposed distribution pipeline will run along Bruce Road 16, Stephana Street, Adam Street, Barbara Street, Enoch Street, Forler Street, Jacob Street, Grey Road 16, and Grey Road 9, all within the boundaries of the community of Neustadt. An alternate route proposes shifting the tie-in point to the crossing of 7<sup>th</sup> Avenue and 2<sup>nd</sup> Street, running south along Durham Road, following Concession 2 South Durham Road until it crosses Side Road 30, following this road south until it crosses Concession Road 10, and running east towards Queen St at the community of Neustadt. For further details, please refer to the attached map.

The distribution portion of the Project includes approximately 12.2 km of polyethylene (PE) natural gas main pipeline ranging from Nominal Pipe Size 2" to 6". Wherever possible, the proposed pipeline will be located within existing road allowances. In addition, approximately 1 km of 6" PE reinforcement pipeline will be required to be installed along 1<sup>st</sup> Street, 14<sup>th</sup> Avenue, and 2<sup>nd</sup> Street in road allowances.

As part of the planning process, Enbridge 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, will accompany Enbridge's application to the OEB as part of the application requesting leave to construct (LTC). It is anticipated that the Environmental Report for the study will be completed in May 2023, after which Enbridge may file an LTC application. Construction is currently anticipated to begin in Q2 2024.

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 the «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.

February 6, 2023 Chief Conrad Ritchie Page 2 of 3

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

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

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

As a result, both In-person and Virtual Open Houses will be held, and print copies of the Open House materials will be made available for an in-person review. These Open Houses will provide Indigenous communities with an overview of the Project, the OEB process, potential environmental and socioeconomic impacts, along with standard mitigation measures that may be proposed within the Environmental Report.

The In-person Open House will be held at the Neustadt Community Centre (183 Enoch Street, Neustadt, ON NOG 2M0) on **March 16, 2023**, from 5:00 – 8:00 PM.

The Virtual Open House will be available for two weeks starting on March 13, 2023 and finishing on March 27, 2023 at <a href="https://www.solutions.ca/NeustadtEA">https://www.solutions.ca/NeustadtEA</a>

Print copies of the Open House Materials will also be available for in-person review at the following locations:

- The Municipality of West Grey, 402813 Grey County Road 4, R.R.2, Durham (Municipal Office)
- Hanover Public Library, 451 10<sup>th</sup> Avenue, Hanover (Public Library)
- West Grey Public Library, Neustadt Branch, 511 Mill Street, Neustadt (Public Library)

A questionnaire will be available as part of the In-person and Virtual Open Houses, and you will have the ability to submit comments and/or questions about the proposed Project. In addition, a copy of the Open House storyboards will be available on the Enbridge project website at: <u>https://www.enbridgegas.com/Neustadt</u>

Enbridge is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the «ORGANIZATION» to share project-related information, should you wish. If you have any questions, would like to provide feedback, share knowledge, or would be interested in setting up a briefing on this project please feel free to contact me directly. We look forward to engaging with the Saugeen First Nation 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 April 12, 2023. Please let us know if you are unable to respond by this date but are interested in participating in the consultation process for the Project.

If you have questions or concerns regarding the Neustadt Community Expansion Project, please do not hesitate to contact me directly.

Regards,

February 6, 2023 Chief Conrad Ritchie Page 3 of 3

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

#### **Kevin Berube**

Senior Advisor – Community and Indigenous Engagement Enbridge Gas Inc. Phone: (416) 666-6759 Kevin.Berube@enbridge.com

Attachment: Figure 1 – Study Area

c. Greg Asmussen, Environmental Advisor, Enbridge Gas Inc Fernando Gomez-Sanchez, Lead Planner, Stantec Consulting Ltd. Rooly Georgopoulos, Senior Advisor, Stantec Consulting Ltd.

### B.5 Virtual Open House Materials



Presented on behalf of Enbridge Gas Inc.







### Welcome

- 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 Inc. (Enbridge) is committed to involving Indigenous communities, agencies, interest groups, and community members.
- Enbridge will provide up-to-date information in an open, honest, and respectful manner, and will carefully consider your input.
- Enbridge provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario.
- Enbridge is committed to environmental stewardship and conducts its operations in an environmentally responsible manner.



# **Neustadt Community Expansion Project**



- Consult with Indigenous communities, and engage with members of the public, and ٠ 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 ٠ public to review the proposed Project, and to ask any questions and/or provide comments to representatives from Enbridge and Stantec.
- In addition to this Virtual Open House, an In-person Open House will be held at the ٠ Neustadt Community Centre (183 Enoch Street, Neustadt, ON N0G 2M0) on March 16, 2023, from 5:00 - 8:00 PM.
- Print copies of these Open House materials are also available for in-person review at: ٠
  - The Municipality of West Grey, 402813 Grey County Road 4, R.R.2, Durham (Municipal Office) 0
  - Hanover Public Library, 451 10th Avenue, Hanover (Public Library) 0
  - West Grey Public Library, Neustadt Branch, 511 Mill Street, Neustadt (Public Library) 0

# **Virtual Open House**









### **Indigenous Peoples Policy**

Enbridge 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 well-being of Indigenous Peoples. Enbridge recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes for Indigenous communities. Enbridge commits to pursuing sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge conducts business. To achieve this, Enbridge will govern itself by the following principles:

- 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 protect the rights of Indigenous Peoples.
- We engage in forthright and sincere consultation with Indigenous Peoples about Enbridge 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 Inc.'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 employees and contractors, in order to create better relationships between Enbridge and Indigenous communities.

This commitment is a shared responsibility involving Enbridge 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 commits to periodically review this policy so that it remains relevant and respects Indigenous culture and varied traditions.







## **Project Overview**

- The Project will connect to the existing 4" steel pipeline south of Hanover, along 10<sup>th</sup> Ave. near the intersection of Regional Rd. 10 and Knappville Rd.
- The proposed pipeline will run south along Regional Rd. 10 from the tie-in point to the intersection with Queen St., turning west on Queen St. and then south on Mill St. (which becomes Jacob St.) before terminating at the intersection of Jacob St. and William St.
  - An alternate route proposes shifting the tie-in point to the crossing of 7th Ave. and 2nd St., running south along Durham Rd., following Concession 2 South Durham Rd. until it crosses Side Rd. 30, following this road south until it crosses Concession Rd. 10, and running east towards Queen St. at the boundary of the community of Neustadt.
- The proposed distribution pipeline will run along Bruce Rd. 16, Stephana St., Adam St., Barbara St., Enoch St., Forler St., Jacob St., John St., Grey Rd. 16, and Grey Rd. 9, all within the boundaries of the community of Neustadt.
- The distribution portion of the Project includes approximately 13.0 km of polyethylene natural gas main pipeline ranging from Nominal Pipe Size 2" to 6". Wherever possible, the proposed pipeline will be located within existing road allowances. In addition, approximately 1 km of 6" polyethylene reinforcement pipeline will be required to be installed along 1st St., 14th Ave., and 2nd St. within the road allowances.



# **Project Preliminary Preferred and Alternative Routes**

- The preliminary preferred route, the alternate route, and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts.
- This map does not represent the final project scope/design that will provide access to natural gas to end-use customers.







### **Environmental Study Process**

As part of the planning process, Enbridge 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.






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

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

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

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



Additional information about the OEB process can be found at: <u>www.ontarioenergyboard.ca</u>

### **Consultation and Engagement**

- Consultation and engagement are key components of the Environmental Report.
- At the outset of the Project, Enbridge submits a Project Description to the Ministry of Energy; upon review, the Ministry of Energy determines potential impacts on Aboriginal or treaty rights and identifies Indigenous communities that Enbridge will 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 allows for participation in the Project review and development process.
- Input during engagement and consultation will be used to help finalize the pipeline route and mitigation plans for the project.
- Once the LTC application is made to the OEB, any party with an interest in the Project, including members of the public, can participate in the process.





### **Route Selection Process**

- Pipeline routing constraints include natural environmental features, topography, and socio-economic features and landscapes. Opportunities to reduce potential impacts include the ability to follow existing linear infrastructure such as road right-of-ways.
- The proposed Preliminary Preferred and Alternative Routes follow existing linear infrastructure such as existing municipal road right-of-ways and avoid, to the extent possible, existing environmental and socio-economic features.

An interactive map that shows the Preliminary Preferred Route and the Alternative Route can be accessed at: <u>http://www.solutions.ca/NeustadtEA</u>

















### **Environment, Health and Safety Policy**

### **Our Commitment**

- Enbridge is committed to protecting the health and safety of all individuals affected by our activities.
- Enbridge 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 is committed to environmental protection and stewardship, and recognizes 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.







### **Access and Land Requirements**

While most of the pipeline route will be constructed within municipal road allowances, some circumstances requiring access agreements, permanent easement or temporary working space during construction could result in the need for additional land outside of road allowances.

Enbridge has a comprehensive Landowner Relations Program that uses a dedicated Lands Advisor who would:

- Provide direct contact & liaison between landowners and Enbridge.
- 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 the temporary use of property, access agreements, permanent easements, and impacts or remedies to property.



# 

# Neustadt Community Expansion Project Virtual Open House

# **Constructing an Enbridge Pipeline**



- 1. Pre-construction tiling
- 2. Surveying and staking
- 3. Clearing

- Right-of-way topsoil stripping
  - **5.** Front-end grading
  - 6. Stringing pipe
- 7. Field bending pipe
- 8. Lining-up pipe
- 9. Welding process
- X-ray or ultrasonic inspection, weld repair
- **11.** Field coating
- **12.** Digging the trench
- 13. Padding trench bottom14. Final inspection and coating repair
- **15.** Lowering pipe
- 16. Backfilling
- 17. Hydrostatic testing
- **18.** Site restoration and post-construction tiling



### **Constructing an Enbridge Pipeline (Continued)**

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

- **Photo 1:** Shows a typical Enbridge natural gas pipeline. The Neustadt Community Expansion Project will involve the installation of a polyethylene pipeline ranging from 2- to 6-inches and will be smaller than the pipeline shown in Photo 1.
- Photo 2: Represents a typical trench that is created during the installation process.
- **Photo 3:** Represents the process of backfilling a trench.
- **Photo 4:** Represents final clean-up and restoration. Once the pipeline has been installed, clean-up will involve the restoration of the RoW and other work areas. In natural areas, clean-up will involve restoring the environment (i.e., re-seeding of the RoW), and restoring ditch banks and watercourse crossings.









Stantec

# Neustadt Community Expansion Project Virtual Open House

Horizontal Directional Drilling (HDD) Procedures







### **Socio-economic Features**

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

### **Potential Effects**

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

### **Example Mitigation Measures**

- Provide access across the construction area.
- Restrict construction to daylight hours and adhere to applicable noise by-laws.
- 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 representative available prior to and throughout construction.
- Dust control measures.
- Re-vegetation of cleared areas (seeding/planting).







### **Aquatic Resources**

Enbridge 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 ٠ habitat and/or nuisance effects
- Increased erosion, sedimentation, and turbidity ٠ resulting from removal of vegetation.

#### **Example Mitigation Measures**

- Adhere to the existing Enbridge agreement with the DFO.
- 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.





### **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.







### **Cultural Heritage Resources**

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

#### **Potential Effects**

• Damage or destruction of archaeological or historical resources.

#### **Example Mitigation Measures**

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







### **Pipeline Design**

The high-grade polyethylene 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**

Enbridge takes 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.







### **Next Steps**

After this Virtual Open House, Enbridge intends to pursue the following schedule of activities:









### Thank You!

On behalf of the Project team, thank you for listening to the Virtual Open House presentation. Please complete a Questionnaire (located in the Resources Tab) by **April 12, 2023**, for your comments to be considered as part of the Environmental Report.

#### **Fernando Gomez-Sanchez** Environmental Consultant / Lead Planner

Assessment & Permitting

Stantec Consulting Ltd. 300 - 1331 Clyde Avenue Ottawa, ON K2C 3G4 Phone: (226) 789-4883 Email: NeustadtEA@stantec.com

#### Greg Asmussen

Environmental Advisor Lands, Permitting & Environment

Enbridge Gas Inc. 10 Surrey St., Guelph, ON N1H 3P5 Phone: (416) 606-8891 Email: Greg.Asmussen@enbridge.com

For more information about the proposed project, please visit our project website at: <a href="https://www.Enbridgegas.com/Neustadt">https://www.Enbridgegas.com/Neustadt</a>







Slide #	Slide Theme	Script				
1	Title Page	Thank you for viewing the Virtual Open House for the Neustadt Community Expansion Project. This presentation				
	-	has been prepared by Stantec Consulting Ltd. on behalf of Enbridge Gas Inc. (Enbridge).				
2	Welcome/ Our	Welcome				
	Commitment	Welcome to the Virtual Open House for the Neustadt 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 or Stantec representative will respond.				
		If you would like to receive future Project updates, please complete the "Contact Information" section of the questionnaire.				
		<b>Our Commitment</b> Enbridge 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.				
		Enbridge provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario. Enbridge is committed to environmental stewardship and conducts all operations in an environmentally responsible manner.				
3	Purpose of the Open House	The Purpose of the 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 Open House also provides an opportunity for individuals to ask any questions and provide comments to representatives from Enbridge and Stantec.				
		In addition to this Virtual Open House, an In-person Open House will be held at the Neustadt Community Centre (183 Enoch Street, Neustadt, ON) on March 16, 2023, from 5:00 – 8:00 PM.				
		<ul> <li>Print copies of these Open House materials are also available for in-person review at the following locations:</li> <li>The Municipality of West Grey, 402813 Grey County Road 4, R.R.2, Durham (Municipal Office)</li> <li>Hanover Public Library, 451 10th Avenue, Hanover (Public Library)</li> <li>West Grey Public Library, Neustadt Branch, 511 Mill Street, Neustadt (Public Library)</li> </ul>				





Slide Theme	Script
Indigenous Peoples Policy	Enbridge 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 well-being of Indigenous Peoples. Enbridge recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes for Indigenous communities. Enbridge commits to pursuing sustainable relationships with Indigenous Nations in proximity to where Enbridge conducts business. To achieve this, Enbridge will govern itself by the following principles, as seen on this slide.
Project Overview	The Project will connect to the existing 4" steel pipeline south of Hanover, along 10 <sup>th</sup> Avenue near the intersection of Regional Road 10 and Knappville Road. The proposed pipeline will run south along Regional Road 10 from the tie-in point to the intersection with Queen Street, turning west on Queen Street and then south on Mill Street (which becomes Jacob Street) before terminating at the intersection of Jacob Street and William Street. An alternate route proposes shifting the tie-in point to the crossing of 7 <sup>th</sup> Avenue and 2 <sup>nd</sup> Street, running south along Durham Road, following Concession 2 South Durham Road until it crosses Side Road 30, following this road south until it crosses Concession Road 10, and running east towards Queen St at the boundary of the community of Neustadt. The proposed distribution pipeline will run along Bruce Road 16, Stephana Street, Adam Street, Barbara Street, Enoch Street, Forler Street, Jacob Street, John Street, Grey Road 16, and Grey Road 9, all within the boundaries of the community of Neustadt. The distribution portion of the Project includes approximately 13.0 km of polyethylene natural gas main pipeline ranging from Nominal Pipe Size 2" to 6". Wherever possible, the proposed pipeline will be located within existing road allowances. In addition, approximately 1 km of 6" polyethylene reinforcement pipeline will be required to be installed along 1 <sup>st</sup> Street, 14 <sup>th</sup> Avenue, and 2 <sup>nd</sup> Street in Hanover, within the road allowances. Please note that the proposed distribution portion of the project has not been finalized yet and is subject to change as project plane and design programses.
Project Route Map	This slide shows an image of the preliminary preferred route and the alternate route being considered. The preliminary preferred or alternate route and ancillary facilities have been developed for the purposes of an assessment of potential environmental and socioeconomic impacts. This map does not represent the final project scope/design that will provide access to natural gas to end-use customers.
	Slide Theme         Indigenous         Peoples Policy         Project Overview         Project Route         Map





Slide #	Slide Theme	Script
7	Environmental	The environmental study and Environmental Report will be completed according to the Ontario Energy Board's
	Study Process	<ul> <li>Environmental Guidelines.</li> <li>The study will: <ul> <li>Undertake engagement to understand the views of interested and potentially affected parties.</li> <li>Consult with Indigenous communities and key stakeholders to understand interests and potential</li> </ul> </li> </ul>
		<ul> <li>impacts.</li> <li>Be conducted during the earliest phase of the Project.</li> <li>Identify potential impacts of the Project</li> </ul>
		<ul> <li>Develop environmental mitigation and protective measures to avoid or reduce potential impacts; and,</li> <li>Develop an appropriate environmental inspection, monitoring, and follow-up program.</li> </ul>
8	OEB Review and Approval Process	It is anticipated that the Environmental Report for the study will be completed in May 2023, after which Enbridge may file a Leave-to-Construct application. The application to the Ontario Energy Board will include the following information on the Project: <ul> <li>The need for the Project</li> <li>Environmental Report and mitigation measures</li> <li>Project costs and economics</li> <li>Pipeline design and construction</li> <li>Land requirements</li> <li>Consultation with Indigenous Communities</li> </ul> <li>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 the construction of the Project. Additional</li>
		information about the Ontario Energy Board process can be found on their website.





Slide #	Slide Theme	Script
9	Consultation and Engagement	Consultation and engagement are key components 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.
		Enbridge submits a Project Description to the Ministry of Energy, which then uses this Project Description to determine potential impacts on aboriginal and treaty rights and identify indigenous communities that Enbridge must consult with during the entirety of the Project.
		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.
		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.
10	Route Selection Process	Pipeline routing constraints include natural environmental features, topography, and socio-economic features and landscapes. Opportunities to reduce potential impacts include the ability to follow existing linear infrastructure such as road right-of-ways.
		The proposed Preliminary Preferred and Alternative Route follow existing linear infrastructure such as existing municipal road right-of-ways and avoid, to the extent possible, existing environmental and socio-economic features.
		An interactive map that shows the proposed Preliminary Preferred Route and the alternative route can be accessed at: <a href="http://www.solutions.ca/NeustadtEA">www.solutions.ca/NeustadtEA</a>
11	Environmental Study Process	This slide shows the environmental study process that Enbridge follows as part of the Ontario Energy Board's Environmental Guidelines. As seen on the diagram, we are currently approaching the end of Phase 1.





Slide #	Slide Theme	Script
12	Environment, Health and Safety	Enbridge is committed to protecting the health and safety of all individuals affected by our activities.
	Policy	Enbridge 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 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, fostering safe working attitudes, and operating in an environmentally responsible manner.
13	Access and Land Requirements	While most of the pipeline route will be constructed within municipal road allowances, some circumstances requiring access agreements, permanent easement or temporary working space during construction could result in the need for additional land outside of road allowances.
		<ul> <li>Enbridge has a comprehensive Landowner Relations Program that uses a dedicated Lands Advisor who would:</li> <li>Provide direct contact &amp; liaison between landowners and Enbridge.</li> <li>Be available to the landowner during the length of the Project and throughout construction activities.</li> <li>Address the concerns and questions of the landowner.</li> <li>Act as a singular point of contact for all landowners.</li> </ul>
		<ul> <li>Address any landowner questions and any legal matters relating to the temporary use of property, access agreements, permanent easements, and impacts or remedies to property.</li> </ul>
14	Constructing and Enbridge Pipeline	This slide shows an infographic of typical pipeline construction procedures. Please press "pause" to review these procedures. When you are ready to move to the next slide, please press "next".
15	Constructing an Enbridge Pipeline Con'd	The pipeline construction process includes various procedures, as described in the previous slide. Photos 1 through 4 shows a typical Enbridge natural gas pipeline, pipeline trench, and the procedures of backfilling and clean-up and restoration.
16	Horizontal Directional Drilling (HDD) Procedures	This slide shows an infographic of typical Horizontal Directional Drilling (HDD) procedures. Please press "pause" to review these procedures. When you are ready to move to the next slide, please press "next".





Slide #	Slide Theme	Script
17	Socio-economic Features	The Project will mainly be constructed in existing road allowances. As a result of construction, private businesses, agricultural operations, and residential land, as well as Saugeen Valley Conservation Authority land along the pipeline route may be impacted.
		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.
		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.
18	Aquatic Resources	Enbridge 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 on aquatic environments include disruption and alteration to aquatic species and habitat, increased erosion, sedimentation, and turbidity resulting from the removal of vegetation.
		The following are examples of mitigation measures that may be implemented to reduce the potential effects of construction:
		<ul> <li>Adhere to the existing Enbridge agreement with the DFO.</li> <li>Install erosion and sediment control measures.</li> </ul>
		<ul> <li>Obtain all agency permits and approvals.</li> <li>Conform to fish timing window guidelines.</li> </ul>
		<ul> <li>Horizontal Directional Drill and/or trenchless drill within or near environmentally sensitive features.</li> <li>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.</li> </ul>
		<ul> <li>Restore and seed disturbed areas to establish habitat and reduce erosion, it necessary; and</li> <li>Replant vegetation along waterways.</li> </ul>





Slide #	Slide Theme	Script
19	Terrestrial Resources	During construction, natural environmental features such as wildlife habitat and vegetated or wooded areas will need to be crossed. Potential effects include damage to vegetation and wildlife in the construction area.
		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 the conditions outlined will be followed in order to reduce damage and disturbance to vegetation and wildlife.
20	Cultural Heritage Resources	During construction, cultural heritage features such as archaeological finds, buildings, fences, and landscapes may be encountered. Detailed field surveys will be conducted by independent, third-party archaeologists and cultural heritage professionals prior to construction if required.
		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 Citizenship and Multiculturism.
21	Pipeline Design	The high-grade polyethylene pipeline is designed to meet or exceed the regulations of the Canadian Standards Association and the applicable regulations of the Technical Standards & Safety Association.
		Enbridge takes many steps to ensure the safe and 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.





Slide #	Slide Theme	Script
22	Next Steps	Serving hundreds of communities in Ontario, we at Enbridge consider ourselves strong community partners who believe in and are committed to consultation and engagement.
		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.
		After this Virtual Open House is complete, we plan to complete our Environmental Report by May 2023. Once complete, Enbridge will 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 Q1 of 2024. Permitting, pipeline design and construction planning will then take place. We would plan to start construction in Q2 of 2024 and be in service by Q3 of 2024.
23	Thank you	On behalf of the Project team, thank you for listening to the Virtual Open House presentation for the Neustadt Community Expansion Project.
		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 by April 12, 2023, 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.
		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.
		For more information about the proposed project, please visit our project website at the website link shown on this slide.



#### Neustadt Community Expansion Project Open House Questionnaire



Thank you for attending the Neustadt Community Expansion Project 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 **NeustadtEA@stantec.com**. 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 **April 12, 2023**, for feedback 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.





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 Open House meet your needs?

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



Newspaper Advertisement



**Project Notification Letter** 



Social Media Post

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







#### Neustadt Community Expansion Project 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: **NeustadtEA@stantec.com**.

	Contact Information	
Name:		
Address:		
Email:		
Phone:	()	

Any personal information (PI), such as names and addresses, collected by Enbridge Gas Inc. (EGI) on this comment form (or through the Open House process) for this project will be used for the purpose of conducting an environmental assessment and related activities, such as creating an environmental assessment report. EGI may also share PI with its consultant(s) for this purpose and will share PI with the Ontario Energy Board (OEB) and other government agencies as required for the project. In accordance with the Ontario Freedom of Information and Protection of Privacy Act, PI provided to the OEB will not be disclosed on the public record or to any third parties. However, comments, questions and other information collected may be disclosed on the public record provided that any PI will be redacted.

### B.6 Project Correspondence

#### Appendix B6 – Project Correspondence

 Table B6.1:
 Summary of Project Correspondence – Agency

Record	Correspondent	Туре	Date	Subject Matter	Forwarded/ Date	Responder/Date	
Notice o	of Commencement ar	nd In-perso	n and Virtual O	pen Houses information published in local newspapers on M	arch 2, 2023, and	March 9, 2023.	
Notice of	f Commencement ar	nd In-perso	n and Virtual O	pen Houses information sent via email to PM, PMM and Muni	cipalities on Febr	uary 13, 2023, and to	o all remaining contact
1	Caroline Ladanowski Environment and Climate Change Canada (ECCC)	E-mail	March 02, 2023	<ul> <li>Confirmation of receipt.</li> <li>Indicated that she would not be attending the OH and that she shared the NoC with colleagues for their consideration.</li> </ul>	N/A	N/A	N/A
2	DFO - Fish and Fish Habitat Protection Program	E-mail	March 02, 2023	Automated confirmation of receipt.	N/A	N/A	N/A
3	Angelune Des Lauriers Ministry of Environment, Conservation and Parks (MECP) - Source Protection Section	E-mail	March 02, 2023	<ul> <li>Confirmation of receipt.</li> <li>Indicated that for circulation to the Conservation and Source Protection Branch, simply use the email address sourceprotectionscreening@ontario.ca to ensure that notices are seen even when there are staffing changes and vacations.</li> </ul>	N/A	Stantec / March 02, 2023	<ul> <li>Thanked for the co</li> <li>Indicated that the was included in the communication.</li> </ul>
4	MECP - Species at Risk Branch	E-mail	March 02, 2023	<ul> <li>Automated confirmation of receipt.</li> <li>Indicated the email is being reviewed by branch staff to determine the nature of your inquiry or submission.</li> <li>Provided general steps in case ESA permits are triggered.</li> </ul>	N/A	N/A	N/A
5	MECP - South West Regional Office	E-mail	March 02, 2023	<ul> <li>Acknowledgement of receipt.</li> <li>Indicated that a Regional EA Coordinator will contact the Project if additional information is needed.</li> </ul>	N/A	N/A	N/A
6	Stephanie Barbeau Crown-Indigenous Relations and Northern Affairs Canada - Treaties and Aboriginal Government	E-mail	March 02, 2023	<ul> <li>Indicated she was not the right contact for this project.</li> <li>Cc'd executive support (Sylvie Racine) for their support and direction.</li> </ul>	N/A	Stantec / March 10, 2023	Contacted Sylvie F Consultation and F
7	Madeline McFadden Saugeen Conservation Authority - Planning and Regulations	E-mail	March 02, 2023	<ul> <li>Indicated she is the SVCA Regulations Officer who reviews proposals in the Neustadt area.</li> <li>Mentioned her database indicates that a file has not been initiated for the proposed works and has included SVCA's Resource Information Technician (RIT) – Vivian Nolan, a part of this email reply.</li> </ul>	N/A	N/A	N/A



Response
icts on the agency contact list on March 2, 2023.
confirmation. e email address <u>sourceprotectionscreening@ontario.ca</u> the initial Notice of Commencement e-mail
e Racine (Executive Support) by e-mail to identify the d Accommodation unit team lead for the Project.

#### Appendix B6 – Project Correspondence

Table B6.1:	Summary of Project Correspondence –	Agency
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Record	Correspondent	Туре	Date	Subject Matter	Forwarded/ Date	Responder/Date	
8	Connor Gamelin MECP - Conservation and Source Protection Branch	E-mail	March 02, 2023	<ul> <li>Confirmation that the Conservation and Source Protection Branch (CSPB) has received a notification about the Project.</li> <li>Provided comments and indicated that natural gas pipelines are not identified as a threat to drinking water sources under the <i>Clean Water Act, 2006</i>; however, certain activities related to the construction of pipelines may pose a risk to sources of drinking water.</li> <li>Indicated that if the project scope were to change, this should be communicated.</li> </ul>	N/A	Stantec / March 10, 2023	<ul> <li>Thanked their res</li> <li>Indicated that the consideration of Environmental R</li> </ul>
9	Farrah Ali-Khan Ontario Ministry of Energy - Indigenous Energy Policy Unit	E-mail	March 03, 2023	Confirmation of receipt.	N/A	N/A	N/A
10	Ramona Santiago TSSA - Fuel Safety Program	E-mail	March 03, 2023	<ul> <li>Indicated that an application needs to be filled and submitted for the review of this project by TSSA as part of Ontario Pipeline Coordinating Committee.</li> </ul>	Enbridge / March 03, 2023	Stantec / March 03, 2023	<ul> <li>Thanked the TSS</li> <li>Indicated that the team for them to</li> </ul>
11	Vivian Nolan Saugeen Conservation Authority - Planning and Regulations	E-mail	March 03, 2023	• Email indicating general steps to follow when the Project is ready to engage the CA and start an application.	N/A	Stantec / March 03, 2023	<ul> <li>Thanked their res</li> <li>Acknowledged their</li> </ul>
12	Anjala Puvananathan IAAC - Ontario Regional Office	E-mail	March 07, 2023	<ul> <li>Response indicating that based on the information provided, the proposed project does not appear to include physical activities that are described in the regulations.</li> </ul>	N/A	Stantec / March 07, 2023	<ul> <li>Thanked their res</li> <li>Indicated that the</li> </ul>
13	Karina Cerniavskaja MNRF - Southern Region	E-mail	March 09, 2023	<ul> <li>Confirmation of receipt.</li> <li>Noted that they have not completed a screening of natural heritage or other resource values for the Project at this time.</li> <li>Provided information to guide EGI in identifying and assessing natural features and resources as required by applicable policies and legislation, as well as engaging with the Ministry for advice as needed.</li> <li>Indicated that if none of MNRF's interests listed are identified, there is no need to circulate any subsequent notices to their office.</li> </ul>	N/A	N/A	N/A



#### Response

#### esponse.

here were no comments at this point and that f their information will be taken in the development of the Report.

SA for the information.

ne application requirement was shared with the Enbridge proceed with the application.

esponse.

he information provided.

esponse.

ere were no questions at this stage.

#### Appendix B6 – Project Correspondence

Table B6.1:	Summary of Pro	oject Correspondence	e – Agency
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F	Record	Correspondent	Туре	Date	Subject Matter	Forwarded/ Date	Responder/Date	
1	14	ECCC – Wildlife Ontario	E-mail	March 15, 2023	<ul> <li>Received a standard Letter of Advice from the Canadian Wildlife Service Ontario Region</li> <li>Asked for confirmation of receipt by March 22, 2023.</li> <li>Indicated the Project has the potential to result in disturbance of migratory birds nesting at the site; thus, the project must comply with the Migratory Birds Convention Act, 1994 (MBCA) and associated Migratory Birds Regulations (MBR).</li> </ul>	N/A	Stantec / March 15, 2023	<ul> <li>Acknowledged reco</li> <li>Will consider the in the Neustadt Comr</li> </ul>
1	15	Hydro One – Secondary Land Use Department	E-mail	March 15, 2023	<ul> <li>Received Hydro One's response to the NoC.</li> <li>Indicates that from a preliminary assessment, they have existing distribution assets within the study area but are unable to comment on the potential resulting impacts from the available information</li> <li>Asks that Hydro One is consulted during all stages of the project via email to: secondarylanduse@hydroone.com</li> </ul>	N/A	N/A	N/A
1	16	Transport Canada (TC) - Environmental Assessment Program - Ontario Region	E-mail	March 20, 2023	<ul> <li>Indicates that TC does not require receipt of all individual or class EA related notifications.</li> <li>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.</li> </ul>	N/A	N/A	N/A
1	17	Joseph Harvey Ministry of Citizenship and Multiculturalism (MCM) - Heritage Planning Unit	E-mail	March 28, 2023	<ul> <li>Provided the initial Letter of Advice for the Project.</li> <li>Noted that the responsibility for administration of the <i>Ontario Heritage Act</i> and matters related to cultural heritage have been transferred from the Ministry of Tourism, Culture and Sport (MTCS) to the Ministry of Citizenship and Multiculturalism (MCM); individual staff roles and contact information remain unchanged.</li> <li>Please continue to send any notices, report and/or documentation to both Karla Barboza and Joseph Harvey.</li> </ul>	N/A	Stantec / March 29, 2023	<ul> <li>Thanked for the co</li> <li>Indicated that infor incorporating atten guidelines and the</li> </ul>
1	18	Sherri Walden Town of Hanover	E-mail	April 5, 2023	<ul> <li>Indicated future developments in the Project's Study Area for consideration, primarily in the AR.</li> <li>Noted no issues for the Reinforcement portion of the Project.</li> </ul>	Enbridge / April 10, 2023	Stantec / April 10, 2023	<ul> <li>Thanked for the co</li> <li>Indicated that this v</li> </ul>



Response
eceipt of the letter of advice attached.
e information provided to avoid harm to migratory birds at ommunity Expansion Project.
confirmation and the letter of advice.
formation provided in the LOA would be considered, tention to the cultural heritage as per the OEB's he OHA.
confirmation and information provided.
is was shared with Enbridge for their consideration.

#### Appendix B6 – Project Correspondence

Table B6.1:	Summary of Project Correspondence – Agency
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Record	Correspondent	Туре	Date	Subject Matter	Forwarded/ Date	Responder/Date		
19	Mark Badali MECP – Southwest Region Project Review Unit	E-mail	April 12, 2023	<ul> <li>Recommends that the ER for the Project includes enough information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the study area.</li> <li>Recommends that measures be included in the planning and design process to ensure that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the Project.</li> </ul>	N/A	Stantec / April 18, 2023	•	Thanked for the of Indicated that the Environmental Re



#### Response

communication.

e recommendations would be considered as part of the Report.

Appendix B6 – Project Correspondence

Log updated as of May 18, 2023

#### Table B6.2 Enbridge Gas Inc. Indigenous Engagement Log - Neustadt Community Expansion Project

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge") Engagement Activity	Summary of Community Engagement Activ
Chippewa	as of Nawash First Nation (C	NFN)		
1.0	February 9, 2023	Email	An Enbridge representative emailed the CNFN representative to introduce themselves and inform CNFN of the upcoming Project. The Enbridge representative provided a Notice of Commencement ("NOC") and an invitation to participate in a Virtual Open House ("VOH") and in-person open houses that are coming up. The Enbridge representative advised that they will continue to engage and provide updates to CNFN throughout the Project and to reach out should they have any questions.	
1.1	February 9, 2023	Email		A CNFN representative emailed the Enbridge represent advise that they received the NOC and VOH. The CNFN representative advised that CNFN and CSFN work toge manage an Environmental office through Saugeen Ojiby (SON) and that someone would respond through the SO soon.
Chippewa	as of Saugeen First Nation (C	CSFN)		
2.0	February 9, 2023	Email	An Enbridge representative emailed the CSFN representative to introduce themselves and inform CSFN of the upcoming Project. The Enbridge representative provided a NOC and an invitation to participate in a VOH and in-person open houses that are coming up. The Enbridge representative advised that they will continue to engage and provide updates to CSFN throughout the Project and to reach out should they have any questions.	
2.1	May 8, 2023	Email	An Enbridge representative emailed the Saugeen Ojibway Nation (SON) representative to advise that they received an email from the CNFN Chief, who advised that CNFN and CSFN would work together to manage an environmental office through SON. The Enbridge representative confirmed that they would forward the information to the SON Environmental representatives. The Enbridge representative inquired as to whether they had received the Project NOC. The Enbridge representative wanted to confirm that they had the correct representatives and asked to be advised if they had not received the information. The Enbridge representative advised that they would continue to engage and provide updates to CSFN throughout the Project and to reach out should they have any questions.	
2.2	May 9, 2023	Email		A SON representative emailed Enbridge to advise that t see the information and asked if it could be re-sent.
2.3	May 9, 2023	Email	An Enbridge representative emailed they SON representative to re-send the Project NOC and VOH and to advise that the VOH information was originally sent on February 9, 2023. The Enbridge representative advised that they would provide the Environmental Report ("ER") as soon as it has been completed and that CSFN would have the opportunity to comment and provide feedback. The Enbridge representative also advised that if an Archeology Assessment ("AA") is required, they would be advised and offered the opportunity to participate. The Enbridge representative advised that the CSFN representative should reach out if they have any questions.	
2.4	May 18, 2023	Email	An Enbridge representative emailed the SON representative to advise that they were going to be preparing the ER in the next few weeks and to ask if they would be interested in reviewing the ER.	



tivity	Issues or Concerns Raised and Enbridge Responses
	-
entative to IFN ogether to jibway Nation SON office	-
	-
at they did not	-
	-
	-

Appendix B6 – Project Correspondence

Table B6.2         Enbridge Gas Inc. Indigenous Engagement Log - Neustadt Community Expansion	Project
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Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge") Engagement Activity	Summary of Community Engagement Activity	Issues or Concerns Raised and Enbridge Responses
Metis Nat	ion of Ontario (MNO)				
3.0	February 9, 2023	Email	An Enbridge representative emailed the MNO representative to introduce themselves and inform MNO of the upcoming Project. The Enbridge representative provided a NOC and an invitation to participate in a VOH and in-person open houses that are coming up. The Enbridge representative advised that they would continue to engage and provide updates to MNO throughout the Project and to reach out should they have any questions.		-
3.1	May 18, 2023	Email	An Enbridge representative emailed the MNO representative to advise that they are going to be preparing the ER in the next few weeks and to ask if they would be interested in reviewing the ER.		-



Appendix B6 – Project Correspondence

#### Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date/Type	
Notice o	f Commencement and In-person and N	/irtual Open House	s information put	blished in local newspapers on March 2, 2023, and March 9	, 2023.	1
Notice o	f Commencement and In-person and N	/irtual Open House	s mailed via Cana	ada Post unaddressed Ad-mail on March 3, 2023.		
Virtual O	Open House took place online from Ma	rch 13, 2023, to Ma	rch 27, 2023.			
In-perso	n Open House took place at the Neust	adt Community Ce	nter on March 16,	2023 from 5:00-8:00 pm.		1
1	@gmail.com Directly affected landowner /	In-Person Questionnaires	March 16, 2023	• Their view on the project is that it "looks good"	N/A	N/A
	Interested citizen					
2	@yahoo.com Former councillor	In-Person Questionnaires	March 16, 2023	<ul> <li>Their view of the project is that it is "excellent".</li> <li>No potential impacts to their property/business that they would like addressed</li> <li>No specific environmental features that should be considered in the ER; minimizing damage to foliage and forestry during construction</li> </ul>	N/A	N/A
3	Resident interested in gas conversion / Interested citizen	In-Person Questionnaires	March 16, 2023	<ul> <li>Their view on the project is that it is "a great idea".</li> <li>Considers erosion and trees are important environmental features that should be considered in the ER</li> </ul>	N/A	N/A
4	@yahoo.com Resident interested in gas conversion / Interested citizen	In-Person Questionnaires	March 16, 2023	<ul> <li>Their view on the project is that they are pleased it is finally moving forward</li> <li>Dependent on the side of the street the installation occurs, there could be damages to their new cement driveway and the invisible fence for their dog around the property; asked if Enbridge repairs this</li> </ul>	Stantec / April 18, 2023 / E-mail	Tha sub Ind eve lan- inst Ent is r



Response						
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Thanked the landowner for their interest and for submitting a questionnaire Indicated that Enbridge and its contractor would make every effort to minimize disruption or damage to landscape features and hard surfaces during the installation process; if disruption cannot be avoided, Enbridge will repair/restore to pre-existing conditions as is reasonable	_					

Appendix B6 – Project Correspondence

#### Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date/Type	
5	@gmail.com Interested citizen	In-Person Questionnaires	March 16, 2023	<ul> <li>Their view on the project is that hopefully it [natural gas] will be cost-effective to homes</li> <li>Wanted to know more about what the process is for getting natural gas to the actual homes</li> </ul>	Stantec / April 18, 2023 / E-mail	•
6	hotmail.com Directly affected landowner / Resident interested in gas conversion / Interested citizen	In-Person Questionnaires	March 16, 2023	<ul> <li>Their view on the project is that it is wonderful upgrade for Neustadt and the homes on the proposed route</li> <li>No potential impacts to their property/business that they would like addressed; acknowledge that roadside work is to be expected (cost of doing business) and that they would benefit as to property upgrade</li> <li>No additional questions; needs to see if the project will go past their rural property</li> </ul>	N/A	N/A
7	@wightman.ca Directly affected landowner / Resident interested in gas conversion	In-Person Questionnaires	March 16, 2023	<ul> <li>Their view is that it will be good to get the project going and completed.</li> <li>No potential impacts, just hopes Enbridge does a good job repairing any houses that are "dug up" (damaged).</li> </ul>	N/A	N/A
8	@icloud.com Business owner / Resident interested in gas conversion / Interested citizen	In-Person Questionnaires	March 16, 2023	<ul> <li>Considers that the project is definitely needed in the town of Neustadt</li> <li>Considers the potential impact to be positive, as it will definitely help their family and family business to become more cost-effective</li> </ul>	N/A	N/A
9	Directly affected landowner / Resident interested in gas conversion	In-Person Questionnaires	March 16, 2023	<ul> <li>Considers it's about time that natural gas came to Neustadt.</li> </ul>	N/A	N/A



#### Response

Thanked the landowner for their interest and for submitting a questionnaire

Mentioned that Enbridge would install a service line from the gas main to the home; a riser will be installed next to an exterior wall that brings the gas service above grade where a regulator and meter are hung. Indicated that as per Enbridge's service installation policy (April 2023), Enbridge provides and installs, at no cost, one (1) service line per civic address (up to 30m of laid pipe); anything beyond that has no additional cost.
Appendix B6 – Project Correspondence

#### Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date		Subject Matter	Responder/Date/Type	
10	@wightman.ca Resident interested in gas conversion	In-Person Questionnaires	March 16, 2023	•	Supportive of the project Inquired if the project distribution would reach his home [addressed at the OH]	N/A	N/A
11	@hotmail.com Directly affected landowner	In-Person Questionnaires	March 16, 2023	•	Supportive of the project – "make it happen" Considers wildlife as an important environmental component that should be considered in the ER Required "exact dates" for the project, which were detailed during the OH.	N/A	N/A
12	@eastlink.ca Resident interested in gas conversion	In-Person Questionnaires	March 16, 2023	•	Considers the project to be good for the community Mentioned that the difference in cost between propane and natural gas is getting smaller which they will consider before they hook-up to the service	N/A	N/A
13	@gmail.com Directly affected homeowner	In-Person Questionnaires	March 16, 2023	•	Acknowledged that gas is needed to expand the community	N/A	N/A
14	@hotmail.com Directly affected homeowner	In-Person Questionnaires	March 16, 2023	•	Thinks that the project is a great idea Considers that the river and wildlife as important environmental components that should be considered in the ER; asks to protect them Would like to know if she will get service	Stantec / April 18, 2023 / E-mail	•



### Response

Thanked the landowner for their interest and for submitting a questionnaire

Mentioned that Enbridge tries to select a route and distribution that allows them to offer access to reliable, affordable natural gas to as many area residents as possible. Environmental studies are still being conducted which will inform the final route selection, which will continue to be reviewed and validated as the pre-work continues.

Indicated that Enbridge noted their interest in natural gas as part of the consultation process through their participation in the OH and the submission of a questionnaire; Enbridge will be in touch once the studies have concluded when they will be able to respond to their question fully.

Appendix B6 – Project Correspondence

#### Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date/Type	
15	@gmail.com Interested citizen	In-Person Questionnaires	March 16, 2023	<ul> <li>Supportive of the project – "all looks good, the sooner, the better"</li> <li>Would like to know the cost associated with extending the connection from the road to the property and the installation</li> </ul>	Stantec / April 18, 2023 / E-mail	•
16	@wightman.ca Directly affected landowner	In-Person Questionnaires	March 16, 2023	<ul> <li>In favour of the project moving forward</li> <li>Feels that the ER should highlight places for potential leaks and/or sabotage</li> </ul>	N/A	N/A
17	Resident in natural gas conversion	In-Person Questionnaires	March 16, 2023	<ul> <li>Supportive of the project and looking forward to switching to natural gas</li> <li>As per the map, they believe they are not being covered; feels that we need to be included in this project</li> <li>Hopes to get contacted once the distribution is defined to know if they will be getting gas</li> </ul>	N/A	N/A
18	@gmail.com Resident in natural gas conversion	In-Person Questionnaires	March 16, 2023	<ul> <li>Very interested in switching to natural gas 9currently using propane).</li> <li>The preliminary plan appears not to include them (located at the SE end of Forler St.) and indicates that they are still a part of the village</li> <li>Consider it fair and reasonable that the gas pipeline be extended to include them</li> <li>Trusts to get contacted once the distribution is defined to know that they will be getting natural gas</li> </ul>	N/A	N/A
19	@gmail.com Resident interested in natural gas conversion	In-Person Questionnaires	March 16, 2023	<ul> <li>Interested in switching to natural gas</li> <li>Mentioned that the in-person open house gave them an opportunity to voice their request to Enbridge</li> <li>Trusts that they will be included in the natural gas extension</li> </ul>	N/A	N/A



#### Response

Thanked the landowners for their interest and for submitting a questionnaire

Mentioned that Enbridge would install a service line from the gas main to the home; a riser will be installed next to an exterior wall that brings the gas service above grade where a regulator and meter are hung

Indicated that as per Enbridge's service installation policy (April 2023), Enbridge provides and installs, at no cost, one (1) service line per civic address (up to 30m of laid pipe); anything beyond that has an additional cost

Any piping or conversion of existing appliances to natural gas downstream of the meter is the responsibility of the property owner; all downstream work needs to be executed by the property owner's heating/HVAC contractor of choice

Appendix B6 – Project Correspondence

### Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date/Type	
20	Business owne <i>r</i>	In-Person Questionnaires	March 16, 2023	<ul> <li>Interested to know if he will receive gas – owner of RC Automotive (business).</li> <li>Access to gas would help his auto repair business</li> <li>Important that gas is available to all people on route</li> </ul>	N/A N/A	Ά
21	wightman.ca Directly affected landowner	In-Person Questionnaires	March 16, 2023	<ul> <li>Thinks the project is a great thing and will bring businesses/people to the community (a drawing card)</li> <li>Potential impacts are expected during installation but has confidence that this will be short-lived</li> <li>Considers that wildlife and land structures as important to be considered in the ER; hopes these will be put back to the way it was pre-installation</li> <li>All their questions regarding this were answered very well when asked; very impressed of the OH</li> </ul>	N/A N/	Ά
22	@wightmen.ca Business owner	In-Person Questionnaires	March 16, 2023	<ul> <li>Supportive of the project – interesting and does look good; is OK with either route</li> <li>Considers no impacts from the project</li> </ul>	N/A N/A	Ά
23	@gmail.com Resident interested in natural gas conversion	In-Person Questionnaires	March 16, 2023	<ul> <li>Is happy that the project is moving forward</li> <li>Considers the project will increase traffic</li> <li>Considers that crossing under the rivers is important and should be discussed the ER</li> </ul>	N/A N/A	Ά
24	@mapleleaf.com / @mapleleaf.com Business owners	In-Person OH Questionnaire (e-mailed)	March 17, 2023	<ul> <li>No objection to the project</li> <li>Main concern regarding the potential for the natural gas service to be interrupted; he is an existing customer near the preliminary route and is very dependant of natural gas in their processes (Maple Leaf)</li> </ul>	Stantec / March 27, 2023 / E-mail	-

### Response

Thanked the correspondent for viewing the Open House materials and for submitting questions/comments. Noted that:

- After reviewing, Enbridge indicated that their facility should not be affected by any interruption of its gas service.
- Enbridge has taken note of their concerns, and these will be kept in mind if there were any changes to the existing construction plan; in this unlikely case, you would be contacted promptly and advised accordingly should any impacts materialize.

Appendix B6 – Project Correspondence

#### Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date/Type	
25	©gmail.com Surrounding landowner / Interested citizen	VOH Questionnaire (online) + [Submission follow-up e-mail]	March 23, 2023	<ul> <li>Objects to the nature of the project, considering it not aligned to Ontario's net-zero goals; states that we need to stop using fossil fuels</li> <li>Believes the project will contribute to exacerbating climate change, which is already impacting him</li> <li>Description of trenching and remediation appears limited</li> <li>Submitted four questions, wishing to know which Indigenous communities have been consulted, why consultation speaks about "commenting" but not "withholding consent" to the project, the environmental impact in terms of climate change potential, and why the PPR was selected</li> </ul>	Stantec / April 11, 2023	•
26	@wightman.ca Surrounding landowners / Residents interested in natural gas conversion	In-Person OH Questionnaire (mailed)	March 23, 2023	<ul> <li>Their view of the project is that natural gas is needed as a fuel in Neustadt and surrounding areas to help promote growth</li> <li>No potential impacts to their property/business that they would like addressed</li> <li>Fell that the preferred route from Hanover down County Rd. 10 would be shorted and least disruptive route</li> <li>Discussed their need to acquire gas directly with Jamie Coote (Enbridge's Customer Service Representative – Community Expansions)</li> <li>Would like to request that the 2" service lines continue to the end of Forler St. so that it would service the 5 properties and to be notified when a decision of the final distribution is made.</li> </ul>	N/A	N/A



#### Response

Thanked the correspondent for viewing the Open House materials and for submitting questions/comments. Addressed the four questions noting that:

- The Saugeen Ojibway Nation, Chippewas of Nawash and the Metis Nation of Georgina were consulted; discussed Enbridge's Indigenous Peoples Policy
- Currently completing the environmental assessment of the project and public consultation, all in accordance with the OEB Guidelines; the guidelines do not indicate that interested parties hold a right to withhold consent for a project
- Ontario is increasingly focused on moving to lowercarbon energy sources, and Enbridge shares that goal; natural gas plays a critical role in Ontario's energy transition and complements the growth of renewable and low-carbon solutions estimating that over its 40-year lifespan; the project will allow the Town of Neustadt to reduce its greenhouse gas emissions by a minimum of approximately 30% when natural gas is used in comparison to the continued use of the town's existing sources of energy used for heating
- As per the OEB Guidelines, Enbridge identifies all reasonable alternative routes to evaluate as part of the environmental assessment process; the final route has not been selected at this point as environmental studies and public consultation processes continue to understand better the impacts that may occur from the selection of either of the identified routes; the route identified to have the least amount of impacts will be selected

Appendix B6 – Project Correspondence

## Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date/Type	
27	Residents interested in natural gas conversion	In-Person OH Questionnaire (mailed)	March 23, 2023	<ul> <li>Their view of the project is that it should cut their heating costs and is good for the village</li> <li>No potential impacts to their property/business that they would like addressed</li> <li>Feel that the rivers are important environmental features that should be considered in the ER</li> </ul>	N/A	N/A
28	Anonymous submission Resident interested in natural gas conversion	In-Person OH Questionnaire (mailed)	March 23, 2023	<ul> <li>Their view of the project is that they are excited that natural gas will be coming to the village of Neustadt</li> <li>No potential impacts to their property/business that they would like addressed, just understand there will be temporarily a bit more traffic in the route</li> </ul>	N/A	N/A
29	@wightman.ca Residents interested in natural gas conversion	In-Person OH Questionnaire (mailed)	April 06, 2023	Supportive of the Project and looking forward to avoiding wood cutting and piling for heat	N/A	N/A
30	@wightman.ca Resident interested in natural gas conversion	In-Person OH Questionnaire (mailed)	April 06, 2023	<ul> <li>Looking forward to the Project as he has been waiting for several years to convert to natural gas</li> <li>Considers that crossing of the rivers should be considered in the ER</li> <li>Would like to know if the gas line will extend from the mainline to the residential property line and if Enbridge has a list of contractors that can put the line in for the residents</li> </ul>	Stantec / April 18, 2023 / E-mail	



Response
Thanked the landowners for their interest and for submitting a questionnaire
Mentioned that Enbridge would install a service line from he gas main to the home; a riser will be installed next to an exterior wall that brings the gas service above grade where a regulator and meter are hung.
ndicated that per Enbridge's service installation policy April 2023), Enbridge provides and installs, at no cost, one (1) service line per civic address (up to 30m of laid bipe); anything beyond that has an additional cost.
Any piping or conversion of existing appliances to natural gas downstream of the meter is the responsibility of the property owner; all downstream work needs to be executed by the property owner's heating/HVAC contractor of choice.

Appendix B6 – Project Correspondence

#### Table B6.3: Summary of Project Correspondence – In-Person and Virtual Open Houses Exit Questionnaires

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date/Type	
31	@hotmail.com Surrounding landowners / Residents interested in natural gas conversion	In-Person OH Questionnaire (mailed)	April 06, 2023	<ul> <li>Supportive of the Project, indicating it should have been done years ago</li> <li>Would like to know if the distribution will reach their property as it appears outside of the boundary</li> </ul>	Stantec / April 18, 2023 / E-mail	
32	@wightman.ca Resident interested in natural gas conversion	In-Person OH Questionnaire (mailed)	April 12, 2023	Supportive of the project moving forward	N/A	N/A
33	@gmail.com Directly affected landowner	In-Person OH Questionnaire (mailed)	April 18, 2023	Wishes to know when construction will start and when the line will be in service	Stantec / April 18, 2023 / E-mail	•
34	@icloud.com Directly affected landowner / Resident interested in natural gas conversion	In-Person OH Questionnaire (mailed)	April 18, 2023	Wishes to know when gas will reach the community	Stantec / April 18, 2023 / E-mail	



#### Response

Thanked the landowners for their interest and for submitting a questionnaire

Mentioned that Enbridge tries to select a route and distribution that allows them to offer access to reliable, affordable natural gas to as many area residents as possible. Environmental studies are still being conducted, which will inform the final route selection, which will continue to be reviewed and validated as the pre-work continues.

Indicated that Enbridge noted their interest in natural gas as part of the consultation process through their participation in the OH and the submission of a questionnaire; Enbridge will be in touch once the studies have concluded when they will be able to respond to their question fully.

Thanked the landowner for their interest and for submitting a questionnaire

Indicated that Enbridge plans to start construction in Q2 of 2024 and be in service by Q1 of 2025, considering permitting, pipeline design, and construction proceed according to schedule.

Suggested to follow the Project's progress on Enbridge's site: <u>https://www.enbridgegas.com/about-</u> enbridge-gas/projects/neustadt

Thanked the landowners for their interest and for submitting a questionnaire

Indicated that Enbridge plans to start construction in Q2 of 2024 and be in service by Q1 of 2025, considering permitting, pipeline design, and construction proceed according to schedule.

Suggested to follow the Project's progress on Enbridge's site: <u>https://www.enbridgegas.com/about-enbridge-gas/projects/neustadt</u>

Appendix B6 – Project Correspondence

## Table B6.4: Summary of Project Correspondence – Landowner / Residents

Record	Correspondent	Туре	Date	Subject Matter	Responder/Date							
Notice o	lotice of Commencement and In-person and Virtual Open Houses information published in local newspapers on March 2, 2023, and March 9, 2023.											
Notice o	f Commencement and In-per	son and Virtual	Open Houses mail	ed via Canada Post unaddressed Ad-m	ail on March 3, 2023.							
1	wightman.ca)	E-mail	March 6, 2023	Emailed inquiring about how far on Forler Street the line will be run.	Stantec / March 8, 2023	Thanked their communication and indic may need to be revised based on these communications displays our Environm reviewed and validated as our pre-work						
2		Phone	March 14, 2023	Called inquiring the extent of the project within Hanover. Indicated that she was located outside of the project's area but there was gas nearby.	Stantec / March 14, 2023	Indicated that the newspaper publicatio virtual and in-person open houses as ch Additionally, filling out a questionnaire of attending the in-person OH to speak to						



#### Response

cated that the map shows the preliminary routes which e studies' findings. The Project map in our consultation mental Assessment area, which will continue to be k continues.

on was for the Neustadt Project and mentioned both the channels for her to learn more about the project. online to formalize her input was suggested, as well as o an Enbridge Customer representative. **Neustadt Community Expansion Project: Environmental Report Appendix B Consultation** August 23, 2023

# **B.7** OPCC Review Comments and Responses Log

Appendix B7 – OPCC Review Comments and Responses Log

Last Updated: August 21, 2023

## Table B7: Comments from OPPC Members, Agencies, Indigenous Communities, and Municipalities

Correspondence Tracking - Post Environmental Report Submission									
ltem #	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response			
1.0	All OPCC contacts on the Project's Contact List, Indigenous communities, and representatives from select Agency and Municipal contacts	N/A	Email	May 31, 2023	Enbridge emailed a notice of the Environmental Report (ER) and a link to the Report, requesting comments to be submitted by July 12, 2023.	N/A			
1.1	All OPCC contacts on the Project's Contact List, Indigenous communities, and representatives from select Agency and Municipal contacts	N/A	Email	July 5, 2023	Stantec emailed a reminder to review the ER and submit associated comments/questions by July 12, 2023.	N/A			
					OPCC Members				
2.0	Ministry of Transportation (MTO)	Alicia Edwards	Email	June 29, 2023	MTO indicated that the proposed project is outside of MTO's permit control area and therefore, MTO has no requirements.	N/A			
2.1	МТО	Ritchie Murray	Email	June 29, 2023	MTO confirmed that their previous email is considered a "Review Letter" for the purposes of the Environmental Guidelines and to make note of the email from MTO in the ER consultation log.	June 29, 2023			
3.0	Ministry of Natural Resources and Forestry (MNRF)	Catherine Warren	Email	June 13, 2023	Mentioned she had been forwarded the ER for review and requested access to the file.	June 14, 2023			
3.1	MNRF	Catherine Warren	Email	July 7, 2023	MNRF confirmed that they had completed their review of the ER, having reviewed sections of the report related to Ministry interests and how features of MNRF interest may intersect with the Preliminary Preferred Route. MNRF mentioned that they do not have any additional information to share on this proposal at this time.	July 18, 2023			
4.0	Ministry of the Environment, Conservation and Parks (MECP) - Source Protection Branch (SPB)	Michael Halder	Email	July 11, 2023	SPB requested an extension to July 14th for comments on this project related to drinking water source protection as they could not access the file.	July 11, 2023			
4.1	Ministry of the Environment, Conservation and Parks (MECP) - Source Protection Branch (SPB)	Michael Halder	Email	July 19, 2023	<ul> <li>CSPB thanked Stantec for the opportunity to review the project and the review extension, apologizing for submitting comments outside of the deadline.</li> <li>CSPB provided a letter with the following comments:</li> <li>Noted that the risk posed to drinking water sources is not limited to those stemming from construction related</li> </ul>	July 19, 2023 July 31, 2023			

Stantec

Summary of Response
N/A
N/A
N/A
Stantec thanked MTO for their review and confirmation. Indicated that this communication would be logged as part of the consultation.
Stantec thanked her for her email and indicated access had been granted.
Stantec thanked MNRF for their review of the ER and confirmation of no comments.
Stantec provided access to the file and indicated that considering the issues with the access, comments would be accepted until Friday.
Stantec thanked the CSPB for their comments and indicated that they would discuss them with Enbridge to provide an update to the ER and provide a response where needed. Stantec provided Enbridge's comments to the CSPB as summarized below:

Appendix B7 – OPCC Review Comments and Responses Log

ltem #	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
					<ul> <li>activities, but also from activities associated with the operational and maintenance aspects of the proposed natural gas pipeline. These additional activities must also be assessed for any risk they may pose to drinking water sources.</li> <li>Acknowledge that the applicable activities associated with the construction, operation, and/or maintenance of the natural gas pipeline may be governed by the relevant and applicable policies of the Saugeen, Grey Sauble, Northern Bruce Peninsula Source Protection Plan.</li> <li>Section 3.3.3 correctly states that while there are no Wellhead Protection Areas and Intake Protection Zones source protection vulnerable areas that intersect with the study area, there are Significant Groundwater Recharge Areas (SGRAs) that do. While vulnerability scores associated with SGRAs are referenced, such scores are no longer associated with SGRAs as per the updated Technical Rules established under the CWA.</li> <li>Missing that parts of the study areas also intersect with Highly Vulnerable Aquifers (HVAs) with a vulnerability score of 6 - please consult the Source Protection Information Atlas mapping tool to see the various vulnerable areas that intersect with a score of 6.</li> <li>Source protection itself is not a multi-barrier approach as erroneously noted in section 3.3.3, but rather a part of the province's multi-barrier approach to protecting drinking water from source to tap.</li> <li>Table 5.1 in section 5 of the ER identifies trench dewatering and hydrostatic testing as the only potential impacts were also considered and assessed that would be associated with the project's construction, operation, and maintenance. If not, CSPB strongly advises identifying and assessing other impacts.</li> <li>It would be helpful if the potential impacts and mitigation measures described in Table 5.1 were organized by each of the phases of the undertaking (i.e., construction, operation, and maintenance).</li> <li>Identify how sensitive hydrologic features, including current or future sour</li></ul>		<ul> <li>Enbridge acknowledges the CSPB's comments.</li> <li>The operation of natural gas pipelines is not identified as a threat to drinking water sources under the Clean Water Act, 2006. Activities related to the construction and maintenance of pipelines that may potentially pose a risk to sources of drinking water will be managed through the measures outlined in Table 5.1 under Groundwater.</li> <li>The ER will be updated to include: "Both the PPR and the AR study areas intersect with Highly Vulnerable Aquifers (HVAs) with a vulnerability score of 6."</li> <li>The ER will correct this information to: "Source protection is part of Ontario's multibarrier approach to collectively prevent or reduce the contamination of drinking water from source to tap to reduce risks to public health (Government of Canada, 2022)."</li> <li>The operation of natural gas pipelines is not identified as a threat to drinking water sources under the Clean Water Act, 2006. Activities related to the construction and maintenance of pipelines that may potentially pose a risk to sources of drinking water will be managed through the measures outlined in Table 5.1 under Groundwater.</li> <li>Enbridge completes operation and maintenance activities through standard procedures which are in accordance with applicable regulations.</li> <li>As discussed in Table 5.1, a Spill Response Plan will be prepared for the construction of the Project, as well as a private well monitoring program. Operation and maintenance of the pipeline does not pose a significant risk to private water wells and the municipal water sources under the Clean Water Act, 2006. Activities related to the construction and maintenance of the pipeline does not pose a significant risk to private water wells and the municipal water sources under the Clean Water Act, 2006. Activities related to the construction and maintenance of pipelines that may potentially pose a risk to sensitive hydrologic features and sources of drinking water will be managed through</li></ul>

## Correspondence Tracking - Post Environmental Report Submission



Appendix B7 – OPCC Review Comments and Responses Log

ltem #	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response
5.0	Ministry of Energy (MOE) – Indigenous Energy Policy (IEP)	Farrah Ali-Khan	Email	July 11, 2023	IEP completed its review of the section(s) that pertain to Indigenous Consultation in the draft ER and had no questions or comments to note.	July 11, 2023
6.0	Ministry of Citizenship and Multiculturalism (MCM)	Joseph Harvey	Email	July 12, 2023	<ul> <li>MCM provided a letter with the following comments and observations:</li> <li><u>Archaeological Resources</u></li> <li>MCM acknowledged that a Stage 1 archaeological assessment (under Project Information Form P422-0035-2023 dated May 12, 2023) was undertaken by Stantec Consulting Ltd. and is included in Appendix E. However, Stage 1 AA is under review by MCM.</li> <li>MCM noted that archaeological concerns have not been addressed until reports have been entered into the Ontario Public Register of Archaeological Reports, where those reports recommend that: <ol> <li>the archaeological assessment of the project area is complete and</li> <li>all archaeological sites identified by the assessment are either of no further cultural heritage value or interest (as per Section 48(3) of the Ontario Heritage Act) or that mitigation of impacts has been accomplished through an avoidance and protection strategy.</li> </ol> </li> <li>MCM noted that approval authorities (such as the OEB, MECP or a municipality) typically wait to receive the ministry's review letter for an archaeological assessment report before issuing a decision on the application as it can be used, for example, to document that due diligence has been undertaken.</li> <li>Built Heritage Resources and Cultural Heritage Landscapes</li> <li>A Cultural Heritage Screening Report (dated May 2, 2023, by Stantec Consulting Ltd. included in Appendix F.2) was undertaken for the study area. The Report indicates there is potential for heritage properties within the study area, therefore a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHRECPIA) shall be undertaken for the entire study area during the planning phase and summarized in the ER.</li> <li>Enbridge should make every attempt to complete a CHRECPIA for the study area during the planning the set by the taken to complete and infalize the assessment should be</li> </ul>	July 13, 2023 July 31, 2023

#### **Correspondence Tracking - Post Environmental Report Submission**

## Summary of Response

Stantec thanked the IEP for their prompt response and confirmation of review.

Stantec thanked the MCM for their comments. Indicated that they will discuss them with Enbridge to provide a response and incorporate applicable changes to the ER as part of the revision process. Stantec provided Enbridge's comments to the MCM as summarized below:

- Enbridge acknowledges the MCM's comments and will update the ER with the suggested text in some sections.
- As noted, and committed in the ER within Table 5.1, under line item 'Built Heritage Resources and Cultural Heritage Landscapes, prior to the construction, a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHRECPIA) will be undertaken and submitted to the MCM for their review and comment. The CHRECPIA will contain mitigation measures for potential impacts if required.
- When able, Enbridge will attempt to complete the Cultural Heritage Report during the planning phase.
- Enbridge engages with Indigenous communities and interested parties throughout the proposed project development process and encourages cultural heritage information to be provided early in our engagement so we can consider it in the course of the project development, including the environmental assessment. Enbridge provides the environmental report to potentially impacted Indigenous communities and interested parties for review and comment, and the Cultural Heritage Report is provided to Indigenous communities upon request.

Appendix B7 – OPCC Review Comments and Responses Log

Item #	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response
					MCM recommended that, at a minimum, the Existing Condition section of the Cultural Heritage Report be completed during the planning phase.	
					• 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 the MCM suggested that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them.	
					<ul> <li>Indicated that the Cultural Heritage Report would be prepared by a qualified person(s) and submitted for review and comment to MCM, Indigenous communities, and other interested groups and organizations.</li> <li>In addition, the MCM suggested some text revisions in the ER</li> </ul>	
					that Enbridge should consider.	
6.1	МСМ	Joseph Harvey	Email	August 14, 2023	MCM thanked Stantec for providing the MCM with a response to their comments, and indicated they would appreciate receiving a copy of the updated ER for their records once it is ready.	August 21, 2023
7.0	Ontario Ministry of Agriculture, Food and	Jocelyn Beatty	Email	July 13, 2023	OMAFRA completed a scoped review of the ER and appreciated the opportunity.	July 13, 2023
	Rural Affairs (OMAFRA)				Consideration was given to our mandate of protecting agricultural land and uses. OMAFRA staff generally do not have concerns with the proposed project, as our understanding is that the intent is to site the new pipeline within existing municipal rights-of-way. OMAFRA understands that there is the potential need for easements, as well as temporary working spaces, along the proposed route to support the construction, and ongoing functioning, of the proposed project.	July 31, 2023
					The ER references soil capability for agriculture, agricultural tile drainage, and soybean cyst nematode mitigation. OMAFRA appreciates the mitigation measures that have been referenced regarding soil capability.	
					Where temporary workspaces and easements may impact prime agricultural lands, OMAFRA suggests that the project team broaden the scope of considerations to avoid agricultural lands in production where possible.	
					As part of the project team's consultation with impacted landowners and farm operators, there may be opportunities to avoid further and/or mitigate impacts to agriculture (e.g., siting staging areas on lower priority soils or areas that are not in production, as well as ensuring proper ingress and egress for farm equipment).	

## Correspondence Tracking - Post Environmental Report Submission



Summary of Response
Stantec thanked the MCM and indicated that the ER will be shared once finalized and filed with the OEB.
<ul> <li>Stantec thanked OMAFRA for sharing their comments and indicated that they would be considered as part of the ER review process.</li> <li>Stantec provided Enbridge's comments to OMAFRA as summarized below:</li> <li>Enbridge acknowledges OMAFRA's comments.</li> <li>The pipeline installation is planned to occur within the existing road allowance right of way, and as such, the pipeline installation is not anticipated to impact prime agricultural lands. In addition, during the detailed design phase of the Project, the Project team will examine locations for temporary works spaces that minimize or completely avoid works on prime agricultural lands.</li> <li>Enbridge will work with impacted landowners and farm operators to ensure proper ingress and egress for farm equipment. Please refer to the previous response.</li> </ul>

Appendix B7 – OPCC Review Comments and Responses Log

ltem #	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response
					Agencies	
8.0	Saugeen Valley Conservation Authority	Madeline McFadden	Email	July 12, 2023	SVCA thanked Enbridge for the opportunity to review and comment on the ER.	July 13, 2023
	(SVCA)				Indicated that their interest is two-fold, given 1) the Project's proximity to several SVCA-owned (or easement areas) infrastructure projects within the community of Neustadt, and 2) the Project is proposed within SVCA's Regulated Area, associated with Ontario Regulation 169/06, as amended.	
					SVCA Water Resources Comments	
					SVCA requested that Enbridge circulate draft plans showing trenching/drilling locations and depths when available, as the proposed work may impact numerous SVCA water and erosion control structures within the Village of Neustadt. The extent of this impact will only be known once plans are provided, and separate permission from the SVCA's Water Resources department may be required.	July 31, 2023
					SVCA Regulation Comments	
					• SVCA mentioned that a permit would be required for works proposed within the regulated area.	
					• A site inspection must be conducted once the PR is confirmed and the inspection fee is paid.	
					• Plans should provide measurements from known points to where the pipeline will be installed (e.g., from the centerline of the road, shoulder of the road, etc.)	
					• The plans should clearly identify what sections of the PR will be trenched and what sections will be HDD.	
					• Inquired if the appropriate Drainage Superintendent(s) have been contacted regarding the Municipal Drains encountered along the PPR, PR, and AR.	
					• SVCA will require submission of written permission from landowners (e.g., Municipality, County, private landowners, etc.) for works to be completed on lands not owned by Enbridge.	
					Building demolition within SVCA Regulated Area will likely require a permit from SVCA.	
					• Any excess soil, such as bedrock discussed on page 94 of the ER, construction debris, or vegetation debris shall be hauled off-site and deposited outside of the SVCA Regulated Area.	
					• Consider that fiber optic cable has been/is being installed, by Wightman Telecom, throughout Neustadt above and below watercourse crossings and structures.	
					• SVCA's in-water works timing window is from June 15th to September 15th.	

**Correspondence Tracking - Post Environmental Report Submission** 



### Summary of Response

Stantec thanked the SVCA's for their comments. Indicated that these will be shared with Enbridge for their review and consideration, and that the ER will be updated accordingly.

Mentioned that applicable associated documentation discussed will be prepared and submitted as the Project progresses.

Stantec provided Enbridge's comments to the SVCA as summarized below:

- Enbridge acknowledges the SVCA's comments.
- Once the Project plans are complete, Enbridge will engage the SVCA to secure a permit for works in the regulated areas.
- Enbridge will pay the inspection fee and coordinate a site visit with the SVCA.
- Plans will provide the information requested by the SVCA.
- Plans will provide the information requested by the SVCA.
- West Grey's Manager of Public Works was contacted as part of the ER's consultation process, attended the In-person Open House for the Project, and no comments or concerns were raised.
- Enbridge will seek written municipal consent for all Project works completed on municipal lands within SVCA regulated areas.
- No demolition activities are planned for the Project.
- Enbridge will implement its waste management protocol during the course of the Project, which will avoid any deposits in SVCA regulated areas.
- Prior to the construction and during detailed design, utilities and other services will be marked and noted on the drawings.
- At this stage, the Project does not contemplate any in-water works; all watercourse crossings are planned to be crossed using the Horizontal Directional Drilling (HDD) technique. Should any in-water works be required, Enbridge will abide by the SVCA's in-water works timing window from June 15 to September 15.

Appendix B7 – OPCC Review Comments and Responses Log

Item #	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
					• Drilling works under a watercourse shall be offset from the channel bed by a depth of at least 1.5 meters.		The drilling criterion will be added to the design drawings.
					<ul> <li>SVCA regulates closed tile drains as watercourses.</li> <li>All works within the watercourse are to be done "in the dry" by means of temporary diversion using coffer dams.</li> </ul>		• Enbridge will seek permit approval from SVCA for any works within regulated areas, including areas of closed tile drains.
					SVCA's policies would not support non-isolated trench and/or wet open cut installation methods.		The Project does not contemplate any in-water works; all watercourse crossings are planned to be crossed using the HDD technique. Should any
					<ul> <li>An erosion and sediment control, dewatering, and frac- out plan, will be required for a complete Application.</li> <li>Please submit the required plans to SVCA for review.</li> </ul>		in-water works be required, these will be done 'in the dry'.
					Provide SVCA with a copy of the Environmental Protection Plan.		Enbridge will include any applicable information from the Environmental Protection Plan for the Project within the SVCA permitting package to be
					Opdate the Conservation Authority Contact List with Madeline McFadden and Elise MacLeod and remove Darren Kenny.		obtained prior to construction.
8.1	SVCA	Madeline McFadden	Email	August 15, 2023	SVCA thanked Stantec for providing a response to their comments, and indicated that:	August 21, 2023	Stantec thanked the SVCA for their comments and indicated that:
					<ul> <li>The drainage superintendent for West Grey is Stephen Cobean (<u>scobean@cobideeng.com</u>)</li> <li>Noted that Horizontal Directional Drilling (HDD) is only permitted above or below watercourses between June</li> </ul>		• Enbridge will engage the drainage superintendent once design drawings are prepared to confirm any permitting or approval requirements from their office.
					<sup>,</sup> 15th and September 15 <sup>th</sup> (SVCA's in-water works timing window).		• Enbridge acknowledges the SVCA comment and will consider the timing window during HDD watercourse crossings.
				1	Indigenous Communities	<b></b>	
9.0	Métis Nation of Ontario (MNO)	Ethan Roy	Email	July 11, 2023	Thank you for circulating the ER and the offer to review and comment with the Georgian Bay Traditional Territory Consultation Committee (GBTTCC), the Regional Consultation Committee (RCC) for Métis Nation of Ontario Region 7, an Aboriginal rights-bearing community including the Georgian Bay Métis Council, the Great Lakes Métis Council, Barrie South-Simcoe Métis Council and the Moon River Métis Council.	July 11, 2023	Stantec thanked the RCC for promptly sharing the MNO's position regarding the Project.
					The RCC expressed that based on the information provided, the MNO does not believe the project has the potential to adversely impact Métis rights, interest, and way of life and have raised no concerns with the project proceeding.		
	1	L	1	1	Municipalities	L	
10.0	Municipality of West Grey	Mayor Kevin Eccles	Email	May 31, 2023	Mentioned there was an error in the description of the road names, mentioning "Bruce County Rd 16". Asked to verify the roads listed as he continued doing his due diligence on the project.	June 1, 2023	Stantec thanked Mayor Eccles for pointing out the road discrepancy and indicated that this will be addressed as part of the review process. However, Stantec indicated that the figures in Appendices A and C represent the correct distribution of the proposed Project and studies performed.

#### Correspondence Tracking - Post Environmental Report Submission



Appendix B7 – OPCC Review Comments and Responses Log

Item #	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response
10.1	Municipality of West Grey	Laura Johnston	Email	July 6, 2023	<ul> <li>Requested the following updates to the Contact List:</li> <li>Remove Kodey as he is responsible for community services/facility booking.</li> <li>Add Jamie Eckenswiller, our municipal clerk: clerk@westgrey.com</li> <li>Add Laura Johnston, the chief administrative officer: ljohnston@westgrey.com</li> <li>Add Karl Schipprack, the director of infrastructure and development (and municipal chief building official): cbo@westgrey.com</li> </ul>	July 6, 2023
10.2	Municipality of West Grey	Mayor Kevin Eccles	Email	July 6, 2023	<ul> <li>Thanked Stantec for the reminder to make comments on this very important topic and project in their Municipality.</li> <li>In line with item 10.0 above, mentioned that the roads listed were not accurate as follows:</li> <li>Grey Rd 16 and Bruce Rd 16 - neither shows up on any of the maps provided, and to his knowledge, Bruce County does not have a road designated with the number 16, whereas Grey County Rd 16 runs east/west from the county line through Keady to highway 6/10 north of Chatsworth.</li> <li>Conc.10 West Grey does not run remotely close to Neustadt, as Conc. 10 East is a road in South Bruce, but it stops at the county line and does not exist in Neustadt.</li> <li>Additionally, he mentioned that in the comments and question section on pages 214, 216, and 218, comment #5 states that according to a policy update on April 2023 that a line will be installed to the house and left above ground level for a meter and valve to connect, further that anything beyond 30 meters will be NO additional cost. However, items #15 and #30 respondents get the same answer to their question, except it states that anything beyond 30 meters will be an additional cost. He assumes the latter is correct, but it should be clarified in case it gets challenged by the landowner.</li> <li>He highlighted that he fully supports the project and hopes it moves forward in an orderly fashion.</li> </ul>	July 6, 2023

### **Correspondence Tracking - Post Environmental Report Submission**



### Summary of Response

Stantec thanked Laura for reaching out, apologized for the omission, and indicated they would update the Contact List accordingly. Additionally, Stantec indicated and provided access to the ER to the new contacts for their review.

Stantec thanked the mayor for his comments which will be addressed in the review of the ER.

Mentioned that, as previously discussed, the road discrepancies in the executive summary and introduction will be revised so that these align with the Project's study area depicted in the figures (appended) and the actual assessment conducted.

In relation to Comment #5 in the Consultation Log, this was determined as a typo in the ER – the response should indicate "at AN additional cost" instead of "at NO additional cost". This was supported with evidence from Stantec's response to the landowner (name redacted), which indicated that the correct message was provided supporting this typo, which in turn, will be corrected. **Neustadt Community Expansion Project: Environmental Report Appendix C Existing Conditions Figures** August 23, 2023

# Appendix C Existing Conditions Figures













Neustadt Community Expansion Project: Environmental Report Appendix D Significant Wildlife Habitat Assessment for the Neustadt Community Expansion Project (Ecoregion 6E) August 23, 2023

# Appendix D Significant Wildlife Habitat Assessment for the Neustadt Community Expansion Project (Ecoregion 6E)

Criteria	Results of Desktop and Field Habitat Assessment – Preferred Proposed Route (PPR) and distribution study areas	Results of Desktop and Field Habitat Assessment – Alternative Route (AR) and reinforcement study areas
RATION AREAS		
Fields with evidence of annual spring flooding from meltwater or runoff; aquatic habitats such as ponds, marshes, lakes, bays, and watercourses used during migration, including large marshy wetlands.	Absent. Ponds, marshes, and lakes are not present in the Study Area.	Absent. Ponds, marshes, lakes, and flooded fields are not present in the Study Area.
Beaches and un-vegetated shorelines of lakes, rivers, and wetlands.	Absent. Lakes, beaches are not present in the Study Area. Shorelines of Saugeen River are heavily vegetated.	Absent. Lakes, beaches are not present in the Study Area. Shorelines of Saugeen River are heavily vegetated.
Combination of fields that are idle/fallow or lightly grazed (>15 ha) with adjacent woodland (total >20 ha).	Absent. Large woodlands are absent with open habitats predominantly intensive agriculture.	Absent. Large woodlots present but open habitats are predominantly intensive agriculture.
Hibernacula may be found in caves, mine shafts, underground foundations and karsts.	Absent. Caves, mine shafts, and karsts absent.	Absent. Caves, mine shafts, and karsts absent.
Maternity colonies considered significant wildlife habitat are found in forested ecosites.	Candidate SWH potentially present in forested areas.	Candidate SWH potentially present in forested areas.
Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Water has to be deep enough not to freeze and have soft mud substrate.	Candidate SWH potentially present in permanent ponds.	Candidate SWH potentially present in permanent ponds.
Rock piles or slopes, stone fences, crumbling foundations.	<b>Candidate SWH potentially present.</b> Agricultural fields and forest tracts likely have rock piles, fences and/or crumbling foundations.	<b>Candidate SWH potentially present.</b> Agricultural fields and forest tracts likely have rock piles, fences and/or crumbling foundations.
Eroding banks, sandy hills, steep slopes, rock faces or piles.	Absent. No banks or cliffs noted during field surveys.	Suitable banks noted in an active gravel pit during field surveys. However, SWH for bank and cliff breeding habitat does not include licensed/permitted Mineral Aggregate
	Criteria         RATION AREAS         Fields with evidence of annual spring flooding from meltwater or runoff; aquatic habitats such as ponds, marshes, lakes, bays, and watercourses used during migration, including large marshy wetlands.         Beaches and un-vegetated shorelines of lakes, rivers, and wetlands.         Combination of fields that are idle/fallow or lightly grazed (>15 ha) with adjacent woodland (total >20 ha).         Hibernacula may be found in caves, mine shafts, underground foundations and karsts.         Maternity colonies considered significant wildlife habitat are found in forested ecosites.         Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Water has to be deep enough not to freeze and have soft mud substrate.         Rock piles or slopes, stone fences, crumbling foundations.         Eroding banks, sandy hills, steep slopes, rock faces or piles.	CriteriaResults of Desktop and Field Habitat Assessment – Preferred Proposed Route (PPR) and distribution study areasFATION AREASFields with evidence of annual spring flooding from metiwater or runoff, aquatic habitats such as ponds, marshes, lakes, bays, and watercourses used during migration, including large marshy wetlands.Absent. Ponds, marshes, and lakes are not present in the Study Area.Beaches and un-vegetated shorelines of lakes, rivers, and wetlands.Absent. Lakes, beaches are not present in the Study Area. Shorelines of Saugeen River are heavily vegetated.Combination of fields that are idle/fallow or lightly grazed (>15 ha) with adjacent woodland (total >20 ha).Absent. Caves, mine shafts, and karsts absent.Hibernacula may be found in caves, mine shafts, underground foundations and karsts.Absent. Caves, mine shafts, and karsts absent.Over-wintering sites are permanent water bodies, large wetlands, and bogs or fens with adequate dissolved oxygen. Water has to be deep enough not to freeze and have soft mud substrate.Candidate SWH potentially present in permanent ponds.Rock piles or slopes, stone fences, crumbling foundations.Candidate SWH potentially present, Agricultural fields and forest tracts likely have rock piles, fences and/or crumbling foundations.Froding banks, sandy hills, steep slopes, rock faces or piles.Absent. No banks or cliffs noted during field surveys.

# Table D-1: Wildlife Habitat Assessment for the Neustadt Community Expansion Project (Ecoregion 6E)

# Appendix D: Terrestrial Habitat

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment – Preferred Proposed Route (PPR) and distribution study areas	Results of Desktop and Field Habitat Assessment – Alternative Route (AR) and reinforcement study areas
Colonial-Nesting Bird Breeding Habitat	Dead trees in large marshes and lakes, flooded timber, and shrubs, with nests of	Candidate SWH identified during the background review of the NHIC.	Candidate SWH identified during the background review of the NHIC.
(Tree/Shrubs)	colonially nesting heron species.	Not observed during roadside surveys conducted in 2022.	Not observed during roadside surveys conducted in 2023.
Colonial-Nesting Bird Breeding Habitat (Ground)	Rock islands and peninsulas in a lake or large river.	Absent. Not observed during roadside surveys conducted in 2022.	Absent. Not observed during roadside surveys conducted in 2023.
Migratory Butterfly Stopover Areas	Meadows and forests that are a minimum of 10 ha and are located within 5 km of Lake Erie.	Absent. Study Area is not within 5 km of Lake Erie.	Absent. Study Area is not within 5 km of Lake Erie.
Landbird Migratory Stopover Areas	Woodlands of a minimum size located within 5 km of Lake Ontario.	Absent. Study Area is not within 5 km of Lake Erie.	Absent. Study Area is not within 5 km of Lake Erie.
Deer Yarding or Winter Congregation Areas	Deer winter congregation's areas are mapped by MNRF and species use surveys are not required.	Absent.	Absent.
RARE VEGETATION C	OMMUNITIES		
Sand Barren, Alvar, Cliffs and Talus Slopes	Sand barren, Alvar, Cliff and Talus ELC Community Classes, and other areas of exposed bed rock and patchy soil development, near vertical exposed bedrock and slopes of rock rubble.	Absent.	Absent.
Old-growth Forest	Relatively undisturbed, structurally complex; dominant trees >100 years' old.	Absent.	Absent.
Tallgrass Prairie and Savannah	Open canopy habitats (tree cover < 60%) dominated by prairie species.	Absent.	Absent.
Other Rare Vegetation Communities	Provincially Rare S1, S2 and S3 vegetation communities listed by the NHIC.	Absent.	Absent.
SPECIALIZED HABITA	T FOR WILDLIFE		
Waterfowl Nesting Area	Upland habitats adjacent to wetlands (within 120 m).	Absent. Upland habitat adjacent to wetlands were not observed in the Study Area.	Absent. Upland habitat adjacent to wetlands were not observed in the Study Area.

# Appendix D: Terrestrial Habitat

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment – Preferred Proposed Route (PPR) and distribution study areas	Results of Desktop and Field Habitat Assessment – Alternative Route (AR) and reinforcement study areas
Bald Eagle and Osprey nesting, Foraging, and Perching Habitat	Treed communities adjacent to rivers, lakes, ponds, and other wetlands with stick nests of Bald Eagle or Osprey.	Absent. eBird identified observations east of the Study Area. Nests not documented during the site visit in 2022.	Absent. Suitable treed communities adjacent to rivers, lakes, and ponds not present. Nests not documented during the site visit in 2023.
Woodland Raptor Nesting Habitat	Forested ELC communities >30 ha with 10 ha of interior habitat.	Absent. Forest tracts smaller than 30 ha in size.	<b>Candidate SWH potentially present</b> in two woodlands (33 ha and 59 ha) in the study area.
Turtle Nesting Areas	Exposed soil, including sand and gravel in open sunny areas near wetlands.	Not observed during roadside surveys conducted in 2022.	Not observed during roadside surveys conducted in 2023.
Seeps and Springs	Any forested area with groundwater at surface within the headwaters of a stream or river system.	Not observed during roadside surveys conducted in 2022.	Not observed during roadside surveys conducted in 2023.
Amphibian Breeding Habitat (Woodland and Wetland)	Treed uplands with vernal pools, and wetland ecosites.	Candidate SWH present in wetlands and/or woodlands.	Candidate SWH present in wetlands and/or woodlands.
Woodland Area- sensitive Bird Breeding Habitat	Large mature forest stands, woodlots >30 ha and >200 m from the forest edge.	Absent. Forest tracts are not mature and are smaller than 30 ha in size.	<b>Candidate SWH potentially present</b> in two woodlands (33 ha and 59 ha) with interior habitat in the Study Area.
HABITAT FOR SPECIE	S OF CONSERVATION CONCERN		
Marsh Bird Breeding Habitat	Wetlands with shallow water and emergent aquatic vegetation.	Absent. Suitable wetlands absent from the Study Area.	Absent. Suitable wetlands absent from the Study Area.
Open Country Bird Breeding Habitat	Large grasslands and fields (>30 ha).	Absent. Large grasslands absent from the Study Area.	Absent. Large grasslands absent from the Study Area
Shrub/Early Successional Bird Breeding Habitat	Large shrub and thicket habitats (>10 ha).	Absent. Large thickets absent from the Study Area.	Absent. Large thickets absent from the Study Area.
Terrestrial Crayfish	Wet meadows and edges of shallow marshes.	Absent. Suitable habitats absent and not identified during field visits conducted in 2022.	Absent. Suitable habitats absent and not identified during field visits conducted in 2023.

# Appendix D: Terrestrial Habitat

Wildlife Habitat Type	Criteria	Results of Desktop and Field Habitat Assessment – Preferred Proposed Route (PPR) and distribution study areas	Results of Desktop and Field Habitat Assessment – Alternative Route (AR) and reinforcement study areas				
SPECIES OF CONSER	SPECIES OF CONSERVATION CONCERN <sup>1</sup>						
ANIMAL MOVEMENT (	ANIMAL MOVEMENT CORRIDORS						
Amphibian Movement Corridor	Corridors may be found in all ecosites associated with water. Determined based on identifying significant amphibian breeding habitat (wetland).	<b>Candidate SWH potentially present</b> due to candidate SWH for breeding amphibians. Associated with watercourses.	<b>Candidate SWH potentially present</b> due to the likely presence of amphibian habitat in the Study Area. Associated with watercourses.				
Deer Movement Corridors	Corridors may be found in all forested ecosites.	Absent.	Absent.				

<sup>&</sup>lt;sup>1</sup> See Table 3.1 in the body of the report for details on candidate SOCC.

# Appendix E Stage 1 Archaeological Assessment



## Stage 1 Archaeological Assessment: Neustadt Community Expansion Project

Various Lots and Concessions, Brant Township and Carrick Township, now Municipality of Brockton and Municipality of South Bruce, Bruce County, and Bentinck Township and Normanby Township, now Town of Hanover and the Municipality of West Grey, Grey County, Ontario

May 12, 2023

Prepared for: Enbridge Gas Inc. 10 Surrey Street Guelph, Ontario N1H 3P5 Email: Greg.Asmussen@enbridge.com Tel: 416-606-8891

Prepared by: Stantec Consulting Ltd. 600 – 171 Queens Avenue London, Ontario N6A 5J7

Project Number: 160951366

Licensee: Darren Kipping, MA License Number: P422 Project Information Form Number: P422-0035-2023

#### **ORIGINAL REPORT**

# **Executive Summary**

Stantec Consulting Ltd. (Stantec) was retained by Enbridge Gas Inc. (the Client) to complete an environment study for the Neustadt Community Expansion Project (the Project), comprising approximately 1105.13 hectares within the Geographic Township of Brant now Municipality of Brockton, the Geographic township of Carrick now the Municipality of Bruce, within Bruce County, and the Geographic Townships of Bentinck and Normanby, now the Town of Hanover and Municipality of West Grey, within Grey County, in Ontario. In support of the environmental study, a Stage 1 archaeological assessment was conducted to evaluate the archaeological potential of the Project's study area. The Stage 1 archaeological assessment for the Project was conducted in accordance with the *Ontario Heritage Act*, the Ontario Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists, and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon <i>Pipelines and Facilities in Ontario, 7th Edition* (OEB 2016).

The Stage 1 archaeological assessment of the study area, including a property inspection completed on April 14, 2023, determined that most of the study area, approximately 80.19%, retains archaeological potential. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction activities which impact an area of archaeological potential.** 

The Stage 1 archaeological assessment determined that the remaining portions of the Project study area, approximately 18.98%, retain low to no archaeological potential for a variety of reasons, including existing disturbance, steep slope, low and wet areas, areas subject to previous archaeological assessment. In accordance with Section 1.3.2, Section 2.1 Standard 2, and Section 7.74 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction activities which impact an area of low to no archaeological potential.** 

Three historical cemeteries are documented to be within, or adjacent to, the study area. Legal boundary maps of the cemeteries were provided by the Bereavement Authority of Ontario (BAO) (see Supplementary Documentation). However, based on personal communication, background research, and historical documentation, it could not be completely confirmed that no burial activity occurred beyond the legal boundaries. The final route and construction easement, including any temporary land use, for the Project will be determined at a later date. If any components of the final route and construction easement are proposed within a minimum 10 metres of these cemeteries' currently understood property boundaries, further investigation may be warranted in consultation with the MCM and the BAO.

In addition, the Stage 1 archaeological assessment of the study area determined that portions of the study area, approximately 0.83%, overlap navigable waterways, i.e., Beatty Saugeen River, South Saugeen River, and a portion of Meux Creek. If any in-water disturbance is proposed as part of the Project for these portions of the waterways within the Project study area, the proponent should complete



the *Criteria for Evaluating Marine Archaeological Potential* checklist (Government of Ontario 2016) to determine if a marine archaeological assessment is required.

Detailed recommendations for further archaeological work are provided in the body of the report.

The MCM is asked to review the results presented and accept this report into the Ontario Public Register of Archaeological Reports.

The Executive Summary highlights key points form the report only; for complete information and findings, the reader should examine the complete report.

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# Acknowledgements

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	-

# 1 Project Context

# 1.1 Development Context

Stantec Consulting Ltd. (Stantec) was retained by Enbridge Gas Inc. (the Client) to complete a Stage 1 archaeological assessment for lands associated with the Neustadt Community Expansion Project (the Project). The Project is located on parts of various Lots and Concessions, Geographic Township of Carrick and Brant, now the Municipalities of South Bruce and Brockton, in Bruce County, and the Geographic Townships of Bentinck and Normanby, now the Town of Hanover and the Municipality of West Grey, in Grey County, Ontario (Figure 1). The archaeological assessment for the Project was conducted in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition* (OEB 2016).

To ensure the continued reliable delivery of natural gas, improve the integrity of the pipeline network, and to increase system flexibility, Enbridge Gas Inc. is proposing an expansion of natural gas pipelines from Neustadt to Hanover. The study area for the Stage 1 archaeological assessment of the overall Project is approximately 1,105.13 hectares (ha) and consists of four main components: the Preliminary Preferred Route (PPR) study area (approximately 349.78 ha), the Alternative Route (AR) study area (approximately 565.52 ha), the Distribution Network study area (approximately 123.35 ha) and the Reinforcement Section study area (approximately 66.48 ha), and includes undeveloped forested areas, agricultural fields, and residential and commercial properties within the communities of Hanover and Neustadt (Figure 2).

# 1.1.1 Objectives

In compliance with the provincial standards and guidelines set out by the Ministry of Citizenship and Multiculturalism (MCM) in the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of 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, the following research was completed:

- 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 MCM's *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- A query of the MCM's *Ontario Public Register of Archaeological Reports* to identify previous archaeological assessments within 50 metres of the study area.



In addition to the above, a property inspection was undertaken by a licensed archaeologists as part of the Stage 1 archaeological assessment. Permission to conduct the Stage 1 visual assessment of the study area was provided by the Enbridge. However, access to private lands for the purposes of the archaeological assessment was not obtained. Thus, photo documentation completed during the Stage 1 visual assessment was completed from the municipal road ROW and public lands.

# 1.2 Historical Context

"Contact" is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. The precise moment of contact is a constant matter of discussion. Contact in what is now the province of Ontario is broadly assigned to the 16<sup>th</sup> century (Loewen and Chapdelaine 2016).

# 1.2.1 Pre-Contact Indigenous Resources

As the Laurentide ice sheet receded from southern Ontario, the land was opened and those parts of it not submerged under glacial lakes were available for human occupation (Lothrop *et al.* 2016). Much of what is understood about the lifeways of the Indigenous peoples who first populated the land in southern Ontario is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous occupation prior to the period of contact with European peoples has been divided by archaeologists into archaeological culture periods based on observed changes in material culture. These archaeological culture periods are largely based on observed changes in formal lithic tools, and are classified as Early Paleo, Late Paleo, Early Archaic, Middle Archaic, and Late Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record in Ontario, archaeological culture periods are classified as Early Woodland, Middle Woodland, and Late Woodland periods, distinguished primarily on observed changes in formal ceramic decoration. It should be noted that archaeological culture periods do not represent specific Indigenous cultural identities but are, rather, a useful paradigm for categorizing changes in Indigenous material culture practice through time.

The current understanding of Indigenous archaeological culture periods in southern Ontario is summarized in Table 1, based on Ellis and Ferris (1990) and more recent advances in late Pleistocene radiocarbon calibration techniques (Ellis 2013; Fiedel 1999; Lothrop *et al.* 2016; Munson 2013). The provided time periods are based on the "Common Era" calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

Archaeological Culture Period	Characteristics	Approximate Time Period	Comments
Early Paleo	Fluted Projectiles	11500 – 9500 BCE	Spruce parkland/caribou hunters
Late Paleo	Hi-Lo Projectiles	9500 – 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	Lamoka (narrow points)	2500 – 1800 BCE	Increasing site size

## Table 1: Generalized Cultural Chronology for Southern Ontario

Archaeological Culture Period	Characteristics	Approximate Time Period	Comments
	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	Saugeen Complex	400 BCE – 500 CE	Increased sedentism and dentate/pseudo-scalloped pottery
	Transitional Groups	500 – 800 CE	Poorly understood Princess Point-like archaeological cultures
Late Woodland	Material Culture with Algonquian and Iroquoian Affinities	800 – 1500 CE	Agricultural development and continued hunting and gathering similar to later recorded groups
Contact Indigenous	Various Algonquian and Iroquoian Groups	1600 – 1875 CE	Early written records and treaties
Historical	French/Euro-Canadian	1749 CE – present	European settlement and Indigenous interaction

Between 11000 and 8500 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 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 groundstone 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 Lakes basin had 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. Evidence exists at this time for an increase in population and the contraction of group territories. By approximately 4500 BCE, evidence exists from southern Ontario for the utilization of native copper, i.e., naturally occurring pure copper metal (Ellis 2013:42). The recorded 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 River and 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). Cemeteries have powerful meaning in terms of "place", both social and cosmological, and often have significance of identity between groups and can be the bases for consolidating territory (Pearson 1999:141; Holloway and Hubbard 2001:71). By 2500 BCE, the earliest evidence exists for the widespread construction of fishing weirs (Ellis *et al.* 1990: Fig.4.1). There is some evidence to suggest that fishing weirs had been constructed much earlier: a radiocarbon sample from a weir site in Lovesick Lake along the Trent-Severn Waterway provided a date of 4600 BCE (Stevens 2004). Construction of fishing weirs would have required a large amount of communal labour and is 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 with the intensive exploitation of seed foods, such as goosefoot and knotweed, and nuts. 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).

The Middle Woodland Saugeen Complex (Finlayson 1977), circa 400 BCE to 500 CE, would have been present in the study area or the vicinity. Saugeen complex ceramics are characterized by dentate, pseudo-scallop shell stamping, and rocker stamping decorations. Distinctive chipped stone tools from that period include cobble spall scrapers and Saugeen type projectile points with broad, shallow side notches and convex bases (Spence *et al.* 1990:148).

By approximately 550 CE, evidence emerges for the introduction of maize into southern Ontario. This crop would have initially only supplemented diet and economy (Birch and Williamson 2013:13-14). Maizebased agriculture gradually became more important to societies and by approximately 1000 CE permanent communities emerge that 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.

Indigenous economy and lifeways probably remain similar to preceding periods. These communities living within the region are understood to have spoken an Algonquian language, probably similar to Anishinaabemowin, and possessed many cultural traits similar to the historical Odawa. Summer fishing settlements would have been the focal settlements for communities, probably occupied by groups of up to 300 people. These settlements would have broken up for the winter for family groups to move to winter hunting camps inland. By the late 14<sup>th</sup> century, ancestral Wendat-Tionontati populations began settling along the southern shore of Georgian Bay (Birch 2015). This new proximity between Algonquian and Iroquoian peoples brought changes in culture and subsistence. Archaeologically, these are most visible in

terms of material culture and botanical remains indicating the exchange of materials such as ceramics and foods such as maize into Algonquian communities (Fox 1990:463; Williamson 2013:57).

## 1.2.2 Post-Contact Indigenous Resources

At the turn of the 17<sup>th</sup> century, the region of the study area is understood to have been occupied by the Odawa (Ottawa), possibly by the Sinago band (Fox 1990:457-461, 473). The Odawa were an Anishinaabeg-speaking people who were agriculturalists and actively engaged in regional trade. Several archaeological settlements dating to the 17<sup>th</sup> century have been documented within northern Bruce County (Fox 1990:461-462). Traditionally, the mouth of the Penetangore (Nabenemtangaugh) River was a seasonal meeting place for the Anishinaabeg people of the region for conducting trade (Belden & Co. 1880). In 1649, the Seneca and the Mohawk led a campaign into southern Ontario and dispersed the Huron-Wendat, Tionontati (Petun), and Atawandaron (Neutral) (Heidenreich 1978). During this period, some Odawa populations dispersed from the Bruce Peninsula and moved to the lands around the Straits of Mackinac. In 1670/1671, some Odawa, along with some Mississauga (an Ojibway Nation), moved to Manitoulin Island (Feest and Feest 1978:772-773; Rogers 1978:761). The Pottawatomi, Ojibway, and Odawa constituted a political confederacy known as the Three Fires (Feest and Feest 1978:777). In the latter part of the 17<sup>th</sup> century, the region of the study area was a contested territory between Ojibway nations and the Mohawk Iroquois. Ojibway oral tradition records several pitched battles throughout Bruce County, focused along the Saugeen River Valley (Schmalz 1991:22-23).

By the turn of the 18<sup>th</sup> century, Ojibway people had become established across southern Ontario. The Indigenous economy since the turn of the 18<sup>th</sup> century focused on fishing and the fur trade, supplemented by agriculture and hunting (Rogers 1978). The study area falls within the traditional territory of the Saugeen Ojibway Nation (SON), who continue to live in Bruce County today (SON 2023). The SON consists of the Saugeen Ojibway First Nation and the Chippewas of Nawash Unceded First Nation. The people of SON reside in the SON Traditional Territory, known as Anishnaabekiing. This traditional territory includes the Saugeen Peninsula (also known as the Bruce Peninsula) and the waters and islands of Lake Huron and Georgian Bay, extending to the south and to the east into the watersheds of the Maitland and Nottawasaga rivers (SON 2023).

Despite the differentiation among Indigenous groups in Euro-Canadian sources, there was a considerably different view by Indigenous groups concerning their self-identification during the first few centuries of European contact. These peoples relied upon kinship ties that cut across European notions of nation identity (Bohaker 2006:277-283). Many of the British-imposed names such as Chippewa, Odawa, Pottawatomi, or Mississauga artificially separated how self-identified Anishinaabeg classified themselves (Bohaker 2006:1-8) and as a result, a number of these groups were culturally and socially more alike than contemporary European documentation might indicate.

The expansion of the fur trade led to increased interaction between European and Indigenous people, and ultimately intermarriage between European men and Indigenous women. It is during the 18<sup>th</sup> century that the progeny of these marriages began to identify as Métis and no longer identified directly with either their paternal or maternal cultures. The ethnogenesis of the Métis progressed with the establishment of distinct Métis communities along the major waterways in the Great Lakes of Ontario. By 1815, many
Métis families had moved to Kincardine and elsewhere along the Lake Huron shore (McArthur *et al.* 2013:41; McNab 2005:11; Métis Nation of Ontario 2023; Stone and Chaput 1978:607-608).

There is a long history of occupation by the SON and their ancestors in their traditional lands. The study area is located within the extent of the 1836 Saugeen Treaty between the Saugeen and the British Government ("the Crown") (Government of Canada 2016). While it is difficult to exactly delineate treaty boundaries today, Figure 3 provides an approximate outline of the Saugeen Treaty, also known as Treaty Number 45 ½, identified by the letter "W", based on a compilation by Morris (1943:27-29). On August 9, 1836, Sir Francis Bond Head, Lieut.-Governor of Upper Canada, met on August 9, 1836, at Manitowaning with the Saugeen residents south of Owen Sound:

### To the Sauking (Saugeen)...

I now propose that you should surrender to your Great Father, the Sauking territory that you presently occupy, and that you shall repair either to this island (Manitoulin) or to that part of your territory which lies on the north of Owen Sound upon which proper houses shall be built for you, and proper assistance given to enable you to become civilized and to cultivate land which your Great Father engages for ever to protect for you from the encroachment of the whites.

(Government of Canada 2016)

## 1.2.3 Euro-Canadian Resources

In 1791, the Provinces of Upper Canada and Lower Canada were created from the former Province of Quebec by an act of British Parliament (Craig 1963:17). At this time, Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing the new province, directing its settlement, and establishing a constitutional government modelled after that of Britain (Coyne 1895). At its inception, Upper Canada was only sparsely settled and its land had not been officially surveyed to any great extent. Thus, there was an urgency by Simcoe to survey the region for establishing military roads and for preventing settlers from clearing and settling land not legally belonging to them. In 1792, Upper Canada was divided into 19 counties consisting of previously settled lands, new lands opened for settlement, and lands not yet acquired by the Crown. These new counties stretched from Essex in the west to Glengarry in the east.

### 1.2.3.1 Bruce County

Bruce County was established in 1849 and named in honour of James Bruce, Lord Elgin, who was Governor-General of Canada at that time. Bruce County is bounded in the west by Lake Huron, in the east by Georgian Bay and Grey County and in the south by Huron County. The northern portion of Bruce County is a peninsula separating Lake Huron and Georgian Bay. The county was divided into sixteen townships (Mika and Mika 1977:285-286).

Bruce County was surveyed in 1848 and was opened to European settlers that same year. By the end of the summer of 1848, a dozen families had taken up land at the small settlement of Kincardine, in the southern end of the county. A further influx of settlers, most of them Scottish, came to the vicinity of Kincardine in 1849. Settlement in the northern portion of the county slowly followed. There were also



reserves in the northern part of the county, several of which, including the Saugeen and the Cape Croker Reserves, are still in existence today (Mika and Mika 1977:285-286).

## 1.2.3.2 Carrick Township

The Township of Carrick was initially laid out in 1850-51 when Elora Road was extended to the northwest corner of Carrick township to join Bruce County to southwestern Ontario (Bruce County Museum & Cultural Centre 2015). The remainder of the township was surveyed by 1852 and Lots were opened for settlement in 1854. The majority of the early settlers were German, Scottish, and Irish, with Germans being the predominant group arriving between 1853-1854 (Mika and Mika 1977). In 1854, the township was united with Brant Township to form a single municipality. However, in 1856 Carrick Township separated. In 1998, the village of Mildmay united with Carrick Township to form the Township of Mildmay-Carrick and a year later they were amalgamated with the Township of Teeswater-Culross to form the Municipality of South Bruce (South Bruce Tourism 2019).

## 1.2.3.3 Brant Township

Brant Township was first settled by Europeans in 1849; however, was not surveyed until 1851. Early settlement was slow, and it was not until 1854 that population was sufficient to justify municipal government. The exception to this is the community of Walkerton, which developed so rapidly that it was first incorporated as a town before officially achieving status as a village and by 1871 was separated from the township. By 1880, the only village in the Township was Hanover (Belden & Co. 1880; Mika and Mika 1977:254-255).

## 1.2.3.4 Grey County

Grey County is located in the northern part of the peninsula extending into Georgian Bay. It is bounded on the north by Georgian Bay, on the east by Simcoe County, on the south by Wellington County, and on the west by Bruce County. At its inception in 1842, Grey County included seventeen townships including: Artemisia, Bentinck, Collingwood, Derby, Egremont, Euphrasia, Glenelg, Holland, Keppel, Melancthon, Normanby, Osprey, Proton, Sarawak, Sullivan, St. Vincent, and Sydenham (Smith 1865).

Grey County is predominantly forested by hardwood and so saw-mills produce only for local use and export focuses on flour from gristmills. Grey County has an abundance of waterpower, with numerous fast-moving rivers and is in close proximity to navigable water (Smith 1865). In addition, Owen Sound and the town of Durham hosted iron foundries that were important to the industry of the county in the nineteenth century (Smith 1865).

## 1.2.3.5 Bentinck Township

Bentinck Township was first settled in 1848 and subsequently surveyed in 1850, although squatters had settled in the township since 1842. The township was named after Lord George Bentinck, a British politician active in the 1840s who died in 1848 (Mika and Mika 1977: 182). Early settlement was focused around Hanover and along Garafraxa Road. The post office community of Dornoch was first settled in 1842 with the post office being established in 1880. The township was historically noted for having fertile

soil (Belden & Co. 1880; Mika and Mika 1977:182). In 1848, Durham Road, a line leading directly across the county east and west from the village of Durham, was laid out during Brough's survey with "Freegrants" for settlement (Smith 1865). The study area is situated along the west side of Durham. Durham, although not the County Seat as Owen Sound was, housed the County Crown Land Agency and was incorporated as a town in 1872 (Ontario Heritage Trust 2023). The town boasted one gristmill, one flour mill, two sawmills, two woolen mills, a foundry, tannery, ash factory, furniture factory, and brewery as an industry centre of Bentinck Township, the Saugeen River providing the necessary waterpower for the numerous mills (Smith 1865).

Bentinck Township was amalgamated into the current Municipality of West Grey with Normanby and Glenelg Townships and the former Village of Neustadt and the former Town of Durham in 2001 (West Grey 2023).

## 1.2.3.6 Normanby Township

Normanby township is located within the southwestern corner of Grey County and was named for Constantine Henry Phipps, the marquis of Normanby. The township was initially surveyed in 1841 with the construction of Garafraxa Road (now Highway 6). The survey of the township was not finished until 1852 and the township was not officially opened for settlement until 1856 (Marsh 1937). Most of the early settlers in the area were German and Scottish who established farms within the township, and much of which are still being used as such (Marsh 1937; Stantec 2017). The town of Neustadt was founded in 1856 by a settler from Germany who laid out the town, dammed the nearby Meux Creek, and constructed a sawmill (Raue 2015). Other mills soon followed. A brewery was built over a natural spring in 1857 by a German settler Henry Heuther, adjacent to the dammed Meux Creek (Nuestadt Springs Brewery 2022; Raue 2015). The original brewery was constructed of wood and was destroyed by a fire in 1859. Huether reconstructed the brewery over the spring out of local fieldstone using German masons and by 1869 it was operational. Despite an interruption in beer production from 1916 to 1997, the fieldstone brewery is still extant and operational today (Nuestadt Springs Brewery 2022; Raue 2015). In 2001, the townships of Normanby, Bentick, and Gleneg, the village of Neustadt and the town of Durham were amalgamated into the Municipality of West Grey (Stantec 2017).

## 1.2.3.7 Cemeteries

There are three cemeteries within, or directly adjacent to, the study area: the Hanover and Old Hanover Cemetery, St. Paul's Lutheran Cemetery, and St. Peter's Lutheran Cemetery.

The Hanover Cemetery and Old Hanover Cemetery (also known as the Crispen-Hanover Cemetery) is within the AR portion of the study area, located at 95 7<sup>th</sup> Avenue South, Hanover (Figures 2-8 and 2-9). This cemetery is operated by the Town of Hanover and is still an active cemetery on the east side of 7<sup>th</sup> Avenue South, with the older portion of the cemetery located on the west side of 7<sup>th</sup> Avenue South. Detailed mapping is available on the Hanover Cemetery website (Town of Hanover 2023). Stantec contacted the Bereavement Authority of Ontario (BAO) to inquire about historical documentation and any available mapping. The BAO provided a legal cemetery survey map, but it appears though it is for the newer part of Hanover Cemetery and doesn't include the older portion (or Crispen cemetery) (see Supplementary Documentation). The Town of Hanover was also contacted to possibly obtain mapping of



the legal boundaries of the cemetery limit; however, the Town of Hanover did not have any mapping available. The Town of Hanover did mention that as portions of the cemetery were older, it is thought that earlier burial plots may exist outside the current limits of the cemetery (Henderson 2023).

The St. Paul's Lutheran Cemetery is within the PPR portion of the study area, located at 32220 Side Road 5 in Neustadt and operated by the St. Paul's Lutheran Church (Figure 2-1). Based on background research, burial plots date from the mid-to-late 19<sup>th</sup> century. The St. Peter's Lutheran Cemetery is within the PPR portion of the study area, located at 308 Cemetery Road in Neustadt and operated by the St. Peter's Lutheran Church (Figure 2-2). Based on background research, burial plots date from the late 19<sup>th</sup> century. Calls were made to both operators to inquire about legal survey limits or additional historical documentation, but no response has been received. The BAO did provide legal cemetery survey maps of both cemeteries; these are provided in the Supplementary Documentation.

## 1.2.3.1 Grand Trunk, Georgian Bay and Lake Erie Railway (GT, GB & LE)

In 1881, three of the rail lines that operate within Grey and Bruce counties were amalgamated into the Grand Trunk Rail Line (GTR) and was named the Grand Trunk, Georgian Bay & Lake Erie (GT, GB, & LE) Railway (Cooper 2014). In 1882, a line was constructed that ran from Harriston and terminating in Wiarton was constructed. A section of this line that connects Hanover to Neustadt passes through the study area. The GT, GB & LE Railway joined the Canadian National Railway Company in 1923 and formed part of the Owen Sound Subdivision (Cooper 2014). The rail line was decommissioned in 1995, however, the abandoned railbed is visible in Figures 2-1 and 2-2 crossing through the study area.

### 1.2.3.2 Historical Map Review

The 1880 historical atlas of Bruce and Grey County (Belden & Co. 1880) was reviewed (Figures 4 to 7). These maps provide limited information on land tenure and historical features throughout the historical townships. The towns of Hanover, Neustadt, and Carlsruhe are intersected by the study area and are depicted on the 1880 maps with their limits, however with no distinct structures depicted within the communities (Figures 4 to 7). The study area crosses many historical roads, the rail line, and the branches of the Saugeen River in several sections with a few lots containing unidentified structures (Figures 4 to 7) (Belden & Co. 1880). Tables 2 through 5 below detail the features within each lot.

In discussing the late 19<sup>th</sup> 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).

Lot(s)	Concession(s)	Landowner(s)	Feature(s)
74	1 South of Durham Road	None illustrated (-)	Town of Hanover in northern portion, historical rail line passes through southern portion
74	2 South of Durham Road	Jno Crisp…	House located on west side of lot, historical rail line,

### Table 2: Landowner Information for Study Area, Brant Township, 1880

Lot(s)	Concession(s)	Landowner(s)	Feature(s)
			historical roadway, Saugeen River
73	2 South of Durham Road	-	Historical rail line, historical roadway and Saugeen River
72	2 South of Durham Road	-	Saugeen River
71	2 South of Durham Road	-	Saugeen River
70	2 South of Durham Road	-	Saugeen River, historical roadway
69	2 South of Durham Road	-	Historical roadway
68	2 South of Durham Road	-	Historical roadway
67	2 South of Durham Road	-	Historical roadway
66	2 South of Durham Road	-	Historical roadway
65	2 South of Durham Road	-	Historical roadway
74	3 South of Durham Road	Jno Crisp…	Saugeen River
73	3 South of Durham Road	-	Saugeen River, historical roadway
72	3 South of Durham Road	-	Historical rail line, historical roadway
71	3 South of Durham Road	-	Historical roadway
70	3 South of Durham Road	-	Historical roadway
69	3 South of Durham Road	-	Historical roadway
68	3 South of Durham Road	-	Historical roadway
67	3 South of Durham Road	-	Historical roadway
66	3 South of Durham Road	-	Historical roadway
65	3 South of Durham Road	-	Historical roadway

## Table 3: Landowner Information for Study Area, Carrick Township, 1880

Lot(s)	Concession(s)	Landowner(s)	Feature(s)
34	10	-	Historical roadway
33	10	-	Historical roadway
32	10	-	Branch of the Saugeen River, historical roadway
31	10	-	Branch of the Saugeen River, historical roadway
30	10	-	Historical roadway, lake
34	11	-	Historical roadway
33	11	-	Historical roadway
32	11	-	Branch of the Saugeen River, historical roadway
31	11	-	Branch of the Saugeen River, historical roadway
30	11	-	Historical roadway
31	12	-	Branch of the Saugeen River, historical roadway
30	12	-	Historical roadway
31	13	-	Branch of the Saugeen River, historical roadway
30	13	-	Historical roadway



Lot(s)	Concession(s)	Landowner(s)	Feature(s)
31	14	-	Structure, historical roadways
30	14	-	Carlsruhe Village, historical roadways
31	15	-	Carlsruhe Village, historical roadways
30	15	-	Carlsruhe Village, historical roadways, cemetery

### Table 4: Landowner Information for Study Area, Bentinck Township, 1880

Lot(s)	Concession(s)	Landowner(s)	Feature(s)
1	1 South of Durham Road	-	Historical roadway
2	1 South of Durham Road	-	Hanover Village, historical roadway
3	1 South of Durham Road	-	Hanover Village, historical roadway
4	1 South of Durham Road	-	Hanover Village, historical roadway
5	1 South of Durham Road	-	Hanover Village, historical roadway
6	1 South of Durham Road	-	Historical roadway
7	1 South of Durham Road	C. Oppertshauser	Structure, historical roadway
8	1 South of Durham Road	-	Historical roadway
1	2 South of Durham Road	-	Beatty Saugeen River, historical roadway
2	2 South of Durham Road	-	Beatty Saugeen River, historical roadway
3	2 South of Durham Road	-	Historical roadway
4	2 South of Durham Road	-	Historical roadway
5	2 South of Durham Road	-	Branch of the Beatty Saugeen River, historical roadway
6	2 South of Durham Road	-	Branch of the Beatty Saugeen River, historical roadway
7	2 South of Durham Road	C. Oppertshauser	Historical roadway
8	2 South of Durham Road	-	Beatty Saugeen River, historical roadway
2	3 South of Durham Road	-	Beatty Saugeen River, historical roadway
3	3 South of Durham Road	-	Beatty Saugeen River, historical roadway
4	3 South of Durham Road	-	Beatty Saugeen River, historical roadway

### Table 5: Landowner Information for Study Area, Normanby Township, 1880

Lot(s)	Concession(s)	Landowner(s)	Feature(s)
1	13	-	Branch of Saugeen River, historical roadways
2	13	Jno. B. Ashley	Branch of Saugeen River, historical roadway, Neustadt Village, structure
3	13	Jno. B. Ashley	Branch of Saugeen River, historical roadway, Neustadt Village
4	13	-	Stratford and Lake Huron Rail line, historical roadway
5	13	-	Stratford and Lake Huron Rail line, historical roadway, Branch of Saugeen River



Lot(s)	Concession(s)	Landowner(s)	Feature(s)
1	14	D. Knapp	Historical roadway, structure, branch of Saugeen River
2	14	-	Neustadt Village, Stratford and Lake Huron Rail line, historical roadway, branch of Saugeen River
3	14	-	Stratford and Lake Huron Rail line, historical roadway
4	14	D. Eckstein	Structure, historical roadway, Stratford and Lake Huron Rail line
2	15	-	Stratford and Lake Huron Rail line, historical roadway
3	15	-	Historical roadway
2	16	-	Stratford and Lake Huron Rail line, historical roadway, Branch of Saugeen River
3	16	-	Historical roadway
2	17	-	Historical roadway
3	17	-	Branch of Saugeen River, historical roadways
1	18	-	Stratford and Lake Huron Rail line, historical roadway, Branch of Saugeen River
2	18	-	Branch of Saugeen River, historical roadways

## **1.3** Archaeological Context

## 1.3.1 The Natural Environment

The study area is situated within the Horseshoe Moraine and Teeswater Drumlin Field physiographic regions (Chapman and Putnam 1984). This Horseshoe Moraine region is comprised of the Port Huron Moraine system as well as the associated meltwater deposits. The southwestern flank of the Horseshoe moraine in Huron County, north of Clinton, is a complex of clay till ridges and spillways. Towards the toe of the Horseshoe Moraine, east of Chelsey and into Bentinck Township, the moraine consists of two morainic belts separated by clay and, easterly, by spillways and till ridges (Chapman and Putnam 1984:127). The Teeswater Drumlin Fields composed of a loamy till that is moderately compact and rocky that is mainly located within the drumlin fields, these fields are broken up by kames and their associated outwash, which has deposited sandhills amongst the rocky till. The study area is located within a spillway surrounding the Saugeen River, with drumlinized till plains and kame moraines crossing the southern portion.

Spillways are abandoned fluvial channels which indicate former meltwater courses draining away from moraines. Typically, these channels are still occupied by a modern watercourse, though some glacial spillways have been completed abandoned by modern drainage courses (Chapman and Putnam 1984:12).

Till plains are large expanses of unstratified glacial drift deposited by glaciers and consisting of clay, sand, gravel or boulders intermixed in any proportion (Department of Agriculture 1976:40). The till plain within the study area was exposed, following the retreat of the Laurentian glacier's Ontario lobe (Karrow and Warner 1990:15).

Drumlins are moulded features on the surface of glacial till created by the forward motion of the glacier. Their alignment is indicative of the glacier's direction of movement. Their relative relief varies from impressive hills with steep slopes to barely noticeable undulations (Chapman and Putnam 1984:10, 11).

Moraines are glacial features which consist of glacial till deposited at the forefront of the glacier following a halt in its advance. Moraines are characterized topographically by a "knob and kettle" landscape, consisting of a series of hills with shallow interstitial lakes formed when blocks of ice became marooned in the sediments and melted in place. Kame moraines possess the typical terrain features of all moraines however are formed glacial meltwaters depositing sand and gravel on the ice front and are typically stratified (Chapman and Putnam 1984:11,12).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southwestern 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 used variables for predictive modeling of archaeological site location in Ontario. Numerous waterways cross through the study area, including the Saugeen River and the Beatty Saugeen River, as well as Carrick Creek and Meux Creek. The Saugeen River is broken down into six separate watersheds, the Lower Main Saugeen, the North Saugeen, the Rocky Saugeen, the South Saugeen, the Beatty Saugeen River, and the Upper Main Saugeen (Saugeen Valley Conservation Authority 2016).

## 1.3.2 Registered Archaeological Sites and Surveys

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the curvature of the earth. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lower case letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MCM who maintain the *Ontario Archaeological Sites Database*. The study area under review is located within Borden Block BaHg.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990b). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

An examination of the *Ontario Archaeological Sites Database* has shown that there is one archaeological site registered within a one-kilometre radius of the study area (Government of Ontario 2023a). The archaeological site is not within 50 metres of the study area. The nearby registered archaeological site, BaHg-1, was identified in the 1950s (Government of Ontario 2023a). The *Ontario Public Register of Archaeological Reports* had no additional information regarding BaHg-1 (Government of Ontario 2023b).

A query of the *Ontario Public Register of Archaeological Reports* (Government of Ontario 2023b) indicates there are five previous archaeological assessments within 50 metres of the study area. However, as the MCM does not currently maintain an accessible or searchable database of archaeological assessment areas by study areas, additional archaeological assessments and studies may have occurred, or are occurring, within or adjacent to the current study area. A summary of the previous archaeological assessments associated with the study area is listed in Table 6 and discussed further below.

Year	Report	Author	Project Information Form (PIF) Number
2014	Stage 1 Archaeological Background Study, Hanover Property, Part of Lots 7 and 8 Concession 1, Part of Lots 7 and 8 Concession 2, South of Durham Road (Geographic Township of Bentinck), Town of Hanover, County of Grey	AMICK Consultants Ltd.	P038-468-2012
2014	Archaeological Assessment (Stages 1, 2) Proposed 18th Avenue Extension from 2nd Street to 6th Street Town of Hanover, Geographical and Historical Township of West Grey, Grey County (Town of Hanover reference number 131-22300- 00) CP# 2013-049, PIF# P017-0310-2013 Original Report	Detritus Consulting Ltd.	P017-0310-2013
2015	Archaeological Assessment (Stages 1, 2) Proposed Saugeen Riverside Developments Subdivision Town of Hanover, Part of Lot 6, Concession 1, Geographical and Historical Township of Bentink, Grey County (Town of Hanover reference number 141-17431-00) CP# 2014-058, PIF# P017-0350-2014 Original Report	Detritus Consulting Ltd.	P017-0350-2014
2015	Stage 2 Archaeological Property Assessment of Hanover Property Part of Lots 7 and 8, Concession 1, Part of Lots 7 and 8, Concession 2, South of Durham Road (Geographic Township of Bentinck), Town of Hanover, County of Grey	AMICK Consultants Ltd.	P384-033-2013
2021	Stage 1 and 2 Archaeological Assessment, Town of Hanover Community Trail Bridges 1, 2 and 4, Part of Lots 70 and 71, Concession 1 SDR, Part of Lot 71, Concession 2 SDR, Geographic Township of Brant, now Town of Hanover, Ontario	Golder Associates Ltd.	P1056-0140-2021

Table 6: Previous Archaeologica	I Assessments within 50	) metres of the Study Area
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In 2012, AMICK Consultants Ltd. (AMICK) conducted a Stage 1 archaeological assessment for a property on parts of Lots 7 and 8, Concession 1 and Concession 2 South of Durham Road, Geographic Township of Bentinck, now the Town of Hanover, as part of a Municipal Class Environmental Assessment (AMICK 2014). The Stage 1 archaeological assessment determined that the area retained archaeological potential and recommended Stage 2 archaeological assessment (AMICK 2014). AMICK conducted the Stage 2



archaeological assessment in the summer of 2013 (AMICK 2015). The Stage 2 archaeological assessment consisted of test pit survey and pedestrian survey. No archaeological resources were identified, and no further archaeological work was recommended. A portion of AMICK's (2014; 2015) study areas overlap with the eastern portion of the Reinforcement Section component of the study area for this Project (Figure 8-9).

In 2013, Detritus Consulting Ltd. (Detritus) conducted a Stage 1-2 archaeological assessment on behalf of the Town of Hanover as part of an Environmental Assessment (EA) associated with the extension of 18<sup>th</sup> avenue from 2<sup>nd</sup> Street to 6<sup>th</sup> Street in the town of Hanover (Detritus 2014). Detritus determined the study area to retain archaeological potential and subsequently conducted a test pit survey of the study area. No archaeological resources were identified, and no further archaeological work was recommended (Detritus 2014). A portion of Detritus' (2014) study area overlaps with the eastern portion of the Reinforcement Section component of the study area for this Project (Figure 8-9).

In 2014, Detritus conducted a Stage 1-2 archaeological assessment as part of an EA for a proposed subdivision development in Hanover, Ontario on behalf of WSP Canada Inc. (Detritus 2015). A pedestrian survey was conducted across the entire study area. No archaeological resources were identified, and no further archaeological work was recommended (Detritus 2015). A portion of Detritus' (2015) study area overlaps with the eastern portion of the Reinforcement Section component of the study area for this Project (Figure 8-9).

In 2021, the Town of Hanover retained Golder Associates Ltd. (Golder) to conduct a Stage 1-2 archaeological assessment in support of replacement bridges for three spans along the town's community trail (Golder 2021). The Stage 1 archaeological assessment determined the study areas for the three bridges retained archaeological potential based on proximity of water sources. The Stage 2 archaeological assessment consisted of test pit survey and photo documentation of areas of previous disturbance around the existing bridges (Golder 2021). No archaeological resources were identified, and no further archaeological work was recommended. The study area for Bridge No. 1 overlaps with a portion of the AR component of the study area for this Project (Figure 8-8).

## 1.3.3 Existing Conditions

The study area for the Project is approximately 1,105.13 ha of land that is comprised of roadways, agricultural fields, a quarry, forested areas, scrublands, residential houses with grassed lawns, industrial and commercial structures, paved parking areas, and cemeteries.

## 2 Field Methods

Prior to the start of the Stage 1 archaeological assessment, the Client provided preliminary mapping of the Project's components (i.e., the study area). This mapping was geo-referenced by Stantec's Geographical Information Systems (GIS) team and a digital file (i.e., a shape file) was created of the study area. The digital file of the study area was uploaded to ArcGIS Field Maps powered by ESRI, customized by Stantec for archaeological survey and assessment, for digital data recording in the field. Data was recorded in the field on a handheld mobile device paired with a Trimble R1 Global Navigation Satellite System (GNSS) receiver to an accuracy of less than one metre.

Initial background research compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on April 14, 2023, by Darren Kipping (P422), under PIF number P422-0035-2023 issued to Darren Kipping, MA, RPA by the MCM in accordance with Section 1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The property inspection involved examining the entirety of the study area to identify the presence or absence of any features of archaeological potential. However, specific access to private lands was not obtained for the property inspection. As such, photo documentation completed during the Stage 1 visual assessment was completed from municipal road rights-of-way (ROW) and public lands.

During the property inspection the weather was sunny and warm, and visibility of land features was excellent. At no time were field, lighting, or weather conditions detrimental to the identification of features of archaeological potential. The photography from the property inspection conducted on April 14, 2023, is presented in Section 7.1, and confirms that the requirements for a Stage 1 property inspection were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Figure 8 illustrates photo locations and the archaeological potential of the study area.

As noted elsewhere, the study area consists of four components. The PPR component of the study area mainly traverses County Road 10 between Neustadt and Hanover. The AR component of the study area generally traverses Concession 10 East, Sideroad 30 South, and Concession 2 SDR East. The Distribution Network component of the study area generally traverses the local roads within Neustadt. The Reinforcement Section component of the study area generally traverses 2<sup>nd</sup> Street, 14<sup>th</sup> Avenue, and 1<sup>st</sup> Street in the town of Hanover.

Based on the results of the property inspection, a large portion of the study area, approximately 79.28%, consists of manicured lawn within non-ROW lands, agricultural fields, scrublands, cemeteries, and woodlots/managed forests. Photos 1 to 6 illustrate typical examples of these areas.

Approximately 16.91% of the study area consists of modern disturbances from existing commercial and residential buildings and frontages, existing construction activities and grading, the municipal ROW, including existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads, bridges, and ditching, gravel and paved driveways/laneways, and buried utilities and

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municipal infrastructure (e.g., sewers, pipelines, telecommunication cables, etc.). Photos 7 to 21 illustrate typical examples of existing disturbance identified throughout the study area.

Approximately 1.27% of the study area consists of areas subject to previous archaeological assessment. These areas were not subject to photo documentation.

Approximately 0.91% of the study area consists of cemeteries and their adjacent lands (i.e., a 10-metre buffer). Photos 22 to 23 illustrate examples of cemeteries in the study area.

Approximately 0.47% of the study area consists of areas of steep slope. Photos 24 illustrates typical areas of steeply sloped terrain within the study area.

Approximately 0.33% of the study area consists of areas considered to be low and permanently wet. Photos 25 to 26 illustrate typical examples of low and permanently wet areas throughout the study area.

The remaining portions of the study area, approximately 0.83% of the study area consists of navigable waterways. Photos 27 to 29 illustrate examples of navigable waterways throughout the study area.



## 3 Analysis and Conclusions

Archaeological potential is established by determining the likelihood that archaeological resources may be present within a study area. Stantec applied archaeological potential criteria commonly used by the MCM (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, distance to historical structures or settlements, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

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, 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 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. Finally, extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

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 MCM categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, and creeks.
- Secondary water sources: intermittent streams and creeks, springs, marshes, and swamps.
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, and shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, and sandbars stretching into marsh.

The study area is within proximity to both primary and secondary water sources such as the South Saugeen River, Beatty Saugeen River, Meux Creek, Carrick Creek as well as many of its tributaries. Ancient and/or relic tributaries of other primary and secondary water sources may have existed but are not identifiable today and are not indicated on historical mapping. Further examination of the study area's natural environment identified soil conditions suitable for Indigenous agriculture. A review of the *Ontario Archaeological Sites Database* identified one registered archaeological site within one kilometre of the study area. As there is no other available information regarding this archaeological site, its cultural affiliation remains unknown. It should be noted that the paucity of assessments and registered archaeological sites may be due to the relatively undeveloped landscape surrounding the study area and is not necessarily reflective of an absence of archaeological resources or potential.

Archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register



or designated under the *Ontario Heritage Act* (Government of Ontario 1990a) or property that local histories or informants have identified with possible historical events, activities, or occupations. The study area includes several historical transportation routes (roadways and rail lines), three historical villages (Neustadt, Hanover, and Carlsruhe), and three historical cemeteries (Hanover and Old Hanover Cemetery, St. Paul's Lutheran Cemetery, and St. Peter's Lutheran Cemetery). Stantec's *Cultural Heritage Screening Report* (Stantec 2023) for the Project indicates that there are additional built heritage resources within the study area that retain cultural heritage value or interest, including mid-19<sup>th</sup> and 20<sup>th</sup> century farmsteads, homesteads, and structures, and a network of tunnels that could be considered a local landmark in Neustadt. Historical mapping demonstrates that the study area was occupied as early as the mid-to-late 19<sup>th</sup> century and that much of the established road and rail networks and agricultural settlement from the 19<sup>th</sup> century are still visible today.

When the above listed criteria are applied, the study area is considered to retain archaeological potential. However, as noted above, extensive and deep land alteration can eradicate archaeological potential. The Stage 1 property inspection determined that portions of the study area, particularly the municipal ROW, are previously disturbed from existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads, bridges, and ditching, gravel and paved driveways/laneways, buried utilities and municipal infrastructure (e.g., sewers, pipelines, telecommunication cables, etc.), disturbance from existing commercial and residential buildings and frontages, as well as additional disturbance from existing construction activities and grading. These portions of the study area have been subject to deep and extensive land disturbance which has removed archaeological potential. The Stage 1 property inspection determined that portions of the study area are steeply sloped and low and permanently wet; these areas do not retain archaeological potential. A small portion of the study area has been subject to previous archaeological assessment (AMICK 2014; 2015; Detritus 2014; 2015; Golder 2021) and retains no further cultural heritage value or interest. Figure 8 illustrates the areas of low to no archaeological potential, including previous modern disturbance, low and permanently wet areas, and the portion of the study area previously assessed.

The Stage 1 property inspection has also determined that areas of archaeological potential remain within the study area. These areas include manicured lawn within non-ROW lands, agricultural fields, scrublands, cemeteries, and woodlots/managed forests, and other lands not visually identified to be previously disturbed from any of the above-mentioned land disturbances. Thus, these areas are considered to retain archaeological potential. Figure 8 illustrates the areas that retain archaeological potential.

It should also be noted that in Ontario, projects that have components which may impact below the highwater mark of navigable waterways should determine the marine archaeological potential of the project limits prior to any in-water disturbance. Portions of the study area overlap with navigable and/or historical waterways, which includes the Beatty Saugeen River, the South Saugeen River, and a portion of Meux Creek adjacent to the Neustadt Brewery and existing dam. Only a portion of Meux Creek is identified as retaining marine archaeological potential as components, or remnant structures, of the early dam construction and original 1859 wooden brewery may be within or deposited within this portion of the creek. The remaining portions of Meux Creek are considered low and permanently wet and do not retain archaeological potential. Marine archaeological potential for navigable waterways cannot be determined through a land-based Stage 1 archaeological assessment, and therefore these areas retain archaeological potential until, the proponent can complete the *Criteria for Evaluating Marine Archaeological Potential* checklist (Government of Ontario 2016) if necessary, to determine if a marine archaeological assessment is required.

In summary, the Stage 1 archaeological assessment of the Project study area, involving background research and a property inspection, determined that much of the study area retains archaeological potential. However, the property inspection also indicted that approximately 16.91% of the study area consists of modern disturbances, approximately 1.27% of the study area has been subject to previous archaeological assessment, approximately 0.47% of the study area consists of areas of steep slope, and approximately 0.33% consists of low and permanently wet areas. These areas, cumulatively 18.98% of the study area, are considered to retain low to no archaeological potential. Approximately 0.83% of the study area is recommended for a marine archaeological potential checklist. The remaining 80.19% of the study area, is considered to retain archaeological potential. In accordance with Section 1.3.1 of the MCM'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.

The final route and construction easement, including any temporary land use, for the Project will be determined at a later date. A refinement of archaeological potential specific to the Project's anticipated impacts will be included as part of the Stage 2 archaeological assessment for the Project. The results of the Stage 1 assessment are illustrated on Figure 8.

## 4 Recommendations

The Stage 1 archaeological assessment of the study area for the Project determined that most of the study area, approximately 80.19%, retains archaeological potential. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction activities which impact an area of archaeological potential (Figure 8).** 

The objective of Stage 2 archaeological assessment is to document archaeological resources within the portions of the study area still retaining archaeological potential and to determine whether these archaeological resources require further assessment. For areas that are actively or recently cultivated, the Stage 2 archaeological assessment must include the systematic walking of open ploughed fields as outlined in Section 2.1.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MCM standards require that all agricultural land, both active and inactive, be recently ploughed and sufficiently weathered to improve the visibility of archaeological resources. Ploughing must be deep enough to provide total topsoil exposure, but not deeper than previous ploughing, and must provide at least 80% ground surface visibility. For areas inaccessible for ploughing, the Stage 2 archaeological assessment must include a test pit survey as outlined in Section 2.1.2 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The MCM standards require that each test pit be at least 30 centimetres in diameter, excavated to at least five centimetres into sterile subsoil, and have excavated soil screened through six-millimetre hardware cloth to facilitate the recovery of any cultural material that may be present. Prior to backfilling, each test pit will be examined for stratigraphy, cultural features, or evidence of fill.

If the archaeological field team determines any additional lands to be low and permanently wet, steeply sloped, or disturbed during the Stage 2 field work, those areas will not require survey, but will be photographically documented in accordance with Section 2.1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

It is further recommended that Stage 2 archaeological assessment of the study area include engagement with Indigenous communities interested in the Project. Indigenous engagement practices conducted during the Stage 2 archaeological assessment must be completed in accordance with the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* Government of Ontario 2011) and the MCM's draft technical bulletin on *Engaging Aboriginal Communities in Archaeology*.

The Stage 1 archaeological assessment determined that the remaining portions of the study area, approximately 18.98%, retain low to no archaeological potential due to areas of steep slope, low and wet areas, areas subject to previous archaeological assessment, and areas subject to deep and extensive modern disturbances such existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads, bridges, and ditching, gravel and paved driveways/laneways, buried utilities and municipal infrastructure (e.g., sewers, pipelines, telecommunication cables, etc.), disturbance from existing commercial and residential buildings and frontages, and additional disturbance from existing construction activities and grading. In accordance with Section 1.3.2, Section 2.1 Standard 2, and Section 7.74 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario



# 2011), Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction activities which impact an area of low to no archaeological potential (Figure 8).

Three historical cemeteries are documented to be within, or adjacent to, the study area. Legal boundary maps of the cemeteries were provided by the BAO (see Supplementary Documentation). However, based on personal communication, background research, and historical documentation, it could not be completely confirmed that no burial activity occurred beyond the legal boundaries. As described previously, the final route and construction easement, including any temporary land use, for the Project will be determined at a later date. If any components of the final route and construction easement are proposed within a minimum of 10 metres of these cemeteries' currently understood property boundaries, as allowed by the study area, further investigation may be warranted in consultation with the MCM and the BAO. This may include Stage 2 test pit survey of areas with topsoil followed by a Stage 3 cemetery investigation, comprising mechanical topsoil and asphalt removal using a backhoe or excavator equipped with a flat bladed (ditching) bucket, under the supervision of a licensed archaeologist. Mechanical excavation should be completed using a smooth bladed trenching bucket under the observation of a licensed archaeologist with stop-work authority to inspect for evidence of extramural burials. Where mechanical excavation or other methodology is not viable for the purpose of making a conclusive assessment of deeply buried potential for extramural burials, construction excavations should be monitored by a licensed archaeologist with stop-work authority to inspect for evidence of extramural burials. These deep-testing methodologies should be employed within a minimum area of 10 metres from the modern cemetery boundary, as allowed by the study area. If any human remains or grave shafts are encountered, all work should cease, and the licensee should consult with the BAO and MCM. If evidence of extramural burials is identified then further assessment of a minimum area of 10 metres beyond all identified extramural burials may be required, as allowed by the study area.

In addition, the Stage 1 archaeological assessment of the study area for the Project determined that portions of the study area, approximately 0.83%, overlap navigable waterways, i.e., Beatty Saugeen River, South Saugeen River, portion of Meux Creek. If any in-water disturbance is proposed as part of the Project for these portions of the waterways within the study area, the proponent should complete the *Criteria for Evaluating Marine Archaeological Potential* checklist (Government of Ontario 2016) to determine if a marine archaeological assessment is required. Marine archaeological assessments must be conducted by a qualified marine/underwater archaeologist under a Marine Licence acquired from the MCM.

The MCM is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*.

## 5 Advice on Compliance with Legislation

In accordance with Section 7.5.9 of the MCM's 2011 <u>Standards and Guidelines for Consultant</u> <u>Archaeologists</u> (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the MCM's 2011 <u>Standards and Guidelines</u> <u>for Consultant Archaeologists</u> (Government of Ontario 2011).

This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 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 study area of a development proposal have been addressed to the satisfaction of the MCM, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* (Government of Ontario 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 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 Public and Business Service Delivery is also immediately notified.

Archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

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## 6 References

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## 7 Images



Photo 1: Manicured lawn, illustrating area retaining archaeological potential, facing northwest

Photo 2: Scrubland, illustrating area retaining archaeological potential, facing north-northwest



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Photo 3: Agricultural field, illustrating area retaining archaeological potential, facing east

Photo 4: Scrubland, illustrating area retaining archaeological potential, facing southwest





Photo 5: Wooded area, illustrating area retaining archaeological potential, facing west

Photo 6: Wooded area, illustrating area retaining archaeological potential, facing south



Stage 1 Archaeological Assessment: Neustadt Community Expansion Project 7 Images May 12, 2023



Photo 7: Existing road, municipal ROW, and ditching, illustrating area of previous disturbance, facing north

Photo 8: Existing road, municipal ROW, and ditching, illustrating area of previous disturbance, facing southwest







### Photo 9: Former railbed, illustrating area of previous disturbance, facing south-southeast

Photo 10: Existing road and subsurface infrastructure, illustrating area of previous disturbance, facing west-southwest



Stage 1 Archaeological Assessment: Neustadt Community Expansion Project 7 Images May 12, 2023



Photo 11: Existing road, parking lot, and municipal ROW, illustrating area of previous disturbance, facing south

Photo 12: Existing road, foreslope, ditching, and municipal ROW, illustrating area of previous disturbance, facing north-northwest







Photo 13: Existing road, foreslope, ditching, and municipal ROW, illustrating area of previous disturbance, facing south

Photo 14: Existing road, foreslope, ditching, and municipal ROW, illustrating area of previous disturbance, facing north-northwest





Photo 15: Ditching and grading, illustrating area of previous disturbance, facing east-northeast

Photo 16: Existing road, illustrating area of previous disturbance, facing south-southeast



Stage 1 Archaeological Assessment: Neustadt Community Expansion Project 7 Images May 12, 2023



Photo 17: Existing road, ditching, and subsurface infrastructure, illustrating area of previous disturbance, facing north-northwest

Photo 18: Existing road, ditching, and municipal ROW, illustrating area of previous disturbance, facing west-southwest







### Photo 19: Existing road, illustrating area of previous disturbance, facing south-southeast

Photo 20: Existing quarry, illustrating area of previous disturbance, facing west-northwest



Stage 1 Archaeological Assessment: Neustadt Community Expansion Project 7 Images May 12, 2023



Photo 21: Existing road, ditching, and municipal ROW, illustrating area of previous disturbance, facing east-northeast

Photo 22: Old Hanover Cemetery, facing southwest



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Photo 23: Hanover Cemetery and municipal ROW, facing north-northwest

Photo 24: Illustrating area of steeply sloped terrain, facing northeast





Photo 25: Carrick Creek, illustrating low and permanently wet area, facing east

Photo 26: Carrick Creek, illustrating low and permanently wet area, facing north




Photo 27: South Saugeen River, illustrating navigable waterway, facing northwest

Photo 28: South Saugeen River, illustrating navigable waterway, facing southeast





Photo 29: South Saugeen River, illustrating navigable waterway, facing northwest

## 8 Maps

General maps of the study area follow on succeeding pages.







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, 2022.
3. Orthoimagery: © 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS.
Date of imagery, unknown.

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Location of Study Area





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Client/Project ENBRIDGE GAS INC. STAGE 1 ARCHAEOLOGICAL ASSESSMENT NEUDSTADT COMMUNITY EXPANSION PROJECT Figure No. 2-2 Title

Location of Study Area





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Legend Study Area (Approximate)

#### Figure Not to Scale

Notes 1. Source: Belden, H & Co. 1880. Grey County Supplement in the Illustrated Atlas of the Dominion of Canada. Toronto: H. Belden & Co.



Project Location COUNTIES OF BRUCE AND GREY

160951366 REVA Prepared by SPE on 2023-05-11 Technical Review by BCC on 2024-04-27

Client/Project ENBRIDGE GAS INC. STAGE 1 ARCHAEOLOGICAL ASSESSMENT NEUDSTADT COMMUNITY EXPANSION PROJECT

Figure No. 6

#### Title

### Portion of the 1880 Map of Bentinck Township





Legend Study Area (Approximate)

#### Figure Not to Scale

Notes 1. Source: Belden, H & Co. 1880. Grey County Supplement in the Illustrated Atlas of the Dominion of Canada. Toronto: H. Belden & Co.



Client/Project ENBRIDGE GAS INC. STAGE 1 ARCHAEOLOGICAL ASSESSMENT NEUDSTADT COMMUNITY EXPANSION PROJECT

Portion of the 1880 Map of Normanby

Figure No. 7

Township

Title



Notes

Archaeologica
A

Figure 8-1

o 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.

Low and Permanently Wet Area, Low to No Archaeological Potential - No Further

Archaeological Work Required

STAGE 1 ARCHAEOLOGICAL ASSESSMENT NEUDSTADT COMMUNITY EXPANSION PROJECT Figure No.

8-1 Title

Stage 1 Archaeological Assessment Results





o 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.

Client/Project ENBRIDGE GAS INC. STAGE 1 ARCHAEOLOGICAL ASSESSMENT NEUDSTADT COMMUNITY EXPANSION PROJECT Figure No. 8-2

Title

Stage 1 Archaeological Assessment Results





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.

8-3 Title Stage 1 Archaeological Assessment Results

Figure No.



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s no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient releases Stantec, its officers, employees, consultants and agents, from any and all claims arising in any way from the content or provision of the data.

## 9 Closure

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities, or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Quality Daviau	Alf	Colin Varley 2023.05.16 11:51:06 -04'00'	
Quality Review			

Colin Varley – Senior Associate, Environmental Services

Independent Review

Dickson, Parker 2023.05.12 15:04:39 -04'00'

Parker Dickson – Senior Associate, Environmental Services



**Neustadt Community Expansion Project: Environmental Report Appendix F Cultural Heritage Checklist and Screening Report** August 23, 2023

## Appendix F Cultural Heritage Checklist and Screening Report

**Neustadt Community Expansion Project: Environmental Report Appendix F Cultural Heritage Checklist and Screening Report** August 23, 2023

## F.1 Cultural Heritage Checklist



Ministry of Tourism, Culture and Sport

Programs & Services Branch 401 Bay Street, Suite 1700 Toronto ON M7A 0A7

## Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes A Checklist for the Non-Specialist

The purpose of the checklist is to determine:

- if a property(ies) or project area:
  - is a recognized heritage property
  - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including but not limited to:
  - the main project area
  - temporary storage
  - staging and working areas
  - temporary roads and detours

Processes covered under this checklist, such as:

- Planning Act
- Environmental Assessment Act
- Aggregates Resources Act
- Ontario Heritage Act Standards and Guidelines for Conservation of Provincial Heritage Properties

### **Cultural Heritage Evaluation Report (CHER)**

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

### Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 separate checklist
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Proposed	roperty Name Natural Gas Pipeline to Serve the Community of Neustadt		
Project or P West Grey	roperty Location (upper and lower or single tier municipality) y, Hanover Grey County; Brockton and South BruceBruce County		
Proponent N Enbridge	lame Gas Inc.		
Proponent C	Contact Information		
Screening	Questions		
1. Is there	e a pre-approved screening checklist, methodology or process in place?	Yes	No V
If Yes, plea	ase follow the pre-approved screening checklist, methodology or process.		
If No, conti	inue to Question 2.		
Part A: Sc	reening for known (or recognized) Cultural Heritage Value		
o 11 /		Yes	No
2. Has the	e property (or project area) been evaluated before and found <b>not</b> to be of cultural heritage value?		
If Yes, do i	not complete the rest of the checklist.		
The propor	nent, 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 summ	ary and appropriate documentation may be:		
•	submitted as part of a report requirement		
•	maintained by the property owner, proponent or approval authority		
If No, conti	inue to Question 3.		
		Yes	No
3. Is the p	property (or project area):		
a.	identified, designated or otherwise protected under the Ontario Heritage Act as being of cultural heritage value?		<ul> <li>✓</li> </ul>
b.	a National Historic Site (or part of)?		✓
C.	designated under the Heritage Railway Stations Protection Act?		$\checkmark$
d.	designated under the Heritage Lighthouse Protection Act?		$\checkmark$
e.	identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?		$\checkmark$
f.	located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?		<ul> <li>✓</li> </ul>
If Yes to a	ny 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 Statem proposed,	ent of Cultural Heritage Value has been prepared previously and if alterations or development are 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, conti	inue to Question 4.		

Tare B. Corcenning for Potential Outrara Heritage Va		
	Y	'es No
4. Does the property (or project area) contain a parce	l of land that:	
a. is the subject of a municipal, provincial or fe	deral commemorative or interpretive plaque?	
b. has or is adjacent to a known burial site and	d/or cemetery?	✓
c. is in a Canadian Heritage River watershed?		
d. contains buildings or structures that are 40	or more years old?	✓
Part C: Other Considerations		
	Y	′es No
5. Is there local or Aboriginal knowledge or accessible	e documentation suggesting that the property (or project area):	
a. is considered a landmark in the local comm defining the character of the area?	unity or contains any structures or sites that are important in	<ul><li>✓</li></ul>
b. has a special association with a community	, person or historical event?	
c. contains or is part of a cultural heritage land	lscape?	
<b>If Yes</b> to one or more of the above questions (Part B ar property or within the project area.	nd C), there is potential for cultural heritage resources on the	
You need to hire a qualified person(s) to undertake:		
a Cultural Heritage Evaluation Report (CHE	R)	
If the property is determined to be of cultural heritage v hire a qualified person(s) to undertake:	alue and alterations or development is proposed, you need to	
• a Heritage Impact Assessment (HIA) – the	report will assess and avoid, eliminate or mitigate impacts	
<b>If No</b> to all of the above questions, there is low potential property.	I for built heritage or cultural heritage landscape on the	
The proponent, property owner and/or approval authori	ty will:	
summarize the conclusion		
add this checklist with the appropriate docu	mentation to the project file	
The summary and appropriate documentation may be:		
<ul> <li>submitted as part of a report requirement e. processes</li> </ul>	g. under the Environmental Assessment Act, Planning Act	

• maintained by the property owner, proponent or approval authority

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D. C.

Potential Cultural Heritage Valu

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 <u>Ontario Heritage Toolkit</u> or <u>Standards and Guidelines for</u> <u>Conservation of Provincial Heritage Properties</u>.

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 <u>Standards & Guidelines for Conservation of Provincial Heritage Properties</u> [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:

- <u>Ontario Heritage Trust</u> 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:

- <u>municipal heritage committees</u> 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 <u>Heritage</u> <u>Property Evaluation</u>.

#### 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.
- <u>municipal heritage committees</u> or local heritage organizations
- Ontario Historical Society's "<u>Heritage Directory</u>" 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.

**Neustadt Community Expansion Project: Environmental Report Appendix F Cultural Heritage Checklist and Screening Report** August 23, 2023

## F.2 Cultural Heritage Screening Report



## Memo

To:	Greg Asmussen	From:	Frank Smith, MA, CAHP
	Enbridge Gas Inc.		Meaghan Rivard, MA, CAHP
			Stantec Consulting Ltd.
Project/File:	160951366	Date:	May 2, 2023

#### Reference: Enbridge Gas Inc., Proposed Natural Gas Pipeline to Serve the Community of Neustadt—Cultural Heritage Screening Report (CHSR)

## 1 Introduction

Stantec Consulting Ltd. (Stantec), on behalf of Enbridge Gas Inc. (Enbridge), is undertaking a series of environmental studies for the Neustadt Community Expansion Project (the Project). Stantec was retained by Enbridge to prepare a Cultural Heritage Screening Report (CHSR) for the Project. Enbridge is proposing to construct the Project to supply the community of Neustadt with affordable natural gas. The need to consider previously identified and potential built heritage resources and cultural heritage landscapes is defined by Section 4.3.4 of the Ontario Energy Board (OEB) Environmental Guidelines for the Location. Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario<sup>1</sup> (the OEB Environmental Guidelines) (OEB 2023). The proposed Project consists of approximately 13.0 km of polyethylene natural gas main pipeline. The Proposed Preliminary Route (PPR) will connect to the existing 4" steel pipeline south of Hanover, along 10th Avenue near the intersection of Regional Road 10 and Knappville Road, running south along Regional Road 10 from the tie-in point to the intersection with Queen Street. An Alternative Route (AR) proposes shifting the tie-in point to the crossing of 7th Avenue with 2nd Street, running south along Durham Road, following Concession 2 South Durham Road until it crosses Side Road 30, following this road south until it crosses Concession Road 10, and running east towards Queen Street (Figure 1). The Distribution portion of the Project within the community of Neustadt will then run along Queen St., Bruce Road 16, Stephana Street, Adam Street, Barbara Street, Enoch Street, Forler Street, Jacob Street, John Street, Grey Road 16, and Grey Road 9. In addition, a Reinforcement section of approximately 1.0 km is required to be installed along 1st Street, 14th Avenue, and 2nd Street in Hanover, within the road allowance. The objectives of this CHSR are to identify known and potential built heritage resources and cultural heritage landscapes within, adjacent, or crossed by, the Project Study Area. If identified, the CHSR will determine if the Project will require subsequent cultural heritage studies, such as a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHR), Cultural Heritage Evaluation Reports (CHERs), or Heritage Impact Assessments (HIAs). This CHSR follows the Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes: A Checklist for the Non-Specialist (the Checklist) published by the Ministry of Citizenship and Multiculturalism (MCM) in 2016 (MCM 2016).

<sup>&</sup>lt;sup>1</sup> The OEB Guidelines use 'cultural heritage resources', however, built heritage resources and cultural heritage landscapes better delineates between built features and archaeological resources. Therefore, built heritage resources and cultural heritage landscapes is used throughout this report except when quoting directly from policies or guidelines.



# 2 Methodology

The CHSR is comprised of a program of community input and a desktop review of available mapping, digital databases, and photography. The results of the desktop survey were used to complete the MCM checklist for the PPR and Distribution portion, the AR, and the Reinforcement section.

Community information requests were conducted to determine the presence of previously identified built heritage resources and cultural heritage landscapes. Community input included correspondence with the following agencies and groups:

- Ministry of Citizenship and Multiculturalism (MCM)
- Ontario Heritage Trust (OHT)
- Municipality of Brockton
- Town of Hanover
- Municipality of West Grey
- Municipality of South Bruce
- Neustadt Springs Brewery
- Grey County Historical Society

Digitized historical mapping and topographic mapping were reviewed to identify areas where potential built heritage resources and cultural heritage landscapes may be located. Mapping reviewed included:

- Illustrated Atlas of the Dominion of Canada, Bruce County, 1880 (Belden 1880a)
- Illustrated Atlas of the Dominion of Canada, Grey County, 1880 (Belden 1880b)
- Topographic Map, Walkerton Ontario Sheet, 1946 (Department of National Defence 1946)
- Topographic Map, Durham Ontario Sheet, 1945 (Department of National Defence 1945)

Present-day mapping and available online photography were also reviewed to identify potential built heritage resources and cultural heritage landscapes and to confirm the location of previously identified built heritage resources and cultural heritage landscapes.

Alongside community input and a review of historical mapping, a desktop review of databases was completed, including:

- Parks Canada Directory of Federal Heritage Designations (Parks Canada 2023a)
- Parks Canada Canada's Historic Places (Parks Canada 2023b)
- Ontario Heritage Trust Plaque Database (Ontario Heritage Trust 2023)
- Ontario Trails Council Find a Trail (Ontario Trails Council 2023)
- Canada GenWeb Cemetery Find a Cemetery (Can GenWeb 2023)

- Town of Hanover Heritage Story Map (Town of Hanover 2023)
- South Bruce Heritage Register (Municipality of South Bruce 2023)
- Brockton Heritage Register (Municipality of Brockton 2023)
- Canadian Heritage Rivers Systems (CHRS) (CHRS 2023)
- UNESCO World Heritage List (UNESCO 2023)

## 3 Desktop Review

### 3.1 Introduction

The Study Area is located in the Municipality of West Grey and Town of Hanover, within Grey County and the Municipality of South Bruce and the Municipality of Brockton, within Bruce County. Historically, the Study Area is located in the former Township of Brant and Township of Carrick, Bruce County, and the former Township of Bentinck and Township of Normanby, Grey County. These townships were historically divided into lots and concessions to facilitate the settlement of the area during the 19<sup>th</sup> century. To screen for potential built heritage resources and cultural heritage landscapes, historical, topographic, and present-day mapping and photography were reviewed for each lot and concession within the Study Area.

While historical mapping from 1880 was reviewed, it is important to note this mapping was part of the *Illustrated Atlas of the Dominion of Canada Grey Supplement* (Belden 1880). Mapping from this period often only included structures and landowners who subscribed to the *Dominion Atlas* in which these illustrated historical township maps were added as a supplement (Caston 1997; Gentilcore 1984). Therefore, the lack of a structure on a lot does not necessarily indicate it was unoccupied.

## 3.2 Preliminary Preferred Route and Distribution

### 3.2.1 MAPPING REVIEW

The PPR and Distribution are located in parts of the former Township of Normanby and Township of Bentinck. Tables 1 and 2 contain a summary of the mapping and review for the PPR and Distribution Study Areas.

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1945 and 1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 1, Concession 13	No structures depicted. An unnamed creek and pond are in the lot.	A sawmill dam is depicted on the lot along Meux Creek. The map also depicts structures, including a church, associated with the community of Neustadt.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping. Meux Creek runs through the lot.
Lot 2, Concession 13	Mapping depicts the grid of the community of Neustadt is located	A gristmill dam is depicted on the lot along Meux Creek. The map also depicts structures associated	Structures are depicted on the lot that match the approximate location of the 1880 historical mapping and

Table 1. N	lonning Doview	for Normonhy	/ Township /	(procent day	/ Municipality	y of Moot Crow
	abbillu Review			present-uav		v or west diev.

Reference:	Enbridge Gas Inc., Proposed Natural Gas Pipeline to Serve the Community of Neustadt-Cultural Heritage Screening
	Report (CHSR)

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1945 and 1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
	on the lot as well as a structure owned by Jacob Ashley south of present-day William Street. An unnamed creek and pond run through the lot.	with the community of Neustadt and a cemetery at the approximate location of the present-day location of St. Paul's Lutheran Cemetery.	1946 topographic mapping. Meux Creek runs through the lot.
Lot 3, Concession 13	Mapping depicts the grid of the community of Neustadt is located on the lot.	The map depicts structures associated with the community of Neustadt. The Canadian National Railway is also depicted running through the lot.	Structures are depicted on the lot that match the approximate location of the 1880 historical mapping and 1946 topographic mapping.
Lot 4, Concession 13	The Stratford and Lake Huron Railway runs through the lot.	The map depicts structures associated with the community of Neustadt. The Canadian National Railway is also depicted running through the lot.	A former railway alignment is visible and late 20 <sup>th</sup> to early 21 <sup>st</sup> century residences are located along Forler Street.
Lot 1, Concession 14	A structure occupied by D. Knapp is depicted along present-day Queen Street. An unnamed creek runs through the lot.	Structures are depicted along present-day Queen Street. An unnamed creek runs through the lot.	Structures are depicted on the lot that match the approximate location of the 1880 historical mapping and 1946 topographic mapping. An unnamed creek runs through the lot.
Lot 2, Concession 14	Mapping depicts the grid of the community of Neustadt is located on the lot. An unnamed creek runs through the lot.	Structures are depicted along present-day Queen Street and Highway 10 associated with the community of Neustadt. An unnamed creek runs through the lot.	Structures are depicted on the lot that match the approximate location of the 1880 historical mapping and 1946 topographic mapping. An unnamed creek runs through the lot.
Lot 3, Concession 14	The Stratford and Lake Huron Railway runs through the lot.	Structures are depicted along present-day Queen Street and Highway 10 associated with the community of Neustadt. A cemetery is depicted along present-day Cemetery Road and the Canadian National Railway is depicted running through the lot.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.
Lot 4, Concession 14	The mapping depicts a structure occupied by D. Eckstein along present-day Queen Street.	The map depicts structures associated with the community of Neustadt. The Canadian National Railway is also depicted running through the lot.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping. A former railway alignment is also visible.
Lot 2, Concession 15	The Stratford and Lake Huron Railway runs through the lot.	Structures depicted on the lot along present-day Highway 10 and the Canadian National Railway runs through the lot.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.
Lot 3, Concession 15	No structures depicted.	Structures depicted on the lot along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.

Reference:	Enbridge Gas Inc., Proposed Natural Gas Pipeline to Serve the Community of Neustadt-Cultural Heritage Screening
	Report (CHSR)

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1945 and 1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 2, Concession 16	The Stratford and Lake Huron Railway runs through the lot.	Structures depicted on the lot along present-day Highway 10 and the Canadian National Railway runs through the lot.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping. A former railway alignment is visible.
Lot 3, Concession 16	No structures depicted.	Structures depicted on the lot along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.
Lot 2, Concession 17	No structures depicted.	Structures depicted on the lot along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.
Lot 3, Concession 17	No structures depicted.	Structures depicted on the lot along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.
Lot 1, Concession 18	No structures depicted.	Structures depicted on the lot along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.
Lot 2, Concession 18	No structures depicted.	Structures depicted on the lot along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of 1946 topographic mapping.

#### Table 2: Mapping Review for Bentinck Township (present-day Municipality of West Grey)

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 2, Concession 3 South of Durham Road	No structures depicted. The Saugeen River runs through the lot.	Structures are depicted along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 3, Concession 3 South of Durham Road	No structures depicted. The Saugeen River runs through the lot.	Structures are depicted along present-day Highway 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 2, Concession 2 South of Durham Road	No structures depicted.	Structures are depicted along present-day Highway 10.	Mid to late 20 <sup>th</sup> century structures located on the lot.
Lot 3, Concession 2 South of Durham Road	No structures depicted.	Structures are depicted along present-day Highway 10	Mid to late 20 <sup>th</sup> century structures located on the lot.

### 3.2.2 DATABASE REVIEW

Table 3 contains a summary of the findings of the Database Review for the PPR and Distribution Study Areas.

Database	Results
Parks Canada Directory of Federal Heritage Designations	No federal heritage designations are located within or adjacent to the PPR and Distribution Study Areas.
Canada's Historic Places	No properties on the Canada's Historic Places Register are located within or adjacent to the PPR and Distribution Study Areas.
Ontario Heritage Trust Plaque Database	No plaques are located within or adjacent to the PPR and Distribution Study Areas.
Ontario Trail Council	The Rabbit Road hiking trail is located within the Study Area of the PPR. The trail is located off Highway 10 on part of Lot 1, Concession 18, Bentinck Township.
Canada GenWeb Cemetery Project	St. Peter's Lutheran Cemetery is located adjacent to the PPR on part of Lot 3, Concession 14, Normanby Township and St. Paul's Lutheran Cemetery is located within the Distribution Study Area on part of Lot 2, Concession 13
CHRS	The Study Area is not located in a CHRS watershed.
UNESCO	No UNESCO site is located within or adjacent to the PPR and Distribution Study Areas.

#### Table 3: Database Review<sup>2</sup>

### 3.2.3 DISCUSSION

The results of the desktop review determined that the PPR and Distribution Study Areas are situated within the community of Neustadt and the surrounding agricultural land between Neustadt and Hanover. This part of Grey County was settled during the mid to late 19<sup>th</sup> century. Based on an understanding of the historical development of this area, a review of mapping, and a review of Google Street View photography, the PPR and Distribution Study Areas contain many examples of residences and farmsteads which likely date to the mid-19<sup>th</sup> to late 19<sup>th</sup> century. The PPR and Distribution Study Areas are also located adjacent to the St. Peter's Lutheran Cemetery, located on Cemetery Road just north of the community of Neustadt and St. Paul's Lutheran Cemetery, located on Tower Street.

The community of Neustadt is known to contain a network of underground tunnels connected to the present-day Neustadt Spring Brewery. Based on correspondence with Michael Weber, owner of the Neustadt Spring Brewery, one tunnel ran northeast of the brewery towards a former mill. The tunnel then continued to a former inn and terminated near present-day 410 Mill Street. The former mill dam locations near the present-day brewery are depicted in historical mapping from 1946 (Plate 1). Tunnels are also located near the front of the brewery and across the street from the brewery. According to Mr. Weber, approximately 30 years ago much of the tunnel network was filled in when a municipal sewer was installed.

<sup>&</sup>lt;sup>2</sup> The Municipality of West Grey does not have a digitally available Heritage Register. The municipality was contacted as part of the Community Input discussed in Section 4.



Plate 1: Mill dam locations (Department of Defence 1946)

## 3.3 Alternative Route

### 3.3.1 MAPPING REVIEW

The AR is situated in parts of the former Township of Brant, Township of Bentinck, Township of Normanby, and Township of Carrick. Table 4 to Table 6 contains a summary of the mapping desktop review for the AR Study Area.

Table 4: Mapping Review Results for Carrick	Township, Bruce County	(present-day Municipality of
South Bruce)		

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 30, Concession 10	No structures depicted on lot.	Structures are depicted on the lot off present-day Concession Road 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 31, Concession 10	No structures depicted on lot. An unnamed creek runs through the lot.	Structures are depicted on the lot off present-day Concession Road 10. An unnamed creek runs through the lot.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping. An unnamed creek runs through the lot.
Lot 32, Concession 10	No structures depicted on lot.	Structures are depicted on the lot off present-day Concession Road 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.

Reference:	Enbridge Gas Inc., Proposed Natural Gas Pipeline to Serve the Community of Neustadt-Cultural Heritage Screening
	Report (CHSR)

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography
			(ESRI and Google Street View)
Lot 33, Concession 10	No structures depicted on lot.	No structures depicted on lot.	No structures depicted on the lot.
Lot 34, Concession 10	No structures depicted on lot.	Structures are depicted on the lot off present-day Concession Road 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 30, Concession 11	No structures depicted on lot.	Structures are depicted on the lot off present-day Concession Road 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 31, Concession 11	No structures depicted on lot. An unnamed creek runs through the lot.	Structures are depicted on the lot off present-day Concession Road 10. An unnamed creek runs through the lot.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping. An unnamed creek runs through the lot.
Lot 32, Concession 11	No structures depicted on lot.	Structures are depicted on the lot off present-day Concession Road 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping
Lot 33, Concession 11	No structures depicted on lot.	Structures are depicted on the lot off present-day Concession Road 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 34, Concession 11	No structures depicted on lot.	Structures are depicted on the lot off present-day Concession Road 10.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 30, Concession 12	No structures depicted on lot	Structures are depicted on the lot off present-day Concession Road 12 East.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping.
Lot 31, Concession 12	No structures depicted on lot. An unnamed creek runs through the lot.	Structures are depicted on the lot off present-day Concession Road 12 East. An unnamed creek runs through the lot.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping. An unnamed creek runs through the lot.
Lot 30, Concession 13	No structures depicted on lot	No structures depicted on lot.	A structure is presently located at the southeast corner of the lot.
Lot 31, Concession 13	No structures depicted on lot. An unnamed creek runs through the lot.	Structures are depicted on the lot off present-day Concession Road 12 East and Side Road 30 North. An unnamed creek runs through the lot.	Structures are depicted on the lot that match the approximate location of the 1946 topographic mapping. An unnamed creek runs through the lot.
Lot 30, Concession 14	Structures associated with the hamlet of Carlsruhe are depicted	Structures associated with the hamlet of Carlsruhe are depicted.	Structures associated with the hamlet of Carlsruhe are depicted.
Lot 31, Concession 14	Structures associated with the hamlet of Carlsruhe are depicted	Structures associated with the hamlet of Carlsruhe are depicted.	Structures are depicted that match topographic mapping from 1946.

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 30, Concession 15	Structures associated with the hamlet of Carlsruhe are depicted	Structures associated with the hamlet of Carlsruhe are depicted.	Structures are depicted that match topographic mapping from 1946.
Lot 31, Concession 15	Structures associated with the hamlet of Carlsruhe are depicted	Structures are depicted along Concession Road 18 and Sideroad 30 North.	Structures are depicted that match topographic mapping from 1946.

# Table 5: Mapping Review Results for Brant Township, Bruce County (present-day Municipality of Brockton)

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 65, Concession 3 South of Durham Road	No structures depicted on lot.	Structures are depicted along Sideroad 30.	Structures are depicted that match topographic mapping from 1946.
Lot 66, Concession 3 South of Durham Road	No structures depicted on lot.	Structures are depicted along Concession 2 Sideroad.	Structures are depicted that match topographic mapping from 1946.
Lot 65, Concession 2 South of Durham Road	No structures depicted on lot.	Structures are depicted along Concession 2 Sideroad.	Structures are depicted that match topographic mapping from 1946.
Lot 66, Concession 2 South of Durham Road	No structures depicted on lot.	Structures are depicted along Concession 2 Sideroad.	No structures are present on the lot.
Lot 67, Concession 3 South of Durham Road	No structures depicted on lot.	No structures depicted on lot.	No structures are present on the lot.
Lot 68, Concession 3 South of Durham Road	No structures depicted on lot.	No structures depicted on lot.	No structures are present on the lot.
Lot 69, Concession 3 South of Durham Road	No structures depicted on lot.	No structures depicted on lot.	No structures are present on the lot.
Lot 70, Concession 3 South of Durham Road	No structures depicted on lot.	No structures depicted on lot.	No structures are present on the lot.

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography
			(ESRI and Google Street View)
Lot 71, Concession 3 South of Durham Road	No structures depicted on lot.	No structures depicted on lot.	No structures are present on the lot.
Lot 72, Concession 3 South of Durham Road	No structures depicted on lot. The Saugeen River runs through the lot.	No structures depicted on lot. The Saugeen River runs through the lot.	No structures are present on the lot. The Saugeen River runs through the lot.
Lot 73, Concession 3 South of Durham Road	No structures depicted on lot. The Saugeen River runs through the lot.	Canadian National Railway tracks depicted running through lot. The Saugeen River runs through the lot.	No structures are present on the lot. The Saugeen River runs through the lot.
Lot 67, Concession 2 South of Durham Road	No structures depicted on lot.	No structures depicted on lot.	No structures are present on the lot.
Lot 68, Concession 2 South of Durham Road	No structures depicted on lot.	Structures depicted off Concession 2 Sideroad.	No structures are present on the lot.
Lot 69, Concession 2 South of Durham Road	No structures depicted on lot.	No structures depicted on lot.	No structures are present on the lot.
Lot 70, Concession 2 South of Durham Road	No structures depicted on lot.	Structures depicted off Concession 2 Sideroad.	Structures are depicted that match topographic mapping from 1946.
Lot 71, Concession 2 South of Durham Road	No structures depicted on lot. The Saugeen River runs through the lot.	Canadian National Railway tracks depicted running through lot. The Saugeen River runs through the lot.	Evidence of the railway right of way remains. The Saugeen River runs through the lot.
Lot 72, Concession 2 South of Durham Road	The Wellington, Grey and Bruce Railway is depicted running through the lot. The Saugeen River runs through the lot.	No structures depicted on lot. The Saugeen River runs through the lot.	No structures are present on the lot. The Saugeen River runs through the lot.
Lot 73, Concession 2 South of Durham Road	The Wellington, Grey and Bruce Railway is depicted running through the lot. The Saugeen River runs through the lot.	Structures depicted off Concession 2 Sideroad. The Saugeen River runs through the lot.	A structure is present on the lot. The Saugeen River runs through the lot.
Lot 74, Concession 2 South of Durham Road	A structure is depicted on this lot occupied by Johnathan Crispin.	Structures depicted off Concession 2 Sideroad.	Structures are depicted that match topographic mapping from 1946.

# Table 6: Mapping Review Results for Bentick Township, Grey County (Study Area located within present-day Town of Hanover)

Lot/Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 1, Concession 2 South of Durham Road	No structures depicted on lot.	A cemetery is depicted on the lot.	The lot contains a cemetery (Hanover Cemetery).

### 3.3.2 DATABASE REVIEW

Table 7 contains a summary of the findings of the Database Review for the AR Study Area.

#### Table 7: Database Review Results

Database	Results
Parks Canada Directory of Federal Heritage Designations	No federal heritage designations within or adjacent to AR Study Area
Canada's Historic Places	No properties on the Canada's Historic Places Register within or adjacent to AR Study Area
Ontario Heritage Trust Plaque Database	No plaques within or adjacent to AR Study Area
Ontario Trail Council	No trails within or adjacent to AR Study Area
Canada GenWeb Cemetery Project	The Hanover Old Cemetery and Hanover Cemetery are located adjacent to the AR Study Area
Hanover Municipal Heritage Register	No listed or designated properties within or adjacent to the AR Study Area
Brockton Municipal Heritage Register	No listed or designated properties within or adjacent to the AR Study Area
South Bruce Municipal Heritage Register	No listed or designated properties within or adjacent to the AR Study Area
CHRS	The AR Study Area is not located in a CHRS watershed.
UNSECO	No UNESCO sites are located within or adjacent to the AR Study Area.

### 3.3.3 DISCUSSION

Following a desktop review of historical and present-day mapping for the AR Study Area, the route has been determined to be adjacent to many examples of farmsteads and agricultural properties that date to the at least the 1940s. In addition, the AR runs through the hamlet of Carlsruhe. Based on settlement patterns of this part of Grey County and Bruce County, many of these farmsteads and the hamlet of Carsruhe may date to the mid to late 19<sup>th</sup> century. In addition, the AR Study Area is adjacent the Hanover Cemetery and Old Hanover Cemetery, both at 95 7<sup>th</sup> Avenue. A cemetery has existed at this site since at least 1946 based on topographic mapping. No other protected or previously identified built heritage resources or cultural heritage landscapes were identified within or adjacent to the AR Study Area.

## 3.4 Reinforcement Section

### 3.4.1 MAPPING REVIEW

The Reinforcement Section is in the former Township of Bentinck, present-day Town of Hanover. Table 8 contains a summary of the mapping desktop review for the Reinforcement Section Study Area.

Lot/ Concession	Historical Atlas Map (1880)	Topographic Mapping (1946)	Present-Day Mapping and Photography (ESRI and Google Street View)
Lot 3, Concession 1, South of Durham Road	While the lot contains part of the street grid of Hanover, the part of the lot within and adjacent to the Study Area depicts no structures	No structures depicted	The area contains a mix of mid to late 20 <sup>th</sup> century residences
Lot 4, Concession 1, South of Durham Road	While the lot contains part of the street grid of Hanover, the part of the lot within and adjacent to the Study Area depicts no structures	No structures depicted	The area contains a mix of mid to late 20 <sup>th</sup> century residences and a public school
Lot 5, Concession 1, South of Durham Road	While the lot contains part of the street grid of Hanover, the part of the lot within and adjacent to the Study Area depicts no structures	No structures depicted	The area contains a mix of mid to late 20 <sup>th</sup> century residences
Lot 3, Concession 2, South of Durham Road	No structures depicted	While structures are depicted off present-day 2 <sup>nd</sup> Street, they do not match the location of any present-day structures	The area contains a mix of mid to late 20 <sup>th</sup> century residences
Lot 4, Concession 2, South of Durham Road	No structures depicted	No structures depicted	The area contains a mix of mid to late 20 <sup>th</sup> century residences
Lot 5, Concession 2, South of Durham Road	No structures depicted	No structures depicted	The area contains a mix of mid to late 20 <sup>th</sup> century residences
Lot 6, Concession 2, South of Durham Road	No structures depicted	No structures depicted	The area contains mid to late 20 <sup>th</sup> century industrial buildings
Lot 7, Concession 2, South of Durham Road	No structures depicted	No structures depicted	The area contains mid to late 20 <sup>th</sup> century industrial buildings

### 3.4.2 DATABASE REVIEW

Table 9 contains a summary of the database review for the Reinforcement Section Study Area.

Database	Results
Parks Canada Directory of Federal Heritage Designations	No Federal Heritage Designations within or adjacent to Reinforcement Section Study Area.
Canada's Historic Places	No properties on the Canada's Historic Places Register within or adjacent to Reinforcement Section Study Area.
Ontario Heritage Trust Plaque Database	No plaques within or adjacent to Reinforcement Section Study Area.
Ontario Trail Council	No trails within or adjacent to Reinforcement Section Study Area.
Canada GenWeb Cemetery Project	No cemeteries within or adjacent to Reinforcement Section Study Area.
Hanover Municipal Heritage Register	No listed or designated properties within or adjacent to the Reinforcement Section Study Area.
CHRS	No CHRS watershed within or adjacent to Reinforcement Section Study Area
UNESCO	No UNESCO site within or adjacent to Reinforcement Section Study Area.

#### Table 9: Database Review Results

### 3.4.3 DISCUSSION

Following a desktop review of historical and present-day mapping for the Reinforcement Section, the route has been determined to be in a part of the Town of Hanover that was developed during the mid to late 20<sup>th</sup> century. The area includes typical mid-20<sup>th</sup> century residences such as ranch houses, a mid-20<sup>th</sup> century school that was heavily modified in 2014, and light industrial buildings. These types of structures are common throughout southern Ontario. Many examples of these types of structures were built in southern Ontario, and many remain. Following a review of databases, no protected or previously identified built heritage resources or cultural heritage landscapes were identified within or adjacent to the Study Area for the Reinforcement section.

## 4 Community Input

Community input was conducted to determine the presence of previously identified built heritage resources and cultural heritage landscapes. Table 10 contains a summary of the community input results.

Organization	Contact	Results
Ontario Heritage Trust	Kevin Baksh	Mr. Baksh responded confirming that there are no OHT conservation easements or Trust-owned properties within or adjacent to the Study Areas for the PPR, the Distribution, the AR, or the Reinforcement section.
Ministry of Citizenship and Multiculturalism	registrar@ontario.ca	Ms. Karla Barboza responded confirming that there are no properties designated by the Minister and no provincial heritage properties within or adjacent to the Study

 Table 10: Community Input Results

Organization	Contact	Results
		Areas for the PPR, the Distribution, the AR, or the Reinforcement section.
Town of Hanover	Sherri Walden, Town of Hanover Heritage Committee	A response is pending.
Municipality of West Grey	Laura Johnston, Deputy Clerk	A response is pending.
Municipality of Brockton	Dean Leifso, Brockton Heritage Committee Chair	A response is pending.
Municipality of South Bruce	Leanne Martin, CAO/Clerk	On behalf of Ms. Martin, Candace Hamm confirmed that the Municipality of South Bruce has not designated any properties along the PPR or within or adjacent to the Study Area.
Neustadt Springs Brewery	Michael Weber	Mr. Weber provided Stantec with information regarding the tunnel network originating at the brewery.
West Grey Historical Society	info@greycountyhs.ca	The West Grey Historical Society responded that they do not maintain any repositories or archives.

## 5 Results

## 5.1 Preliminary Proposed Route and Distribution

The results of the MCM Checklist for the PPR and Distribution are contained in Table 11.

#### Table 11: MCM Checklist Results for PPR and Distribution

Indicators of Cultural Heritage Value or Interest (CHVI)	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 Heritage Railway Stations Protections Act	Not Identified
Designated under the Heritage Lighthouse Protection Act	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 (UNESCO) World Heritage Site	Not Identified
Is the 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	Identified
Is in a Canadian Heritage River watershed	Not Identified
Contains buildings or structures that are 40 or more years old	Identified
Local or Aboriginal knowledge that the property is considered a landmark in the local community or contains structures or sites that are important in defining the character of the area	Identified

Indicators of Cultural Heritage Value or Interest (CHVI)	Identified within the Study Area		
Local or Aboriginal knowledge that the property has a special association with a community, person, or historical event	Not Identified		
Local or Aboriginal knowledge that the property contains or is part of a cultural heritage landscape	Not Identified		

## 5.2 Alternative Route

The results of the MCM Checklist for the AR are contained in Table 12.

#### Table 12: MCM Checklist Results for Alternative Route

Indicators of Cultural Heritage Value or Interest (CHVI)	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 Heritage Railway Stations Protections Act	Not Identified
Designated under the Heritage Lighthouse Protection Act	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 (UNESCO) World Heritage Site	Not Identified
Is the 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	Identified
Is in a Canadian Heritage River watershed	Not Identified
Contains buildings or structures that are 40 or more years old	Identified
Local or Aboriginal knowledge that the property is considered a landmark in the local community or contains structures or sites that are important in defining the character of the area	Not Identified
Local or Aboriginal knowledge that the property has a special association with a community, person, or historical event	Not Identified
Local or Aboriginal knowledge that the property contains or is part of a cultural heritage landscape	Not Identified

## 5.3 Reinforcement Section

The results of the MCM Checklist for the Reinforcement section are contained in Table 13.

#### Table 13: MCM Checklist Results for Reinforcement Section

Indicators of Cultural Heritage Value or Interest (CHVI)	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 Heritage Railway Stations Protections Act	Not Identified
Designated under the Heritage Lighthouse Protection Act	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 (UNESCO) World Heritage Site	Not Identified
Is the 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
Local or Aboriginal knowledge that the property is considered a landmark in the local community or contains structures or sites that are important in defining the character of the area	Not Identified
Local or Aboriginal knowledge that the property has a special association with a community, person, or historical event	Not Identified
Local or Aboriginal knowledge that the property contains or is part of a cultural heritage landscape	Not Identified

## 6 Recommendations

## 6.1 Preliminary Preferred Route and Distribution

The PPR and Distribution meets three indicators of CHVI as they contain structures over 40 years of age, are adjacent to two cemeteries, and contain a network of tunnels that could be considered a local landmark. The structures identified as over 40 years of age include mid-19<sup>th</sup> to early 20<sup>th</sup> century farmsteads and structures associated with the community of Neustadt. Therefore, a *Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment* is required.

## 6.2 Alternative Route

The AR meets two indicators of CHVI as it contains structures over 40 years of age and the Hanover Cemetery is within the Study Area. The structures identified as over 40 years of age include mid-19<sup>th</sup> to early 20<sup>th</sup> century farmsteads. Therefore, a *Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment* is required.

## 6.3 Reinforcement Section

The Reinforcement section is located in a section of the Town of Hanover that was developed in the mid to late 20<sup>th</sup> century. While this area may include structures that were built more than 40 years ago, based on a desktop review and review of Google Street View photography, these structures include a mix of typical mid-20<sup>th</sup> century ranch style residences, contemporary residences, light industrial structures, and a mid-20<sup>th</sup> century school which was heavily modified in 2014. These types of structures are common throughout southern Ontario, and many examples remain. Therefore, they do not contain potential for cultural heritage value or interest. No further cultural heritage studies are recommended for the Reinforcement section.

## 7 Closure

This memo has been prepared for the sole benefit of Enbridge and may not be used by any third party without the express written consent of Stantec Consulting Ltd., and Enbridge.

We trust this memo 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.

Sincerely,

#### STANTEC CONSULTING LTD.

Digitally signed by Smith, Frank Date: 2023.05.16 16:51:36 -04'00'

Frank Smith MA, CAHP Cultural Heritage Specialist Mobile: (226) 448-7417 Frank.smith@stantec.com Digitally signed by Meaghan Rivard Date: 2023.05.16 16:56:18 -04'00'

Meaghan Rivard MA, CAHP Associate, Senior Heritage Consultant Mobile: (226) 268-9025 Meaghan.Rivard@stantec.com Belden, H. 1880a. Illustrated Atlas of the Dominion of Canada, Bruce Supplement. Toronto: H. Belden & Co.

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**Neustadt Community Expansion Project: Environmental Report Appendix G Environmental Alignment Sheets** August 23, 2023

## Appendix G Environmental Alignment Sheets

	CONSERVATION AUTHORITY REGULATED AREA	SVCA Regulated Area
ources	WETLAND WATERCOURSE ANSI	Watercourse
	VEGETATION	Wooded Area
Resou	WATER WELL WITHIN 50 m	Wells Present
	LINEAR FEATURES	Driveways and Roads
	ENVIRONMENTALLY SENSITIVE AREA	
	SPECIES AT RISK HABITAT	Potential SAR Hab <mark>t</mark> at
Construction Const	Truction Mitigation Notes: 1: HDD construction method recommended. Refer to is HDD construction method recommended. Refer to is Habitat and Aquite Species at Risk in Table 5.1 ER, Sections 12.1, 12.4, and 15.0 of ECMM and the EGI Agreement. 2: Without preconstruction nesting surveys, no gativities should take place during the migratory ing bird-restricted activity period (April 1 – August 31), to row "Wildlife, Wildlife Habitat and Species at Risk 6.1 of the ER and EECP. 3: Tree removal to avoid the active season for bats 1: 6 to September 30). Refer to row Wildlife, Wildlife at and Species at Risk in Table 5.1 of the ER and 4: Groundwater wells present. Refer to row Wildlife birdlife, Store 1.0 of the ER and 5: Water well monitoring program recommended. to Section 7.1.2 of the ER. 5: Other the SVCA required. Refer to row all Hazards and Regulated Areas' in Table 5.1 of the F. Local Infrastructure. Refer to row 'Infrastructure' in 5: of the ER and Sections 12.0 and 18.0 of ECMM. 8: Maintain an emergency egress. Refer to row multy Services and Municipal Infrastructure' in Table the FE and Sections 12.0 of no work from Oct Junity Services and Municipal Infrastructure' in Table the FE and Sections 12.0 of no work from Oct Junity Services and Municipal Infrastructure' in Table the FE and Sections 12.0 on do 32.0 of ECMM. 8: Maintain an emergency egress. Refer to row multy Services and Municipal Infrastructure' in Table the FE and Sections 12.0 on do 30.0 or oct form Oct Junity Services and Municipal Infrastructure' in Table the FE and Sections 12.0 no work from Oct Junity Services and Socion 52.2 and 1 ECMM. the DFO-EGI Agreement. 10: Overall Benefit Permit under the Endangered s, or protected habitat, are impacted by project tes, Refer to row "Tish Habitat and Aquatic Species at 1 Table 5.1 of the ER and Aquatic Species at 1 Table 5.1 of the ER the COMM.	TOWER ST
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	CONSTRUCTION REQUIREMENTS	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)	Note 9
	PIPELINE CROSSING METHODS	Note 1
tion	VEGETATION RESTRICTIONS	Notes 2 & 3
Aitiga	MONITORING	Notes 4 8 5
tion \	PERMITTING REQUIREMENTS	Noie 6
nstruc	SPECIES AT RISK HABITAT	Note 10
Col	POTENTIALLY CONTAMINATED SITES	Note 11



Γ		CONSERVATION AUTHORITY REGULATED AREA	SVCA SVCA Regulated Regulated Regulated
		WETLAND WATERCOURSE ANSI	Watercourse
Recources	Irces	VEGETATION	
	Resou	WATER WELL WITHIN 50 m	WellsWellsPresentPresent
		LINEAR FEATURES	Driveways Driveways and Roads
		ENVIRONMENTALLY SENSITIVE AREA	
		SPECIES AT RISK HABITAT	Potentia SAR Habitat
	Constr Note 1. DFO-E OFO-E Note 2. dearing breading Refer tr in Table Refer tr in Table ECPM Note 3. Note 4. Note 7. Note 4. Note 7. Note 3. Note 3. Note 4. Note 7. Note 3. Note 4. Note 7. Note 3. Note 4. Note 7. Note 3. Note 4. Note 7. Note 7. N	<ul> <li>ruction Miligation Notes:</li> <li>rHDD construction method recommended. Refer to the habit and Aquatic Species at Risk in Table 5.1 ER, Sections 12.1, 12.4, and 15.0 of ECMM and the Gi Agreement.</li> <li>rWithout preconstruction nesting surveys, no g activities should take place during the migratory ng bird-restricted activity period (Aqril 1 – August 31), or owr Widliff, Widliffe Habitat and Species at Risk in Table 5.1 of the ER and EECP.</li> <li>Tiere enroval to avoid the active season for bats 15 to September 30). Refer to row Widliffe, Widliffe Habitat and Species at Risk in Table 5.1 of the ER and Sections 12.0 of the ER and Sections 12.0 of the ER and Sections 12.0 of the ER and Sections 14.0 of the ER and Sections 15.0 of the ER and Sections 15.0 of the ER and Sections 12.0 and 18.0 of ECMM.</li> <li>* Uselar well monitoring program recommended.</li> <li>to Sections 12.0 and 18.0 of ECMM.</li> <li>* Local Infrastructure. Refer to row Infrastructure' in Table 5.1 of the ER and Sections 12.0 and 18.0 of ECMM.</li> <li>* Maintain an emergency egress. Refer to row Junity Services and Municipal Infrastructure' in Table 1.0 for Berley and Municipal Infrastructure' in Table 5.1 of the ER and Sections 18.0 on GCMM.</li> <li>* Maintain an emergency egress. Refer to mov City 150 (NNRF 2013). Further correspondence with recommended before construction fin-water works paired. Refer to row 'Fish Habitat and Aquatic set as AtX 2007 from the MECP may be required if the s. or protected the ER and Sections 7.0 of the ER and Sections 7.0 of the ER and Sections 7.0 of the ER Section 15.2 and 1ECMM. the DFO-EGI Agreement 10. Overall Benefits 2.1 of the ER and Section 7.5 of the ECMM.</li> <li>1: Implement Suspect Solis Program. Refer to row Tish Habitat and Aquatic Species at SA 3.0 of The ER and Section 7.5 of the ECMM.</li> <li>1: Ministry of the ER and Section 7.5 of the ECMM.</li> <li>1: Ministry of the ER and Section 2.2 of</li></ul>	See Fig Ad o See F
			Note 8
		(CONSTRUCT BETWEEN) PIPELINE CROSSING	9 Note
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		CONSERVATION AUTHORITY REGULATED AREA	SVCA Regulated
	ŀ	WETLAND WATERCOURSE ANSI	Watercourse
	ces	VEGETATION	
	resour	WATER WELL WITHIN 50 m	Wells Present
		LINEAR FEATURES	Driveways and Roads
	ŀ	ENVIRONMENTALLY SENSITIVE AREA	
	ŀ	SPECIES AT RISK HABITAT	Potential SAR Habitat
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ס	MONITORING					Notes 4 & 5			Notes 4 & 5					
	PERMITTING REQUIREMENTS					Note 6								
	SPECIES AT RISK HABITAT													
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Resources	CONSERVATION AUTHORITY REGULATED AREA	
	WETLAND WATERCOURSE ANSI	
	VEGETATION	
	WATER WELL WITHIN 50 m	Wells Present
	LINEAR FEATURES	Driveways and Roads
	ENVIRONMENTALLY SENSITIVE AREA	
	SPECIES AT RISK HABITAT	

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Acronyms List: DFO: Fisheries and Oceans Car DFO-EGI Agreement: DFO and related to Watercourse Crossing and Maintenance in Ontario (Ma ECMM: Ehröfage's Construction (September 28, 2022) EECP: Enbridge's Easement Ck 2022)

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2022) ER: Neustadt Community Expa Environmental Report (Stantec MECP: Ministry of the Environm Parks MWRF: Ministry of Natural Resources and Forestry OWES: Ontario Wetland Evaluation System SVCA: Saugeen Valley Conservation Authority SAR: Species at Risk CONSTRUCTION REQUIREMENTS

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	CONSERVATION AUTHORITY REGULATED AREA	SVCA Regulated		SVCA Regulated			Re	SVCA egulated			
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	CONSERVATION AUTHORITY REGULATED AREA			SVCA Regulatec Area	I	Stantec
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	ENVIRONMENTALLY SENSITIVE AREA			·	· · · · ·	<ul> <li>Proposed Watercourse Crossing</li> <li>Flow Direction</li> </ul>
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apvieboli	CONSTRUCTION REQUIREMENTS	Note 8	Note 8	Note 8	Note 8	1. Coordinate System: NAD 1983 UTM Zone 17N     2. Base features produced under license with the Ontario Ministry of Natural Resourc     and Forestry © Queen's Printer for Ontario, 2022; CanVec, 2022; Fisheries and Ocean     Canada, 2022.
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)			Note 9		<ol> <li>Orthoimagery © © 2023 Microsoft Corporation © 2023 Maxar ©CNES (2023) Distribution Airbus DS. Imagery Date, unknown.</li> <li>MOECC Water well locations are approximate and have been positioned based published UTM coordinates © Queen's Printer for Ontario, 2023.</li> </ol>
5 5 5	PIPELINE CROSSING METHODS			Note 1		<ol> <li>Produced using information under License with the Saugeen Valley Conservation Authority © Saugeen Valley Conservation Authority, 2023.</li> <li>Contains information licensed under the Grey County Open Data Licence. Last Updated March 88, 2023. Significant Woodlands in Grey County from 2018 Official</li> </ol>
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Γ	CONSER REGULA	ERVATION AUTHORITY ATED AREA	SVCA Regulated Area	<b>Stantec</b>
	WETLAN WATERO ANSI	ND COURSE	Watercourse	
	VEGETA	TATION	Wooded Area Wooded	Legend
	WATER WITHIN	₹WELL N 50 m		Legend Legend Professed Route (Segment Evaluated)
	LINEAR	R FEATURES	Driveways and Roads	Preferred Route (Segment not Evaluated on this page)
	ENVIRO SENSITI	ONMENTALLY TIVE AREA		<ul> <li>Proposed Watercourse Crossing</li> <li>Flow Direction</li> </ul>
	SPECIE	ES AT RISK HABITAT	Potential SAR Habitat	Water Well (MECP)     Cold Water, Thermal Regime
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d\gis\mx	(CONS	STRUCT BETWEEN)	9 Note	<ol> <li>MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2023.</li> <li>Produced using information under License with the Saugeen Valley Conservation Authority © Saugeen Valley Conservation Authority, 2023.</li> </ol>
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	CONSERVATION AUTHORITY REGULATED AREA	SVCA Regulated Area	Stanter
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rces	VEGETATION	Wooded Area Significant Woodland	arend
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	LINEAR FEATURES	Driveways and Roads Road	Preferred Route (Segment not Evaluated on this page)
	ENVIRONMENTALLY SENSITIVE AREA		Proposed Watercourse Crossing     Flow Direction
	SPECIES AT RISK HABITAT	Potential SAR Habitat	Water Well (MECP)      Cold Water, Thermal Regime      Cool Water, Thermal Regime
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Neustadt Community Expansion Project: Environmental Report Appendix H DFO and Enbridge Gas Inc. Agreement Related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (March 2022) August 23, 2023

Appendix H DFO and Enbridge Gas Inc. Agreement Related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario (March 2022)
DFO and Enbridge Gas Inc. Agreement related to Watercourse Crossings for Pipeline Construction and Maintenance in Ontario

# BETWEEN

Her Majesty the Queen in Right of Canada, as represented by the Minister of Fisheries, Oceans and the Canadian Coast Guard (DFO)

AND

Enbridge Gas Inc.

March, 2022

# 1. NAME OF PARTICIPANTS

- HER MAJESTY THE QUEEN IN RIGHT OF CANADA as represented by the Minister of Fisheries, Oceans and the Canadian Coast Guard (hereinafter referred to as "DFO")
- Enbridge Gas Inc. includes any parties working on their behalf

# 2. INTRODUCTION

- WHEREAS:
  - the *Constitution Act, 1867* assigns to the federal government exclusive jurisdiction for sea coast and inland fisheries and the *Fisheries Act* sets out powers and duties of the federal government with respect to the protection of fish and fish habitat;
  - The Species at Risk Act, 2002 identifies the Minister of Fisheries and Oceans Canada as the competent minister with respect to aquatic species other than those individuals in or on federal lands administered by the Parks Canada Agency and, as competent minister, has specific powers, duties and functions related to the conservation, survival and recovery of aquatic species at risk and their habitat;
  - Enbridge Gas Inc. is an Ontario company responsible for natural gas storage, transmission and distribution in Ontario. On Jan. 1, 2019, Union Gas Limited and Enbridge Gas Distribution Inc. amalgamated to form Enbridge Gas Inc.;
  - Since 1997 DFO and Enbridge Gas Inc. (formerly Union Gas Limited) have established a process for the review and notification of watercourse crossing projects. This process provides for effective protection of fish and fish habitat in the Province of Ontario; and
  - Enbridge Gas Inc. has a legal obligation to stay compliant with the *Fisheries Act* and *Species at Risk Act.*

# 3. PURPOSE/OBJECTIVES/EXPECTED OUTCOMES

This Agreement is intended to:

- Help ensure that fish and fish habitat, as defined under the Fisheries Act and Species at Risk Act and related policies, are considered during the planning, review, approval and monitoring of pipeline construction and maintenance activities in the Province of Ontario.
- Increase certainty, consistency, efficiency and effectiveness in the conservation, protection and enhancement of fish and fish habitat in Ontario according to the provisions of the relevant federal legislation, regulations, policies and programs. In part this will be accomplished following the process outlined in Annex 1.
- Facilitate compliance by Enbridge Gas Inc. with the Fisheries Act and Species at Risk Act and in cases where required, assist with attaining the necessary DFO approvals that are required before construction can begin.

# 4. OTHER GENERAL INFORMATION

- This Agreement replaces the Agreement Letter between Union Gas Limited and Fisheries and Oceans Canada – Ontario Great Lakes Area Related to Watercourse Crossings for Pipeline Construction and Maintenance (DFO-OGLA/UGL Agreement 2008) and the associated conditions of the afore-mentioned Agreement.
- Nothing in this Agreement abrogates or derogates from any Aboriginal, treaty or other rights of Indigenous People including self-government.

# 5. **DEFINITIONS**

- **Base Flow**: the volume of flow in a stream channel that is not derived from surface runoff or flow from stream regulation, water diversion or other human activities. Base flow is attributed to such natural storage sources as groundwater, lakes, and swamps.
- Best management practices and mitigation measures: a suite of planning, design, construction, maintenance and removal tools and approaches that supports the fulfilment of watercourse crossing standards as defined in this Agreement.
- **Critical habitat**: means the habitat that is necessary for the survival or recovery of a SARA listed species and that is identified as the species' critical habitat in the recovery strategy or in an action plan for the species.
- **Deleterious substance:** means, as defined by Section 34 of the *Fisheries Act* and summarized here, any substance that, if added to any water in such quantity or concentration or has been changed by heat or other means would degrade or alter the water quality such that it could directly or indirectly harm fish, fish habitat, or the use of fish by humans. Note: Environment and Climate Change Canada (ECCC) is responsible for its administration and enforcement.
- **DFO-Enbridge Standard**: standardized methodology for construction and removal of temporary watercourse crossings specifically identified in Annex 1 of this Agreement.
- **Fiscal Year:** means any twelve month period starting April 1<sup>st</sup> of the year and ending March 31<sup>st</sup> of the following year.
- **Fish:** as defined by the *Fisheries Act,* includes parts of fish, shellfish, crustaceans, marine animals and any parts of shellfish, crustaceans or marine animals, and the eggs, sperm, spawn, larvae, spat and juvenile stages of fish, shellfish, crustaceans and marine animals.
- **Fish habitat:** means, as defined by the *Fisheries Act*, water frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas.
- **Fish passage:** means the ability for all life stages and sizes of fish to freely migrate and move between different areas of fish habitat including but not limited to through bridges, culverts or other obstructions.
- **Ford:** A shallow, stable crossing location that does not require alteration of the bed or banks of the watercourse
- Harmful, Alteration, Disruption or Destruction of Fish Habitat (HADD): means, as interpreted by DFO in the Fish and Fish Habitat Protection Policy Statement (2019), any temporary or permanent change to fish habitat that directly or indirectly impairs the habitat's capacity to support one or more life processes of fish.
- **In-water timing windows:** means a period of time when in-water work associated with watercourse crossing activities is permitted.
- **In-water work:** aspects of a watercourse crossing project that requires any machinery, or parts thereof, or disturbance within a watercourse, including any disturbance to the watercourse bed, channel, banks or adjacent riparian habitat, as delineated by its ordinary high water mark.
- **Meander Belt**: the land area on either side of a watercourse representing the furthest potential limit of stream channel migration. Areas within the meander belt may someday be occupied by the watercourse.
- Ordinary high water mark/bankful channel: the usual or average level to which a body of water rises at its highest point and remains for sufficient time so as to change the characteristics of the land. In flowing waters (e.g., rivers, streams) this refers to the "active channel/bank-full level" which is often the 1:2 year flood flow return level. In inland lakes, wetlands or marine environments it refers to those parts of the waterbody bed and banks that are frequently flooded by water so as to leave a mark on the land and where the

natural vegetation changes from predominately aquatic vegetation to terrestrial vegetation (excepting water tolerant species). For reservoirs this refers to normal high operating levels (i.e. full supply level).

- **Riparian area:** the vegetated areas adjacent to a watercourse that directly contribute to fish habitat by providing shade, over and food production areas. They also stabilize watercourse banks and shorelines.
- **Sediment**: means soil or other surface material transported by wind or water as a result of erosion. Note that sediment not resulting from natural processes could be considered a deleterious substance under the *Fisheries Act*.
- **Sensitive habitat**: examples of sensitive habitat include but are not limited to, those habitats that provide specialized function for fish to carryout their life processes, are rare within the area, are easily perturbed and/or are slow to recover. Some examples include structurally complex areas like riffles; areas of groundwater upwellings; areas with submergent native aquatic vegetation.
- **Species at risk:** means an extirpated, endangered or threatened species, or a species of special concern, that is listed in Schedule 1 of the *Species at Risk Act* (SARA).
- **Temporary clear span bridge:** small scale bridge structures (e.g., Bailey bridge or log stringer bridge) that completely span the watercourse, do not alter the stream bed or banks, and are a maximum of one lane wide. The bridge structure (including bridge approaches, abutments, footings, and armouring) is built entirely above the ordinary high water mark.
- Winter crossings Ice bridges and snow fills: these are two methods used for temporary winter access in remote areas. Ice bridges are constructed on large watercourses that have sufficient stream flow and water depth to prevent the ice bridge from coming into contact with the stream bed or restricting water movement beneath the ice. Snow fills are temporary stream crossings constructed by filling a stream channel with clean compacted snow, and are typically used for crossing smaller watercourses. Materials such as gravel, rock and loose woody materials are NOT used in the construction of winter crossings.

# 6. SCOPE

- This Agreement applies to all watercourse crossings for the construction and maintenance of pipelines by Enbridge Gas Inc. in all freshwater fish habitats in the Province of Ontario. Specifically, Annex 1 will outline a process with a set of DFO-Enbridge standards for the review and submission of watercourse crossing projects to DFO.
- This Agreement pertains to the administration of Sections 34.3, 34.4, 35, 38(4), 38(5), 38(6) and 38(7) of the Fisheries Act.
- This Agreement pertains to the administration of Sections 32(1), 33 and 58(1) of the *Species at Risk Act*.

# 7. ROLES AND ACTIVITES/RESPONSIBILITIES

- The Parties agree to participate in the periodic review of the Agreement to ensure that it remains consistent with the roles and responsibilities described therein. The Parties further agree to collaborate on the creation of harmonized watercourse crossing standards guidelines, and mitigation measures to guide decisions designed to protect fish and fish habitat.
- The Parties agree to carry out compliance and effectiveness monitoring activities as outlined in Annex 2 in order to ensure that the Agreement implementation and protection of the sustainability and ongoing productivity of fish and fish habitat are carried out in a consistent and effective manner.

- The Parties agree to develop and deliver joint training programs for staff as required.
- Enbridge Gas Inc. and their contractors will also abide by the Fisheries Act Sections 38(4), 38(4.1) and 38(5) Duty to Notify provisions. These provisions apply to persons whose actions have led to occurrences, or the serious and imminent danger of such occurrences, that result in the death of fish, HADD to fish habitat or deposit of deleterious substances. There is a duty to notify when the death of fish, HADD to fish habitat or deleterious deposit has not been authorized under the Act or where there is a serious and imminent danger of such an occurrence by notifying DFO (notify through email: fisheriesprotection@dfo.mpo.gc.ca or by phone: 1-855-852-8320). When reporting, please make note this work was completed under the Enbridge DFO Agreement. The obligation extends beyond notification to taking corrective action and reporting in accordance with Sections 38(6) and 38(7).
- Enbridge Gas Inc. and their contractors must also immediately report the spill of any material harmful to the environment (e.g. fuel, fluids, silt) in waters to the Ministry of Environment, Conservation and Parks (MECP) Spills Action Centre at 1-800-268-6060 and take corrective measures. In such cases, Enbridge Gas Inc. must also notify on the details of the occurrence and the corrective measure being taken.

# 8. MANAGEMENT PROVISIONS

- The Parties will meet annually or more frequently as required to fulfil the objectives.
- DFO and Enbridge Gas Inc. will oversee implementation of this Agreement and will establish an Implementation Team to ensure effectiveness of the Agreement by recommending changes to the Agreement as required; and providing an issues resolution mechanism.

# 9. ANNUAL REPORT

- Enbridge Gas Inc. will submit an annual report on the implementation of this Agreement for the previous year to DFO by June 1. A year will be considered to run from April 1 to March 31 (e.g., report is due on June 1, 2022 for works undertaken between April 1, 2021 and March 31, 2022).
  - The report shall contain the information as outlined in Annex 2 (Annual Reporting and Audit).

# **10. REVIEW**

• During the fifth year that this Agreement is in effect and every fifth year after that, a review team will review the effectiveness of activities under this Agreement.

# **11. FINANCIAL ARRANGEMENTS**

• This Agreement will not impose any financial responsibilities on its Parties, except that each Party will be responsible for the staff and funding costs it incurs in its own interest, related to the support of the Agreement. The Parties may agree to jointly fund and support projects and initiatives that support the program activities.

# 12. DURATION, AMENDMENT, REVIEW, RENEWAL, WITHDRAWAL AND TERMINATION

- The Agreement will come into effect on the date it is signed by both Parties and will be formally reviewed every five years to evaluate its effectiveness.
- The Agreement will remain in effect until terminated in writing.
- The Agreement replaces any previous versions of the Agreement.

- Either Party may amend at any time with agreement by both Parties. The amendments shall be in writing.
- Either Party may terminate this Agreement by providing six (6) months written notice to the other Party. Enbridge Gas Inc. shall submit a final annual report providing notification of any projects reviewed under the Agreement before termination occurs.

# **13. LEGAL DISCLAIMER**

- This Agreement is an expression of the mutual intentions of the Parties and is not legally binding on them or enforceable against them.
- The regulatory and legal decision making authority of DFO is not delegated or otherwise affected by this Agreement.
- It is the responsibility of Enbridge Gas Inc. to comply with all federal and provincial laws and regulations, all municipal by-laws, and any other orders, rules and by-laws. Compliance with this Agreement does not relieve proponents from possible prosecution under either Canada's *Fisheries Act* or *Species at Risk Act*.

# **14. CONTACTS**

Correspondence relating to this Agreement is to be sent to the respective points of contact designated below. Either Party may revise its point of contact by written notice to the other Party at any time.

# For DFO:

Coordinator Client Liaison & Partnerships, Ontario **For Enbridge Gas Inc.:** Supervisor, Permitting

Fish and Fish Habitat Protection Program

Ontario and Prairie Region

Email: fisheriesprotection@dfo-mpo.gc.ca

# **15. EFFECTIVE DATE AND SIGNATURE**

SIGNED IN THE PRESENCE OF:

# FOR HER MAJESTY THE QUEEN IN RIGHT OF CANADA

March 22, 2022

C. Thomas Hoggarth Regional Director Ontario and Prairie Region, Fisheries and Oceans Canada Date

# FOR ENBRIDGE GAS INC.

Neil MacNeil

Date

Director System Improvement Engineer

This Agreement comes into effect on the latest date noted above.

# **Annex 1: Watercourse Crossing Review Process**

These watercourse crossing standards have been developed collaboratively between DFO and Enbridge Gas Inc. They represent minimum levels of performance requirements that must be met by Enbridge Gas Inc. when constructing, maintaining and removing watercourse crossings.

The conditions and requirements included in the general and specific watercourse crossing standards have been deemed as the necessary mitigation measures required to classify the watercourse crossing project as not likely to result in the death of fish or HADD to fish habitat. If Enbridge Gas Inc. determines that the requisite watercourse crossing standards that apply to their specific project can be implemented as outlined in the Steps below, they may proceed with their activity without coming to DFO for a review of their project.

In cases where Enbridge Gas Inc. determines that the requisite watercourse crossing standards that apply to their specific project cannot be implemented, such as a watercrossing completed in the wet, a Request for Review must be submitted to DFO.

# Step1 - Does fish and/or fish habitat exist?

The types of watercourses that are excluded from the *Fisheries Act* can be found on the Fisheries and Oceans Canada's Projects Near Water website (<u>https://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html</u>).

If the proposed project has fish and/or fish habitat features, **proceed to Step 2**. If not – no further DFO review required.

# Step 2 - Are there SARA listed species in the vicinity of the work site?

Enbridge Gas Inc. will determine whether aquatic species at risk (i.e. fish and mussels) listed federally under SARA are likely present. When determining if species at risk are likely to be impacted by the project, Enbridge Gas Inc. should consider both the immediate footprint and the potential spatial and temporal extent of the possible project impacts relative to the documented presence of species at risk and/or their habitat. SARA prohibitions only apply to species that are classified as Extirpated, Endangered or Threatened under Schedule 1 of the SARA. Consult DFO's aquatic species at risk maps (<u>http://www.dfo-mpo.gc.ca/species-especes/sara-lep/map-carte/index-eng.html</u>). Species listed as Special Concern should be identified to ensure their life history parameters are considered.

If there are Endangered or Threatened SARA listed aquatic species at risk and/or their habitat that may be impacted by the works in question then then submit a Request for Review (https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-004-eng.html) to DFO, if not then **proceed to Step 3**.

**EXCEPTION**: If the project requires Horizontal Directional Drilling in areas with aquatic Species at Risk AND you can meet all of the conditions outlined in the DFO-Enbridge Standard for Horizontal Directional Drill outlined in Step 4 below, submission to DFO is not required.

# Step 3 - Is there a code of practice?

DFO has developed a series of standards and codes of practice (COP) for common works, undertakings and activities. These provide guidance on how to avoid and mitigate impacts to fish

and fish habitat and comply with the *Fisheries Act* and *Species at Risk Act*. DFO Codes of Practice are available at <u>https://www.dfo-mpo.gc.ca/pnw-ppe/practice-practique-eng.html</u>. These can change so it is important to check the website to ensure the most recent version is being followed. When applying a DFO Code of Practice, notification forms do not need to be sent to DFO. Notification will be included in the annual reporting as outlined in Annex 2.

Note that DFO Codes of Practice reference additional *Measures to Protect Fish and Fish Habitat* and *Standards.* These measures are available on DFO's website (<u>https://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html</u>) and also apply.

If there is not a code of practice then **proceed to Step 4.** 

# Step 4 - Is there an agreed upon DFO-Enbridge standard?

The following step outlines standards for different types of works, undertakings and activities agreed to by Enbridge Gas Inc. and DFO. Enbridge Gas Inc. is required to meet ALL of the criteria and conditions listed for the standard to apply.

# Horizontal Directional Drill

# You can use this standard if:

- You follow the procedures and methodology outlined in the following Enbridge Gas Inc. documents in appendix 1:
  - Generic Sediment Control Plan Horizontal Directional Drill dated December 2021
  - Horizontal Directional Drilling Contingency Plan Guide dated December 1, 2021
- Work is taking place outside of Critical Habitat including any identified riparian areas
- Work is taking place at least 15m from any watercourse
- Work is taking place at least 30m from any watercourse that has aquatic species at risk

# Temporary bridges

# You can use this standard if:

- You follow the procedures and methodology outlined in the Enbridge Gas Inc. document in appendix 1:
  - Generic Sediment Control Plan Temporary Vehicle Crossings dated December 2021
- The temporary bridge is no greater than one lane wide
- The crib, log or swamp mat support is above the ordinary high water mark

# Temporary culverts:

# You can use this standard if:

- You follow the procedures and methodology outlined in the Enbridge Gas Inc. document in appendix 1:
  - Generic Sediment Control Plan Temporary Vehicle Crossings dated December 2021
- The use of explosives is not required to complete the works, undertakings and activities
- Fish passage is maintained during the works, undertakings and activities

- No sensitive habitat exists at the crossing location
- The temporary culvert does not result in the draining of upland ponded or wetland features
- The culverts have a maximum length of no longer than 12.2m (40ft)
- The installation and removal of culverts must occur within a single allowable activity timing window

# Dam and pump crossings:

# You can use this standard if:

- You follow the procedures and methodology outlined in the Enbridge Gas Inc. document in appendix 1:
  - Generic Sediment Control Plan Dam and Pump Water Crossings dated December 2021
- The crossing can be completed in 7 calendar days or less avoiding the restricted activity timing window
- The watercourse is 15 m or less wide (current water level) <u>AND</u> flow conditions are 1.5m<sup>3</sup>/sec or less
- The in-water work site disturbs a maximum of 50 linear m or less of the watercourse
- Note: fish passage in a dam and pump crossing is not required

# Dry Flume Crossings

# You can use this standard if:

- You follow the procedures and methodology outlined in the Enbridge Gas Inc. document in appendix 1:
  - Generic Sediment Control Plan Dry Flume Water Crossings dated December 2021.
- The crossing can be completed in 7 calendar days or less avoiding the restricted activity timing window
- The watercourse is 15 m or less wide (current water level) AND flow conditions are 1.5m<sup>3</sup>/sec or less
- The in-water work site disturbs a maximum of 50 linear m or less of the watercourse
- Note: fish passage in a dry flume is not required

# Step 5 – if none of the above apply, submit a request for review to DFO

https://www.dfo-mpo.gc.ca/pnw-ppe/reviews-revues/request-review-demande-d-examen-004eng.html

# **Annex 2: ANNUAL REPORT AND AUDIT**

- The report will detail the number and types of watercourse crossings that are constructed using the Agreement and any corresponding compliance monitoring. The intent of the reporting is to confirm the conditions for each type of crossing were met and therefore the reporting will differ for each crossing method.
- For each watercourse crossing the annual report will include the following basic information:
  - Location info: township or municipality, name of watercourse, co-ordinates
  - Contractor information: name, contact information
  - COP being used /type of crossing method
  - Will be submitted by June 1 the following year
- For dam and pump and dry flume crossings the annual report will also include the following information:
  - Start and end date for inwater work
  - Area of temporary dewatering
- For temporary culvert crossings the annual report will also include the following information:
  - Photographs of temporary culverts (pre, during and post construction)
- Audit: Compliance and effectiveness monitoring will occur jointly by DFO and Enbridge Gas Inc. The data and feedback obtained will be used to evaluate how the goals and objectives of the Agreement are being met and to support improvements and revisions to future versions, while supporting an adaptive management approach to policy development.
  - A subset of projects will be selected for audit. Joint site visits will be undertaken and should include during construction and/or 1- 5 years post construction.

### **Generic Sediment Control Plan – Horizontal Directional Drill**

This Plan is applicable to Enbridge Gas Inc. (EGI) workers and Contractors involved in HDD activities. It establishes best management practices to prevent and/or mitigate an unauthorized death of fish or harmful alteration disruption or destruction (HADD) of fish and fish habitat or the impairment of water quality from an inadvertent release of drilling fluid or sedimentation in the vicinity of, or beneath, watercourses. NOTE: There is a Duty o Notify and Duty to Take Corrective Measures to report death of fish or a HADD of fish habitat to DFO.

Drilling fluid is typically composed of bentonite clay-water mixture, which is considered non-toxic/hazardous, however, if it is released to a watercourse, there is the potential for the drilling fluid to adversely impact fish and invertebrates. EGI recognizes the need to protect downstream water users, as well as aquatic species and their habitat, from sedimentation. As such, extensive planning prior to, and constant vigilance during, onstruction operations are essential

#### Conditions for use

- Work is taking place outside of Critical Habitat including any identified riparian areas
- Work is taking place at least 30m from any watercourse that has aquatic species at risk
- Work is taking place at least 15m from any watercourse

#### **Planning and Pre-Construction**

The following precautionary measures should be implemented to minimize the risk of an inadvertent release or sedimentation during HDD activities:

- Select a pipeline route to minimize the number of watercourse crossings;
- If possible, schedule HDD activities during low flow times;
- Ensure watercourse crossing permits and approvals are obtained, reviewed and remain on-site throughout the duration of the project:
- Where necessary, EGI will notify the required regulatory authorities (i.e. Conservation Authority) prior to the watercourse crossing
- Ensure that all construction personnel are aware of this contingency plan prior to the commencement of drilling activity:
- Conduct a feasibility assessment (i.e. geotechnical assessment) to assess the suitability of subsurface conditions (if required):
- Maximize distance of HDD entry and exit points from the watercourse and ensure they are at least 10 m from a watercourse if aquatic species at risk are not present in 30 m if present; and
- Maximize depth of the drill path beneath the watercourse.

#### **Construction Mitigation Measures**

The steps and precautions that follow should be completed when conducting HDD activities beneath, or in the vicinity of, a watercourse:

- Clearly flag the expected drill path prior to commencing any drilling operations, to facilitate monitoring for potential drilling fluid releases.
- Assign personnel to monitor the drill path for inadvertent returns of drilling fluid or sedimentation.
- Fluid volumes, annular pressure and cutting returns will be continuously monitored to ensure potential drilling fluid losses are detected and addressed immediately. Dedicated personnel should be assigned to continuously monitor drilling pressure and fluid volumes.
- Ensure an approved spill kit is on site and readily available, as per the Spill Response Procedure.
- Sediment control measures (i.e. silt fencing, SiltSoxx<sup>™</sup>, etc.) should be set-up prior to initiating HDD operations to contain potential releases of drilling fluid, sediment-laden groundwater or run-off along the proposed drill path. Sediment control measures shall be installed:
- Around entry and exit pits:
- Around drilling fluid containment pits:
- Surrounding spoil piles:
- Between all HDD operations and watercourse as identified on this drawing;
- Over-excavate the entry and exit pits to create drilling fluid sump pits:
- Drilling fluid must be contained in entry and exit pits (sump pits) and as they are filled, drilling fluids should be promptly removed and/or removed at the completion of HDD operations at an approved location;
- All vehicles, machinery and other equipment shall not enter the water. There must be no fording of any watercourse:
- If possible, refueling of equipment should not occur within a minimum of 30 m from a watercourse, however, if required, secondary containment must be used around the refuelling area to prevent entry into the watercourse: and
- If necessary, ensure dewatering occurs through a 'sediment-bag' and utilizes other erosion and sediment control (ESC) measures, as required, and is released greater than 30 m from the top-of-bank into a vegetated area.

During HDD operations, workers should keep enough spill response material on-site and readily available to contain any inadvertent releases of drilling fluid or release of sediment-laden groundwater, including (but not imited to):

- Sandbags Straw bales
- Filter cloth (i.e. silt fence) Snow fencing T-Posts

Shovels

- Sediment control lots (i.e. SiltSoxx<sup>™</sup>) or equivalent Polyethylene sheets
- Corrugated culverts
- Numerous 5-gallon pails
- Vacuum trucks

n addition to the above, for larger watercourse crossings, the following materials should also be kept on-site:

Turbidity curtains

- Floating sediment boom
- Trash pumps complete with sufficient lengths of leak-free hose, suction heads, and fish screens

## **Contingency Plan for Inadvertent Release**

#### Bank and Riparian Zone Areas

The steps that follow should be completed when pipeline installation by HDD is occurring adjacent to a watercourse bank or riparian zone and drilling fluid is identified along the drill path.

HDD operations should stop immediately and spill containment be established using EGI's approved methods including, but not limited to:

- Straw bales and sediment control fencing;
- Sandbags and polyethylene sheets;
- Containment pits, rings and/or absorbent booms;
- Vacuum trucks; and,
- Site re-grading (berms)
- The EGI Supervisor and Environmental Inspector (if applicable) must be notified of the inadvertent release of drilling fluid or sedimentation.
- The EGI Supervisor must follow the reporting requirements outlined in the Spill Response Procedure and at a minimum, contact, the Environmental Advisor at 1-855-336-2056 to ensure regulatory reporting requirements are met and to ensure clean-up operations are completed.
- If in doubt, report the spill. At a minimum, the following information will be required when reporting to the Environmental Advisor: 1. Date and time of spill
  - 5. Volume of material spilled
    - 6. Any impacts from the spill
- 2. How the spill occurred 7. Immediate spill response actions
- 3. Location of spill 4. Type of material spilled 8. Photographs
- Contact an approved environmental consultant to support spill cleanup and restoration, if deemed necessary based on the extent and impacts of the release
- Workers including the EGI Inspector, Environmental Advisor and Contractor and Environmental Inspector (if used) should check for the root cause of release and identify potential solutions including (but not limited to):
- Reducing the pressure of slurry flow (i.e. excavate pressure relief pits);
- Reducing the speed of drill rotation:
- Reducing the speed of drill rod advancement
- Moving the drill location (laterally, depth, etc.); and
- Utilizing water to replace the bentonite drilling fluid, if site conditions allow
- Any substantial deviation (i.e. installation method, crossing location/depth) from approved pipeline construction drawings must be resubmitted to the respective regulatory agencies (i.e. Conservation Authority) prior to resuming work
- Residual drilling fluid must be removed by shovel or vacuum truck. Clean-up activities must minimize further disruption to the bank and riparian zone area.
- Any damage must be repaired, such as settlement and/or heaving.
- HDD activities may resume when preventative actions have been implemented and all parties are satisfied with the approach (i.e. EGI Supervisor, Environmental Advisor, Environmental Inspector and regulatory authorities [if involved]).

### Minimum Horizontal Directional Drill Setback and Depth

SEDIMENT FENCE

SEDIMENT FENCE

# NOTES SEDIMENT FENCE TO BE SET UP A MINIMUM OF 15m FROM A NO SPECIES AT RISK WATERCOURSE AND 30m FOR A

- SPECIES AT RISK WATERCOURSE. HORIZONTAL DIRECTIONAL DRILL TO BE
- SET UP BEHIND SEDIMENT FENCE. MINIMUM OF 1.5m COVER FROM TOP OF PIPE TO BED OF WATERCOURSE.
- ALL DISTURBED AREAS TO BE RESTORED TO PRE-CONSTRUCTION CONDITIONS OR AS CLOSE AS POSSIBLE.

#### Watercourses

In addition to the above steps and precautions for bank and riparian zone areas, the following should be completed when pipeline installation by HDD is occurring beneath a watercourse and drilling fluid is identified or suspected in the watercourse itself:

Where leakage of drilling fluids is suspected in a watercourse (i.e. sediment plume) operations should stop immediately and a visual inspection be conducted to verify the presence and extent. All necessary steps should be taken to minimize the impacts.

Containment and clean-up activities must be initiated as soon as possible, where appropriate.

Where the release is small with no visible sediment plume it should be allowed to dissipate naturally. Clean-up efforts within the watercourse may potentially be disruptive and cause further suspension of sediment in the water column than if the release were left to dissipate. Where the release is large with a visible sediment plume extending beyond the drilling site, the Environmental Advisor must be contacted to retain an environmental consultant to monitor the turbidity levels of the plume and associated potential impacts. In addition, the location of the inadvertent release should be isolated from the watercourse by installing a cofferdam or other containment system by utilizing the following materials

- Sandbags and polyethylene sheets:
- Siltsoxx<sup>™</sup>, filter cloth (silt fence), straw bales;
- Corrugated culverts: and/or.
- Turbidity curtains.
- The following materials can be used to control and clean up the release:
- Shovels and 5-gallon pails (if conditions are drv)
- Trash pumps with hose, suction head and fish screens; and/or
- Vacuum trucks.

If subsequent drilling attempts result in additional inadvertent returns of drilling fluid, the crossing should be halted, the Supervisor contact the Environment Department at 1-855-336-2056 and refer to the Contingency Plan for Installation Alternatives below

#### **Contingency Plan for Installation Alternatives**

If EGI is unable to use HDD methodology to install the pipeline even with the mitigation implemented above, construction activities must be suspended, and the Environmental and/or Permit Advisor must be contacted to discuss alternate crossing methods. Any changes to the permitted crossing method may require permit amendments or government agency approval

EGI should consider the following (from most to least preferred):

Measures to report death of fish or a HADD to DFO.

Restoration

construction condition.

- Further geotechnical investigations to revise the pipeline alignment or depth
- Implement another crossing method as outlined in the Enbridge Gas Inc. and Department of Fisheries and Oceans Agreement Related to Watercourse Crossings for Pipeline
- Construction and Maintenance in Ontario (EGI DFO Agreement)

Once the crossing method is reviewed by all internal parties and has been revised, the revised crossing method must be resubmitted for review and approval to the respective regulatory agencies (i.e. Conservation Authority, DFO [if required]) prior to resuming work

#### Death of Fish or Harmful Alteration. Disruption or Destruction of Fish Habitat (HADD)

If death of fish or HADD has occurred due to failure of this plan, a restoration plan should be developed and implemented by the company in consultation with and upon receipt of approval from the respected Conservation Authority and the DFO. If a HADD occurs, notification are required as per the Contingency Plan for Inadvertent Release section above. NOTE: There is a Duty to Notify and Duty to Take Corrective

If post-construction monitoring reveals erosion, remedial work will be taken as guickly as possible.

All debris and garbage shall be removed from the construction site to an approved location.



### Generic Sediment Control Plan - Temporary Vehicle Crossings

This plan sets out the measures that will be taken by Enbridge Gas Inc. (EGI) and its contractors to control downstream sediment to the lowest level practically achievable during the construction, use and removal of temporary vehicle water crossing at any watercourse (e.g., streams, rivers and ponds). he conditions and techniques set out on this plan are to be followed unless approved otherwise by the Department of Fisheries and Oceans (DFO).

#### General Measures

EGI must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the unauthorized harmful alteration, disruption or destruction of fish habitat or the impairment of water quality. General measures are available at tttps://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html. Vehicle crossings typically include temporary bridges (e.g., Bailey bridges, log stringer pridges) and winter crossings such as ice bridges and snow fills. The following requirements apply to any watercourse and areas adjacent to it:

- Temporary vehicle crossings to be in place no longer than a single restricted activity timing window.
- Use existing vehicle access across watercourses wherever possible.
- Prior to removal of the low vegetative cover, effective mitigation techniques for erosion and sediment control must be in place to protect water quality. Limit the areal extent of disturbance to the minimum needed for construction and delay grubbing to immediately prior to grading operations.
- Prior to commencing the installation of temporary vehicle crossings, local weather stations will be monitored to determine whether any precipitation is forecasted. If practical work will be delayed until weather conditions are favourable. If necessary, to proceed with work under unfavourable conditions. EGI will exercise due diligent.
- Vehicle crossing structures capable of handling anticipated high water flows during the construction period will be used. See guidelines below on sizing of water opening.
- Coarse cobbles, sandbags, geotextile liners and/or curb stringers will be used to protect culvert and ramp approach fills from erosion and to prevent sediment from entering a watercourse
- On the approaches to vehicle crossing structures, road ditches constructed for drainage control will incorporate the necessary erosion and sedimentation control measures (e.g., silt fence, check dams) to prevent sediment from entering a watercourse
- Except during construction of the crossing. EGI will not obstruct any watercourse so as to impede the free movement of water and fish.
- All exposed mineral soil must be graded to a stable slope and treated as quickly as possible to prevent erosion and sediment from entering a watercourse.
- All temporary vehicle crossing structures will be removed upon completion of construction. Banks and approaches will be restored and stabilized immediately upon removal of a vehicle crossing structure.
- The area around water crossings is to be regularly monitored and if erosion problems develop, immediate action is to be taken with appropriate treatments and completed as quickly as possible. Accumulated sediment is to be removed regularly from sediment control mitigations.
- Equipment fording will only be allowed if the Code of Practice can be met. It is available at https://www.dfo-mpo.gc.ca/pnw-ppe/codes/temporarycrossings-traversees-temporaires-eng.html.
- The Company will be held responsible for implementation of this plan. Any questions regarding the implementation of this plan should be directed towards the Environmental Advisor assigned to the project.

#### Sizing of Water Opening

It is important that the size of the water opening be selected so the structure can safely pass flood flows that can reasonably be expected to occur during the life of the crossing. These structures must also allow for fish passage at all times except during the pipeline installation. Any one of the following methods can be followed:

- Install a bridge that clear spans the watercourse from top of bank to top of bank where banks are defined (i.e. ordinary high water mark), and ensure adequate freeboard to allow for anticipated increase in stream discharge and passage of debris. In cases where banks are undefined: use cribbing or other footing material to hold the bridge and ensure adequate freeboard to allow for anticipated increase in steam discharge and passage of debris
- Maximum culvert length will be 12.2 m (40 ft).
- Conduct a hydrology and hydraulics analysis to determine theoretical opening size. The design flow will be the two year flood (O2), unless the culvert is to be left in place through the spring freshet, in which case the theoretical opening size will be based on the five year flood (Q5).
- Culvert sizes may also be selected to be the same as nearby culverts that have been in place for many years and have performed satisfactorily.
- If culverts are used, the approved size or equivalent multiple culverts must be installed. If multiple culverts are used a low-flow channel through one culvert must be established

#### **Detailed Construction Sequence - Temporary Bridges**

In general terms, the following sequence of construction and mitigation measures will be followed at all temporary bridges

#### Conditions for use

- The temporary bridge is no greater than one lane wide
- The crib, log or swamp mat support is above the ordinary high water mark.
- 1. Generally, there are no restrictions on timing for the construction of clear-span structures as they do not involve in-water work. However, if there are any activities with the potential to disrupt fish or fish habitat (e.g., in-water crossing of watercourse by machinery), these should be undertaken outside of the restricted activity timing windows
- Install the bridge in a manner that will minimize sediment entering the watercourse. Stringers must be 2. engineered to support the loads expected on the bridge. Curbs at least 150 mm high must be installed along the edge of the deck and if necessary, the deck lined with geotextile to contain mud on the bridge. Fasteners connecting components must be strong enough to hold them in position during the life of the bridge.
- Road approaches leading to the bridges must be raised and stable, so equipment loads are supported a sufficient distance back from the watercourse to reduce sediment entering the watercourse from equipment. This may require using materials such as gravel, rock or corduroy. If cuts are needed to obtain a satisfactory grade, they are to be dug with side ditches and stable slopes. Erosion and sediment control measures are to be installed to keep sediment from entering the watercourse (e.g., check dams, filler cloth, rip rap, seed and mulch, sediment traps, etc.)
- 4. While the bridge is in use, any buildup of sediment on the bridge deck or approaches that has the potential to enter the watercourse is to be scraped off and disposed of in an approved location.
- 5. Temporary crossings will be removed as quickly as possible when no longer required. Surplus gravel and bridge materials are to be removed from the crossing area and stabilized above the floodplain in an approved location. The watercourse bed and banks are to be restored to a stable angle and protected with erosion resistant material compatible with flow velocity (e.g., coarse gravel or rip rap). Measures such as berms or logs may be needed to prevent sediment laden water from entering the watercourse
- 6. Vegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.









#### **Detailed Construction Sequence - Temporary Culverts** Conditions for use

- The use of explosives is not required to complete the works, undertakings and activities
- Fish passage is maintained during the works, undertakings and activities
- No sensitive habitat exists at the crossing location
- The temporary culvert does not result in the draining of upland ponded or wetland features
- The culverts have a maximum length of no longer than 12.2m (40ft)
- The installation and removal of culverts must occur within a single allowable activity timing window

In general terms, the following sequence of construction and mitigation measures will be followed at all temporary culverts. Pre-, during-, and post-construction photographs showing the culvert location will be taken

- 1. Install culvert pipe of diameter and length as per the Sizing of Water Opening requirements to ensure for stable fill slopes and safe vehicle/equipment passage. Culvert invert is to be set to allow a minimum of 10cm water depth for fish passage. Culvert installation can be done in flowing water as long as the installation occurs outside the restricted activity timing window. Culvert backfill and fill for the road is to be course granular or rock fill material. Erosion protection may be needed on the upstream road fill slope and if scour is possible, rip rap is to be placed in the watercourse upstream and downstream of the culvert outlet.
- 2. Road approaches leading to the culvert crossing must be raised and stable, so equipment loads are supported a sufficient distance back from the watercourse to reduce sediment entering the watercourse from equipment. This may require using materials such as gravel, rock, or corduroy. If cuts are needed to obtain a satisfactory grade, they are to be dug with side ditches and stable slopes. Erosion and sediment control measures are to be installed to keep sediment from entering the watercourse (e.g., check dams, filter cloth, rip rap, seed and mulch, sediment traps, etc.).
- 3. While the culvert is in use, any build-up of sediment on the road surface or approaches that has the potential to enter the watercourse is to be scraped off and disposed of in an approved location.
- 4. Temporary crossings will be removed as quickly as possible when no longer required. Removal must occur outside the restricted activity timing window. Surplus gravel and culvert materials are to be removed from the crossing area and stabilized above the floodplain in an approved location. The watercourse bed and banks are to be restored to a stable angle and protected with erosion resistant material compatible with flow velocity (e.g., coarse gravel or rip rap). Measures such as berms or logs may be needed to prevent sediment laden water from entering the watercourse
- Vegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.





#### **Generic Sediment Control Plan Dam and Pump Water Crossings**

This plan sets out the measures that will be taken by Enbridge Gas Inc. (EGI) and its contractors to control downstream sediment to the lowest level practically achievable during the construction, use and removal of dam and pump type crossings. The conditions and techniques set out on this plan are to be followed unless approved otherwise by the Department of Fisheries and Oceans (DFO). This includes the current DFO Code of Practice for temporary cofferdams and diversion channels available at https://www.dfo-mpo.gc.ca/pnw-ppe/codes/cofferdams-batardeaux-eng.html

#### Conditions for using the Standard

- The crossing can be completed in 7 calendar days or less avoiding the restricted activity timing window
- The watercourse is 15 m or less wide (current water level) AND flow conditions are 1.5m<sup>3</sup>/sec or less
- The in-water work site disturbs a maximum of 50 linear m or less of the watercourse

Note: fish passage in a dam and pump crossing is not required

#### **General Measures**

EGI must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the death of fish, unauthorized harmful alteration, disruption or destruction of fish habitat or the impairment of water quality. General measures are available at https://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures-eng.html. The following requirements apply to any permanent or intermittent watercourse (stream, river, pond) and areas adjacent to it

- EGI will adhere to all permits and approvals of federal and provincial agencies related to watercourse crossings.
- EGI will notify the appropriate federal or provincial agencies prior to commencement of a watercourse crossing in accordance with regulatory permit conditio
- In-stream work will occur during the appropriate time windows for the geographic region and for the fish species present unless otherwise permitted by the appropriate agencies
- Prior to removal of the low vegetative cover, effective mitigation techniques for erosion and sediment control must be in place to protect water guality. Limit the areal extent of disturbance to the minimum needed for construction and delay grubbing to immediately prior to grading operations
- All watercourses will require a minimal disturbance zone (MDZ) to be clearly marked with flagging prior to the commencement of clearing activities or any construction activity near the watercourse. This flagging will be set back a minimum of 5m from the watercourse and will be based on site specific conditions. Extra work area required at watercourse crossing will be situated away from the watercourse outside of the MDZ.
- Materials removed or stockpiled during construction (e.g., excavated soil, backfill material) must be deposited in a manner to ensure sediment does not enter a watercourse. Appropriate erosion and sediment controls (e.g. revegetation, vegetated buffer strips, drainage control, sediment settling devices, and sediment fence or other appropriate mitigation measures) will be installed around spoil or stockpiles, to prevent sediment from stockpile runoff from entering a watercourse.
- All vehicles, machinery and other construction equipment shall not enter the water. There must be no fording of any stream.
- Except during construction of the crossing, EGI will not obstruct any watercourse so as to impede the free movement of fish
- Flow will be maintained at all times downstream of the watercrossing.
- All exposed soil must be stabilized (e.g. graded to a stable slope and erosion control measures implemented) as quickly as possible to prevent erosion.
- EGI is to adhere to the Generic Sediment Control Plan For Temporary Vehicle Crossings.
- All required materials (e.g., silt fencing, filter cloth, polyethylene liners, granular material, rip rap, dam materials) and installation equipment (e.g., pipe, flumes, pumps, pump hoses, generators, spores, energy dissipaters) will be on-site and in good working order prior to construction.
- Prior to commencing watercourse crossings, local weather stations will be monitored to determine whether any precipitation is forecasted. Instream activity will be delayed if flows are in flood stage and until weather conditions are favourable. If practical work will be delayed until weather conditions are favourable. If necessary, to proceed with work under unfavourable conditions, EGI will exercise due diligence
- If there is any flow in the watercourse, EGI is to install pumps to maintain streamflow around the blocked off section of channel. An energy dissipater is to be built to accept pump discharge and prevent watercourse erosion
- Adequate pump capacity will be on site to handle anticipated water flows and any potential increases in flow during the construction period. Backup pumps with adequate capacity to handle 100% of the downstream flow must be on site and ready for immediate replacement, should the primary operating pump(s) fail.
- Water intakes used in fish bearing waters will be screened in accordance with current DFO Code of Practice for end-of-pipe fish protection screens for small water intakes in freshwater https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.htm
- Fish recovery and transfer will be conducted prior to and during the isolation of flow and in accordance with permit regulations. See detailed construction sequence for timing of fish recovery operations
- Instream activities in all watercourses (e.g., trenching, pipe installation, backfilling) will be completed in as short a time as possible to minimize disturbance to water quality fish and fish habitat
- In situations where the crossing can be completed in one day, in-stream excavation will begin in the early morning to allow for same day installation
- Refueling and lubrication of equipment will be conducted in areas that will allow any accidental spill of deleterious substance to be disposed of in an approved location before it reaches any watercourse. Appropriate spill prevention kits will be readily available on site
- The area around water crossings is to be regularly monitored and if erosion problems develop, immediate action is to be taken with appropriate treatments and completed as quickly as possible. Accumulated sediment is to be removed regularly.
- Revegetation must be completed as quickly as possible. Revegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
- All use of silt fence, rock check dams and dewatering traps shall be constructed/installed in accordance to the most up to date EGI specifications and drawings. Where these mitigation measures are not sufficient to prevent sediment from entering the watercourse, additional mitigation measures will be implemented to prevent sediment from entering the watercourse.
- EGI will be held responsible for implementation of this plan. Any questions regarding the implementation of this plan should be directed towards the Environmental Advisor assigned to the project.

#### Contingency Plan

If unforeseen events (e.g., bedrock in trench, dam washout) cause the strategies set out in this plan to be insufficient or inappropriate to meet the objective. EGI is expected to respond in a timely manner with all reasonable measures consistent with safety, to prevent, counteract or remedy any effects on fish or fish habitat that may result. DFO is to be notified as soon as practical. NOTE: There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD of fish habitat to DFO.

Spill reporting procedures established by EGI shall be used to report any unexpected discharge of silt or sediment or other deleterious substance at the water crossing. At a minimum contact the Environmental Advisor at 1-855-336-2056.

If DFO determines that long term damage to fish habitat has occurred due to failure of this plan to control sediment, a restoration plan will be developed by EGI, in consultation with and approval from DFO for implementation by EGI.



pump" type water crossings.

# DAM AND PUMP WATER CROSSINGS

SCALE NTS		DATE DECEMBER 2021	
FILE No.		PROJECT No.	
DRAWN GTH	CHECKED	DRAWING	REV O
APPROVED			

#### **Generic Sediment Control Plan - Dry Flume Water Crossings**

This plan sets out the measures that will be taken by Enbridge Gas Inc. (EGI) and its contractors to control downstream sediment to the lowest level practically achievable during the construction, use and removal of dry flume type crossings. The conditions and techniques set out on this plan are to be followed unless pproved otherwise by the Department of Fisheries and Oceans (DFO).

#### Conditions for using the Standard

- The crossing can be completed in 7 calendar days or less avoiding the restricted activity timing window
- The watercourse is 15 m or less wide (current water level) AND flow conditions are 1.5m<sup>3</sup>/sec or less
- The in-water work site disturbs a maximum of 50 linear m or less of the watercourse
- Note: fish passage in a dry flume is not required

#### General Measures

EGI must use materials, construction practices, mitigation techniques and monitoring of operations at every water crossing in order to prevent the death of fish, unauthorized harmful alteration, disruption or destruction of fish habitat or the impairment of water guality. General measures are available at https://www.dfo mpo.gc.ca/pnw-ppe/measures-mesures-eng.html. The following requirements apply to any permanent or intermittent watercourse (stream, river, pond) and areas adiacent to it.

- EGI will adhere to all permits and approvals of federal and provincial agencies related to watercourse crossings.
- EGI will notify the appropriate federal or provincial agencies prior to commencement of a watercourse crossing in accordance with regulatory permit conditions.
- In-stream work will occur outside of the restricted activity timing windows for the geographic region and for the fish species present unless otherwise permitted by the appropriate agencies
- · Prior to removal of the low vegetative cover, effective mitigation techniques for erosion and sediment control must be in place to protect water quality. Limit the areal extent of disturbance to the minimum needed for construction and delay grubbing to immediately prior to grading operations
- All watercourses will require a minimal disturbance zone (MDZ) to be clearly marked with flagging prior to the commencement of clearing activities or any construction activity near the watercourse. This flagging will be set back a minimum of 5m from the watercourse and will be based on site specific conditions. Extra work area required at watercourse crossings will be situated away from the watercourse outside of the MDZ
- Materials removed or stockpiled during construction (e.g., excavated soil, backfill material) must be deposited in a manner to ensure sediment does not enter a watercourse. Appropriate erosion and sediment controls (e.g. revegetation, vegetated buffer strips, drainage control, sediment settling devices, and sediment fence or other appropriate mitigation measures) will be installed around spoil or stockpiles to prevent sediment from stockpile runoff from entering a watercourse
- All vehicles, machinery and other construction equipment should not enter the water. There should be no fording of any stream.
- Except during construction of the crossing. EGI will not obstruct any watercourse so as to impede the free movement of fish
- Flow will be maintained at all times downstream of the water crossing.
- All exposed soil must be stabilized (e.g. graded to a stable slope and erosion control measures implemented) as quickly as possible to prevent erosion.
- EGI is to adhere to the Generic Sediment Control Plan For Temporary Vehicle Crossings.
- All required materials (e.g., silt fencing, filter cloth, polyethylene liners, granular material, rip rap, dam materials) and installation equipment (e.g., pipe, flumes, pumps, pump hoses, generators, spores, energy dissipaters) will be on-site and in good working order prior to constructior
- Prior to commencing watercourse crossings, local weather stations will be monitored to determine whether any precipitation is forecasted. In-stream activity will be delayed if flows are in flood stage and until weather conditions are favourable. If practical work will be delayed until weather conditions are favourable. If necessary, to proceed with work under unfavourable conditions, EGI will exercise due diligence
- Water intakes used in fish bearing waters will be screened in accordance with current DFO Code of Practice for end-of-pipe fish protection screens for small water intakes in freshwater https://www.dfo-mpo.gc.ca/pnw-ppe/codes/screen-ecran-eng.htm
- Fish recovery and transfer will be conducted prior to and during the isolation of flow and in accordance with permit regulations. See detailed construction sequence for timing of fish recovery operations
- In-stream activities in all watercourses (e.g., trenching, pipe installation, backfilling) will be completed in as short a time as possible to minimize disturbance to water quality, fish and fish habitat
- In situations where the crossing can be completed in one day, in-stream excavation will begin in the early morning to allow for same day installation.
- Refueling and lubrication of equipment will be conducted in areas that will allow any accidental spill of deleterious substance to be disposed of in an approved location before it reaches any watercourse. Appropriate spill prevention kits will be readily available on site.
- The area around water crossings is to be regularly monitored and if erosion problems develop, immediate action is to be token with appropriate treatments and completed as quickly as possible. Accumulated sediment is to be removed regularly.
- Revegetation must be completed as quickly as possible. Revegetate any disturbed areas by planting and seeding native trees, shrubs or grasses and cover such areas with mulch or erosion control matting to prevent soil erosion and to help seeds germinate.
- All use of silt fence, rock check dams and dewatering traps shall be constructed/installed in accordance to the most up to date Company specifications and drawings. Where these mitigation measures are not sufficient to prevent sediment from entering the watercourse, additional mitigation measures will be implemented to prevent sediment from entering the watercourse.
- EGI will be held responsible for implementation of this plan. Any questions regarding the implementation of this plan should be directed towards the Environmental Advisor assigned to the project.

#### Contingency Plan

If unforeseen events (e.g. bedrock in trench, flume washout) cause the strategies set out in this pion to be insufficient or inappropriate to meet the objective, EGI is expected to respond in a timely manner with all reasonable measures consistent with safety, to prevent, counteract or remedy any effects on fish or fish habitat that may result. DFO is to be notified as soon as practical. NOTE: There is a Duty to Notify and Duty to Take Corrective Measures to report death of fish or a HADD of fish habitat to DFO

Spill reporting procedures established by EGI will be used to report any unexpected discharge of silt or sediment or other deleterious substance of the water crossing. At a minimum contact the Environmental Advisor at 1-855-336-2056

If DFO determines that tong term damage to fish habitat has occurred due to failure of this plan to control sediment, a restoration plan will be developed by EGI, in onsultation with and approval from DFO for implementation by EGI

#### Flume Sizing

- Flumes will be sized initially based on hydrology and hydraulic analysis to determine theoretical opening size. The capacity of the flumes will be sized to handle 150% of the anticipated flow.
- The approved size or equivalent multiple flumes must be installed.
- Flume sizes may also be selected to be the same as existing nearby culverts that have been in place for many years and have performed satisfactorily.



**Detailed Construction Sequence - Dry Flume Crossings** 

crossings

- vegetation. Ensure equipment operators working on the crossing have been briefed about this plan and the measures needed to protect water quality. Install pre-work sediment control measures, including silt fences and measures to contain excavated spoil and backfill. All necessary equipment and materials to build the flume must be on site or readily available prior to commencing in-water construction. Pipe shall be strung, welded and coated ready for installation prior to watercourse trenching.
- 2. Install flumes equal to or larger than the diameter determined by the methods described above. Place impervious dams at each end of the flume, upstream first then downstream. Alternative dam materials include coarse gravel with rip rap protection, pea stone bags, steel plate and metre bags. During placement, install an impervious membrane, if necessary, to prevent leakage. Dams may need keying into the bank and streambed. Once the area is isolated, conduct fish recovery and transfer operations and dewater the area between the dams. All pump water is to be discharged well away (minimum 30 m) from the watercourse and through a sediment trap to prevent reentry of sediment into the watercourse. Pump discharge lines will be installed to keep pumped water from coming into contact with soil on the construction site
- 3. Excavate trench through plugs and under flume, then dewater. Work area dewatering will be filtered to remove suspended solids. Lower in pipe by passing under flume and backfill immediately. The top 300 mm of trench backfill is to be clean rock, cobble material or native streambed material. EGI is to use granular backfill if the native material is not suitable. Any excess material is to be disposed of in an approved location and stabilized to prevent reentry into the watercourse. Work is to be completed as quickly as possible