



**Eganville Community
Expansion Project:
Environmental Report**

ORIGINAL REPORT

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Executive Summary

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Eganville Community Expansion Project to supply the community of Eganville, Ontario with affordable natural gas (the “Project”). The Project will involve construction of new natural gas pipelines to transport natural gas supply from Snake River Line near Cobden, Ontario to new distribution system pipelines in Eganville, to residential, commercial and industrial customers in Eganville, and along the supply lateral, which is proposed to span the Townships of Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.

The Project is proposed to be placed into service in phases, with the supply lateral proposed to be placed in service by 2024 and the distribution pipelines being placed in service beginning as early as 2025. The supply lateral will be composed of up to approximately 21 km of natural gas pipeline ranging in size from NPS (nominal pipe size) 4 to 8 (i.e., 4 to 8 inches in diameter) polyethylene (PE) pipeline. The distribution portion of the Project includes approximately 22 km of PE pipeline ranging in size from NPS 2 to NPS 6 (i.e., 2 to 6 inches in diameter). To accommodate the increased supply of natural gas, the Project will also involve the instalment of a pressure reducing station along the supply lateral.

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the proposed pipeline. The environmental study will fulfill the requirements of the Ontario Energy Board’s (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines).

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

The route evaluation process was undertaken as per the *OEB Environmental Guidelines (2016)*, which identifies the environmental and socio-economic features to take into consideration and the principles to be considered during the route evaluation. The preliminary preferred route¹ for the supply lateral is proposed to travel from Snake River Line along Mcguinty Road to Mcgaghran Road, north on Bulger Road, and then along Cold Creek Road and Letts Cemetery Road to Eganville. Alternate routes being considered for the supply lateral would travel from Snake River Line along Cobden

¹ The preliminary preferred or alternate route and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.



Road and Highway 60, or along Cobden Road and then north on Bulger Road to intercept with the preliminary preferred route.

An extensive engagement and consultation program was conducted for the Project with Indigenous communities, and federal and provincial agencies, municipal personnel and elected officials, utility owners and operators, special interest groups, the general public, and residents and businesses within 1 kilometer (km) of the Study Area were engaged. The engagement and consultation program included development and maintenance of various Project Contact Lists which were used to distribute the required notices, newspaper advertisements, a Virtual and/ or in-person Open House, and provision of feedback to those members of the public who had questions, issues, or concerns or positive feedback about the Project. Enbridge is committed to ongoing engagement and consultation with interested and potentially affected parties through detailed design and construction and will respond to stakeholder concerns throughout the life of the Project.

The potential effects and impacts of the Project on physical, biophysical, and socio-economic features have been assessed for the Project. In the opinion of Stantec, the recommended program of supplemental studies, mitigation, protective, and contingency measures are considered appropriate to 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 to 3 months), and reversible and positive and are, therefore, not anticipated to be significant.

The environmental study investigated data on the physical, biophysical, and socio-economic environment within the Study Area. In the opinion of Stantec, 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, and adherence to permit, regulatory, and legislative requirements, potential adverse residual environmental and socio-economic impacts of this Project are not anticipated to be significant.



Abbreviations

AA	Archaeological Assessment
AAFC	Agriculture and Agri-Food Canada
AOO	Algonquins of Ontario
AOPFN	Algonquins of Pikwàkanagàn First Nation
AR0	Alternate Route for Phase 1 PPR1
AR1	Alternate Route 1 for Phase 2 PPR2
AR2	Alternate Route 2 for Phase 2 PPR2
AR3	Alternate Route 3 for Phase 2 PPR2
BGS	Below ground surface
CAO	Chief Administrative Officers
CEA	Cumulative effects assessment
CHECPIA	Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment
Checklist	MTCS Criteria for Evaluating Potential Build Heritage Resources and Cultural Heritage Landscapes
CHVI	Cultural heritage value or interest
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
CHR	Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment
DFO	Fisheries and Oceans Canada
EASR	Environmental Activity and Sector Registry



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ECCC	Environment and Climate Change Canada
Enbridge Gas	Enbridge Gas Inc.
END	Endangered
EPP	Environmental Protection Plan
ER	Environmental Report
ESA	<i>Endangered Species Act, 2007</i>
ESC	Erosion and Sediment Control
GIS	Geographic Information Systems
HADD	the harmful alteration, disruption or destruction of fish habitat
HDD	Horizontal Directional Drill
HVA	Highly Vulnerable Aquifer
Hydro One	Hydro One Networks Inc.
IO	Infrastructure Ontario
IPZ	Intake Protection Zone
km	Kilometre(s)
LIO	Land Information Ontario
LTC	Leave to Construct
m	Metre(s)
MBCA	Migratory Birds Convention Act, 1994
MCM	Ministry of Citizenship and Multiculturalism
MECP	Ministry of the Environment, Conservation and Parks
MENDM	Ministry of Energy, Northern Development and Mines



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MOE	Ministry of Energy
MTCS	Ministry of Tourism, Culture and Sports
MTO	Ministry of Transportation
NAR	Not at Risk
MNRF	Ministry of Natural Resources and Forestry
NHIC	Natural Heritage Information Centre
NPS	Nominal Pipe Size
OEB	Ontario Energy Board
OEB Environmental Guidelines	Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)
OGS	Ontario Geological Survey
OHA	Ontario Heritage Act
OMAFRA	Ontario Ministry of Agriculture, Food and Rural Affairs
OP	Official Plan
OPCC	Ontario Pipeline Coordinating Committee
OPP	Ontario Provincial Police
O. Reg.	Ontario Regulation
ORAA	Ontario Reptile and Amphibian Atlas
OWES	Ontario Wetland Evaluation System
PE	Polyethylene
PPR	Preliminary Preferred Route
PR	Preferred Route
PTTW	Permit to Take Water



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PSW	Provincially Significant Wetland
ROW	Right-of-Way
SAR	Species at Risk
SARA	Species at Risk Act
SARB	Species at Risk Branch
SARO	Species at Risk in Ontario
SGRA	Significant Groundwater Recharge Area
SOCC	Species of Conservation Concern
SC	Special Concern
Stantec	Stantec Consulting Ltd.
SWH	Significant Wildlife Habitat
TC	Transport Canada
The Project	Eganville Community Expansion Project
THR	Threatened
WHPA	Wellhead Protection Area
WWR	Water Well Record(s)
WTFN	Williams Treaties' First Nation



1 Introduction

1.1 Project Description

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Eganville Community Expansion Project to supply the community of Eganville, Ontario with affordable natural gas (the “Project”). The Project will involve construction of new natural gas pipelines to transport natural gas supply from Snake River Line near Cobden, Ontario to new distribution system pipelines in Eganville, to residential, commercial, and industrial customers in Eganville, and along the supply lateral, which is proposed to span the Townships of Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.

The Project is proposed to be placed into service in phases, with the supply lateral proposed to be placed in service by 2024 and the distribution pipelines being placed in service beginning as early as 2025. The supply lateral will be composed of up to approximately 21 km of natural gas pipeline ranging in size from NPS (nominal pipe size) 4 to 8 (i.e., 4 to 8 inches in diameter) polyethylene (PE) pipeline. The distribution portion of the Project includes approximately 22 km of PE pipeline ranging in size from NPS 2 to NPS 6 (i.e., 2 to 6 inches in diameter). To accommodate the increased supply of natural gas, the Project will also involve the instalment of a pressure reducing station along the supply lateral (Appendix A).

Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an environmental study of the construction and operation of the proposed pipeline. The environmental study will fulfill the requirements of the Ontario Energy Board’s (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)* (OEB Environmental Guidelines).

1.2 Environmental Study

1.2.1 Objectives

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

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



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

- Undertake a route evaluation process.
- Identify a 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.
- 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: Identification and Consultation on the Alternative Routes.
- Phase II: Gather Information and Consultation on the Preliminary Preferred Route.
- 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 also provides background on the extensive engagement and consultation program and engineering design carried out by Enbridge Gas to arrive at the pipeline Study Area that is the subject of this ER.

Phase I: Identification and Consultation on the Alternative Routes

The environmental study began with the route generation and selection process. The first step was the development of routing parameters, including delineating the Study Area, generating routing objectives and identifying environmental and socio-economic constraints and opportunities through a detailed review of available literature and a field reconnaissance. A route evaluation was undertaken to identify environmentally acceptable routes in the Study Area in consideration of the routing objectives, environmental and socio-economic constraints and opportunities, and constructability.



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Phase II: Gather Information and Consultation on the Preliminary Preferred Route

Specific information requests were made to several agencies and stakeholders to assist with identifying environmental features, constraints, the potential for presence of Species at Risk (SAR) and their habitat, and eventually with developing mitigation and protective measures based on predicted effects and potential impacts.

Feedback was sought on the Preliminary Preferred Route (PPR) and alternative routes through newspaper notices, letters, and a Virtual Open House held from September 26 to October 9, 2022. Following the Virtual Open House, no feedback was received that required adjustments be made to the four proposed alternative routes. A quantitative and qualitative evaluation of the PPR and alternative routes resulted in the selection of a Preferred Route (PR). Feedback received from stakeholders following the newspaper publications and the Virtual Open House did not identify potential issues or concerns that required changes to the PR. Feedback received through the engagement and consultation program was acknowledged, reviewed, and incorporated into the ER and route evaluation and supported the overall confirmation of the PR.

Phase III: Environmental Report

Phase III 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 avoid or reduce potential impacts. The environmental study concluded with the preparation of this ER as well as Environmental Alignment Sheets to identify site-specific mitigation and protective measures to be implemented during construction (see Appendix G).

1.2.3 The Environmental Report

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

The ER is organized into the following sections:

1. Introduction: provides a description of the Project and the environmental study
2. Route Evaluation and Selection: provides an overview of the pipeline route evaluation and selection process
3. Engagement and Consultation Program: provides a description of consultation
4. Existing Conditions: describes the existing conditions in the Study Area for the PPR



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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 Gas Project webpage for the public and landowners to review. The ER will accompany a future Enbridge Gas 'Leave-to-Construct' (LTC) application to the OEB for the proposed Project.

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

1.2.5 Additional Regulatory Processes

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



Table 1.1: Summary of Potential Environmental Permit and Approval Requirements

Type of Approval	Permit/Approval	Administering Agency	Description
Federal Permits and Approvals	Clearing of vegetation in accordance with the <i>Migratory Bird Convention Act, 1994</i> (MBCA)	Environment and Climate Change Canada (ECCC)	ECCC does not require a permit to be issued for vegetation clearing, however, precautions need to be taken so that no breeding birds or their nests are harmed or destroyed during the bird nesting season as a result of construction of the Project. Nest sweeps will be required at a maximum of 7 days prior to vegetation removal during the bird nesting season, (e.g., April 1 to August 31), as per the MBCA.
	Species at Risk Act (SARA)	Fisheries and Oceans Canada (DFO) (aquatic species) ECCC (terrestrial species)	Permits are required by those persons conducting activities that may affect species listed on Schedule 1 SARA as extirpated, endangered, or threatened and which contravene the Act's general or critical habitat prohibitions in watercourses (aquatic species) or on federal lands (terrestrial species).
	Review and authorization under the <i>Fisheries Act, 1985</i>	DFO	The Fisheries Act, 1985 is the main federal law governing fisheries in Canada. The Fisheries Act, 1985 provides for the management and control of fisheries, the conservation and protection of fish, the protection of fish habitat and pollution prevention.



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Type of Approval	Permit/Approval	Administering Agency	Description
			<p>At detailed design, the final crossing methods will be reviewed and DFO’s Measures to Protect Fish and Fish Habitat will be reviewed to identify mitigation and protective measures for the proposed crossing locations. For crossings and activities not covered by these measures, the DFO-Enbridge Gas agreements on standard sediment control plans for crossing alternatives will be reviewed for applicability and practice. For any remaining crossings and activities not specifically covered by the above measures, DFO review may be required.</p> <p>The proposed method for pipeline water crossings (i.e., horizontal directional drilling) will likely not require authorization provided measures to avoid causing a HADD – “the harmful alteration, disruption or destruction of fish habitat” – of fish habitat are followed during construction. These measures include completing the work during the appropriate timing window (Ministry of Natural Resources and Forestry [MNRF] formerly the Ministry of Northern Development, Mines, Natural Resources and Forestry [NDMNR] designated construction windows note that In-water work is permitted from July 1 to March 14 for warm water crossings and from July 1 to September 15 for cold water crossings), installation of appropriate</p>



Type of Approval	Permit/Approval	Administering Agency	Description
			sediment and erosion control measures (i.e., silt fencing around disturbed areas and development of a contingency plan). If these measures are followed, a project of this nature is typically considered to be low risk to fish and fish habitat and can proceed without DFO review.
Provincial Permits and Approvals	Crossing Approval	Hydro One Networks Inc. (Hydro One)	Required for crossing Hydro One’s electric transmission corridor. This will be determined during detailed design.
	Approval under the <i>Ministry of Infrastructure Public Work Class Environmental Assessment (Class EA)</i>	Infrastructure Ontario (IO)	Required to obtain an easement on IO owned and/or managed lands. This will be determined during detailed design.
	Permit to Take Water (PTTW) or Environmental Activity and Sector Registry (EASR) (surface and groundwater) under the <i>Ontario Water Resources Act (1990)</i>	Ministry of the Environment, Conservation and Parks (MECP)	Under Ontario Regulation (O. Reg.) 64/16 and O. Reg. 63/16, the MECP requires a PTTW for dewatering in excess of 400,000 L/day, and an EASR for dewatering between 50,000 and 400,000 L/day. This can include trench dewatering and taking water for hydrostatic testing from a pond, lake, etc. There are some exceptions for surface water takings where active or passive surface water diversions occur such that all water taken is returned to within another portion of the same surface water feature.



Type of Approval	Permit/Approval	Administering Agency	Description
	Permitting or registration under the <i>Endangered Species Act</i> (ESA) (2007)	MECP	<p>An ESA permit or Registration is required for activities that could impact species protected under the ESA. Consultation will occur with the MECP to determine ESA permitting requirements.</p> <p>As indicated in Section 9 (1) a of the ESA (2007), “No person shall kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species.”</p> <p>As indicated in Section 17 (1), “the Minister may issue a permit to a person that, with respect to a species specified in the permit that is listed on the Species at Risk in Ontario List as an extirpated, endangered or threatened species, authorizes the person to engage in an activity specified in the permit that would otherwise be prohibited by Section 9 or 10.”</p>
	Archaeological clearance under the <i>Ontario Heritage Act</i> (OHA)	Ministry of Citizenship and Multiculturalism (MCM)	A Stage 1-2 archaeological assessment (AA) is required along the road allowance and temporary land use areas to identify areas of archaeological potential prior to any ground disturbances and/or site alterations. Depending on the results of the Stage 1-2 AA, Stage 3 and 4 AA’s may be required. The completed AA reports are forwarded to the MCM for review and comment.



Type of Approval	Permit/Approval	Administering Agency	Description
	Review of Built Heritage and Cultural Heritage Landscapes under the OHA	MCM	The MTCS Criteria for Evaluating Potential Built Heritage Resources and Cultural Heritage Landscapes (Checklist) was completed to determine the presence or absence of built heritage resources and cultural heritage landscapes in the Study Area and identify if further work is required. The Checklist determined the potential for built heritage resources and cultural heritage landscapes within the Study Area and a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHR) was recommended. The CHR will be undertaken to identify the presence of built heritage resources and cultural heritage landscapes within the Study Area, and to understand the potential impacts of the Project on these resources. The CHR will include an impact assessment of the preferred alternative, with mitigation measures, and recommendations.
	Encroachment Permit under the Highways Act	Ministry of Transportation (MTO)	Required if work will occur in the road allowances.



Type of Approval	Permit/Approval	Administering Agency	Description
Municipal Permits/Approvals	Tree Canopy Policy	Township of Admaston/ Bromley	May be required to adhere to Tree Canopy Policy By-Law No. 2019-17 if trees are removed during construction.
	Noise By-Law Exemption Permit	Township of Bonnechere	Required if construction activities will occur during the prohibited times outlined in the Township of Bonnechere Noise By-Law No. 2013-16.
	Notice Provisions by-law to provide for notice provisions as required under the Municipal Act, 2001	Township of Bonnechere	Notice will be required if permanently closing or blocking off a street, lane or walkway during construction as outlined in the Township of Bonnechere Notice Provisions By- Law 2007-88.
	Noise By-Law Exemption Permit	Township of North Algona Wilberforce	Required if construction activities will occur during the prohibited times outlined in the Township of North Algona Wilberforce By-Law No. 2020-49.
	Site Plan Control By-Law Exemption Permit	Township of North Algona Wilberforce	Required if construction activities will occur on lands which exhibit physical constraints to development and/ or which are environmental sensitive to developments as outline in By-Law 16-98 of the Township of North Algona Wilberforce. This will be determined during detailed design.



2 Route Evaluation and Preferred Route Selection

2.1 The Process

The route evaluation process was undertaken as per the *OEB Environmental Guidelines* (2016), which identify the environmental and socio-economic features to take into consideration and the principles to be considered during the route evaluation. The preferred routes for the proposed Project were confirmed through a five-step process, as illustrated in Figure 2.1.

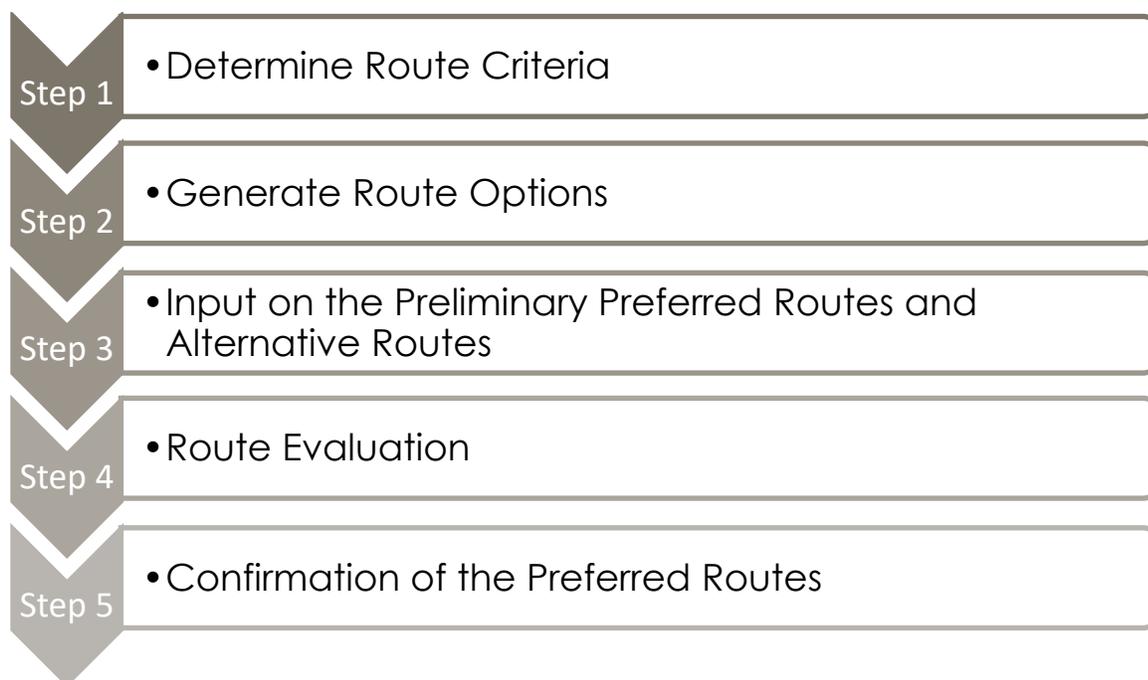


Figure 2.1: Route Evaluation Methodology

2.2 Study Area

The Study Area encompasses an area of approximately 54 km². The Study Area is considered the area within which direct interactions with the socio-economic and natural environment could occur. As such, the Study Area was established as the area within 500 m on either side of the route options (see Appendix A, Figure A-1). It is in this area that desktop information on socio-economic and environmental features has been collected to assess the potential impacts of the Project.

2.3 Step 1: Determine Route Criteria

2.3.1 Routing Objectives

The routing methodology considered the preference to utilize the existing municipal road allowance to locate the proposed new pipeline.

The overarching objective in the route evaluation and selection process is that the selected route presents the least potential for adverse environmental and socio-economic impacts. The following principles support that objective:

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.
2. 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.
3. Existing linear infrastructure should be used or paralleled to the greatest extent feasible to reduce impacts on previously undisturbed environmental and socio-economic features and to limit constraints on future land development.
4. Where new easements are required, existing lot and property lines should be followed to the extent feasible to avoid deviations into previously undisturbed environmental and socio-economic features.

2.3.2 Environmental and Socio-Economic Opportunities and Constraints

Chapter 4 of the *OEB Environmental Guidelines* (2016), 'Route or Site Selection', outlines environmental and socio-economic features that should be considered during the route evaluation and selection process. Features in the Study Area were considered as either pipeline routing opportunities or constraints.

Pipeline routing opportunities are existing features 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:

- Site-specific mitigation measures would be required to reduce potential effects
- The feature has been selected or designated for protection
- 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 Land Information Ontario (LIO) data warehouse. LIO is the province's central repository for authoritative digital data, from the MNRF and other governmental departments and agencies.

After creating a GIS database of pipeline opportunities and constraints, a windshield survey was undertaken by a Stantec biologist from April 27 to April 29, 2022. This windshield survey verified the biophysical 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.

The main routing opportunity is the presence of road allowances, which allow for co-location of the proposal pipeline with existing linear infrastructure and disturbance. 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), geological (i.e., shallow bedrock), and natural environmental features such as watercourses, wetlands, and wooded areas.

2.4 Step 2: Generate Route Alternatives

The generation of route options was based on the routing objectives, Study Area, and environmental and socio-economic constraints and opportunities identified in Step 1. Route generation was conducted by staff of Stantec and Enbridge, using aerial photography interpretation, and GIS mapping of existing environmental and socio-economic constraints and opportunities. In addition to the routing objectives noted in Section 2.3.1, the intent of this Project is to bring natural gas to stakeholders in the Study Area. Therefore, a key objective of the Project is to reach potential customer connections to satisfy customer commitments.

All route options followed existing linear infrastructure (roads) and avoided natural and built cultural heritage features to the extent possible.

PPR were identified by Enbridge for Phases 1 and 2 of the Project. The PPR were selected based on constructability factors, namely the presence of shallow bedrock.

One alternative route segment was considered for Phase 1 of the Project; AR0. Three alternative route segments were considered for Phase 2 of the Project; AR1, AR2 and AR3. Phases 3 and 4 of the Project did not require a routing assessment as they are the community connection Phases. The PPR and alternative route segments for Phases 1 and 2 of the Project are described as follows and shown in Appendix A, Figure A-2:

- Phase 1, PPR1: From Snake River Line to Bulgers Corner, PPR1 travels southwest along Mcguinty Road. From Mcguinty Road, the route travels along Mcgaghan Road till Bulgers Corner. The total length of PPR 1 is approximately 10.6 km.



- Phase 2, PPR2: From the end of PPR1 at Bulgers Corners PPR2 travels west along Cold Creek Road to Letts Corners. From Letts Corners the route travels south via Letts Cemetery Road and bends slightly southwest to Eganville. The total length of PPR2 is approximately 11.5 km.
- Phase 1, AR0: From the intersection of Behms Line and Cobden Road AR0 travels southwest along Cobden Road to Kellys Corner. The total length of AR0 is approximately 11.1 km.
- Phase 2, AR1: From the end of AR0 at Kellys Corner, AR1 continues north to Bulgers Corners. AR1 then travels west along Cold Creek Road to Letts Corners. From Letts Corners the route travels south via Letts Cemetery Road and bends slightly southwest to Eganville. The total length of this route is approximately 16.2 km.
- Phase 2, AR2: From the end of AR0 at Kellys Corner, AR2 continues west along Highway 60 to Bruce Street. The total length of this route is approximately 8.6 km. A portion of AR2 overlaps with PPR2.
- Phase 2, AR3: From the end of PPR1 at Bulgers Corners, this route travels south along Bulger Road (County Road 9) to Kellys Corner, then travels west along Highway 60 to Bruce Street. The total length of this route is approximately 13.2 km.

The route evaluation process was not completed for the portion of the Project located in Eganville. For the Eganville portion of the Project, the number of connections to customers is the driver for where the pipeline is located. The final route in this area will be determined by Enbridge as they progress through detailed design and identify customer connections.

2.5 Step 3: Route Evaluation

The Phase 1 and 2 alternate routes were subject to a comparative evaluation with the corresponding PPR segments. The goal of the comparative evaluation was to determine the potential environmental and socio-economic effects of constructing and operating each alternative route in comparison to the PPR segments, to aid in determining which route was preferred from an environmental perspective.



The four alternative routes and their corresponding PPRs were evaluated by identifying features along the proposed segments with select environmental and socio-economic base data acquired from relevant published literature, maps, digital data, and the windshield surveys conducted from April 27 to April 29, 2022. Categories of assessed features, listed alphabetically, include:

- **Agricultural:** Length of adjacent prime agricultural land and tile drainage.
- **Aquatic:** Number of mapped watercourses and/or drain crossings, number of watercourse crossings with identified SAR, and length of provincially/locally significant and unevaluated wetlands (adjacent to the route).
- **Geology:** Drift thickness / depth to bedrock (km)
- **Groundwater Resources:** Number of water wells (i.e., domestic and livestock wells) within 100 m.
- **Route Characteristics:** Length (km).
- **Socio-Economic:** Number of road crossings.
- **Terrestrial:** Length of adjacent and intersecting woodlots.

Table 2.1 Route Comparative Evaluation Phase 1 (PPR1 vs AR0)

Discipline	Feature	PPR1	AR0
Agricultural	Prime Agricultural Land (km)	11.0	17.4
	Tile Drainage (km)	0.1	0
	Watercourse / Drain Crossings	10 / 0	12 / 3
	Watercourses with Identified SAR	0	0
	Provincially Significant Wetlands (PSWs) (km)	0	0
	Adjacent Locally Significant/Other Unevaluated Wetlands (km parallel)	0.4	0.2
Geology	Drift Thickness <0.0015m (km)	3.7	4.3
	Bedrock Surficial Geology (km)	1.8	1.7
	Bedrock Outcrop (km)	3.4	3.3
Groundwater Resources	Water wells (within 100 m)	12 domestic wells, 1 livestock well	9 domestic wells, 2 livestock wells



Discipline	Feature	PPR1	AR0
Route Characteristics	Length (km)	10.62	11.15
Socio-Economic	Road Crossings	7	6
Terrestrial	Adjacent and Intersecting Woodlands (km parallel)	1.8	0.2

As shown in Table 2.1, PPR1 parallels more woodlands, tile drainage and wetlands, and there are two more domestic water wells nearby than AR0. AR0 parallels more agricultural land. However, with the pipeline proposed to be located in the road allowance, the interaction with paralleling features is expected to be limited. Additionally, mitigation measures will be implemented during construction to reduce impacts with these parallel features. PPR1 has less potential to encounter shallow bedrock and is shorter in length. For these reasons, PPR1 was selected as the preferred route for this segment.

The selection of the Phase 2 route depends on the route that is selected for Phase 1. If Enbridge accepts the PPR1 recommendation for Phase 1, only PPR2 and AR3 are available options for Phase 2. If AR0 is selected for Phase 1, only AR1 and AR2 are available options for Phase 2. Subsequently, for Phase 2, Stantec only compared PPR2 to AR3, and AR1 to AR2.

Table 2.2 Route Comparative Evaluation Phase 2 (PPR2 vs AR3)

Discipline	Feature	PPR2	AR3
Agricultural	Prime Agricultural Land (km)	17.5	12.5
	Tile Drainage (km)	0	0
	Watercourse / Drain Crossings	14	7
	Watercourses with Identified SAR	0	0
	Provincially Significant Wetlands (PSWs) (km)	0	0
	Adjacent Locally Significant/Other Unevaluated Wetlands (km parallel)	2.0	2.2
Geology	Drift Thickness <0.0015m (km)	1.6	5.8
	Bedrock Surficial Geology (km)	0.9	3.7
	Bedrock Outcrop (km)	1.2	3.1



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Discipline	Feature	PPR2	AR3
Groundwater Resources	Water wells (within 100 m)	33 domestic wells, 1 livestock well	44 domestic wells, 5 livestock well
Route Characteristics	Length (km)	11.5	13.2
Socio-Economic	Road Crossings	8	13
Terrestrial	Adjacent and Intersecting Woodland (km parallel)	0.8	1.1

As shown in Table 2.2, PPR2 parallels more prime agricultural land and more watercourse/drain crossings. AR3 parallels more wetlands and woodlands, and there are more domestic water wells nearby. However, with the pipeline proposed to be located in the road allowance, the interaction with paralleling features is expected to be limited, and mitigation measures will be implemented during construction to reduce impacts with these parallel features and watercourse/drain crossings. AR3 is 1.7 km longer than PPR2 and has greater potential to encounter shallow bedrock. For these reasons, if PPR1 is selected for Phase 1, PPR2 is selected as the preferred route for Phase 2.

Table 2.3 Route Comparative Evaluation Phase 2 (AR1 vs AR2)

Discipline	Feature	AR1	AR2
Agricultural	Prime Agricultural Land (km)	25.7	4.4
	Tile Drainage (km)	0	0
	Watercourse / Drain Crossings	17	4
	Watercourses with Identified SAR	0	0
	Provincially Significant Wetlands (PSWs) (km)	0	0
	Adjacent Locally Significant/Other Unevaluated Wetlands (km parallel)	2.2	0.03
Geology	Drift Thickness <0.0015m (km)	1.8	5.6
	Bedrock Surficial Geology (km)	1.4	3.3
	Bedrock Outcrop (km)	1.4	2.9



Discipline	Feature	AR1	AR2
Groundwater Resources	Water wells (within 100 m)	47 domestic wells, 1 livestock well	33 domestic wells, 5 livestock wells
Route Characteristics	Length (km)	16.2	8.6
Socio-Economic	Road Crossings	11	10
Terrestrial	Adjacent and Intersecting Woodland (km parallel)	1.1	0

As shown in Table 2.3 AR1 is located adjacent to more prime agricultural land, woodlots, and wetlands, has more watercourse/drain crossings, and there are more domestic water wells nearby. However, with the pipeline proposed to be located in the road allowance, the interaction with paralleling features is expected to be limited, and mitigation measures will be implemented during construction to reduce impacts with these parallel features and watercourse/drain crossings. AR2 has greater potential to encounter shallow bedrock but is also significantly shorter. . For these reasons, if AR0 is selected for Phase 1, AR1 would be the preferred option.

All route options parallel existing linear infrastructure. In reviewing the potential impacts of the route options, the majority of the potential impacts can be mitigated through standard construction mitigation and protective measures. While two route options for Phase 1 and four route options for Phase 2 are, for that reason, environmentally acceptable, the combination of PPR1 and PPR2 was determined to be the best combination of preferred routes overall, because of the reduced potential to encounter shallow bedrock and reduced overall length.

2.6 Step 4: Input on the Preliminary Preferred Route

To compliment the comparative evaluation, input on the route options for Phases 1 and 2, and the Study Area for Phases 3 and 4 were sought through engagement and consultation. Section 3 of this ER summarizes the engagement and consultation program that was undertaken as part of this Project as well as the comments that were received by the various Indigenous communities and stakeholders on the routing options. Comments received were generally positive, as several members of the public, notably landowners in the area, demonstrated an interest in receiving natural gas.



2.7 Step 5: Confirmation of the Preferred Route

The PR is currently illustrated within a general location of existing road allowance (Figure A-3, Appendix A). Detailed design will be undertaken by Enbridge Gas to determine the exact location of the pipeline within the road allowance. Detailed design will also be influenced by supplemental studies (e.g., geotechnical investigations) and site-specific requests from landowners and agencies. This information will be used to locate the pipeline to further reduce environmental and socio-economic impacts. Enbridge Gas also commits to refining the method of installation of the proposed pipeline through natural areas during detailed design, to reduce the disturbance area to the extent possible (see Table 5.1 of the ER for more details). Additional information on the detailed design will be provided in the LTC application to the OEB.



3 Engagement and Consultation Program

3.1 Objectives

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

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

The engagement and consultation 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 engagement and consultation program
- Provide a forum for the identification of issues
- Identify how input will be used in the planning stages of the Project
- Summarize issues for resolution, and resolve as many issues as feasible
- Revise the program to meet the needs of those being consulted, as feasible
- Develop a framework for ongoing communication and engagement during the construction and operation phases of the Project

An extensive consultation program was undertaken for the Project, including development and maintenance of an Indigenous groups and stakeholder Contact List, which was used to distribute the required notices, newspaper advertisements, agency meetings, 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 3.2 – 3.4 below.

3.2 Identifying Interested and Potentially Affected Parties

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

3.2.1 Identifying Indigenous Communities

Engagement with Indigenous communities was guided by the *OEB Environmental Guidelines* (2016), as noted above, but also by the Enbridge'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).² 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 April 13, 2022. See Appendix B1.

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

- Alderville First Nation (Williams Treaties' First Nation, WTFN)
- Algonquins of Pikwàkanagàn First Nation (AOPFN)
- Algonquins of Ontario (AOO)
- Curve Lake First Nation (WTFN)
- Hiawatha First Nation (WTFN)
- Mississaugas of Scugog Island First Nation (WTFN)
- Beausoleil First Nation (Christian Island)
- Chippewas of Georgina Island First Nation (WTFN)
- Chippewas of Rama First Nation (WTFN)

² On June 18, 2021, the Ontario government implemented changes to several ministries. The Ministry of Energy will continue to handle matters pertaining to delegation of Duty to Consult, while the rest of the MENDM has been combined with the former Ministry of Natural Resources and Forestry to become the Ministry of Northern Development, Mines, Natural Resources and Forestry.



3.2.2 Identifying Interested and Potentially Affected Parties

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

The parties listed below were among those considered when developing the initial stakeholder Contact 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 Virtual Open House and who had contacted the Project Team. The Project Indigenous and stakeholder Contacts Lists are provided in Appendix B2.

3.3 Communication Methods

3.3.1 Newspaper Notices

A Notice of Study Commencement and Virtual Open House was published on September 14, and September 21, 2022, in the Eganville Leader.

The Notice introduced and described the Project, provided a map of the Study Area, including PPR and alternative routes, noted the format and dates of the Virtual Open House, and listed Project contact information.

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

3.3.2 Letters and Emails

3.3.2.1 Notice of Study Commencement and Virtual Open House

Letters were sent via email to all parties identified on the Indigenous Contact List on September 7, 2022, and to parties identified on the OPCC and Agency/Municipal Contact Lists on September 14, 2022, to provide information on the Project and on the Virtual Open House. Letters were mailed to landowners located within a minimum of 1 km of the PR via Canada Post regular mail on September 13, 2022 and delivered to



mailboxes by September 21, 2022. Appended to these letters and emails was a map of the Study Area, including PPR and alternative routes.

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

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

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

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

Copies of the first Virtual Open House slides, presentation script, and exit questionnaire are provided in Appendix B5. Copies of completed questionnaires and Stantec’s response to completed questionnaires are provided in Appendix B6.

3.3.4 Project Webpage

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

The first webpage, referred to in this ER as the Virtual Open House webpage, was developed using the ArcGIS StoryMaps platform (Eganville Community Expansion Project (arcgis.com)) to host the Virtual Open House presentation. This webpage contained a “Resources” tab with a link to a downloadable version of the presentation slides, the exit questionnaire, and the presentation voiceover script.

A second webpage was developed on the Enbridge Gas website (<https://www.Enbridgegas.com/EganvilleProject>) and was designed to provide information on the Project and a link to the Virtual Open House. Once the Virtual Open House was complete, copies of the presentation slides, the exit questionnaire and the



presentation voiceover script were made available. Upon completion of this ER, it will be posted on the Enbridge Gas website.

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

3.3.5 In-Person Options

In addition to the Virtual Open House, print copies of the Open House Materials (poster-sized version of the Project map, copies of the open house presentation and questionnaires with return envelopes) were shipped to the Chief Administrative Officers (CAO's) of the Townships for in-person review for the two-week duration of the Virtual Open House at the following locations:

- Township of Bonnechere Valley, 49 Bonnechere Street, Eganville (Municipal Office)
- Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office)
- North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville, (Municipal Office)

3.4 Consultation Events

3.4.1 Meetings

Meetings regarding the Project have or may occur, if required or requested, between Enbridge Gas and Indigenous communities, lower/upper-tier municipalities, 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.

3.4.2 Virtual Open House

As a result of the health risks associated with in-person gatherings and physical distancing requirements set out by the Province of Ontario due to COVID-19, a Virtual Open House was hosted online. The Virtual Open House was accessible from September 26, 2022, to October 9, 2022. This two-week period was selected to allow agencies, Indigenous communities, landowners, residents, and other stakeholders ample opportunity to review the Project information and provide input.

A Project email address and phone number were provided in the Virtual Open House for attendees to ask questions and leave comments. The Virtual Open House received 123 visits to the ArcGIS StoryMaps webpage, with 11 visits to the visual/audio presentation. Of those that visited the webpage, 94 were from Ontario, 15 from Quebec, 4 from Alberta, 3 from India, 2 from Texas, 1 from California, 1 from Wyoming, 1 from Minnesota, 1 from North Carolina and 1 from Iowa, USA. Following the Virtual Open



House, 5 questionnaires were submitted via either the Project email address or through the questionnaire link in the presentation.

3.5 Input Received

The engagement and consultation program allowed interested or potentially affected parties to provide input into the Project. Input was evaluated and where applicable, integrated into the ER and Project. Comment-response summary tables and a copy of all written comments and responses is provided in Appendix B6.

3.5.1 Indigenous Input

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

Prior to and throughout the environmental study, Enbridge Gas and Indigenous communities engaged in discussions on the proposed Project via email, virtual meetings, and phone conversations.

As recorded in Appendix B6, engagement and consultation began September 7, 2022, with the Curve Lake First Nation. Upon receiving the notice of commencement and virtual open house letter, the nation responded via email noting Curve Lake Nation will not be engaging in the VOH as the Project is within the Algonquin territory and slightly in Alderville's Treaty 27 ¼.

The AOPFN noted that the nation is working out a capacity agreement specific to this project to deal with review of the ER, archaeological studies, and to brief Chief and Council as well as ensuring community inputs from the AOPFN Advisory Committee are included.

Enbridge Gas will continue to meaningfully engage with affected Indigenous communities through phone calls, virtual and in-person meetings, and email communications. During these engagement activities, Enbridge Gas representatives will provide an overview of the Project, respond to questions and concerns, and address any interests or concerns expressed by Indigenous communities to appropriately mitigate any Project-related impacts. A log of Enbridge Gas engagement activities is included in Appendix B7. This log was reviewed, and the comments were considered in the ER. Enbridge Gas will continue to work with Indigenous groups following the distribution of the ER to ensure 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 ensure follow-up, applicable supporting documents are tracked. Consultation with the indigenous nations are included in the comment-response summary table and corresponding comment records, which will be submitted to the OEB upon the filing of the Project application.

3.5.2 Public Input

Fourteen comments were received as of November 2, 2022, in the form of five voicemails, four emails, and five completed questionnaires. The main areas of comment on the Project include:

- Support for the Project
- How landowners might be connected to the pipeline
- Technical support to access the VOH website
- The proximity of the proposed pipeline in relation to landowner properties
- The potential impacts to water wells from environmental contamination that may result from the construction
- The potential to pursue the feasibility of a joint use trench with Enbridge

3.5.3 Agency Input

Seven comments were received as of November 2, 2022, from federal and provincial agencies and were considered in the preparation of this ER. A summary of the comments received is provided below:

Federal Agencies

- The DFO provided confirmation of receipt of the Notice of Study Commencement and noted that if a review is required from DFO then a Request for Review form must be submitted.

Provincial Agencies and Authorities

- The MOE provided Enbridge Gas with a Letter of Delegation detailing the Indigenous communities whose Aboriginal and treaty rights may be impacted by the Project.
- The MECP Species at Risk Branch (SARB) provided a guide to preliminary screening to determine whether a permit under the Endangered Species Act will be required.
- The Source Protection Program Branch of the MECP indicated that natural gas pipelines are not identified as a threat to drinking water sources under the Clean



Water Act, 2006. MECP also provided information to guide identification and assessment of impacts to drinking water, aquifers, and Intake-Protection Zones.

- IO acknowledged the receipt of the notice study commencement and virtual open house and noted that two properties identified within and adjacent to the Project's Study Area are owned by the Minister of Government and Consumer Services.
- MTO noted that the routes that would be crossing or running parallel to Hwy 60 were of their interest.
- Ministry of Citizenship and Multiculturalism (MCM) shared a letter with guidelines on how to incorporate consideration of cultural heritage and outlined the technical cultural heritage studies and level of detail.
- MNRF provided information to guide identification and assessment of natural features and resources as required by applicable policies and legislation.

3.5.4 Municipal Input

One comment was received from the Township of Admaston/Bromley municipal road works department. Municipal employee expressed interest in receiving natural gas to the township and inquired about the route of the pipeline in the village of Eganville.

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

No comments were received from Interest Groups and Third-Party Utility Owners/Operators as of November 2, 2022.

3.6 Refinements Based on Input

At each stage of the engagement and consultation program, input received was compiled, reviewed, and incorporated into the environmental study process. Responses were provided, as applicable, to questions and comments received. No comments or concerns were received to cause a change in the Project and preliminary preferred route, and no refinements were required.

Enbridge Gas has committed to on-going engagement and consultation with directly affected and interested parties through detailed design and construction and will continue to respond to concerns through the life of the Project. Input was reviewed and considered during the identification of potential impacts and determination of mitigation and protective measures. See Section 2.0 'Route Evaluation and Preferred Route Selection' for further discussion on routing decisions.



4 Existing Conditions

4.1 Study Area

A Study Area is the area in which direct interactions with the socio-economic and natural environment could occur. For the purposes of the environmental study, the northern, southern, eastern, and western extents of the Study Area were determined by applying an approximate buffer of 500 m from the centre line of the PR, (see Figure A-3, Appendix A).

4.2 Data Sources

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

A background data review was conducted to determine locations of potential biophysical features (e.g., wetlands, watercourses) in the Study Area. Data were gathered through agency requests and by accessing the following online databases and sources:

- County of Renfrew Official Plan (County of Renfrew 2020b)
- Natural Heritage Information Centre (NHIC) Database (MNRF 2022a)
- Land Information Ontario (MNRF 2022b)
- DFO Aquatic species at risk (SAR) mapping (DFO 2022)
- AgMaps (Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) 2022)
- Environment and Climate Change Canada (ECCC) Species at Risk Critical Habitat and Range Extents dataset
- Species at Risk public registry (ECCC)
- Species at Risk in Ontario (SARO) list
- Atlas of the Mammals of Ontario (Dobbyn 1994)
- Ontario Butterfly Atlas (Ontario Nature 2020a)
- Ontario Reptiles and Amphibians (Ontario Nature 2020b)
- Ontario Moth Atlas (Ontario Nature 2020c)
- Ontario Breeding Bird Atlas (Cadman *et al.* 2007)
- ECCC species at risk Range Map Extents (ECCC 2022)
- eBird Canada (eBird 2022)
- iNaturalist Canada (iNaturalist 2022)



For the socio-economic elements of the assessment, the most recent demographic data were taken from 2021 Census of Population (Statistics Canada 2022) and the most recent economy and employment statistics were extracted from the 2016 Census of Population (Statistics Canada 2017a, b, c, d), as this was the latest statistic available at the time of the ER. The selected census divisions included Ontario, Townships of Bonnechere Valley, Admaston-Bromley and North Algoma, community of Eganville, and Renfrew County.

A reconnaissance assessment of the PR occurred during spring conditions after a majority of the snow melted from the landscape and prior to leaf-on conditions between April 19 and 20, 2022. The purpose of the site investigation was to:

- Determine the potential for additional biophysical resources along the PR not mapped by the applicable agencies
- Confirm the presence of biophysical resources identified as occurring within the Study Area and determine the potential for additional aquatic resources not mapped by the applicable agencies

4.3 Physical Features

4.3.1 Bedrock Geology and Drift Thickness

The bedrock geology of the Study Area is comprised mainly of limestone from the Ottawa Group; Simcoe Group; and the Shadow Lake formation (now considered Upper Ordovician formation). Additionally, alkalic plutonic rocks can also be found in the northeastern portion of the Study Area, around the tail end of McGuinty Road and Cobden Road, as well as in the southern parts of the Study Area around Mink Lake (OGS 2011). The southwest of the Study Area includes the Bonnechere River and is mainly characterized by Palaeozoic limestone (Chapman and Putnam 1984).

To characterize the general depth of the overburden, drift thickness was reviewed. Results indicate that the overburden ranges from 0 m (i.e. bedrock outcrop) to approximately 120 m (Gao *et al.* 2006). The drift thickness generally decreases to the east and south of the Study Area. Overburden is the thickest (approximately 100 m thick) in the vicinity of Mcgraghan Road and Bulger Road and decreases southwards (from Bulgers Corner to Kellys Corner) and at Letts Corner (Gao *et al.* 2006).

A review of available Water Well Records (WWR) within the Study Area reveals that there are 459 water wells and indicates that the depth to bedrock ranges from 0 to 111 m below ground surface (BGS). The average depth to bedrock in the Study Area based on WWRs is 11.1 m BGS (MECP 2022a).



4.3.2 Physiography and Surficial Geology

The Study Area is characterized as drumlinized till plains towards the west of Bulgers Corner and Kellys Corner and mainly clay plains, with patches of shallow till and rocky ridges and isolated area of drumlins east of the Study Area. The southwest portion of the Study Area includes the Bonnechere River therefore the area is mostly characterized as spillways and till moraines with a small portion crossing over drumnilized till plains (Chapman and Putnam 2007).

The Study Area is located in the Ottawa Valley Clay plains physiographic region of southern Ontario, which is a region characterized clay plains interrupted by ridges of rock or sand. The eastern portion of the Study Area (along Mcguinty Road, Mcgaghan Road and Cobden Road) and west of Mink Lake predominantly traverses fine-textured glaciomarine deposits, Precambrian bedrock, bedrock drift complex and shield-derived silty to sandy till. The region of the eastern side of Mink Lake is mostly characterized as silty to sandy till. Strips of glaciofluvial deposits and coarse-textured glaciomarine deposits i.e., sand and gravel deposited by streams of water melting glaciers are also seen traversing the Study Area (OGS 2010).

4.3.3 Groundwater

Based on provincial mapping, the Site is not located within a source protection region, and therefore there are no Wellhead Protection Areas (WHPA), Highly Vulnerable Aquifers (HVAs), Intake Protection Zones (IPZs), municipal wellheads, or Source Protection Plan Policy and Significant Groundwater Recharge Areas (SGRAs)(MECP 2022b). The nearest municipal water supply system is the Eganville drinking water supply system, which takes water from the Bonnechere River.

The nearest WHPA is associated with the town of Almonte and is located about 77 km southeast of the Study Area.

In the Study Area, residents appear to rely on private wells for domestic water supply. MECP WWR's indicated that 459 well records occur within the Study Area and have the following usage:

- 351 are designated as domestic
- 35 are designated as livestock or irrigation
- 17 are designated as commercial/industrial/recharge
- 15 wells are designated for public use
- 41 are either not used, unknown well types, abandoned, or observation/test wells.



A review of these 459 WWR located within 500 m of the proposed pipeline route indicates that detailed well construction are available. Of these 459 WWR, 428 have reported well depths. Of these, records indicate that 3% of the wells (13 out of 428) were completed at less than 10 m BGS and only 1% (4 out of 428) are water supply wells with the other 9 being observation/test wells. Of these shallow water supply wells, all 4 are bedrock wells and had static water levels ranging from about 1.5 to 3.7 m BGS (MECP 2018).

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

Local groundwater flow conditions are impacted by topography and surface water features. Regional groundwater flow within the Precambrian bedrock is generally interpreted to be controlled by topography and secondary porosity produced from fractures systems.

4.3.4 **Aggregates and Petroleum Resources**

A review of the County of Renfrew Official Plan (Renfrew County 2020b) indicates there are no aggregate and petroleum resources in the Study Area. The nearest industrial emitter is the Haley Quarry located at 0.9 km to the Southeast of the Study Area. See Section 3.5.8 for additional details on land use and aggregate sites.

4.3.5 **Soil and Soil Capability**

The most occurring soil types identified in the Study Area are: Eganville, Renfrew and Tweed, (OGS 2010). Additional soil types occur in minor quantities. The soil material is constrained to an area underlain by Ordovician limestone (Gillespie, Wicklund and Matthews 1964).

Eganville soils predominantly cover most of the Study Area west of Bulgers and Kellys Corners. However just south of Mink Lake, as the route travels west from Kellys Corner towards Eganville, the soil type is mostly Tweed.

Renfrew soils can mainly be seen in the eastern part of the Study Area where Mcguinty Road meets Snake River Line, Cobden Road meets Behms Line and small patches as the route travels southwest down Mcgaghran Road towards Bulgers Corner and Cobden Road towards Kellys Corner.

The Soil Survey of Renfrew County (Gillespie, Wicklund and Matthews 1964) was referenced to characterize the soils in the Study Area.



Eganville soils are generally well drained soils and have slopes mostly between three to nine percent but range from two to twelve percent. The Eganville soils are mapped in the Eganville-Douglas region of Renfrew County. The rocky phase has similar characteristics but have rocky outcrops. The shallow phase has a depth of glacial till over limestone bedrock in some areas ranging between one and two feet.

The Renfrew soils are the best agricultural soils in Renfrew County. They occupy a large part of the Ottawa River valley. The Renfrew clay represents one of the soil types developed on the clay sediments deposited in the glacial lake basin that extends, in Renfrew County, from Arnprior to Deep River. Renfrew – Rocky Phase are areas of Renfrew clay that have many rock outcrops and surface stones. The Precambrian rock outcrops are caused by either shallow clay sediments overlying a rough, rocky base or stream erosion uncovering the rocky base and occur at scattered locations over the entire clay basin.

The Tweed soils are stony sandy loam soils associated with surface outcrops of crystalline limestone in certain portions of the Precambrian shield in the southern part of Renfrew County. These crystalline limestone outcrops represent remnants of a deposit that in an earlier geologic age was probably quite extensive in the southeastern Canadian section of the Precambrian shield. The soil parent material is a glacial till that has been derived predominantly from the limestone rock but in addition contains considerable material derived from the adjacent granitic and gneissic rocks.

Soil capability for agriculture is mapped by Agriculture and Agri-Food Canada (AAFC 2005). Lands classified as Class 1 are the most agriculturally productive, while those classified as Class 7 have the lowest capability for agriculture. Class 1 to 5 agricultural lands are generally arable, while classes 1 through 3 are defined by the Ontario Ministry of Agriculture, Food and Rural Affairs to be prime agricultural soils for common field crop production.

The majority of the eastern half of the Study Area (i.e. Phase 1), crosses Class 3 soils, which have moderately severe limitations that restrict the range of viable crops. A portion of the northeast study area (west of the intersection of Mcguinty Road and Mcgaghran Road) crosses Class 4 soils, which have severe limitations, and Class 6 soils, which are only capable of producing perennial forage crops. Along the southern portion of the Study Area in the vicinity of Phase 2, the Study Area crosses mainly soils of Classes 4 and 6. In the Study Areas to the east, north and west of Mink Lake, soils crosses are mainly Class 1 and 2, which have no limitations or moderate limitations, respectively. There is an area of organic soils, associated with wetlands. The majority of soils in and around Eganville are Class 1 and 2, while the westernmost portion of the Study Area has some Class 4 and 5 soils. Class 5 soils have very severe limitations that restrict their capability in producing perennial forage crops, but improvement practices are feasible (AAFC 2005).



4.3.6 Agricultural Tile Drainage

Agricultural tile drains are perforated tubing inserted into the ground below the topsoil to improve drainage in the upper root zone and, ultimately, agricultural productivity. An occurrence of a mapped tile drainage has been identified in the eastern end of the Study Area where Mcguinty Road intersects Snake River Line.

4.3.7 Regulated Area and Natural Hazards

Natural hazards are elements of the physical environment that have the potential to affect a project in an adverse manner. Potential natural hazards in the Study Area are limited and would likely be the result of flooding of watercourses associated flooding/high-water levels and seismic activity.

Regarding the latter, the Study Area lies in the Southern Great Lakes Seismic Zone (Natural Resources Canada 2019). This zone has a low to moderate level of seismicity when compared to the more active seismic zones to the east, such as the Western Quebec Seismic Zone which captures the area along the Ottawa River and in Quebec. (Natural Resources Canada 2019). According to data from Natural Resources Canada (2019), over the last 30 years, on average, 2 to 3 magnitude 2.5 or larger earthquakes have been recorded in the Southern Great Lakes region. By comparison, over the same period, the smaller region of Western Quebec experienced 15 magnitude 2.5 or greater earthquakes per year (Natural Resources Canada 2019).

Three moderately sized (magnitude 5) events have occurred in the 250 years of European settlement of this region, all of them in the United States – 1929, Attica, New York, 1986, near Cleveland, Ohio, and 1998, near the Pennsylvania/Ohio border. All three earthquakes were widely felt but caused no damage in Ontario (Natural Resources Canada 2019).

While the likelihood of seismic activity occurring in the Study Area is low, flooding is more prevalent a risk as it is the most frequent natural hazard experienced in the Country. Flooding can occur throughout the year because of heavy rainfall but often occurs in the spring and is the result of rapid snow melt or ice melt.

There is potential for tornados to form in the Study Area. The Ottawa Valley have experienced an increased number of tornadoes over the past few years (Public Safety Canada 2022). May through August is the peak time for tornado activity in Ontario (ECCC 2020). Ontario experiences an average of 12.6 tornados a year, most of them in the Windsor-Quebec corridor, in which the Project is located (ECCC 2020). T

There is no Conservation Authority in the Study Area, therefore there are no CA-regulated areas (Conservation Ontario 2022).



4.4 Biophysical Features

4.4.1 Aquatic Resources

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

Indigenous engagement with Rights-holders in the Treaty territory has highlighted the importance of water and aquatic resources. The Study Area is in close proximity to waterbodies of high historical value to local Indigenous peoples; places where Rights-holders continue to this day to exercise their Aboriginal or treaty rights. Enbridge values Indigenous conceptions of water stewardship and management and will continue to engage with Rights-holders to distinctively understand potential impacts the proposed project may have.

A reconnaissance assessment of the proposed and alternative routes occurred in late April 2022. The purpose of the site investigation was to:

- Confirm existing watercourse crossings along the proposed and alternative routes and the potential for aquatic resources.
- Determine whether any additional watercourse crossings exist along the proposed and alternative routes, other than those identified in the MNRF databases.

The Study Area occurs within the Snake River Watershed (quaternary watershed) and the western end of AR2 and AR3 and all of Phases 3 and 4 occur within the Douglas Dam – Bonnechere River Watershed (quaternary watershed) to the south. The entire Project occurs with the Bonnechere River – Central Ottawa River Watershed (tertiary watershed), Central Ottawa River Watershed (secondary watershed), and Great Lakes – St. Lawrence River (primary watershed) (MNRF 2022b).

There are a total of 47 watercourse crossings in the Study Area (**Appendix C-3**). The Study Area does not occur within the jurisdiction of a conservation authority.

Table 4.1 below summarizes watercourse crossings per route, thermal regime, and MNRF records (MNRF 2022a) for fish species that have been recorded, if available.



Table 4.1: Watercourse Crossing Details

Crossing ID	Routes	Watercourse Name	Thermal Regime	Species Present (MNR 2022a)
MG-3	PPR1	Tributary of Snake River	cool	Brook Stickleback (<i>Culaea inconstans</i>), Central Mudminnow (<i>Umbra limi</i>), Finescale Dace (<i>Chrosomus neogaeus</i>), Northern Redbelly Dace (<i>Chrosomus eos</i>)
MG-4	PPR1	Tributary of Snake River	cool	Brook Stickleback, Central Mudminnow, Finescale Dace, Northern Redbelly Dace
MG-2	PPR1	N/A	unknown	N/A
MG-1	PPR1	N/A	warm	Bluntnose Minnow (<i>Pimephales notatus</i>)
MBR-1	PPR1	Snake River	cool	Brook Stickleback, Brown Bullhead (<i>Ameiurus nebulosus</i>), Central Mudminnow, Common Shiner (<i>Luxilus cornutus</i>), Fallfish (<i>Semotilus corporalis</i>), Finescale Dace, Iowa Darter (<i>Etheostoma exile</i>), Johnny Darter (<i>Etheostoma nigrum</i>), Largemouth Bass (<i>Micropterus salmoides</i>), Logperch (<i>Percina caprodes</i>), Longnose Dace (<i>Rhinichthys cataractae</i>), Muskellunge (<i>Esox masquinongy</i>), Northern Pike (<i>Esox 35nviro</i>), Pumpkinseed (<i>Lepomis gibbosus</i>), Rock Bass (<i>Ambloplites rupestris</i>), Smallmouth Bass (<i>Micropterus dolomieu</i>), Spottail Shiner (<i>Notropis hudsonius</i>), Walleye (<i>Sander vitreus</i>), White Sucker (<i>Catostomus commersonii</i>), Yellow Perch (<i>Perca flavescens</i>)
MCG-7	PPR1	N/A	unknown	N/A
MCG-6	PPR1	N/A	unknown	N/A



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Crossing ID	Routes	Watercourse Name	Thermal Regime	Species Present (MNRF 2022a)
MCG-5	PPR1	Egan Branch North Tributary Drain	unknown	N/A
MCG-4	PPR1	North Tributary Drain	unknown	N/A
MCG-3	PPR1	Snake River	cool	Brook Stickleback, Brown Bullhead, Central Mudminnow, Common Shiner, Fallfish, Finescale Dace, Iowa Darter, Johnny Darter, Largemouth Bass, Logperch, Longnose Dace, Muskellunge, Northern Pike, Pumpkinseed, Rock Bass, Smallmouth Bass, Spottail Shiner, Walleye, White Sucker, Yellow Perch
MCG-2	PPR1	N/A	unknown	N/A
MCG-1	PPR1	N/A	unknown	N/A
BR-1	PPR2 and AR1	N/A	unknown	N/A
CCR-9	PPR2 and AR1	N/A	unknown	N/A
CCR-8	PPR2 and AR1	Cold Creek	warm	Brook Stickleback, Central Mudminnow, Creek Chub (<i>Semotilus atromaculatus</i>), Northern Redbelly Dace, White Sucker
CCR-7	PPR2 and AR1	N/A	unknown	N/A
CCR-6	PPR2 and AR1	N/A	unknown	N/A



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Crossing ID	Routes	Watercourse Name	Thermal Regime	Species Present (MNRF 2022a)
CCR-5	PPR2 and AR1	N/A	unknown	N/A
CCR-4	PPR2 and AR1	N/A	unknown	N/A
CCR-3	PPR2 and AR1	N/A	unknown	N/A
CCR-2	PPR2 and AR1	N/A	unknown	N/A
CCR-1	PPR2 and AR1	N/A	unknown	N/A
LCR-4	PPR2 and AR1	N/A	unknown	N/A
LCR-3	PPR2 and AR1	N/A	unknown	N/A
LCR-2	PPR2 and AR1	N/A	unknown	N/A
LCR-1	PPR2 and AR1	N/A	unknown	N/A
JS-1	Phase 4	Bonnechere River	cold	Blacknose Shiner (<i>Notropis heterolepis</i>), Bluntnose Minnow, Brook Trout (<i>Salvelinus fontinalis</i>), Brown Bullhead, Brown Trout, Burbot, Common Shiner, Creek Chub, Fallfish, Golden Shiner (<i>Notemigonus crysoleucas</i>), Largemouth Bass, Logperch, Longnose Dace, Mimic Shiner (<i>Notropis volucellus</i>), Northern Pike, Pumpkinseed, Rock Bass, Rosyface Shiner (<i>Notropis</i>



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Crossing ID	Routes	Watercourse Name	Thermal Regime	Species Present (MNR 2022a)
				<i>rubellus</i>), Shorthead Redhorse (<i>Moxostoma macrolepidotum</i>), Smallmouth Bass, Walleye, White Sucker, Yellow Perch
WS-1	Phase 4	N/A	unknown	N/A
FR-1	Phase 4	N/A	unknown	N/A
CR-12	AR0	Tributary of Snake River	cool	Brook Stickleback, Central Mudminnow, Finescale Dace, Northern Redbelly Dace
CR-11	AR0	Tributary of Snake River	cool	Brook Stickleback, Central Mudminnow, Finescale Dace, Northern Redbelly Dace
CR-10	AR0	Tributary of Snake River	cool	Brook Stickleback, Central Mudminnow, Finescale Dace, Northern Redbelly Dace
CR-9	AR0	Tributary of Snake River	cool	Brook Stickleback, Central Mudminnow, Finescale Dace, Northern Redbelly Dace
CR-8	AR0	N/A	unknown	N/A
CR-7	AR0	N/A	unknown	N/A
CR-6	AR0	Upper Harris Creek Municipal Drain	unknown	N/A
CR-5	AR0	O’Gorman Hamilton Municipal Drain	unknown	N/A
CR-4	AR0	O’Gorman Hamilton Municipal Drain	unknown	N/A



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Crossing ID	Routes	Watercourse Name	Thermal Regime	Species Present (MNRF 2022a)
CR-3	AR0	Mink Creek – Main Branch South Fork Tributary	cold	N/A
CR-2	AR0	N/A	unknown	N/A
CR-1	AR0	Mink Creek	cold	Blacknose Shiner, Bluegill, Brook Stickleback, Brook Trout, Brown Bullhead, Central Mudminnow, Common Shiner, Creek Chub, Fathead Minnow, Finescale Dace, Iowa Darter, Johnny Darter, Mottled Sculpin (<i>Cottus bairdii</i>), Northern Redbelly Dace, Pumpkinseed, White Sucker, Yellow Perch
BR-2	AR1 and AR3	N/A	unknown	N/A
BR-3	AR1 and AR3	N/A	cold	Brook Stickleback, Brook Trout, Central Mudminnow, Creek Chub, Fantail Darter (<i>Etheostoma flabellare</i>), Fathead Minnow (<i>Pimephales promelas</i>), Finescale Dace, Iowa Darter, Northern Redbelly Dace
BR-4	AR1 and AR3	Mink Creek	cold	Blacknose Shiner, Bluegill (<i>Lepomis macrochirus</i>), Brook Stickleback, Brook Trout, Brown Bullhead, Central Mudminnow, Common Shiner, Creek Chub, Fathead Minnow, Finescale Dace, Iowa Darter, Johnny Darter, Mottled Sculpin, Northern Redbelly Dace, Pumpkinseed, White Sucker, Yellow Perch
HWY60-1	AR1 and AR3	Tributary of Mink Lake	cold	Brook Stickleback, Central Mudminnow, Iowa Darter, Northern Redbelly Dace



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Crossing ID	Routes	Watercourse Name	Thermal Regime	Species Present (MNRF 2022a)
HWY60-2	AR1 and AR3	Tributary of Mink Lake	cold	Blacknose Shiner, Brook Stickleback, Central Mudminnow, Fathead Minnow, Finescale Dace, Iowa Darter, Johnny Darter, Northern Redbelly Dace
HWY60-3	AR1 and AR3	N/A	unknown	N/A
HWY60-4	AR1 and AR3	Tributary of Mink Creek	cold	Brook Stickleback, Brook Trout, Central Mudminnow, Creek Chub, Fantail Darter, Fathead Minnow, Finescale Dace, Iowa Darter, Northern Redbelly Dace



4.4.1.1 Aquatic Species at Risk

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

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

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

Based on DFO Aquatic species at risk mapping (DFO 2022), the Study Area does not support any federally designated aquatic species at risk.

A review of the provincial NHIC database determined that there are no records of provincially designated aquatic species at risk in the Study Area.

4.4.2 Forest and Vegetation Cover

The majority of Phase 1 PPR and AR Study Area fall within the Pembroke Ecodistrict (6E-16). Approximately half (54%) of this ecodistrict has been converted to agricultural land (e.g., cropland, pasture, hayfield) with mixed forest (23%) and deciduous forest (16%). Sugar maple (*Acer saccharum*), American beech (*Fagus grandifolia*), eastern white pine (*Pinus strobus*), white spruce (*Picea glauca*), and balsam fir (*Abies balsamea*) are common mixed forest species. Deciduous forests are often dominated by trembling aspen (*Populus tremuloides*), large-toothed aspen (*Populus grandidentata*), and paper birch (*Betula papyrifera*) with red maple (*Acer rubrum*), yellow birch (*Betula alleghaniensis*), balsam poplar (*Populus balsamifera*), white ash (*Fraxinus americana*)



and red oak (*Quercus rubra*) as old agricultural land transitions back into forested habitat (Wester et al. 2018).

The remainder of the Study Area falls within the Brent Ecodistrict (5E-10). This ecodistrict is dominated by forest with mixed forest (46%), coniferous forest (28%), and deciduous forest (13%) occupying 87% of the land. Upland species in the ecodistrict include sugar maple, American beech, yellow birch, red maple, large-toothed aspen, eastern hemlock (*Tsuga Canadensis*), eastern white pine, eastern hop-hornbeam (*Ostrya virginiana*), black cherry (*Prunus serotina*), red oak, and red pine (*Pinus resinosa*). Lowland species include eastern white cedar (*Thuja occidentalis*), American larch (*Larix laricina*), black spruce (*Picea mariana*), black ash (*Fraxinus nigra*), balsam poplar and red maple. Coniferous forest generally includes eastern white pine, red pine, white spruce, and balsam fir (Wester et al. 2018).

4.4.2.1 Vegetation Communities

The Study Area is a mix of woodlands (deciduous forest, mixed forest, coniferous forest), agricultural lands (pasture, hayfields, cropfields), and developed lands (rural residential, Eganville).

Significant woodlands along Phase 1 PRP and AR in Ecodistrict 6E-16 are identified in the County of Renfrew Official Plan (County of Renfrew 2020b) as areas that are ecologically important, functionally important and/or economically important. Woodland habitat occupies over 85% of Ecodistrict 5E-10 and as such significant woodlands are not identified for this Ecodistrict in the Official Plan. Woodlands within the Study Area as identified by the MNRF (2022a) are mapped in **Appendix C2**.

4.4.3 Wetlands

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

A review of LIO (MNRF 2022b) natural heritage mapping indicated that one PSW (Mink Creek Wetland Complex), two evaluated wetlands (Cold Creek Wetland and Mink Lake) and various other unevaluated wetlands occur within the Study Area (**Appendix C2**).



4.4.4 Wildlife Habitat and Species at Risk

The potential for species to be present along the pipeline routes are limited by the habitat suitability and availability supported by the Study Area. Therefore, the identified species recorded from these databases may not occur along the pipeline route. The following section outlines the significant wildlife habitat (SWH) features and species at risk found in the Study Area.

Beyond biophysical features identified in alignment with provincial guidelines, Enbridge recognizes the potential presence of cultural keystone species in the Study Area. Through ongoing engagement and consultation, additional shared knowledge will be sought from Indigenous groups to better understand environmental priorities, approaches, and potential mitigations. In addition, Enbridge will be completing additional field studies (as required) to inform additional mitigation measures. Interested Indigenous groups will have the opportunity to participate in these field studies, if desired. The participation of Indigenous groups in field studies provides opportunities to better understand potential cultural keystone species in the Study Area and other environmental priorities.

4.4.4.1 Field Investigation

The reconnaissance survey in April 2022 confirmed the presence of suitable habitat for a variety of species of conservation concern (SOCC) and SAR. Potential habitat for SOCC and SAR within the Study Area includes open meadow, pasture and hayfield habitat [Eastern Meadowlark (*Sturnella magna*), Bobolink (*Dolichonyx oryzivorus*), Monarch (*Danaus plexippus*), etc.], wetland and river habitat (Blanding's Turtle (*Emydoidea blandingi*), Western Chorus Frog (*Pseudacris triseriata*), Least Bittern (*Ixobrychus exilis*), etc.), and forest and woodland habitat (Golden-winged Warbler (*Vermivora chrysoptera*), Eastern Whip-poor-will (*Caprimulgus vociferous*), Little Brown Myotis (*Myotis leibii*)). Turtle nests, identified by the presence of eggshells, were observed in the gravel shoulder of the road at Cold Creek Wetland Complex in Phase 2 PPR and AR1 and Mink Creek Wetland Complex in Phase 1 AR. The turtle species could not be identified by the eggshells. See **Table 4.2** and **Table 4.3** for the list of turtles that may occur in the Study Area.

4.4.4.2 Significant Wildlife Habitat

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



SWH are grouped into four categories:

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

The presence of SWH in the Study Area was determined in two ways. First, publicly available NHIC data was reviewed for SWH (MNR 2022a). Second, potential SWH was identified comparing the Significant Wildlife Habitat Criteria Schedules for Ecoregions 5E and 6E (MNR 2015a,b) to aerial photography and results of the reconnaissance assessment conducted in 2022. The presence of SWH categories are discussed in **Table D-1 (Appendix D)**. Details and summaries of the significant wildlife assessment are summarized below.

4.4.4.2.1 Seasonal Concentration Areas

Seasonal Concentration Areas are sites where large numbers of a species gather at one time of the year, or where several species congregate. Only the best examples of these concentration areas are typically designated as SWH. Review of the NHIC (MNR 2022a) database identified colonial nesting bird habitat for waterbirds (ground) on Phase 2 and deer wintering areas on Phase 2 PPR and AR1, Phase 2 AR2 and AR3, Phase 3 and 4 overlapping with the Study Area (**Appendix C2**). Additional seasonal concentration areas that may occur in the Study Area based on the SWH Criteria Schedule for Ecoregions 5E and 6E (MNR 2015a,b), are assessed in **Table D1, Appendix D**.

4.4.4.2.2 Rare Vegetation Communities or Specialized Habitat for Wildlife

Rare vegetation communities or specialized habitats are defined as separate components of SWH. Rare vegetation communities are habitats that are considered rare or uncommon in the ecoregion, as defined in the SWH Criteria Schedules (MNR 2015a,b). These habitats may support wildlife species that are considered significant. Specialized habitats are microhabitats that are critical to some wildlife species. Review of the NHIC (MNR 2022a) database did not identify any rare vegetation communities or specialized habitats within the Study Area; however, candidate SWH for these components may be present within the Study Area and will be documented, if present, during targeted field surveys.

4.4.4.2.3 Habitat for Species of Conservation Concern

There are four types of SOCC: those which are rare, those whose populations are significantly declining, those which have been identified as being at risk from certain common activities and those with relatively large populations in Ontario compared to the remainder of the globe. The Significant Wildlife Habitat Criteria Schedule for Ecoregions 5E and 6E (MNR 2015a,b) identifies marsh, open country and shrub/early



successional bird breeding habitat and special concern and rare wildlife species and habitat for terrestrial crayfish for Ecoregion 6E (MNR 2015a,b) in this category.

Rare species are considered at five levels: globally rare, federally rare with designations by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC), provincially rare with designations by the Committee on the Status of Species at Risk in Ontario (COSSARO), regionally rare (at the Site Region level), and locally rare (in the municipality or Site District). This is also the order of priority that should be assigned to 45 environmental management 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 **Table D1 (Appendix D)**, habitat for marsh, open country and shrub/early successional bird breeding habitat and special concern and rare wildlife species may occur in the Study Area.

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

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

The NHIC database was accessed in May 2022, to obtain records of species of conservation concern (less than 30 years old) in the vicinity of the Study Area. A review of the NHIC database has indicated that 11 species of conservation concern have been previously documented in the vicinity of the Study Area. This list includes those species with a provincial ranking of S1 through S3, as well as species considered special concern (SC) federally or provincially.

Twenty wildlife species of conservation concern have ranges that overlap the Study Area, including 4 species of reptiles, 1 species of amphibian, 12 species of breeding birds, and 3 species of invertebrates.

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



Table 4.2 below provides a summary of the species of conservation concern that have been identified during the NHIC and Wildlife Atlas background review, and whether potential habitat for these species is present in the Study Area.



Table 4.2: Terrestrial Species of Conservation Concern

Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
Reptiles	Midland Painted Turtle	<i>Chrysemys picta marginata</i>	S4	Not Listed	SC	ORAA, NHIC, iNaturalist	All Routes - Shallow wetlands, open aquatic communities, watercourses
	Northern Map Turtle	<i>Graptemys geographica</i>	S3	SC	SC	ORAA	Phase 2 AR2 and AR3 – Mink Lake, Phase 3 and 4 – Bonnechere River
	Snapping Turtle	<i>Chelydra serpentina</i>	S3	SC	SC	ORAA, NHIC, iNaturalist	All Routes - Shallow wetlands, open aquatic communities, watercourses
	Eastern Milksnake	<i>Lampropeltis triangulum</i>	S4	NAR	SC	ORAA, NHIC, iNaturalist	All Routes – Open meadow, pasture, hayland, farmyards, forest edges
Amphibians	Western Chorus Frog - Great Lakes - St. Lawrence - Canadian Shield population	<i>Pseudacris triseriata</i>	S4	NAR	THR	ORAA	All Routes – Swamps, marshes, wet meadows



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
Birds	Bald Eagle	<i>Haliaeetus leucocephalus</i>	S4	SC	NAR	OBBA, eBird	Phase 2 PPR and AR1, Phase 2 AR2 and 3, Phase 3, Phase 4 – Mature forest near Mink Lake and Bonnechere River
	Canada Warbler	<i>Wilsonia canadensis</i>	S5B	SC	SC-THR	OBBA	All Routes – Wet forest habitat, shrubby marshes, conifer swamps, riparian woodlands, and regenerating forest
	Common Nighthawk	<i>Chordeiles minor</i>	S4B	SC	THR	OBBA, eBird	All Routes – Open habitats with short grass, rocky outcrops
	Eastern Wood-Pewee	<i>Contopus virens</i>	S4B	SC	SC	OBBA, eBird	All Routes – Deciduous forests



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
	Golden-winged Warbler	<i>Vermivora chrysoptera</i>	S3B	SC	THR	OBBA	Phase 1 PPR, Phase 2 PPR and AR1, Phase 2 AR1 and 3, Phase 2 AR2 and 3 – Early successional habitat within a large forest landscape
	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	S4B	SC	SC-NS	OBBA, eBird	Phase 1 PPR, Phase 2 PPR and AR1, Phase 2 AR1 and 3, Phase 2 AR2 and 3, Phase 3 and 4– Large meadows and pastures
	Olive-sided Flycatcher	<i>Contopus borealis</i>	S4B	SC	THR	OBBA, eBird	Phase 1 PPR and AR Phase 2 PPR and AR1, Phase 2 AR1 and 3, Phase 2 AR2 and 3 – Coniferous forests
	Peregrine Falcon	<i>Falco peregrinus</i>	S4	SC	NAR-SC	OBBA, ECCC, eBird	None – Cliffs and tall buildings absent in Study Area



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
	Short-eared Owl	<i>Asio flammeus</i>	S4B?, S2S3N	SC	SC	OBBA, eBird, iNaturalist	All Routes – Large, open meadows and pastures, marshes
	Rusty Blackbird	<i>Euphagus carolinus</i>	S4B, S3N	SC	SC	OBBA	All Routes – Migration habitat in flooded forests and swamps, the edges of lakes, rivers, and streams, and pastures, agricultural fields
	Wood Thrush	<i>Hylocichla mustelina</i>	S4B	SC	THR	OBBA, NHIC, eBird	All Routes – Mature deciduous forests
	Yellow Rail	<i>Coturnicops noveboracensis</i>	S3B	SC	SC	ECCC	All Routes – Graminoid marshes
Invertebrates	American Bumble Bee	<i>Bombus pensylvanicus</i>	S3S4	Not Listed	SC	*COSEWIC	All Routes – Meadows and open fields
	Yellow-banded Bumble Bee	<i>Bombus terricola</i>	S3S5	SC	SC	*COSEWIC	All Routes – Meadows and open fields
	Monarch	<i>Danaus plexippus</i>	S2N, S4B	SC	END	OBA, iNaturalist	All Routes – Meadows where milkweed is found

Notes:

AMO: Atlas of the Mammals of Ontario



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END: Endanger–d - a species facing imminent extinction or extirpation

ECCC: Environment and Climate Change Canada

NHIC: Natural Heritage Information Centre

OBA: Ontario Butterfly Atlas

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

*COSEWIC Assessment and Status Report on the Yellow-banded Bumble Bee; COSEWIC Assessment and Status Report on the American Bumble Bee

eBird: eBird Canada

iNaturalist: iNaturalist Canada

THR: Threaten–d - a species that is at risk of becoming endangered

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

S1: Critically Imperil–d - Critically imperiled in the province (often 5 or fewer occurrences)

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

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

S4: Apparently Secu–e - Uncommon but not rare

S?: Rank Uncertain

SH: Possibly Extirpated (Historical)

S#B: Breeding status rank



4.4.4.2.4 Animal Movement Corridors

Animal movement corridors are elongated, naturally vegetated parts of the landscape used by animals to move from one habitat to another (MNR 2000). Rivers, creeks, and drains may be used as amphibian movement corridors to/from breeding habitat while forested cover may be used by deer moving to/from wintering habitat. These features are present within the Study Area. Preliminary vegetation community classification indicates the presence of watercourses, wetlands (including one PSW), meadows, and large forest tracts within the Study Area. Animal movement corridors are discussed in **Table D-1** (Appendix D).

4.4.4.3 Species at Risk

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

Recent records (less than 30 years old) of endangered and threatened species were obtained through the NHIC database on the LIO Natural Heritage Mapping website, accessed June 2022. The NHIC database uses Element Occurrences to show locations of species. An Element Occurrence is defined as an area of land and/or water on/in which an element (e.g., species or ecological community) is or was present. For protection purposes, exact locations of species are not provided (only within a 1 km grid), and presence of the species in the Study Area are not definite.

Based on the desktop resource review, 18 threatened and endangered species have ranges that overlap the Study Area, including 2 species of reptile, 10 species of breeding birds, 4 species of mammal, and 2 species of plants as shown in **Table 4.3**.

Exact locations of species occurrences are not available from these 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 4.3: Terrestrial Species at Risk

Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
Reptiles	Blanding's Turtle	<i>Emydoidea blandingi</i>	S3	THR	END	ORAA, NHIC, ECCC	All Routes – Shallow lakes, ponds, slow moving creeks, and wetlands with soft organic substrates with abundant submergent vegetation
	Wood Turtle	<i>Glyptemys insculpta</i>	S2	THR	END	ECCC	All Routes – Bonnechere River, Snake River, Hurd Creek, Mink Creek, Cold Creek
Birds	Barn Swallow	<i>Hirundo rustica</i>	S4B	THR	THR	OBBA, NHIC, eBird	All Routes – Human-made structures; culverts and bridges
	Bank Swallow	<i>Riparia riparia</i>	S4B	THR	THR	OBBA, NHIC	Phase 1 PPR – Snake River embankments
	Bobolink	<i>Dolichonyx oryzivorus</i>	S4B	THR	THR	OBBA, NHIC, eBird, iNaturalist	All Routes – Large meadows, hayfields and pastures



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
	Cerulean Warbler	<i>Dendroica cerulea</i>	S2B	THR	END	OBBA	All Routes – Large, mature deciduous forests
	Chimney Swift	<i>Chaetura pelagica</i>	S3B	THR	THR	OBBA, NHIC	All Routes – Forests and swamps, however prefers human-made structures
	Eastern Meadowlark	<i>Sturnella magna</i>	S4B, S3N	THR	THR	OBBA, NHIC, eBird, iNaturalist	All Routes – Meadows, hayfields, pastures and woodlands
	Eastern Whip-poor-will	<i>Caprimulgus vociferous</i>	S4B	THR	THR	NHIC, eBird	All Routes – Large discontinuous patch forests
	Least Bittern	<i>Ixobrychus exilis</i>	S4B	THR	THR	OBBA, NHIC, eBird	All Routes – Marshes
	Loggerhead Shrike	<i>Lanius ludovicianus</i>	S1B	END	END	NHIC, eBird	All Routes – Open pastures, meadows, early successional shrubland with scattered shrubs or trees for nesting



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
	Red-headed Woodpecker	<i>Melanerpes erythrocephalus</i>	S3	END	END	NHIC, eBird	All Routes – Open woodlands and forest edges, cemeteries, parks, golf courses, sparsely treed pastures, and agricultural areas
Mammals	Eastern Small-footed Myotis	<i>Myotis leibii</i>	S2S3	END	NS	AMO COSEWIC*	All Routes– Forests, hedgerows, and swamps
	Little Brown Myotis	<i>Myotis lucifugus</i>	S3	END	END	AMO COSEWIC*	All Routes– Forests, hedgerows, and swamps
	Northern Myotis	<i>Myotis septentrionalis</i>	S3	END	END	AMO COSEWIC*	All Routes– Forests, hedgerows, and swamps
	Tri-colored Bat	<i>Perimyotis subflavus</i>	S3?	END	END	AMO COSEWIC*	All Routes– Forests, hedgerows, and swamps
Plants	American Ginseng	<i>Panax quinquefolius</i>	S2	END	END	ECCC	All Routes – Mature deciduous forest, very rare



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Terrestrial Species	Common Name	Scientific Name	SRANK	Provincial Status (COSSARO)	National Status (COSEWIC)	Source	Potential Habitat in the Study Area? (Routes)
	Butternut	<i>Juglans cinerea</i>	S2?	END	END	NHIC	All Routes – May occur within the Study Area

Notes:

AMO: Atlas of the Mammals of Ontario

END: Endanger–d - a species facing imminent extinction or extirpation

ECCC: Environment and Climate Change Canada

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

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

eBird: eBird Home

iNaturalist: iNaturalist Canada

THR: Threaten–d - a species that is at risk of becoming endangered

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

S1: Critically Imperil–d - Critically imperiled in the province (often 5 or fewer occurrences)

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

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

S4: Apparently Secu–e - Uncommon but not rare

S5: Secu–e - 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



Although potential habitat for species at risk is present in the Study Area, the proposed pipeline routes are located within an existing road allowance that is periodically disturbed for maintenance work. In addition, construction techniques will avoid some sensitive habitats (i.e., through the use of trenchless technologies such as horizontal directional drilling) for areas associated with watercourses and wetlands. Potential impacts and mitigation measures for areas where construction of the pipeline may interact with wildlife and wildlife habitat are noted in **Table 5-1**.

4.5 Socio-Economic Environment

4.5.1 Demographics

Eganville is a community located in the north-east of the Township of Bonnechere Valley in the County of Renfrew, a rural municipality of approximately 106,365 residents (Statistics Canada 2022). The County is comprised of 17 municipalities. The Project Study Area is within the Townships of Bonnechere Valley, Admaston/Bromley and North Algona Wilberforce in the County of Renfrew.

The population breakdown of the counties and townships in the Study Area occurs is presented in **Table 4.4** below.

Table 4.4: Population, 2021

Location	Total Population	Land Area (km ²)	Population Density per km ²
Ontario	14,223,942	892,411.76	15.9
Renfrew (County)	106,365	7357.94	14.5
Admaston and Bromley (Township)	2,995	519.59	5.8
Bonnechere Valley (Township)	3,898	588.36	6.6
North Algona Wilberforce (Township)	3,111	369.23	8.4

Source: Statistics Canada, 2022

As shown in **Table 4.5**, Renfrew County's population increased from 102,394 to 106,365 (3.9% increase in annual growth) (Statistics Canada 2022). This is less than the annual growth of Ontario for the same period (5.8%).



Table 4.5: Population Growth from 2016-2021

Location	Total Population 2016	Total Population 2021	Annual Growth (%)
Ontario	13,448,494	14,223,942	5.8
Renfrew (County)	102,394	106,365	3.9
Admaston and Bromley (Township)	2,935	2,995	2.0
Bonnechere Valley (Township)	3,674	3898	6.1
North Algona Wilberforce (Township)	2,915	3,111	6.7

Source: Statistics Canada, 2022

Between 2016 and 2021, the Townships of Admaston and Bromley, Bonnechere, and North Algona saw an increase in population. The Townships of Bonnechere and North Algona’s population growth exceeded the Provincial and Renfrew County’s average overall. The Township of Admaston and Bromley experienced a lower population growth (around 4% less) over the same period when compared to the Bonnechere Valley and North Algona Townships.

According to population projections (OMOF 2021), the population for Ontario is projected to increase by 35.8% (approximately 5.3 million) over the next 26 years. Moreover, the population of the County of Renfrew is projected to increase to 107,245 by the year 2036 which is approximately a 0.82% increase when compared to the 2021 census information (County of Renfrew 2020a; Statistics Canada 2022). To accommodate the growth that is expected to take place, rural portions of the Townships and County are expected to undergo development (Renfrew County 2020b). This will change the landscape of rural areas, which are presently sparsely populated, and is expected to increase the demand for municipal services and utilities, including natural gas. Also, the County of Renfrew aims to allocate future residential projects to Urban and Village community areas, through residential intensification and redevelopment as well as affordable housing while maintaining the village’s traditional role (County of Renfrew 2020a). At present, the Study Area is comprised of residential properties, agricultural operations, manufacturing, and businesses.



4.5.2 Employment and Business

The most recent economy and employment statistics are provided in the 2016 Census of Population (Statistics Canada 2017a, 2017b, 2017c, 2017d). **Table 4.6** 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, County of Renfrew, and Townships of Admaston and Bromley, Bonnechere Valley, and North Algona Wilberforce.



Table 4.6: Labour Characteristics for Persons > 15 years, 2016

Location	Total Population 15 years and Over	Labour Force	Employed	Participation Rate (%)	Employment Rate (%)	Unemployment Rate (%)
Ontario	11,240,520	11,038,440	6,612,150	64.7	59.9	7.4
Renfrew (County)	85,920	82,830	47,040	61.2	56.8	7.2
Admaston and Bromley (Township)	2,340	2,325	1,560	70.8	67.1	4.9
Bonnechere Valley (Township)	3,175	3,115	1,495	53.5	48	10.5
North Algona Wilberforce (Township)	2,535	2,510	1,380	61.8	55	10.6

Source: Statistics Canada (2017a, 2017b, 2017c, 2017d).



As shown in **Table 4.7**, in 2016, the Townships of Bonnechere Valley and North Algona Wilberforce as well as the County of Renfrew had lower participation and employment rates when compared to the rates for the wider province of Ontario. The Township of Admaston and Bromley has the lowest unemployment rate among the listed locations and is less than the province of Ontario as a whole. In contrast, the Townships of Bonnechere Valley and North Algona have the highest unemployment rates when compared to the Admaston and Bromley Township, the County of Renfrew, and Ontario.

Median income for households and individuals is presented in **Table 4.8**.

Table 4.7: Median Income, 2015

Location	Median Total Income of Households	Median Total Income of Individuals
Ontario	\$74,287	\$33,539
Renfrew (County)	\$67,683	\$34,319
Admaston and Bromley (Township)	\$70,144	\$31,957
Bonnechere Valley (Township)	\$54,240	\$27,157
North Algona Wilberforce (Township)	\$68,139	\$32,032

Source: Statistics Canada (2017a, 2017b, 2017c, 2017d).

Median income of households in the County of Renfrew overall was less than the provincial median by \$6,604, while the median income of individuals was \$780 greater than the provincial median. Among the Townships, Bonnechere Valley has the lowest median total income of households and individuals which are \$20,047 and \$6,382 lower than the provincial median respectively (Statistics Canada 2017d).

The top three occupation classifications in the County of Renfrew in 2016 were Sales and Service (22.3%), retail and education, law and social, community and government services (17.1%), and trade, transport and equipment operators (16.1%) (Statistics Canada 2017d). According to the County of Renfrew Official Plan, agriculture, resource mining, forestry, manufacturing, retail, service and government activity dominate the County's economy (County of Renfrew 2020b).

4.5.3 Community Services & Municipal Infrastructure

Permanent and Temporary Accommodations

In 2016, there were 42,775 occupied private dwellings in Renfrew County. Most homes were single-detached houses (33,240) and the average household size was 2.3 persons. Most occupants were owners (75.7%), followed by renters (24.2%) and band housing (<0.1%) (Statistics Canada 2017d).

The County of Renfrew is in the Provincial Tourism Region 11 (Haliburton Highlands to the Ottawa Valley) (MTCS 2022). The commercial accommodations in this region are mostly dominated by seasonal campgrounds, trailer parks, and housekeeping cottages and cabins (MTCS 2022). In 2021, the occupancy rate at temporary accommodations in Region 11 was 45.9%, a decrease from 53.2% in 2008 (MTCS 2022).

The Study Area falls within a tourist area considered “Ontario’s Adventure Playground” and “Whitewater Capital” (County of Renfrew 2020b). Temporary accommodations were identified in and around the Study Area such as the Egan Inn, the Bonnechere Masonic Lodge, and the Bonnechere Valley Inn. In their Official Plan, The County of Renfrew encourages the construction and expansion of resorts and other tourist commercial facilities to improve the tourism potential in the Whitewater Region (County of Renfrew 2020b).

The COVID-19 pandemic has had an impact on travel and tourism in Ontario (MTCS 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

The County of Renfrew provides municipal services to 107,000 residents including housing, emergency services, public works, economic development, planning, and long-term care (County of Renfrew 2020b). Municipal systems of various sizes draw water from groundwater and surface water sources (MECP 2022b). As such, the County of Renfrew is committed to develop environmentally responsible nutrient management and septage disposal systems, which are needed to protect the quantity and quality of potable water within the County (County of Renfrew 2020b).

A hauled sewage disposal site, the George William Griffith Waste Management System (ECA No. A920231), is located within the Study Area at 131 John St in Eganville (MECP 2001). No local landfills were identified in the Study Area. Two local landfill sites adjacent to the Study Area were found, the Eganville Waste Disposal Site (0.3 km to the Northeast of the Study Area) and the Osceola Landfill (0.2 km to the South of the Study Area), which operate under MECP Environmental Compliance Approval (ECA) No. A413703 and No. A411802 respectively. These sites are permitted to receive non-



hazardous waste such as domestic and commercial waste, clean lumber, brush, construction waste and operate recycling facilities (MECP 2002).

Health and Education Services and Infrastructure

The County of Renfrew is serviced by the Renfrew County and District Health Unit, a provincially legislated public health unit (RCDHU 2022). The Riverside Dental and Dr. Michael Petrini Practice are the only healthcare facilities identified in the Study Area. For medical emergencies and treatments, the residents of the Admaston and Bromley, Bonnechere Valley, and North Algona Wilberforce Townships have access to the Pembroke Regional Hospital (27 km to the North of the Study Area), the Renfrew Victoria Hospital (30 km to the Southeast of the Study Area), and the Saint Francis Memorial Hospital (50 km to the West of the Study Area).

Two schools under the Renfrew County District School Board jurisdiction are located in the Study Area; the Eganville Public School, and the Opeongo High School. The St. James Catholic School, overseen by the Catholic District School Board is also located in the Study Area (RCCDSB n.d., RCDSB 2022).

Roads, Highways and Culverts

Two provincial highways were identified in the Study Area which are managed by the Ministry of Transportation of Ontario, Highway 41, that travels northwest-southeast, and Highway 60, that travels east-west (Ontario Geohub 2022a). The County of Renfrew Public Roads Department is responsible for managing the County's road system, which includes approximately 816 km of roadway (County of Renfrew 2020d). There are two arterial county roads in the Study Area which will be traversed by the PR, which include: Cobden Road (County Road 8) which travels north-south and Foymount Road (County Road 512), which travels north-south. There are approximately 15 additional local roads in the Study Area that may be crossed by the PR that are maintained by the Municipality's Public works department including Cold Creek Road, McGuinty Road, and Letts Cemetery Road (County of Renfrew 2022a).

Policing, Fire and Emergency Response Services

Emergency services are available in the County of Renfrew and are provided by the Municipality, or the province. The Townships of North Algona Wilberforce, Admaston Bromley, and Bonnechere Valley are serviced by the Ontario Provincial Police (OPP). There are no OPP detachments located within the Study Area. The nearest detachment is the Killaloe Detachment which is approximately within 30 km from the Study Area (OPP n.d.a).

The North Algona Wilberforce Fire Department, Douglas Fire Department, and Bonnechere Valley Fire Department are responsible for fire prevention and response within the Study Area (Bonnechere Valley 2022c, North Algona Wilberforce n.d.,



Admaston/Bromley n.d.). Fire dispatch and emergency services in the County are coordinated at the Central Ambulance Communications Centre located in the Town of Renfrew (County of Renfrew 2020c). Ambulance service is provided by County of Renfrew Paramedics, which has one of their seven bases, the County of Renfrew Paramedic Service-Eganville Base, located at 49 Bonnechere St. E, Eganville (Renfrew County Paramedics n.d.). The Bonnechere Valley Fire Department is at the same address (Bonnechere Valley 2022c).

4.5.4 Infrastructure

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

MTO Network Roads

Two provincial highways (Highway 41 and 60) have been identified in the Study Area. The Phase 4 community expansion PR may impact Highway 41. AR2 and 3 for Phase 2 may impact Highway 60.

Railways

No rail lines are located within the Study Area.

Utilities

Two hydro lines, an unknown utility transmission corridor, and a natural gas pipeline were identified in the Study Area (Ontario Geohub 2022b). One hydro line and the natural gas pipeline travelling east-west cross Cobden Road and McGuinty Road at the northeast section of the PR. Another hydro line travelling northeast-southwest and an unknown utility transmission corridor travelling north-south cross Highway 60 at the southwest section of the PR. Also, a variety of buried and overhead utilities (e.g., telephone, low-voltage hydroelectric) are expected to be found in the road allowances throughout the Study Area.

4.5.5 Culture, Tourism and Recreational Facilities

Residents of and visitors to the County of Renfrew have access to a variety of cultural, tourism, and recreational facilities and activities. The County offers outdoor recreation options including natural areas (waterways, woodlands and forests); and river and trail networks (OVTA 2022). The County of Renfrew has a Trails Strategy that recognizes the importance of trail maintenance for attracting tourists and creating jobs. Trail users may visit local shops, restaurants, and accommodations, stimulating the economy and leading to business expansion (County of Renfrew 2016).



The County of Renfrew has over 3,800 km of trails intended for walking, cycling, hiking, snowmobiling, mountain biking, and cross-country skiing (County of Renfrew 2016). The Study Area has parks and trails, most notably, the Eganville-Douglas trail, which provides views of the Bonnechere River. Bike riders may pass by the Bonnechere Caves, a popular and extensive cave system in Ontario, and visit the village of Douglas, known for its St. Patrick's Day festivities. Both tourist sites are located outside of the Study Area to the southeast (County of Renfrew 2020b, Ontario Trails 2022). Cultural and recreational facilities within the Study Area include the Bonnechere Museum, the Eganville Centennial Park, the Bonnechere Union Public Library, the Eganville Community Arena, the Cedar Beach Camp Resort, and the Whitetail Golf Club. Places of worship and cemeteries were also identified including the St. Pius V Church, the Eganville Baptist Church, Melville United Cemetery, and the Grace Lutheran Cemetery.

Culture, tourism, and recreational facilities identified along the PR or immediately outside the Study Area are identified in Appendix C, Figure C-1. Potential cultural heritage resources are discussed in Section 4.5.11 of the ER.

4.5.6 Air Quality and Noise

The landscape of the Study Area is a rural area that is comprised of some agricultural land and open space, residential land, and/or natural heritage features. Agricultural operations and everyday vehicle use have the potential to expel air emissions. No industrial plants or quarries were identified within the Study Area. The nearest industrial emitter is the Haley Quarry located at 0.9 km to the Southeast of the Study Area.

According to the Environmental Noise Guideline (MOECC 2013), the Study Area comprises both urban and rural areas, which would most likely be categorized as Class 2 (urban), and 3 areas (rural). The Eganville community would be classified as Class 2 area which refers to “an area with an acoustical environment typical of a major population centre during daytime, where the background sound level is dominated by the activities of people, usually road traffic, often referred to as “urban hum”, and low evening and night background sound level defined by natural environment and infrequent human activity as early as 19:00 hours”. The remaining parts of the Study Area would be classified as Class 3 area considered as “a rural area with an environment that is dominated by natural sounds having little or no road traffic, such as a small community; agricultural area; a rural recreational area such as a cottage or a resort area; or a wilderness area.”

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



4.5.7 Indigenous Land Use and Traditional Knowledge

Stantec respectfully acknowledges that the Williams Treaties First Nations hold constitutionally protected harvesting rights in portions of the Study Area within Treaty 20. The value of traditional knowledge and oral history are acknowledged and welcomed and provide context and background to the findings of archaeological studies. We recognize that Indigenous communities have strong ties to their lands and that the use of these lands, from a development, ecosystems, and sustainability perspective, is of vital importance to the communities.

During the early post-contact period the north shore of Lake Ontario was occupied by the Huron-Wendat and the Michi Saagiig Nishnaabeg (Mississauga Anishinaabeg). The Mississauga traditional homeland stretched along the north shore of Lake Ontario and its tributary rivers from present-day Gananoque in the east to Long Point on Lake Erie in the west. Michi Saagiig oral histories speak to their people being in this area of Ontario for thousands of years, and the Michi Saagiig of today are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo-Indian periods. The Mississauga traditional territory was located between two powerful confederacies, the Three Fires Confederacy (consisting of the Odawa, Ojibwa and Pottawatomi) located to the north and west, and the Haudenosaunee (Five Nations Iroquois) Confederacy on the south shore of Lake Ontario in present-day New York State. In this geo-political context, the Mississauga acted as peacekeepers among the various Indigenous nations, acting as negotiators and emissaries (Kapyrka 2018). A copy of the document “Michi Saagiig Background – Historical Context” is located in Appendix A of the Stage 1 AA, which is located in Appendix E of the ER.

In 2018 the Williams Treaties were renegotiated, and the settlement agreement included: recognition of pre-existing treaty harvesting rights, federal and provincial apologies, financial compensation, and additional reserve lands. The Study Area is located within the Algonquin territory and slightly in Treaty 27 and 27 ¼, or the Rideau Purchase (Ontario Treaties 2022).

4.5.8 Land Use

Municipal land uses, policies, and practices in the Study Area are governed by local Zoning By-laws, and the County of Renfrew Official Plan, which functions as the OP for the Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce Townships (County of Renfrew 2020b).

As per Schedule ‘A’ of the County of Renfrew OP, a number of landuse designations occur in the Study Area. These landuse designations include Agriculture, Rural, Mineral Aggregate, Waste Disposal, Environmental Protection Area, Village Community, and Crown Land (County of Renfrew 2021a, 2021b, 2021c). The County of Renfrew OP (2020b) describes these land uses in the follow ways (to maintain the intent of the



policies which apply to these designations, the following text has been copied almost directly from the OP):

Agriculture designation applies to lands where the predominant use will be for primary agricultural uses; namely, farm residences and related buildings and structures which support the farm operation being the growing of crops; raising of livestock and other animals for food, or fur, including poultry and fish; aquaculture; agro-forestry; and maple syrup production.

Rural designation comprises lands which are not considered resource lands (i.e. not constituting agricultural land, mineral aggregate resource lands, wetlands, etc.). The rural designation also includes areas containing viable agricultural operations that need to be protected. Land uses that are permitted in rural designation areas include agricultural, forestry, limited to low density residential, commercial, industrial, recreational, institutional, resource-based recreational uses (including recreational dwellings), and conservation uses. Also, institutional, commercial (including highway-commercial) and industrial uses shall be permitted in the Rural designation.

Mineral Aggregate designation applies to lands where the predominant use of land will be for pits and quarries... Other uses which do not preclude the future use of these lands for mineral aggregate extraction purposes such as forestry, farming activities not involving the construction of buildings or structures, conservation and outdoor recreation will also be permitted.

Waste Disposal designation comprises lands where the predominant use will be for disposing of garbage and refuse within approved sanitary landfill sites.

Environmental Protection Area designation refers to lands where their use is limited to conservation of soil and wildlife, non-intensive outdoor recreation uses such as cross-country skiing, hiking, etc., dams and other water control devices, agricultural uses, nurseries, forestry, reforestation, boat anchorages and moorings.

Village Community designation applies to lands where the predominant use is for a full range of residential purposes and housing types. Other permitted uses may include institutional, commercial, light industrial, and recreational uses.

The Village Community designation within the Study Area is located in the Eganville Community.

As per the Township of North Algona Wilberforce Zoning by-law Schedule 'A', areas with Crown Land landuse designation occur in the Study Area (North Algona Wilberforce 2020a, 2020b):



The use of Crown lands will be in accordance with the management policies, plans and strategies prepared or approved by the Ministry of Natural Resources.

Other Crown Land landuse designation areas are also present in the Study Area according to the Township of Admaston/Bromley Zoning by-law Schedule 'A' and the Township of Bonnechere Valley Comprehensive Zoning by-law Schedule 'A' (Admaston/Bromley 2020a,b; Bonnechere Valley 2022a,b).

Crown Lands are not subject to the provisions of this By-law.

There are no policies in the County of Renfrew OP indicating the development of natural gas pipelines is not permitted in the Study Area. The OP cites that, road allowance widths are designed to allow not only for the construction of the road itself but also utilities such as natural gas (County of Renfrew 2020b).

4.5.9 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 sites in the Study Area was determined by cross-referencing OP mapping for the County of Renfrew and mapping by the Townships of North Algona Wilberforce, Admaston Bromley, and Bonnechere Valley as well as the MECP's Small and Large Landfill Sites listed on the MECP website (MECP 2022c).

As noted in Section 4.5.3 of the ER, a hauled sewage disposal site, the George William Griffith Waste Management System is located within the Study Area. There are two landfill sites adjacent to the Study Area; Eganville Waste Disposal Site (0.3 km to the Northeast of the Study Area) and the Osceola Landfill (0.2 km to the South of the Study Area). These sites are permitted to receive non-hazardous waste such as domestic and commercial waste. Based on a review of the above sources, no other large nor small landfill sites occur in the Study Area.

Contaminated Sites

Contaminated sites in and near the Study Area were determined by reviewing the County of Renfrew OP Schedule 'B' (County of Renfrew 2021d), the MECP Brownfield's Environmental Site Registry (MECP 2010), and the Federal Contaminated Sites Inventory accessed through the Treasury Board of Canada Secretariat's website (Treasury Board 2011). Abandoned mine sites were located in the Study Area (4 km to the West of Osceola) as well as within and South of the Eganville Community (County of Renfrew 2021d). A licensed septage hauler area was also found within the Study Area (1 km to the Northwest of Mink Lake) (County of Renfrew 2021d).



A review of the Federal Contaminated Site Inventory indicated there is one entry near the Study Area that the Treasury Board of Canada Secretariat has identified as a contaminated site on federal land: Site ID 00006305, which is located 9.2 km West of the Study Area (Treasury Board 2011).

Areas of potential contamination, such as automotive shops and gas stations, were identified via aerial imagery of the Study Area. Three gas stations, the MacEwen Cardlock Eganville located at 278 Jane St, Eganville; the Eganville Shell located at 16 Alice St, Eganville; and the Eganville Country Store located at 138 Bonnechere St W, Eganville. Three automotive shops were also found within the Study Area, the Brash Brothers Auto located at 172 Ausburg Rd, Eganville; Summers Motors located at 8629 Bonnechere St W, North Algona Wilberforce; and Benson Autoparts located at 280 Water St, Eganville.

4.5.10 Archaeological Resources

A Stage 1 AA (Appendix E; Stantec 2022) has been conducted in support of the Project and has been summarized below. A copy of the Stage 1 AA report was circulated to interested Indigenous communities for review. Once Indigenous communities had an opportunity to provide comments, a copy of the Stage 1 AA was submitted to the MCM for review and inclusion into the *Public Register of Archaeological Reports*.

Initial background research compiled information concerning potential archaeological resources and features of archaeological potential in the Study Area for the Stage 1 AA. Stantec applied archaeological potential criteria stipulated in the *Standards and Guidelines for Consulting Archaeologists* (Government of Ontario 2011) to determine areas of archaeological potential in the Study Area for the Stage 1 AA. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Primary water sources identified in the Stage 1 Study Area includes Bonnechere River which crosses the Study Area at Eganville, Hurds Creek northwest of Eganville, Mink Lake east of Eganville, Cold Creek, Mink Creek, and Snake River. Bonnechere River was a significant historical waterway for transportation, logging, and later power generation. The portion of the Study Area containing the Bonnechere River retains potential for the identification of marine archaeological resources which can be further evaluated using the MTCS' Criteria for Evaluating Marine Archaeological Potential Checklist.



Archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the Ontario Heritage Act (Government of Ontario 1990a) or property that local histories or informants have identified with possible historical events, activities, or occupations. Historical mapping demonstrates that the Study Area follows the early municipal road structure of Renfrew County. One registered archaeological site, the Turner Cabin Site (BjGg-12) is located within the Study Area and to the best of Stantec's knowledge, still retains cultural heritage value and interest (see Section 3.2). One listed property, the Eganville Bridge, and one designated property, the Old Post Office, are located within the Study Area within Eganville. Much of the established road and settlement from the early 19th century is still visible today.

When the above listed criteria are applied, the Study Area retains potential for the identification of Indigenous and Euro-Canadian archaeological resources. The Stage 1 property inspection confirmed that a portion of the Study Area, approximately 17.4%, has been subject to extensive land disturbance. Additionally, the Stage 1 property inspection, aided by MNR wetland mapping, confirmed that a portion of the Study Area, approximately 5.0%, is low and permanently wet. A portion of the Study Area, approximately 3.8% has been previously archaeologically assessed. Collectively, these portions of the Study Area, approximately 26.2%, retain low to no potential for archaeological resources.

The remaining portion of the Study Area, approximately 73.8%, comprises manicured lawn, agricultural field, woodlot, and scrubland, or areas which were not specifically examined as part of the Stage 1 property inspection. This portion of the Study Area retains potential for the identification of archaeological resources.

4.5.11 Built Heritage Resources and Cultural Heritage Landscapes

The *MTCS Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (the Checklist) was completed for the Study Area. The Checklist is used to identify protected and potential cultural heritage resources in the Study Area and make recommendations for future work, as appropriate. The Checklist completed for the Project identified seven indicators of cultural heritage value or interest (CHVI) in the Study Area. Results of the Checklist are included in Table 4.8 and the completed Checklist is included in Appendix F.



Table 4.8: Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes

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

Based on the results of the Checklist and the identification of seven indicators of CHVI, a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHECPIA) will be required to identify potential cultural heritage resources, assess preliminary impacts and provide mitigation measures.



4.5.12 Indigenous Interests

This Project is within the Algonquin territory and slightly in Treaty 27 and 27 ¼ , or the Rideau Purchase (Ontario Treaties 2022). There are no Indigenous communities located in the Study Area. The Algonquins of Pikwàkanagàn is located approximately 12 km from the Project Study Area (Algonquins of Pikwakanagan First Nation 2018).

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 April 13, 2022 (see Appendix B1) are as follows:

- Algonquins of Pikwàkanagàn
- Algonquins of Ontario
- Alderville First Nation (Williams Treaties' First Nation, WTFN)
- Curve Lake First Nation (WTFN)
- Hiawatha First Nation (WTFN)
- Mississaugas of Scugog Island (WTFN)
- Beausoleil First Nation (WTFN)
- Chippewas of Georgina Island First Nation (WTFN)
- Chippewas of Rama First Nation (WTFN)

5 Potential Impacts, Mitigation and Protective Measures and Net Impacts

5.1 Methodology

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

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

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

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

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

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



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

The existing conditions maps (Appendix C) have been generated from data obtained from Ontario GeoHub/LIO (MNR 2022b). Scales have been adjusted from the original source to better represent the features mapped. Stantec has digitally reproduced features added to the base maps. Additional mapping sources are identified on the respective map, and in the references.

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

Table 5.1 below notes the potential impacts, mitigation, and protective measures, including recommended supplemental studies, and net impacts for the existing conditions as described in Sections 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 the Enbridge Construction and Maintenance Manual (October 27, 2021):

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



- **Ploughing:** This pipeline installation method involves the use of a machine that creates a furrow in the ground, places the pipe in the newly created opening, and then closes back up the opening.
- **Hydrostatic/Pressure Testing:** The pipeline is pressure tested by filling the pipe with water or air and holding it at a high pressure for a set period of time, per the requirements of CSA Z662-19 Clause 8 and applicable Enbridge Gas specifications for pressure testing.
- **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

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

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

- Completing a 'line walk' of the entire pipeline by Enbridge Gas personnel on a 4-year cycle to check for exposed pipelines, evidence of damage to aboveground equipment and piping, evidence of damage to underground piping and gas leaks, and identify any unassociated construction activity near the pipeline RoW
- Checking cathodic corrosion protection – a low voltage electric circuit that runs along the length of the pipeline to prevent the development of external corrosion is completed on an annual basis
- Completing regular checks and maintenance at pipeline facilities such as valve sites
- Completing depth of cover surveys, so that the amount of soil cover over the pipeline is maintained
- Performing periodic inspection by running electronic tools through the interior of the pipeline to assess for the presence of corrosion or dents and the need for repairs
- Completing class location surveys



5.2 Summary Table

Table 5.1: Potential Impacts and Recommended Mitigation and Protective Measures

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
Physical Features	Bedrock Geology and Drift Thickness <i>Section 4.3.1</i>	<p>The planned excavation depth for the Project is approximately 1.2 m below grade with the potential to exceed this depth for watercourse, road crossings and other sensitive features. Based on the depth of the excavations and the potential for bedrock outcropping across the Study Area, bedrock is likely to be encountered.</p> <p>Based on the depth of the excavations and the potential for bedrock to be encountered at grade in the Study Area, hoe-ramming may be required during construction for trench excavation</p> <p>Should bedrock be encountered during HDD, there is a potential to encounter cobbles and boulders in the overburden soils along the entire alignment</p>	<ul style="list-style-type: none"> • If HDD is used, pressure relief pits can be considered for implementation in the design on either side of water crossings to dissipate high fluid pressures that may develop during drilling. • Potential presence of weathered zones, soil seams and/or shale interbeds within the bedrock should be considered in the design to address impacts to bedrock. • The over-drill typically used for HDD installation should be sufficient to address any rock squeeze that may occur. • The HDD crossings will be designed and approved by a professional engineer and carried out by a specialty crew. The installation procedures must conform to all relevant Ontario Provincial Standard Specifications. • Where use of a hoe-ram is required, 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 should 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. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts as a result of bedrock removal are anticipated.
	Physiography and Surficial Geology <i>Section 4.3.2</i>	In areas of shallow drift thickness, disturbance to the overburden in the Study Area may cause surface soil erosion and trench slumping during construction.	<ul style="list-style-type: none"> • 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 Enbridge Construction and Maintenance Manual (October 27, 2021) standard Erosion and Sediment Control (ESC) measures are discussed below, in row Section 3.3.5 'Soil and Soil Capability', and erosion and sediment controls specific to protecting watercourses, wetlands, etc. from sedimentation resulting from rainfall events during construction are discussed in row Section 4.4.1 'Aquatic Resources'. • Surface soil erosion can occur in the absence of vegetative cover. Where there is potential for soil erosion, the need for and location of ESC measures should be determined by an inspector with appropriate qualifications and installed prior to the commencement of work in the area. • When land is exposed, the exposure should be kept to the shortest practical period. Natural features should be preserved to the extent practical. Temporary vegetation and mulching should be used to protect areas as appropriate. Where required, natural vegetation should be re-established as soon as practical. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts are anticipated.



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> The contractor must obtain adequate quantities of materials to control erosion. Additional supplies should be maintained in a readily accessible location for maintenance and contingency purposes. ESC structures should be monitored to maintain their effectiveness throughout the life of construction and post-construction rehabilitation. Even with ESC measures, extreme precipitation events could result in collapse of silt fencing, overflow or bypass of barriers, and other situations which could lead to erosion. When site conditions permit, permanent protection measures should be installed on erosion susceptible surfaces. If the erosion is resulting from a construction-related activity, the activity should be halted immediately until the situation is rectified. 	
	<p>Groundwater <i>Section 4.3.3</i></p>	<p><u>Hydrostatic Testing and Dewatering</u></p> <p>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 or natural source. Before withdrawal of water from a municipal source, the municipality/township/county will be contacted to confirm the maximum rate of withdrawal.</p> <p>Where trenches encounter shallow groundwater conditions or following a large precipitation event, removing water from the trench (known as dewatering) may be necessary. During trench dewatering, discharge water will be released to the environment. An uncontrolled discharge of water could cause downstream flooding, erosion, sedimentation, or contamination. Other potential effects of uncontrolled discharge may include introduction of hazardous materials or pollutants to soils or bodies of water.</p> <p><u>Private Water Wells</u></p> <p>In the Study Area, most, if not all, of residence rely on private wells for</p>	<p><u>Hydrostatic Testing and Dewatering</u></p> <ul style="list-style-type: none"> For groundwater dewatering, the MECP allows registration under the EASR for construction dewatering projects where groundwater takings will be greater than 50,000 L/day and less than 400,000 L/day; however, should groundwater takings exceed 400,000 L/day, a PTTW may be required from the MECP. If surface water is used as the source water for the hydrostatic test, a PTTW application would be required and would include an assessment of the capacity of the source to provide the required water without impacting the ecosystem, and recommendations for mitigation measures such as screened water intakes to limit intake of debris and organisms and energy dissipation/erosion control measures during discharge to limit erosion and sedimentation. 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. To reduce the potential for erosion and scouring at discharge locations during construction dewatering and/or hydrostatic testing, energy dissipation techniques should be used. Discharge piping should be free of leaks and should be properly anchored to prevent bouncing or snaking during surging. Protective measures may include dewatering at low velocities, dissipating water energy by discharging into a filter bag or diffuser and utilizing protective riprap or equivalent. If energy dissipation measures are found to be inadequate, the rate of dewatering should be reduced or dewatering discontinued until satisfactory mitigation measures are in place. Discharge should be monitored to make sure that no erosion or flooding occurs. To assess the potential for introduction of contaminated water to soils or bodies of water, testing of hydrostatic and trench dewatering discharge water should be considered. Testing requirements can be influenced by the nature and quality of the source water used, any additives to the test water, the nature of the pipeline, and pipeline contents. An environmental consultant should be consulted to determine what testing is necessary for the discharge water. 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. <p><u>Private Water Wells</u></p> <ul style="list-style-type: none"> Given the dependence on private water wells for domestic water supply, a private well survey should be conducted to assess domestic groundwater use near the Project and a private well 	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on groundwater are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>domestic water supply uses. There are approximately 459 water wells in the Study Area, 351 of which are designed as domestic supply. Depending on the proximity to wells, the depth of the well installation and the groundwater levels encountered during excavation, trench dewatering may impact water well quality or quantity at some of the overburden supply wells.</p> <p><u>Municipal Water Supply</u></p> <p>There are no WHPA within the Study Area.</p> <p>No IPZ-1 or IPZ-2, municipal wellheads, or Source Protection Plan Policy Areas are in the Study Area (MECP 2022b)</p>	<p>monitoring program may be recommended for residents who rely on overburden groundwater supply for domestic use. This monitoring program may include pre-construction water quality monitoring as well as water level monitoring, if available. Should a private water well be affected by Project construction, a potable water supply should be provided, and the water well should be repaired or restored as required.</p> <p><u>Municipal Water Supply</u></p> <p>There are no nearby municipal supply wells, and therefore additional mitigation measures are not required to protect groundwater drinking supply sources.</p> <p>During construction, the primary concern to surface water quality is the potential for a contaminant spill during a large storm event. To address this concern, the following mitigation measures are proposed:</p> <ul style="list-style-type: none"> • Refueling of equipment should be undertaken 100 m from wetlands and watercourses to reduce potential impacts to surface water and groundwater quality if an accidental spill occurs. If a 100 m refueling distance is not possible, under approval from on-site environmental personnel, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose. Spill containment devices and absorbent material shall be on hand and readily available. • To reduce the impact of potential contaminant spills, the contractor should implement spill management protocols such as secondary containment of any temporary fuel storage and preparation of a spill response plan. • Work should be limited or stopped during and immediately following significant precipitation events (i.e., 100-year storm event), at the discretion of on-site environmental personnel. • 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. • Employ the following measures to reduce the risk of fuel spills: <ul style="list-style-type: none"> – all containers, hoses, nozzles are free of leaks; – all fuel nozzles are equipped with automatic shut-offs; and – always have operators stationed at both ends of the hose during fueling. • 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. • 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. • The contractor shall prepare a Spill Response Plan prior to construction. 	



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	Aggregates and Petroleum Resources <i>Section 4.3.4</i>	One active aggregate quarry is located along McGuinty Road within the Study Area. As the proposed pipeline is located in existing road allowances, the expansion of the quarry is already limited by the road. Construction in the road allowance has the potential to impact quarry operations (i.e. access restriction).	<ul style="list-style-type: none"> Stantec recommends that Enbridge Gas consult with local quarry owners and operators in the Study Area to better determine if any constraints on development exist. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on aggregates and petroleum resources are anticipated.
	Soil and Soil Capability <i>Section 4.3.5</i>	The Project will be largely confined to the road allowance where the preferred pipeline will be installed. Though the proposed pipeline will impact a limited amount of agricultural land, where temporary workspace will be required on lands adjacent to the road allowance there is 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. 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.	In addition to the soil erosion mitigation measures outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021), the following measures are recommended. <ul style="list-style-type: none"> As an initial stage of construction, standard ESC measures should be implemented on all active areas. ESC features should be regularly inspected and maintained. Additionally, ESC features should be improved or added to in areas requiring more protection. To the extent feasible, construction activities should occur during drier times of the year. Lands affected by heavy rainfall events and wet soil conditions should be monitored, to avoid the potential for topsoil and subsoil mixing. Construction activities should be temporarily halted on lands where excessively wet soil conditions are encountered. Enbridge Gas’s on-site inspection team should determine when construction activities may be resumed. If a situation develops that necessitates construction during wet soil conditions, soil protection measures should be implemented, such as: confining construction activity to the narrowest area practical, installing surface protection measures, and using wide tracked or low ground pressure vehicles. 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: <ul style="list-style-type: none"> suspend earth moving operations apply dust suppressants protect soil stockpiles with a cover, barrier or windscreen. In conjunction with the above measures, all required materials and equipment should be readily accessible and available for use as required. If clean-up is not practical during the construction year, it should be undertaken in the year following construction, starting in May or June once the soils have sufficiently dried. Interim soil protection measures should be undertaken in sensitive areas to stabilize the ROW for over-wintering. The MECP has regulations for the movement of excess soils in the province of Ontario. Though the Project is not expected to generate excess soil, Enbridge Gas should retain or consult with a 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on soil or soil capability are anticipated.



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>During construction, soils with no vegetative cover (such as those in the shoulder of a road allowance) 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.</p> <p>Excess soil may be generated on-site from construction activities that will require off-site management.</p>	<p>qualified person who is knowledgeable in the current excess soils guidelines, in order to make recommendations for the management of excess soils.</p>	
	<p>Agricultural Tile Drainage <i>Section 4.3.6</i></p>	<p>The Project will be largely confined to the road allowance where the preferred pipeline will be installed. Though the proposed pipeline will impact a limited amount of agricultural land, where temporary workspace will be required on lands adjacent to the road allowance there is the potential to impact agricultural tile drainage.</p> <p>Construction activities, including the movement of heavy machinery, have the potential to crush and/or sever agricultural tile drains. During the environmental study, one agricultural tile drain was identified in the Study Area.</p>	<p>Enbridge should undertake consultation with landowners of agricultural fields to confirm where random tile drainage is present. Enbridge should avoid locating temporary workspace on land where tile drainage is present. If tile drainage cannot be avoided, Enbridge should undertake standard mitigation during construction activities, including:</p> <ul style="list-style-type: none"> • Develop site specific tile plans with an independent tile contractor • Conduct pre-tiling, and install header tile to maintain tile system function • Excavate the pipeline trench to a depth that allows clearance between the top of the pipeline and the bottom of existing drainage systems • Record and flag severed or crushed tile drains • 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 • Cap the downstream side of severed drains that cross the trench to prevent the entry of soil, debris and rodents, as required • Repair damaged and severed drains following construction • After repair and before backfilling, invite the landowner to inspect and approve the repair 	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on agricultural tile drains are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	Regulated Area and Natural Hazards <i>Section 4.3.7</i>	<p>The probability of significant seismic activity in the Study Area is low; therefore, no potential impacts are anticipated from seismic activity.</p> <p>A flooding or tornado event during construction could result in construction delays, soil erosion, sedimentation of a watercourse, trench slumping, and damage or loss of construction equipment and contamination of a watercourse as a result of equipment entering a watercourse. The nature of these impacts would depend on the spatial extent, duration, and magnitude of the event.</p> <p>The likelihood of a flooding event interfering with Project construction is reduced by construction occurring outside of the spring freshet.</p> <p>There is no Conservation Authority in the Study Area, therefore there are no Project effects on CA-regulated areas.</p>	<ul style="list-style-type: none"> • If flooding or a tornado necessitates a change in the construction schedule, affected landowners and regulatory agencies should be notified and construction should continue at non-affected locations. • Temporary workspaces should be located above the floodplain to the extent practical, unless necessary for watercourse crossings. • During construction activities, weather should be monitored to identify the potential onset of high wind conditions and to preserve topsoil. In the event that high winds occur where friable soils are present, the contractor should implement protective measures such as: <ul style="list-style-type: none"> - Suspend earth moving operations; - Apply dust suppressants or vegetate soil stockpiles; and/or - Protect soil stockpiles with a barrier or windscreen. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from natural hazards.
Biophysical Features	Aquatic Resources <i>Section 4.4.1</i>	Watercourse crossings are proposed to be completed by HDD; however, there exists the potential to affect fish directly through impacts on water quality (erosion, sedimentation, and accidental spills), disruption and harassment (vibration and noise), and loss of habitat. Indirect impacts include restrictions to habitat use and fish passage. Long-term impacts can include changes to habitat such as substrate, increased erosion potential, loss of in-stream cover and riparian shading.	Mitigation measures apply to the 47 watercourse crossings in the Study Area. Some of the following general measures may not be applicable to HDD crossing methods but are included in the event a trenched crossing is required. Additionally, activity-specific measures related to the crossing methods are provided following the general mitigation measures. All measures presented are intended to be consistent with DFO's Measures to Protect Fish and Fish Habitat (DFO 2019), which should be consulted immediately prior to construction to reconfirm that the construction plan is consistent with the most up-to-date list of DFO avoidance measures. <u>General Mitigation Measures</u> <ul style="list-style-type: none"> • ESC measures (i.e., sediment fence or Silt SoxTM) must be established around entrance and exits pits for construction within 100 m of watercourses/waterbodies. • No fording of watercourses should occur. • Limits of the temporary workspace should be clearly marked to reduce the potential for encroachment into adjacent wetlands and watercourses and avoid unnecessary encroachment. • In-water work for warm-water habitats is typically permitted from July 16 to March 14 (no work from March 15 to July 15) (MNR 2013). The fish species listed in the cool-water habitats are 	With the implementation of the HDD construction method and the aforementioned mitigation and protective measures, no adverse residual impacts on aquatic features are anticipated.



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>If trenched crossings are required at locations that support direct fish habitat, potential impacts could include restrictions to habitat use and fish passage, changes to habitat such as altered substrate composition, increased erosion potential, loss of in-stream cover and loss of riparian shading. Excessive sediment introduced into a watercourse can adversely impact fish through clogging of fish gills and promoting avoidance behavior and can impact habitat through sedimentation of spawning beds and alteration of habitat structure.</p>	<p>spring spawners; therefore, the warm-water timing restriction applies to the cool-water habitat for this project.</p> <ul style="list-style-type: none"> • In-water work for cold-water habitats is typically permitted from April 1 to September 30 (no work from October 1 to May 31) (MNR 2013). • The Project crosses both warm and cold water environments; therefore, the allowable in-water work period occurs between July 16 to September 30 (MNR 2013). • Watercourses should not be obstructed in a way that impedes the free movement of water and fish. • Prior to removal of the vegetation cover, effective ESC measures should be in place to protect water quality. Disturbance to the area during construction should be limited and grubbing activities should be delayed until immediately prior to grading operations. • Soil exposure should be reduced prior to commencing construction, and the period that soil remains exposed for grading should be limited. • Temporary ESC measures should be maintained and kept in place until work within or near a watercourse has been completed and stabilized. • Temporary sediment control measures should be removed at the completion of the work but not until permanent erosion control measures have been established. • Additional supplies should be maintained on-site, in a readily accessible location, for maintenance and contingency purposes. Prior to construction, adequate quantities of the materials listed below, or comparable substitutions, should be on site to control erosion and sediment deposition: <ul style="list-style-type: none"> - Spill kit - Sediment control fencing - Sediment control logs (i.e., SiltSoxx™) - Straw bales - Wooden stakes - Sandbags - Water energy dissipater - Filter cloth - Water pumps (including stand-by pumps, sufficient lengths of hose and fish screens) • Construction material, excess material, construction debris and empty containers should be stored a minimum of 30 m from watercourses and watercourse banks, where feasible. • Refueling of equipment should be undertaken 30 m away from wetland areas and watercourses identified during field surveys to reduce potential impacts to surface water in the event that an accidental spill occurs. If a 30 m refueling distance is not possible, under approval from on-site environmental personnel and if approved by permit conditions, special refueling procedures for sensitive areas should be undertaken that include, at a minimum, using a two-person refueling system with one worker at each end of the hose and secondary containment, as needed. • Deleterious substances (fuel, oil, spoil) should be stored >30 m from a watercourse or wetland. Any such material that inadvertently enters a watercourse should be removed in a manner satisfactory to the environmental inspector. If a 30 m distance is not possible, conditions noted under relevant permits should be followed so that a minimum required distance is implemented. 	



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> • In the unlikely event of a spill, spills containment and clean-up procedures should be implemented immediately. Enbridge Gas will contact the MECP Spills Action Centre, local and/or regional municipality and/or local Conservation Authority (if required). The MECP Spills Action Centre is the first point of contact for spills at the provincial and federal level. • Exposed soils surrounding watercourses should be seeded immediately following construction. <p><u>Horizontal Directional Drill Mitigation Measures</u></p> <p>HDD construction methods for pipeline water crossings will not require DFO review or Authorization under the <i>Fisheries Act</i> provided measures to avoid causing a harmful alteration, disruption or destruction of fish habitat are followed during construction. These measures include locating drill entry and exit points at sufficient distance to avoid disturbance to the bed and banks, locating the drill path at an appropriate depth below the channel and installation of appropriate sediment and erosion control measures (i.e., silt fencing around disturbed areas, development of a contingency plan, etc.). If these measures are followed, a project of this nature is low risk to fish and can proceed without DFO review.</p> <p>Mitigation measures as they relate to employing the HDD method can include:</p> <ul style="list-style-type: none"> • Standard ESC measures should be implemented around drill and pipe staging areas. • Drilling equipment should be set up a minimum of 30 m from the edge of watercourses and wetlands, if possible. • Clearing of vegetation or grading of watercourse banks should not occur within 30 m from the edge of watercourses, if possible. • A drilling mud release contingency plan should be prepared and kept on-site. • Bentonite-based drilling mud should be used without the use of additives (except with approval from appropriate regulatory authorities). • Suitable drilling mud tanks or sumps should be installed to prevent contamination of watercourses. • The excavation of relief pits may be required to prevent a drilling mud release into sensitive features. Relief pits should be set back 10 m from sensitive features where possible and be contained using appropriate ESC measures (i.e., wire-backed sediment fence). • Berms or check dams should be installed downslope from drill entry and anticipated exit points to contain the release of any drilling mud. • Drilling mud should be disposed in accordance with the appropriate regulatory authority requirements. <p><u>Bore Path Collapse Mitigation Measures</u></p> <p>The following mitigation measures should be applied to prevent HDD borehole collapse from occurring in susceptible soils:</p> <ul style="list-style-type: none"> • Fluid volumes, annular pressure and cutting returns should be strictly monitored to ensure bore hole plugging and fluid losses are detected and addressed immediately. • If challenging soil materials are anticipated, alternative drill paths should be evaluated to limit exposure to these types of materials. 	



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<ul style="list-style-type: none"> • Drilling mud should be maintained in the borehole until the pipeline is installed. This can be facilitated by positioning the entry and exit points in areas with cohesion-less soils (e.g., silt-sand zones). <p><u>Drilling Mud Release (Inadvertent Returns) Mitigation Measures</u></p> <p>The following mitigation measures should be employed to reduce the risk of lost drilling mud circulation:</p> <ul style="list-style-type: none"> • Install appropriate berms, silt fencing and secondary containment measures (i.e., plastic tarp) around drilling and drilling mud management equipment at both bore entry and bore exit locations to contain operational spills. • Clean up operational releases daily to prevent mobilization of drilling mud off site during rain events. • Design the directional drill so that drilling slurry pressure is reduced and the drilling rate is lowered in porous materials to reduce the chance of loss of circulation of the drilling slurry. • Maintain smooth operation of the drilling string and slurry pumping systems to avoid pressure surges. • Reduce slurry viscosity through appropriate filtering of drilled material to reduce the pressure gradient along the drill path due to frictional effects. • Continually monitor slurry volumes to enable a quick response to any indications of lost circulation. • Immediately contain any drilling mud that escapes onto land and transfer it into an on-site containment system. • In addition to the items mentioned in the General Mitigation Measures above, the following materials should be on hand during drilling operations and prepared to employ them in the event of a drilling mud spill or inadvertent return: <ul style="list-style-type: none"> - sandbags - hydrovac truck - T-bar posts and post pounders - 5 gallon pails - Squeegees - Shovels - Polyethylene sheeting - Culvert <p><u>Trenched Crossing Mitigation Measures</u></p> <p>The contingency method for HDD crossings is a trenched crossing. Should in-water work be required, consultation and permit revisions with DFO may be required. In-water work would only be permissible as permitted. If in-water works are required, the following measures are applicable to trenched crossings.</p>	



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<p><u>Flow Diversion/Dewatering</u> If in-water works are required, the work area will be isolated from the remainder of the surface water feature. Downstream flows will be maintained using dam and pump or dam and flume techniques. When dewatering the work area, dewatering operations will be managed to prevent erosion and/or release of sediment laden or contaminated water to the waterbody (e.g., settling basin, filter bag, energy dispersion measures). An isolation/containment plan will be designed and implemented to isolate temporary in-water work zones and maintain flow around the work zone. Maintenance of downstream flow will avoid potential upstream flooding and desiccation of downstream aquatic habitat and organisms. To further reduce the potential for flooding during construction, the weather forecast will be monitored prior to the start of construction to ensure that in-water works occur during a dry period.</p> <p><u>Fish Rescue Plan</u> Prior to dewatering the work zone, fish trapped in the construction area will be collected and moved using capture, handling, and release techniques to reduce harm and stress. Fish rescue plans will be developed on a site-specific basis and implemented by qualified professionals with the appropriate permitting in place (i.e., a License to Collect Fish for Scientific Purposes from the MNRF).</p> <p><u>Site Restoration and Riparian Planting</u> Following construction, the bed and banks of the crossing locations will be restored to pre-construction conditions to the extent possible in accordance with environmental permits. Exposed banks will be re-vegetated with native plants to provide riparian cover and aid in erosion and sediment control. Stream beds will be restored to maintain slopes and tie in with existing grades. Bed material will be replaced to match pre-construction conditions.</p> <p><u>Permitting</u> The <i>Fisheries Act</i> prohibits causing the death of fish and the HADD of fish habitat, unless authorized by DFO. Conditions and circumstances for projects to be exempt from review are listed on DFO's Fish and Fish Habitat Protection Program web pages (accessible at: https://www.dfo-mpo.gc.ca/pnw-ppe/ffhpp-ppph-eng.html). Following guidance and criteria provided on DFO's website regarding mitigation, waterbody types and codes of practice, proponents determine whether their projects in or near water will require review by DFO. DFO review is requested through the submittal of a 'Request for Review' (RfR) form. Following completion of their review, DFO can proceed in two ways: 1) Issue a Letter of Advice indicating work complies with the <i>Fisheries Act</i> or, 2) Refer the Project to the Regulatory Review Unit for site specific review. If the Project can avoid impacts to fish and fish habitat, project approval is not required. If impacts that cause a HADD cannot be avoided, proponents must apply for a <i>Fisheries Act</i> Authorization, and may be required to develop a habitat offsetting or compensation plan.</p>	
	Forest and Vegetation Cover <i>Section 4.4.2</i>	Vegetative cover in the road allowance generally consists of common, hardy plant species that are adaptable to disturbed	The following mitigation measures, or equivalent, should be implemented to reduce impacts on designated natural areas and vegetation cover: <ul style="list-style-type: none"> • Construction traffic should be restricted to the existing road allowance where possible to avoid potential compression damage to the root zones of trees located adjacent to the road allowance. 	With the implementation of the mitigation and protective measures, no



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>environments. The Study Area is dominated by agricultural forage crops, some wooded areas, rural residential properties, mature hedgerows, and wetlands.</p> <p>Without appropriate mitigation measures, construction activities can adversely impact trees and other vegetation through soil compaction, removal of topsoil and equipment encroachment, causing irreversible damage to roots or trunks and destroying the structural integrity of vegetation or soils. Any filling, excavation, grading or trenching (if required) in the root area of a tree has the potential to cause irreversible damage.</p> <p>Where there is natural vegetation within or adjacent to the Project components, potential impacts include the removal of native vegetation, introduction or spread of invasive species, and indirect effects such as dust, erosion, and accidental spills.</p>	<ul style="list-style-type: none"> Limits of the temporary workspace should be clearly marked to reduce encroachment into adjacent wooded areas and avoid unnecessary tree removal. Erosion-prone areas of the road allowance should be revegetated with suitable protective cover during and post-construction. Clearing should be reduced to the extent possible in sensitive areas such as woodlands and wetlands. Clearing should be done during dry soil conditions to the extent practical to limit disturbance to vegetation and terrain. Construction traffic should be restricted to the existing road allowance where possible to avoid potential compression damage to the root zones of trees located adjacent to the road allowance. Native topsoil should be preserved through topsoil salvage and separation (see row Section 3.3.5 'Soil and Soil Capability'). High-traffic or erosion-prone areas of the road allowance should be revegetated with suitable protective cover during and post-construction. A re-vegetation program should be developed and implemented for all vegetated temporary work areas. Enbridge Gas should consult with landowners and municipalities to confirm replanting plans. Seeding of the disturbed temporary work areas and the permanent easement should be done with a native seed mix. Replaced soils should contain native seed bank, facilitating successful revegetation. 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. One year following construction, planted vegetation should be inspected for survival; in areas of severe dieback, dead and diseased planted vegetation should be replaced. 	<p>significant adverse residual impacts on designated natural areas and vegetation are anticipated.</p>
	<p>Wetlands Section 4.4.3</p>	<p>As construction is planned within the previously disturbed road allowance, direct impacts to wetlands from the Project are not anticipated. However, potential indirect 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.</p> <p>Clean-up and restoration activities to contain or remove contaminant and</p>	<p>Wetlands encroaching the road ROW may be crossed by HDD. Mitigation measures for HDD are discussed in the row 'Aquatic Resources'. In addition to these mitigation measures, the following are recommended to be employed:</p> <ul style="list-style-type: none"> A screening field program of wetlands and riparian areas should be undertaken prior to construction, to determine where precautionary measures (ex. equipment washing before site access) may be necessary to mitigate for the spread of non-native species. Work within a wetland, including the potential location of the pipeline, may require permitting discussions with Renfrew County and MNRF. Construction material, excess material, construction debris and empty containers should be stored away from adjacent wetlands. Temporary workspace width should be reduced when working within 30 m of wetlands, where practical. Staging areas should be located at least 30 m away from the edge of wetlands. 	<p>With the implementation of HDD construction and the mitigation and protective measures, no significant adverse residual impacts on wetlands are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>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.</p>	<ul style="list-style-type: none"> • Equipment should be free and clear of debris prior to moving between locations to prevent the spread of non-native species through the use of pneumatic devices, equipment washing, washing stations, etc. 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 maximize the distance to the nearest surface water feature and reduce the slope of the surrounding buffer area. The basin should consist of a temporary enclosure constructed with hay bales, silt fence or both. • All activities, including equipment maintenance and refueling, should be controlled to prevent entry of petroleum products or other deleterious substances, including any debris, waste, rubble or concrete material, into a wetland, unless otherwise specified in the contract. • <i>Phragmites australis</i> stands were identified in Cold Creek Wetland during field investigations, a <i>Phragmites australis</i> management plan should be developed in the event the area will be disturbed. • Implement habitat protection measures for Blanding’s Turtles, discussed in row Section 4.4.4 ‘Wildlife, Wildlife Habitat and Species at Risk’. • Recommended erosion control measures specific to wetlands should include the following: <ul style="list-style-type: none"> - surface runoff should be directed as overland flow with sufficient drainage structures to dissipate hydraulic energy - soil transport should be prevented by diversion of site runoff through shallow vegetated channels, placement of straw bales or sediment control fencing - sediment barriers should be installed along the edge of the road allowance to contain spoil within the road allowance, where required - natural drainage spacing should be provided around spoil piles - topsoil and subsurface soil should be stockpiled in separate piles with adequate spacing between the piles - temporary erosion/silt control structures (i.e., straw bales, sediment fencing should be used down gradient of spoil stockpiles, as necessary - temporary sediment barriers should be maintained until soils have been stabilized - vegetation clearing should not be conducted within 30 m of a wetland unless required for site construction activity (i.e., within the road allowance) - if vegetation regeneration is unlikely immediately following construction (i.e., outside the growing season), all slopes adjacent to wetlands should be stabilized using geogrids or weed-free mulch for a minimum of 30 m from the wetland - 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. 	
	<p>Wildlife Habitat, Wildlife, and Species at Risk Section 4.4.4</p>	<p>New pipeline construction impacts on wildlife populations are associated with vibration and compaction of the shoulder as well as direct mortality from animal-vehicle collisions as a result of</p>	<p>General Mitigation</p> <ul style="list-style-type: none"> • Nuisance and large wildlife encounters (e.g., nuisance bears) or incidents involving wildlife should be reported to the MNR. • Food waste and other debris should be properly contained and should be collected and removed from the site on a daily basis to an approved disposal facility. 	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
		<p>increased construction traffic, temporary avoidance behavior due to the presence of humans and equipment and direct loss of habitat (e.g., destruction of nests or alteration of nesting habitat). No new lands or natural areas are anticipated to be assumed for this Project. Because the Project will be working within a road allowance, mitigation will be primarily targeted at SOCC and ESA 2007 protected species that are known to occur in the area such as turtles, bats, 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 below with regulatory requirements (if any) for species at risk to be determined by the MECP.</p>	<ul style="list-style-type: none"> • Detailed design of the Project components, including location of temporary workspaces, should be reviewed to avoid and reduce the likelihood of impact upon wildlife habitat to the extent possible, and in particular habitats of endangered, rare, special concern, and threatened species. • Prior to all activities, a worker awareness program should be implemented that includes species at risk identification and habitat or nesting characteristics as well as reporting protocols. species at risk sightings should be reported immediately to the Environmental Inspector followed by MECP or ECCC, as required. • On-site construction personnel should be informed of the potential presence of the species at risk identified in the Study Area, obligations under the ESA (Government of Ontario 2007), and recommended actions in the event of an encounter. • Locations of habitats of endangered, threatened, special concern, rare species and SWH along the PR will be confirmed during supplemental surveys. Additional mitigation measures will be developed if applicable. • Trench operations should be followed as closely as practical with backfill operations, to facilitate the movement of wildlife across the trench. • Gaps in stockpiles should be created, in consultation with a biologist, to allow for the potential movement of wildlife across the ROW. • Fencing should be erected around deep excavations to prevent wildlife entrapment. • Equipment and vehicles should yield to wildlife. • The contractor should inform their personnel to not threaten, harass or injure wildlife. • 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. • ESA 2007 protected species cannot be handled unless authorized by MECP and MNRF. • A Wildlife Scientific Collector's Permit (MNRF authorization) will be required to handle wildlife. • If species at risk are found in the Study Area, Enbridge Gas will undertake consultation with the MECP to identify species specific mitigation and/or permitting requirements under the ESA. • Any species at risk individual that is incidentally encountered in the Study Area must be allowed to leave of its own accord. • Should on-site personnel be unable to allow an incidentally encountered species at risk individual to disperse from the active construction area under its own ability, measures developed in consultation with MECP will be implemented. • SAR individuals that are encountered in the work zone should be reported to the MECP staff in 48 hours of the observation or the next working day, whichever comes first. • If an injured or deceased species at risk is found, the specimen must be placed in a non-airtight container that is maintained at an appropriate temperature and MECP must be contacted immediately for additional guidance. 	<p>wildlife habitat, wildlife, species at risk or SWH are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<p><u>Bats</u></p> <ul style="list-style-type: none"> • Tree removal in potential bat maternity roosting habitat areas should be limited to the extent possible and will be avoided during the active season for bats (April 1 to October 1). • If tree removal is required, mitigation recommendations for species at risk bats will be prepared in consultation with MECP. <p><u>Birds</u></p> <ul style="list-style-type: none"> • Construction activities with the potential to remove migratory bird habitat, such as vegetation clearing, should be avoided during the breeding season, which is generally from April 1- August 31 in southern Ontario (Environment Canada 2020). Should vegetation clearing activities be unavoidable during this window, a mitigation program should be developed, which includes measures to reduce and avoid impacts to migratory birds and their nests. This program should include preventative and mitigation measures but may also include avoidance of clearing during key sensitive periods and in key locations. • Bobolink and Eastern Meadowlark are expected to occur within meadows, pastures, and hayfields that may overlap with the Project location. Avoidance of work within these areas between May 1 and August 31 are recommended to avoid impacts to these species. Otherwise, consultation with MECP is required. • If clearing is to be completed during the bird nesting season, nest sweeps should be completed no later than seven days prior to clearing activities. <p><u>Turtles</u></p> <ul style="list-style-type: none"> • Shallow marshes, ponds or watercourses identified within the Study Area may have the potential to provide habitat for Blanding’s Turtle. Regulatory requirements for Blanding’s Turtle are at the discretion of the MECP, with recommended mitigation measures outlined below. • Implement ESC measures as outlined in this table to protect turtle habitat (wetlands). • Exclusion fencing should be installed prior to the sensitive nesting season (May 1 and July 15) if activities are anticipated to occur throughout this period to prevent turtles from entering and/or nesting; or pre-screening can be completed to avoid nests if work must begin during nesting season. • No heavy machinery should be permitted past the exclusion fencing to prevent compaction and prevent destruction of nests and habitat. • Where possible, restrict construction activities within 30 m of a nesting site. • If a Blanding’s Turtle nest is observed, stop construction within 30 m of the nesting site, and contact MECP. <p><u>Plants</u></p> <ul style="list-style-type: none"> • Confirm if Butternut trees are located within 25 m of temporary workspace and potential excavation. Consult with the MECP for potential disturbances to butternut trees. HDD may be an option to bypass ground disturbance work within 25 m of butternuts if amicable to MECP. Otherwise, registration under Ontario Regulation 242/08 Section 23.7 could be undertaken for a maximum of 10 trees, if required. 	



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
Socio-Economic Environment	Demographics <i>Section 4.5.1</i>	No impacts to community demographics are anticipated as a result of the proposed Project	<ul style="list-style-type: none"> As no impacts to community demographics are anticipated, no mitigation or protective measures are recommended. 	As no impacts are anticipated, no net impacts will occur.
	Employment and Business <i>Section 4.5.2</i>	<p>Project demands for labour and goods and services can result in both beneficial and adverse effects. Positive effects may not be evenly distributed among populations, with some residents in a better position to receive economic benefits than others. Similarly, adverse effects may affect some residents more than others. Residual effects on employment are related to the Project's labour demand compared to the labour supply. Three types of employment are considered:</p> <ul style="list-style-type: none"> Direct employment: labour that is hired directly for the Project Indirect employment: labour hired by companies in order to produce and provide goods and services needed for the Project Induced employment: labour hired by industries that produce and provide consumer items and services purchased by people who are directly or indirectly employed by the Project <p>Labour conditions will be affected by direct, indirect, and induced employment during all project phases.</p> <p>The Project could affect business through purchases of labour, goods, and services from local businesses, including businesses owned by Indigenous peoples, and will result in increased local employment income and municipal government</p>	<ul style="list-style-type: none"> It is expected that the Project will generally result in positive effects on employment by employing local and Indigenous people, and by reducing the unemployment rate in the region. These positive effects do not require mitigation, but Enbridge Gas should identify and implement various mechanisms to enhance project benefits. The potential effects of the Project as a result of purchasing labour, goods, and services is expected to be positive during construction and operation, so no mitigation will be required. However, Enbridge Gas has and will continue to work with local and Indigenous businesses to enhance their potential for successfully bidding on project contracts regarding the supply of goods and services, particularly for the operation phase. One initiative to help encourage further local and Indigenous content on the Project is to post Project purchasing requirements in advance, so that businesses can position themselves to effectively bid to supply goods and services needed for construction and operation. Increased participation of local and Indigenous businesses will enhance positive local economic effects. <p>With respect to potential adverse effects on local businesses, the following mitigation and protective measures should be followed:</p> <ul style="list-style-type: none"> Enbridge Gas should engage with landowners, businesses, and the Municipality to address access to the Study Area and any portion of land that will be altered as part of site preparation, and long-term changes. 	<p>With the aforementioned initiatives to encourage local and Indigenous participation on the Project, it is anticipated that the effects from project on employment and business will be positive, including creating positive economic activity through new direct, indirect, and induced employment. Project expenditures on local businesses and suppliers also have the potential to positively affect the local economies.</p> <p>Consultation with residents and businesses will address any concerns to their operations.</p> <p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on employment and business are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	Community Services and Municipal Infrastructure <i>Section 4.5.3</i>	<p>revenue. Local businesses will likely benefit from supplying the Project with goods and services.</p> <p>The presence of temporary workers 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. Non-local Project workers may also choose to rent apartments. The vacancy rate for temporary rentals will likely be able to accommodate the temporary increase.</p> <p>The transportation of Project goods, services, and workers has the potential to lead to increased use of existing transportation infrastructure. Also, increased traffic volumes along local road networks could increase travel times and reduce road safety, which might lead to increased use of local emergency services due to potential vehicle accidents and workplace accidents. In addition, the production of Project-related waste could place additional stress on the capacity of local landfills.</p> <p>During operation, the workforce will remain the same as current operations with no planned changes.</p>	<ul style="list-style-type: none"> • Project employees might require medical attention while staying in the area. The contractor and Enbridge Gas should have emergency response equipment and trained personnel on-site during construction. In addition, an Emergency Response Plan will be developed and implemented, which will address field health services, emergency call-out procedures and fire response plans. Safety fencing will be used where necessary to separate the work area. • Environmental mitigation will be in place to reduce the likelihood of emergency events and to prepare for the management of emergency events on site. If an emergency incident were to occur, it is anticipated that the comprehensive mitigation, contingency plans, and safety strategies will result in a localized and low-intensity response. • A Traffic Management Plan will be in place for all roads affected by construction, which at a minimum outlines measures to: <ol style="list-style-type: none"> a. Control the movement of materials and personnel to and from the construction site b. Post signs to warn oncoming motorists of construction activity c. Control traffic at road crossings d. Reduce on-road disturbance and land closures e. Store equipment as far from the edge of the road as practical f. Install construction barricades at road crossings • Traffic disruptions during construction will be reduced by adherence to the Traffic Management Plan. Guidelines will be developed for vehicular use on the RoW and associated access roads to avoid traffic congestion and accidents. Access to existing transportation infrastructure will be addressed through standard mitigation and will be reversible once the construction phase ends. • The capacity of waste disposal sites will be considered and if Project needs are not easily accommodated, alternative disposal locations will be considered. • Enbridge Gas should provide Project information to local communities and service providers so that they are prepared for any possible demand on community services and infrastructure related to a temporary population increase. Additional correspondence with residents and businesses adjacent to the PR will be held in advance of construction commencement to discuss potential specific impacts to the property or business. Contact information for a designated Enbridge Gas representative should be available to address questions and concerns during construction. Consultation has been initiated and should continue with municipal personnel. • Approvals should be obtained from the municipalities for all road crossings. The contractor must adhere to Enbridge Gas's requirements for road crossings as outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021). 	<p>Community services and infrastructure appear to have additional capacity to absorb potential increased temporary demands that may result from the Project. Adverse effects on traffic will be minimal where roads currently have low levels of traffic and alternative routes are readily accessible. Adverse residual effects in Eganville are anticipated to be low to moderate due to the size of roadways and increased traffic in-town.</p> <p>Given the available capacity of the local community services and infrastructure, along with the implementation of the mitigation and protective measures, no significant adverse residual impacts on community services and municipal infrastructure are anticipated.</p>



Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	Infrastructure <i>Section 4.5.4</i>	Potential to damage infrastructure, compromise the safety of workers and surrounding residents, and cause service disruptions may result from interactions with roads and buried and overhead utilities.	<ul style="list-style-type: none"> • Prior to the commencement of construction Enbridge Gas should obtain subsurface utility engineering data for the PR. The contractor should be responsible for locating existing pipelines and utilities. Machine operators will be informed where electrical transmission lines are present overhead. Lines that may interfere with the operation of construction equipment will be identified with warning poles strung together with rope and suspended red flags. In addition, all necessary permits and conditions of the utility’s infrastructure will be met and abided by. Measures to mitigate induced voltage effects should be followed and are outlined in the Enbridge Construction and Maintenance Manual (October 27, 2021). 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts on infrastructure are anticipated.
	Culture, Tourism and Recreational Facilities <i>Section 4.5.5</i>	Construction of the Project may temporarily interfere with the use of 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 and their users.	<ul style="list-style-type: none"> • Construction barricades should be erected at all areas of construction activity where recreational users may be present. • It is recommended additional consultation with residents and businesses adjacent to the preferred pipeline route occur in advance of construction commencement. Contact information for a designated Enbridge Gas representative should be available prior to and during construction to address questions and concerns. • While pipeline construction activities and machinery have the potential to temporarily affect street aesthetics, restoration of the construction area will leave little evidence that a pipeline exists. Construction should be conducted as expeditiously as possible, to reduce duration of activities. Vegetative buffers at watercourse and road crossings should be restored where feasible. • Access to businesses and residential properties should be maintained always. If required, signs should be used to direct people to correct access. • Safety fence should be installed at the edge of the construction area where public safety considerations are required. 	With the implementation of the mitigation and protective measures, no significant adverse residual effects on culture, tourism, or recreational facilities are anticipated
	Air Quality and Noise <i>Section 4.5.6</i>	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 style="list-style-type: none"> • During construction, motorized construction equipment should be equipped with appropriate mufflers and silencers as available. Company and construction personnel should avoid excessive idling of vehicles; vehicles and equipment should be turned off when not in use unless required for operation. To the greatest extent practical, activities that could create noise should be restricted to daylight hours and adhere to local noise by-laws. Sources of continuous noise, such as portable generators, should be shielded or located so as to reduce disturbance to residents and businesses. • 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: <ul style="list-style-type: none"> - Maintaining equipment in compliance with regulatory requirements - Covering loads of friable materials during transport - Dust suppression of source areas - Watering for dust control must not result in the formation of puddles, rutting by equipment or vehicles, the tracking of mud onto roads or the siltation of watercourses. 	With the implementation of the mitigation and protective measures, no significant adverse residual impacts from air quality and noise are anticipated.

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
	Indigenous Land Use and Traditional Knowledge Section 4.5.7	Impacts on Indigenous Land Use, Traditional Knowledge, and Indigenous interests are still being determined. The Environmental Report will be provided to Indigenous communities for the review and comment. Upon their review, Enbridge Gas will work with Indigenous communities to better understand potential impacts and associated mitigation measures.		
	Land Use Designations Section 4.5.8	Natural gas pipelines and their associated facilities/structures are permitted land uses, and there are no proposed changes to land use. Therefore no impacts are anticipated.	<ul style="list-style-type: none"> • 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. 	As no impacts are anticipated, no net impacts will occur.
	Landfills and Contaminated Sites Section 4.5.9	<p>Improper disposal of waste material generated during construction may result in contamination to soil, groundwater, and/or surface water resources on and off the construction site. Litter generated during construction may also become a nuisance to adjacent properties if not contained.</p> <p>A hauled sewage disposal site, the George William Griffith Waste Management System is located in the Study Area. .</p> <p>The Eganville Waste Disposal Site is 0.3 km to the Northeast of the Study Area and the Osceola Landfill is 0.2 km to the South of the Study Area..</p> <p>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.</p>	<ul style="list-style-type: none"> • All construction wastes should be disposed of in accordance with Enbridge Construction and Maintenance Manual (October 27, 2021). Additionally, Enbridge Gas should undertake responsible management of excess fill. When details on excess fill volumes are known, disposal locations should be determined, and appropriate permitting obtained. • A site-specific waste collection and disposal management plan should be implemented, which may include: <ul style="list-style-type: none"> - Waste materials, sanitary waste, and recycling transported off-site by private waste contractors licensed by the MECP. - Contractors required to remove their excess materials from the site. - Labelling and storage of hazardous and liquid wastes in a secure area that would contain material in the event of a spill. - Implementation of a waste management program consisting of reduction, reuse, and recycling of materials. - Should contaminated soils be encountered during construction, Enbridge Gas should implement their Suspect Soils Program (see Enbridge Construction and Maintenance Manual (October 27, 2021) for further details). - Soils that cannot be reused on site may be reused off-site in accordance with O. Reg. 406/19. - A Phase I 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 Gas 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. - During construction, if evidence of potential contamination is found (such as buried tanks, drums, oil residue or gaseous odour), construction will cease and the Enbridge Suspect Soil Program will be implemented. - 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 	With these mitigations in place to properly test, treat, and dispose of contaminated water/soils, Stantec is of the opinion that impacts of the Smith Landfill on the Project are unexpected, and if they do occur can be managed through the above listed contingency measures.

Feature Types	Environmental Feature(s)	Potential Impact(s)	Mitigation and Protective Measures	Net Impacts
			<p>submitted for chemical analysis to determine management options and appropriate handling and health and safety guidelines.</p> <ul style="list-style-type: none"> - The potential for leachate or landfill gas to interact with the hydrogeologic and geologic settings of the Project is outlined in the D-4 Guideline. Similar to the assumption made on contaminated soils, Enbridge Gas will assume and treat any water that is dewatered as suspect, either through testing or proper disposal. 	
	<p>Archaeological Resources <i>Section 4.5.10</i></p>	<p>The Stage 1 AA has determined that approximately 73.8% of the Study Area for the Stage 1 AA retains potential for the recovery of archaeological resources while approximately 26.2% has either been previously assessed, previously disturbed, or does not retain archaeological potential.</p>	<p>Based on the findings of the Stage 1 AA, a Stage 2 AA is required for any portion of the Project's anticipated construction which impacts an area of archaeological potential. A Stage 2 AA is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential.</p> <p>The results of the Stage 2 AA will provide recommendations for further assessment, protection, and mitigation of archaeological resources. Where feasible for the project, archaeological sites that are determined to retain further cultural heritage value and interest should be mitigated in whole or in part by avoidance and protection/preservation measures. Where avoidance and protection/preservation measures are not feasible, archaeological resources may be mitigated in whole or in part by excavation.</p> <p>For Indigenous archaeological resources retaining further cultural heritage value or interest and which may be subject to impact by the Project, Stage 3 AA and Stage 4 archaeological mitigation options will be evaluated in discussions with interested Indigenous communities.</p>	<p>With the implementation of the AA(s) and mitigation measures, including avoidance and protection/preservation (where feasible) and excavation, no significant adverse residual impacts on archaeological resources are anticipated.</p>
	<p>Built Heritage Resources and Cultural Heritage Landscapes <i>Section 4.5.11</i></p>	<p>The completion of the Checklist included the identification of seven indicators of CHVI. Given the findings of the Checklist, it is recommended that additional technical studies are required. Specifically, a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHECPA) is required prior to Project construction.</p>	<p>Prior to construction, a CHECPA will be undertaken and submitted to the MCM for their review and comment. The CHECPA will contain mitigation measures for potential impacts, if required.</p>	<p>With the implementation of the mitigation and protective measures, no significant adverse residual impacts on built heritage resources or cultural heritage landscapes are anticipated.</p>
	<p>Indigenous Interests <i>Section 4.5.12</i></p>	<p>The proposed Project may impact Treaty and Aboriginal rights and traditional uses, including aboriginal archaeological resources. As noted above, impacts on Indigenous Land Use, Traditional Knowledge, and Indigenous interests are still being determined. The Environmental Report will be provided to Indigenous communities for the review and comment. Upon their review, Enbridge Gas will work with Indigenous communities to better understand potential impacts and associated mitigation measures.</p>		



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* (2016) notes that cumulative effects should be identified and discussed in the ER.

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

6.1 Methodology

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

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

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

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

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

Although rare in occurrence, it is plausible that accidents or emergency events may arise due to an unforeseen chain of events during the Project's construction or



operational life. Due to the rarity and magnitude of such events, they have not been assessed here, as they are extreme in nature when compared to the effects of normal construction and operation activities and require separate response plans.

6.2 Study Boundaries

Spatial

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

Temporal

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

- ER and technical design – 2022
- Construction
 - Phase 1 – Q1 of 2023 to Q2 of 2024
 - Phase 2 – Q2/Q3 of 2024
 - Phase 3 – Q3/Q4 of 2024
 - Phase 4 – Q2/Q3 of 2025
- 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: Q4 2024 to 2023 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:



- Impact Assessment Agency of Canada, Canadian Impact Assessment Registry (IAAC 2022)
- Government of Ontario, Environmental Assessment Projects by Category (Government of Ontario 2022)
- MTO, Ontario's Highways Program Interactive Map (2022 to 2025) (MTO 2022)
- Canadian Energy Regulator, Major Facilities Applications (CER 2022)
- County of Renfrew, Construction and Infrastructure Projects (County of Renfrew 2022)
- OEB Applications Currently Before the Board (facilities applications only) (OEB 2022)
- Information solicited through public consultation

Based on the review of publicly available resources, no projects are proposed in the Study Area in timeframes associated with the Project.

Even though no projects were identified in the Study Area, it is assumed that on-going improvements, upgrades, and maintenance to municipal infrastructure such as bridges, culverts, drains, or roads may occur within the spatial and temporal study boundaries.

6.4 Analysis of Cumulative Effects

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

6.4.1 Construction – Q1 2023 / Q3 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 are additive effects on soil, vegetation, wildlife and wildlife habitat, air quality and the acoustic environment.

However, Enbridge Gas will continue consultations with County of Renfrew and the Townships of Admaston and Bromley, Bonnechere Valley and North Algona Wilberforce, municipal staff to reduce the potential for construction activities that may lead to cumulative effects and coordinate plans to reduce resultant effects during construction. Provided that construction activities implement similar mitigation and protective measures as those recommended for pipeline construction, adverse



cumulative effects up either biophysical features or the socio-economic environment are predicted to be of low to moderate probability and magnitude, short duration (2-3 months), and reversible. Therefore, adverse residual cumulative effects during construction, are not anticipated to be significant.

Soil

Soil erosion and reduced soil capability is a potential residual effect associated with construction of the Project. Mitigation and protective measures for soil are outlined in Section 4.3.5. Provided that concurrent projects follow mitigation measures similar to those outlined in this report, the probability of erosion control failure occurring concurrently is low and based on the nature of the proposed projects the magnitude of such an event would be low. Soil in the road easement has been previously disturbed, and while the current project will affect soil capability the geographic extent will be limited and the magnitude of impact would be low. As such, adverse cumulative residual effects on the natural environment from erosion and on previously degraded soil capability from construction are not anticipated to be significant.

Vegetation

Where there is natural vegetation within or adjacent to the PPR, potential impacts include the removal of native vegetation, and indirect effects such as dust, erosion, and accidental spills. However, with the implementation of the mitigation and protective measures outlined in this report, such as 1:1 vegetation replanting, and provided that concurrent projects follow mitigation measures similar to those outlined in this report, adverse cumulative residual effects on vegetation are not anticipated to be significant.

Wildlife and Wildlife Habitat

Potential residual effects on wildlife and wildlife habitat associated with construction of the Project are accidental direct mortality, habitat removal and sensory disturbance. Mitigation and protective measures for wildlife and wildlife habitat are outlined in Section 4.4.4. In the event of project-related wildlife mortality, the MNR should be contacted. If mortality occurs between concurrent projects for similar species, the Ministry will be able to note the occurrences and coordinate with Enbridge Gas to adjust construction activities and/or mitigation. Potential cumulative effects resulting from sensory disturbance (i.e., noise, air pollution and dust) are discussed below.

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



Air Quality and Acoustic Environment

Potential residual effects on air quality associated with construction of the Project and concurrent projects are an increase in noise and air pollutants from operation of vehicles and equipment, and an increase in dust from construction activities. Mitigation and protective measures for air quality and the acoustic environment are outlined in Section 4.4.5. Provided that the concurrent projects follow mitigation measures similar to those outlined in this report, cumulative effects should be of low magnitude and reversible. Therefore, adverse residual cumulative effects on air quality and the acoustic environment are not anticipated to be significant.

Traffic

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

6.4.2 Operation and Maintenance – Year 2025 to 2030

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

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

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

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



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

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

6.5 Summary of Cumulative Effects

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

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

7 Monitoring and Contingency Plans

7.1 Monitoring

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

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

- Trained personnel should be on-site to monitor construction and should be responsible for checking that the mitigation and protective measures and monitoring requirements in the ER are executed. Enbridge Gas should implement an orientation program for inspectors and contractor personnel to provide information regarding Enbridge Gas' environmental program and commitments, as well as safety measures.
- Recommendations and commitments made in this ER and other applicable permits and reports should be incorporated into an EPP detailing construction activity. The EPP should also include site and feature specific mitigation. The EPP should become part of the contract specification with the contractor selected to construct the Project, as noted in Section 5.8.4 of the *OEB Environmental Guidelines* (2016).
- A walking inspection of the entire PR should be completed three (3) months and 15 months after the in-service date to determine whether areas require further rehabilitation or as required by OEB conditions of approval.
- The following sections list specific environmental monitoring activities recommended for the Project.

7.1.1 Exposed Soils

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



7.1.2 Water Wells

If blasting is required for trenching, well owners within 100 m of the preferred pipeline trench should be provided the option to participate in a Water Well Monitoring Program prior to construction to determine preconstruction quality and quantity conditions. Where blasting is not required, wells within a minimum of 10 m of the trench, or as recommended by future hydrogeological studies, will qualify for participation in the monitoring program. 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 preferred route. 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 Gas.

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

7.1.3 Watercourse and Wetland Crossings

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

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

7.1.4 Vegetation

During pre-construction clearing and construction, the Environmental Inspector should monitor the limits of clearing so as not to damage adjacent vegetation. The Environmental Inspector should identify any trees that pose a potential hazard and may require removal. If clearing is to be completed during the bird nesting season, nest sweeps should be completed no later than seven days prior to clearing activities. In



addition, prior to any tree removals it is recommended that a Butternut Survey and a bat maternity roosting survey be completed to confirm the presence or absence of this species within the work area.

Establishment of vegetative cover should be monitored. Sediment control fencing and other protective measures should be retained in place until cover is fully established. Should any new trees be planted as part of compensation plans, a year following construction, any 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 Gas's inspection program should include annual monitoring until the new plantings are healthy and established.

7.1.5 Wildlife

Should the presence of species at risk be identified within the Study Area, construction monitoring will need to be undertaken. The exact nature of monitoring 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 Gas representative should be available to monitor and respond to requests and concerns voiced by residents and business owners. Landowners affected by construction should be notified in advance of construction activities in their area, as feasible. The notification should provide the contact information for a designated Enbridge Gas representative.

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

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

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



7.1.7 Municipal Roads

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

7.1.8 Cultural Heritage Resources

Based on the results of the Checklist, a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (CHECPA) will be required. The CHECPA may identify monitoring requirements that are needed for the Cultural Heritage Resources in the Project area.

7.2 Contingency

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

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

7.2.1 Private Water Well Complaint

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



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

7.2.2 Contaminated Sites (Suspect Soils Program)

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

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

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

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 Gas Inc., Environment Department.

7.2.3 Watercourse Sedimentation

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

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



7.2.4 Inadvertent Returns During HDD

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

7.2.5 Accidental Spills

During construction, an accidental spill may occur. The impact of the spill will depend upon the magnitude and extent of the spill, and the environmental and socio-economic conditions in which it takes place. Upon release of a hydrocarbon-based construction fluid, Enbridge Gas should immediately determine the magnitude and extent of the spill and rapidly take measures to contain it. Release of sediment should also be treated as a potential spill depending on the magnitude and extent. Spills should be immediately reported to Enbridge Gas's on-site inspection team and Environment Department. If necessary, the MECP Spills Action Center should be notified at 1-800-268-6060, the local/regional municipality and/or the local Conservation Authority (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.

7.2.6 Unexpected Finds: Archaeological or Heritage Resources

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



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

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



8 Conclusion

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8 Conclusion

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

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



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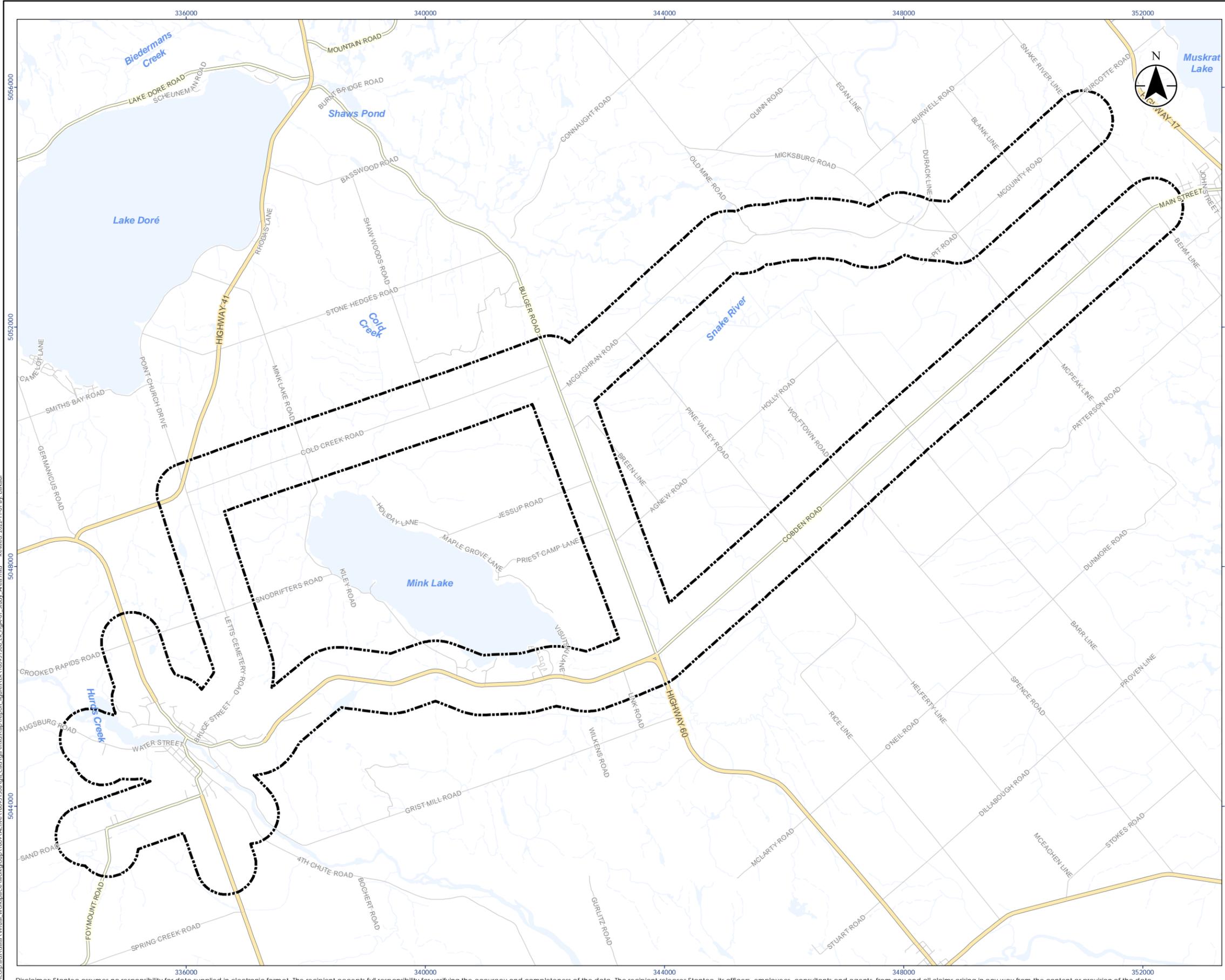
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Appendices



Appendix A Figures

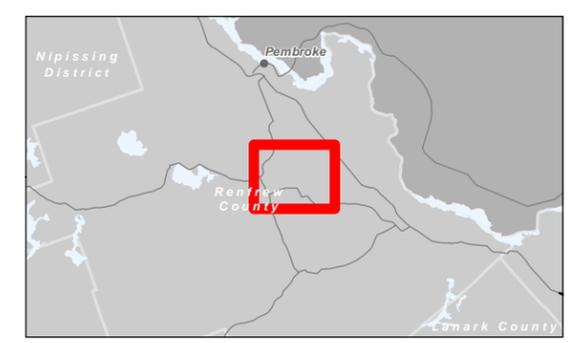




- Legend**
- Study Area (500m)
 - Expressway / Highway
 - Major Road
 - Minor Road
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.



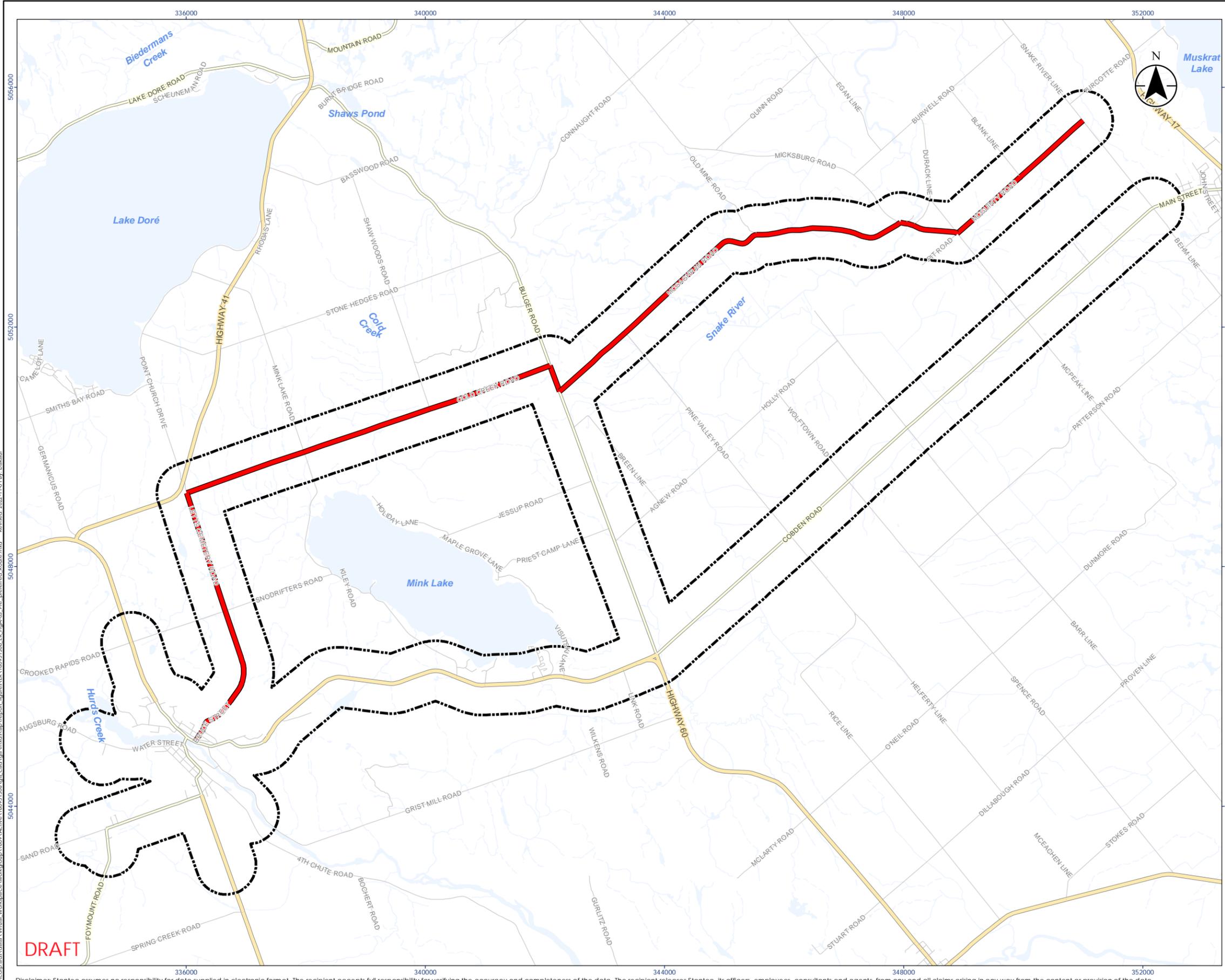
Project Location: County of Renfrew
 Prepared by BK on 2022-11-01
 Technical Review by SPE on 2022-10-28

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: A.1
 Title: Study Area

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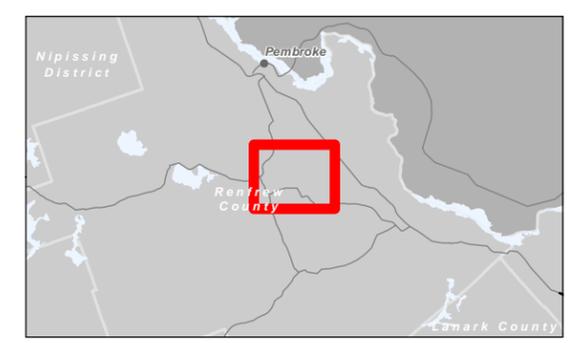


Legend

- Preliminary Preferred Route
- Study Area (500m)
- Expressway / Highway
- Major Road
- Minor Road
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody



- Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.



Project Location: County of Renfrew
 Prepared by BK on 2022-11-01
 Technical Review by SPE on 2022-10-28

Client/Project:
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No. **A.3**
 Title: Preliminary Preferred Route

DRAFT

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 Revised: 2022-11-01 by: babaue

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Appendix B Consultation



Appendix B1: Letter of Delegation



Ministry of Energy

Energy Networks and Indigenous Policy
Branch

Indigenous Energy Policy

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

Ministère de l'Énergie

Direction Générale des Réseaux
Énergétiques et des Politiques
Autochtones

Politique Énergétique Autochtones

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



April 13, 2022

VIA EMAIL

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

Re: Eganville Community Expansion Project

Dear Adam Stiers:

Thank you for your email dated February 14, 2022 notifying the Ministry of Energy (Energy) of Enbridge Gas Incorporated's (Enbridge) intention to apply to the Ontario Energy Board (OEB) for Leave to Construct for the Eganville Community Expansion Project (the Project).

I understand that Enbridge is planning to construct new natural gas pipelines and stations to provide services to the community of Eganville. The Project will transport natural gas supply from Cobden Road to new distribution system pipelines in Eganville as well as distribute natural gas volumes to residential, commercial, and industrial customers in Eganville and customers along the supply lateral in the Townships of Admaston/Bromley, Bonnechere Valley North and Algona Wilberforce.

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

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

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

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

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

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

Community	Mailing Address
Algonquins of Pikwàkanagàn	1657A Mishomis Inamo, Pikwakanagan, ON K0J 1X0
Algonquins of Ontario	31 Riverside Dr #101, Pembroke, ON K8A 8R6
Alderville First Nation (Williams Treaties' First Nation, WTFN)	P.O. Box 46 Roseneath ON K0K 2X0 T: (905) 352-2011 F: (905) 352-3242
Curve Lake First Nation (WTFN)	General Delivery Curve Lake ON K0L 1R0 T: (705) 657-8045, ext. 209 F: (705) 657-8708
Hiawatha First Nation (WTFN)	123 Paudash Street, R.R. #2 Keene ON K0L 2G0 T: (705) 295-4421 F: N/A
Mississaugas of Scugog Island (WTFN)	22521 Island Road Port Perry ON L9L 1B6 T: (905) 985-3337 F: N/A
Beausoleil First Nation (WTFN)	11 O'Gema Miikan Christian Island, ON L9M 0A9 T: (705) 247-2051 F: (705) 247-2239
Chippewas of Georgina Island First Nation (WTFN)	R.R.#2 Box N-13 Sutton West, ON L0E 1R0 T: (705) 437-1337 F: (705) 437-4597
Chippewas of Rama First Nation (WTFN)	5884 Rama Rd Orillia, ON L3V 6H6 T: (705) 325-3611 F: (705) 325-0879

For the Mississauga WTFN (Alderville, Curve Lake, Hiawatha and Scugog Island), Energy has assessed that consultation is required at the 'low' end of the spectrum for this project with respect to archaeological resources and impacts to harvesting rights. Energy requires the proponent to, at minimum, notify the communities of the project, disclose information about the project and discuss issues raised in response to the notice. The notice could include a request to confirm whether or not the community believes the project will impact their rights and accordingly whether they are interested in being consulted. Issues raised should be discussed and considered in light of the potential to impact rights, with mitigation or other forms of accommodation identified where appropriate. Should a community not respond, the proponent should continue to provide high-level notifications in accordance with project stage milestones. Should a community indicate they are not interested in being consulted, or identify one of the other Williams Treaties' First Nations communities as the consultation lead for the Project, the proponent can inform Energy so that we can consider revisions to the consultation list and provide the proponent with further guidance on how to proceed with respect to that community.

For the Chippewa WTFN (Beausoleil, Georgina Island, and Rama), Energy has assessed that consultation is required at the low end of the spectrum with respect to archaeological resources. The WTFN have requested that proponents notify all seven WTFN communities (as noted in the table above) of projects that may impact archaeological resources, and the WTFN will then determine internally which communities should be consulted on this issue and direct proponents accordingly. As above, once the proponent receives this direction, please inform Energy so that we can consider revisions to the consultation list and provide further guidance on how to proceed.

For the Algonquins of Pikwàkanagàn First Nation and the Algonquins of Ontario, Energy requires the proponent to undertake consultation at the moderate range of the spectrum. In addition to the requirements for low consultation, the proponent should meet with both the community and the organization to discuss the project; provide opportunities for Pikwàkanagàn First Nation and the AOO to share evidence or submissions about potential impacts should Pikwàkanagàn First Nation or the AOO so choose; and offer capacity funding to support meaningful participation in the consultation process, as appropriate. The proponent should be able to demonstrate how any concerns were considered and responded to, and what impact they had on project decisions moving forward. More detailed information on the roles and responsibilities delegated to Enbridge is available in the appendix.

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 Gillian Brown, Senior Advisor (gillian.brown2@Ontario.ca).

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

Sincerely,

Samir Adkar

Digitally signed by Samir Adkar
DN: cn=Samir Adkar, o=Ministry of Energy, ou=Energy
Networks and Indigenous Policy,
email=samir.adkar@ontario.ca, c=CA
Date: 2022.04.13 11:20:52 -04'00'

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-appraise the Crown. Whether or not any such business arrangements may be reached with any community, the Crown expects the Proponent to fulfill all of its delegated procedural consultation responsibilities to the satisfaction of the Crown.

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

Roles and responsibilities assumed directly by the Crown

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

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

Consultation Record

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

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

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

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

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

Appendix B2: Project Contact List



**Enbridge Gas Inc.
Eganville Community Expansion Project Project
Contact List - Agencies and Municipalities**

Officials	First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Elected Officials	John	Yakabuski	Elected Officials	Province of Ontario	Renfrew-Nipissing-Pembroke	Member of Provincial Parliament	84 Isabella Street, Unit 6	Pembroke	ON	K8A 5S5	613-735-6627	john.yakabusko@pc.ola.org
	Cheryl	Gallant	Elected Officials	Government of Canada	Renfrew-Nipissing-Pembroke	Member of Parliament	84 Isabella Street, First Floor	Pembroke	ON	K8A 5S5	613-732-4404	cheryl.gallant@parl.gc.ca
Federal Agencies	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@canada.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
	To whom it may concern			Transport Canada								EnviroOnt@tc.gc.ca
	To whom it may concern			Fisheries and Oceans Canada	Fish and Fish Habitat Protection Program			Burlington			L7S 1A1	1-855-852-8320
Ontario Pipeline Coordination Committee	Zora	Crnojacki	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ontario Energy Board		2300 Young Street, 26th Floor, PO Box 2319	Toronto	ON	M4P 1E4	416-440-8104	zora.cmojacki@oeb.ca
	Helma	Geerts	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	1 Stone Road West, 3rd Floor SE	Guelph	ON	N1G 4Y2	519-546-7423	helma.geerts@ontario.ca
	James	Hamilton	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Heritage Sport Tourism and Culture Industries	Heritage Planning Unit	400 University Avenue, 5th Floor	Toronto	ON	M7A 2R9	416-995-8404	james.hamilton@ontario.ca
	Tony	Difabio	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Transportation		301 St. Paul Street, 2nd Floor	St. Catharines	ON	L2R 7R4	905-704-2656	tony.difabio@ontario.ca
	Kourosh	Manouchehri	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Technical Standards and Safety Authority		345 Carlingview Drive	Toronto	ON	M9W 6N9	416-734-3539	kmanouchehri@tssa.org
	Keith	Johnson	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Northern Development, Mines, Natural Resources and Forestry	Environmental Planning Team Lead (Acting)	Whitney Block Rm 5520, 99 Wellesley St W	Toronto	ON	M7A 1W3	705-313-6960	keith.johnston@ontario.ca
	Maya	Harris	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Municipal Affairs and Housing	Manager, Community Planning and Development East	777 Bay Street, 13th Floor	Toronto	ON	M5G 2E5	416-585-6063	maya.harris@ontario.ca
	Michael	Elms	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Municipal Affairs and Housing, Eastern Municipal Services Office	Manager, Community Planning and Development	8 Estate Lane	Kingston	ON	K7M 9A8	613-545-2132	michael.elms@ontario.ca
	Kathy	McDonald	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Environment, Conservation and Parks (MECP) (Northern Regional Contact)	Supervisor, APEP	199 Larch Street, Suite 1101	Sudbury	ON	P3E 5P9	705-564-3273	kathy.mcdonald@ontario.ca
	Ruth	Orwin	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of the Environment, Conservation and Parks, Eastern	Air, Pesticides and Environmental Planning Supervisor	133 Dalton Avenue	Kingston	ON	K7L 4X6	613-549-4000	ruth.orwin@ontario.ca
	Cory	Ostrowka	Ontario Pipeline Coordinating Committee	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@infrastructureontario.ca
	Debbie	Scanlon	Ontario Pipeline Coordinating Committee	Ontario Pipeline Coordinating Committee	Ministry of Environment, Conservation and Parks (Source Protection Program Branch)	Manager Approvals Section	40 St. Clair Av. W, 14th floor	Toronto	ON	M4V 1M2	647-627-5917	sourceprotectionscreening@ontario.ca
Amy	Gibson			Indigenous Energy Policy, Ministry of Energy	Manager							amy.gibson@ontario.ca
Provincial Agencies	Andrew	Evers	Provincial Agencies	Ministry of Environment, Conservation and Parks (MECP)	Environment Assessment Services	Manager (Acting)	135 St Clair Ave W	Toronto	ON	M4V 1P5	647-961-4850	andrew.evers@ontario.ca
	To whom it may concern		Provincial Agencies	Ministry of Environment,	Species at Risk Branch		40 St. Clair Ave. W., 14th Floor	Toronto, ON	ON	M4V 1M2		SAROntario@ontario.ca

**Enbridge Gas Inc.
Eganville Community Expansion Project Project
Contact List - Agencies and Municipalities**

Officials	First Name	Surname	Category	Organization	Department	Position	Address	City/Town	Province	Postal Code	Telephone	E-Mail
				Conservation and Parks (MECP)								
	To whom it may concern		Provincial Agencies	Ministry of Environment, Conservation and Parks (MECP)	Eastern Region				ON			eanotification.eregion@ontario.ca
	Jon	Orpana	Provincial Agencies	Ministry of Environment, Conservation and Parks (MECP)	Environmental Assessment Branch	Environmental Resource Planner & EA Coordinator	135 St Clair Ave W, 7th Floor	Toronto	ON	K7M 8S5	613-561-8250	jon.orpana@ontario.ca
	Karla	Barboza	Provincial Agencies	Ministry of Tourism, Culture and Sports (MTCS)	Heritage Planning Unit	Team Lead - Heritage (Acting)	400 University Ave, 5th Floor	Toronto	ON	M7A 2R9	416-660-1027	Karla.barboza@ontario.ca
	James	Hamilton	Provincial Agencies	Ministry of Tourism, Culture and Sports (MTCS)	Heritage Planning Unit	Manager, Heritage Program Unit	400 University Ave, 5th Floor	Toronto	ON	M7A 0A7	416-995-8404	james.hamilton@ontario.ca
	Jonathon	Wilkinson	Provincial Agencies	Ministry of Northern Development, Mines, Natural Resources and Forestry (NRF)	Indigenous Energy Policy	Senior Advisor (Acting)	77 Grenville Street, 6th Floor	Toronto	ON	M7A 2C1	705-313-3658	jonathon.wilkinson@ontario.ca
	Dawn	Palin Rokosh	Provincial Agencies	Ministry of Infrastructure	Planning and Implementation Branch	Director (Acting)	777 Bay Street, 4th Floor, Suite 425	Toronto	ON	M5G 2E5	416-277-7291	dawn.palin.rokosh@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
	Helma	Geerts	Provincial Agencies	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
	Drew	Crinklaw	Provincial Agencies	Ministry of Agriculture, Food and Rural Affairs	Land Use Policy & Stewardship	Policy Advisor	667 Exeter Road, Ontario Government Offices	London	ON	N6E 1L3	519-317-4493	drew.crinklaw@ontario.ca
	Peter	Makula	Provincial Agencies	Ministry of Transportation	Engineering Office- Eastern Region	Manager	1355 John Counter Blvd, Postal Bag Box 4000	Kingston	ON	K7L 5A3	613-545-4754	peter.makula@ontario.ca
	Sarah	Conway	Provincial Agencies	Ministry of Transportation	Policy, Planning and Agency Relations	Manager (Acting)	777 Bay Street, College Park 30th Floor, Suite 3000	Toronto	ON	M7A 2J8		sarah.conway@ontario.ca
	Dave	Brown	Provincial Agencies	Ministry of Natural Resources and Forestry (MNRF)	Fish and Wildlife Services Branch	Director	300 Water St, 5th Floor N	Peterborough	ON	K9J 3C7	705-930-5211	dave.brown2@ontario.ca
	To whom it may concern		Provincial Agencies	Hydro One Networks Inc.								SecondaryLandUse@HydroOne.com
	Meaghan	Klassen	Provincial Agencies	Ontario Provincial Police	Research and Program Evaluation Unit	Administrator	777 Memorial Avenue, 1st Floor	Orillia	ON	L3V 7V3	705-329-6256	meaghan.klassen@opp.ca
Government Review Team For Aboriginal Information	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
	Caroline	Vachon	Government Review Team	Crown-Indigenous Relations and Northern Affairs Canada	Treaties and Aboriginal Government	Correspondence Coordinator	10 Wellington Street	Gatineau	QC	K1A 0H4	819-360-2503	caroline.vachon2@canada.ca

**Enbridge Gas Inc.
Eganville Community Expansion Project Project
Contact List - Agencies and Municipalities**

First Name	Surname	Title	Agency	Department	Address	City/Town	Province	Postal Code	Telephone	E-Mail
Debbie	Robinson	Warden	County of Renfrew	Council	9 International Drive	Pembroke	ON	K8A 6W5	613-735-7288	warden@countyofrenfrew.on.ca
Michael	Donohue	Mayor	Admaston/Bromley	Council	5030 Highway 60	Douglas	ON	K0J 1S0	613-649-2943	mayordonohue@admastonbromley.com
Jennifer	Charkavi	CAO/Clerk	Admaston/Bromley	Administration	477 Stone Road	Renfrew	ON	K7V 3Z5	613-432-2885	info@admastonbromley.com
Annette	Gilchrist	CAO	Township of Bonnechere Valley	Administration	49 Bonnechere Street, P.O. Box 100	Eganville	ON	K0J 1T0	613-628-3101 ext 222	annetteg@eganville.com
Jennifer	Murphy	Mayor	Township of Bonnechere Valley	Council	49 Bonnechere Street, P.O. Box 100	Eganville	ON	K0J 1T0	613-628-9583	jenniferm@eganville.com
James	Brose	Mayor	North Algoma Wilberforce	Council	1091 Shaw Woods Road	Eganville	ON	K0J 1T0	613-585-9442	jbrose@nalgonawil.com
Andrew	Sprunt	CAO	North Algoma Wilberforce	Administration	1091 Shaw Woods Road	Eganville	ON	K0J 1T0	613-628-2080	cao@nalgonawil.com

**Enbridge Gas Inc.
Eganville Community Expansion Project
Project Contact List - Indigenous**

Title	First Name	Surname	First Nation	Position	Phone	Address	City	Province	Postal Code	E-Mail
Chief	Wendy	Jocko	Algonquins of Pikwàkanagàn	Chief		1657A Mishomis Inamo	Pikwakanagan	ON	K0J 1X0	chief@pikwakanagan.ca
	Algonquins of Ontario Consultation Office		Algonquins of Ontario			31 Riverside Dr #101	Pembroke	ON	K8A 8R6	algonquins@tanakiwin.com
Chief	Dave	Mowat	Alderville First Nation (Williams Treaties' First Nation, WTFN)	Chief	T: (905) 352-2011 F: (905) 352-3242	11696 Second Line Rd PO Box 46	Roseneath	ON	K0K 2X0	dmowat@alderville.ca
Chief	Emily	Whetung-Maclnnes	Curve Lake First Nation (WTFN)	Chief	T: (705) 657-8045, ext. 209 F: (705) 657-8708	General Delivery	Curve Lake	ON	K0L 1R0	emilyw@curvelake.ca
Chief	Laurie	Carr	Hiawatha First Nation (WTFN)	Chief	T: (705) 295-4421 F: N/A	123 Paudash Street, R.R. #2	Keene	ON	K0L 2G0	chiefcarr@hiawathafn.ca
Chief	Kelly	LaRocca	Mississaugas of Scugog Island (WTFN)	Chief	T: (905) 985-3337 F: N/A	22521 Island Road	Port Perry	ON	L9L 1B6	info@scugogfirstnation.com
Chief	Joanne P.	Sandy	Beausoleil First Nation (WTFN)	Chief	T: (705) 247-2051 F: (705) 247-2239	11 O'Gema Miikan	Christian Island	ON	L9M 0A9	bfchief@chimnissing.ca
Chief	Donna	Big Canoe	Chippewas of Georgina Island First Nation (WTFN)	Chief	T: (705) 437-1337 F: (705) 437-4597	R.R.#2 Box N-13	Sutton West	ON	L0E 1R0	dbigcanoe@georginaisland.com
Chief	Edward (Ted)	Williams	Chippewas of Rama First Nation (WTFN)	Chief	T: (705) 325-3611 F: (705) 325-0879	5884 Rama Rd	Orillia	ON	L3V 6H6	consultation@ramafirstnation.ca
	Cathy	Edney	Chippewas of Rama First Nation (WTFN)	Communications and Community Relations Manager	T: (705) 325-3611 F: (705) 325-0879	5884 Rama Rd	Orillia	ON	L3V 6H6	cathye@ramafirstnation.ca
	Sharday	James	Chippewas of Rama First Nation (WTFN)	Community Consultation	T: (705)-325-3611 ext. 1633	5884 Rama Rd	Rama	ON	L3V 6H6	shardayi@ramafirstnation.ca

**Enbridge Gas Inc.
Eganville Community Expansion Project
Project Contact List – Landowner-Stakeholder**

First Name	Surname	Company	Title	Address	City/Town	Postal Code	Telephone	E-Mail
John	Cameron	Whitetail Golf Club	Golf Course Superintendent	7113 Highway 60	Eganville	K0J 1T0	613-628-3774	john@whitetailgolfclub.ca
		Cedar Beach Camping Resort		43 Cedarest Lane	Eganville	K0J 1T0	613-628-2525	info@cedarbeachresort.ca
		Serenity Resorts		7200 Hwy 60	Eganville	K0J 1T0	613-628-2454	loretta@serenityresorts.ca
Matt	Singer	Boys and Girls Club Canada	Camp Smitty Manager	2825 Dumaurier Avenue	Ottawa	K2B 7W3	613-232-0925 ext. 1229	msinger@bgcottawa.org
Tyler	Armstrong	Renfrew Federation of Agriculture	President				613-433-8255	pinnaclehaven@gmail.com
Ian	Nokes	Ontario Federation of Agriculture	Policy Analyst	100 Stone Road West, Suite 206	Guelph	ON	519-821-8883 ext.253	ian.nokes@ofa.on.ca

Appendix B3: Newspaper Notice Tear Sheets





Canadian Tire Pembroke owners Ray and Barb Pilon, surrounded by some of their staff, present a cheque to PRH Foundation executive director Roger Martin in support of the Black & White Gala this fall.

Canadian Tire steps up again to support Black & White Gala

Pembroke -- The *Black & White Gala*, sponsored by the Pembroke Regional Hospital Foundation, is returning on Saturday, October 15th and celebrating its 15th anniversary.

Ray and Barb Pilon, local owners and operators of Canadian Tire Pembroke have donated \$10,000 to this year's event as a *Gift of Humanity* sponsor.

"Barb, myself and our team here at Canadian Tire Pembroke are

happy to once again contribute to the PRHF in support of this year's *Cancer Care Campaign*," Mr. Pilon said. "As a 100 percent locally owned Canadian company, we are committed to supporting our local community."

The *Black & White Gala* is an opportunity for ticket purchasers to enjoy a catered meal from Ulrich's at the Normandy Officers' Mess while supporting the hospital. Tickets are on sale now and avail-

able at www.prhfoundation.com/blackandwhite-gala/.

Proceeds from the gala support the *Cancer Care Campaign*, which will fund the expansions and upgrades to the Chemotherapy and Medical Daycare units at the hospital, improving the lives of local cancer patients and their families.

"We are very blessed to have the support of this local business, Foundation Executive Director Roger Martin said.

A stroll through the Osceola that was

Osceola -- The Bromley Historical Society invites the public to take a visual stroll through the hamlet of Osceola 60 to 70 years ago with a presentation by Carmel (Nefcy) McKeon on Saturday, September 24th, at 2 p.m. in the Old Town Hall, 498 Micksburg Road, Osceola.

The Nefcy family are legendary in the annals of Osceola's history. A family of 12 children plus

parents, crammed into a Ford station wagon, arrived en masse from Motor City - Detroit - to spend their summer months with their grandparents, Michael Thomas and Anna (Dillon) McGee. Annually, the number of children in the tiny village swelled. As well, Carmel, a keen genealogist, has traced back the McGee, Reynolds and Dillon roots that took hold in Bromley,

Admaston and Bagot Townships before being transplanted south of the Canadian border.

Carmel's presentation will feature recently discovered 35mm slides taken during the family visits. She will speak about her memories of the town, her fore-bearers and the people she knew in her youth. Light refreshments will be offered following the talk.



Cleanfarms 2022 Unwanted Pesticides & Old Livestock/Equine Medications Collection
September 19 to 27

Farmers! Got unwanted pesticides or livestock/equine medications?

Safely dispose of unwanted or obsolete agricultural pesticides and livestock/equine medications -- **no charge!** Take them to the following locations on the dates noted between **9 a.m. and 4 p.m.**

- | | | | |
|--|--|--|--|
| <p>BRADFORD
Wednesday, Sept. 21
Bradford Cooperative Storage
61 Bridge St.
905-775-3317</p> <p>BRODHAGEN
Friday, Sept. 23
Hoegy's Farm Supply Ltd.
6777 Perth Line 44
519-345-2941</p> <p>COBOURG
Tuesday, Sept. 27
TCO Agromart Cobourg
7142 County Road 2 W
905-885-9400</p> <p>COTTAM
Monday, Sept. 26
Setterington's Fertilizer Service Ltd.
3518 McCain Side Rd.
519-776-7041</p> <p>DELHI
Tuesday, Sept. 20
FS Partners
1161 Fertilizer Rd.
519-582-0444</p> <p>DUNDALK
Monday, Sept. 19
Huron Bay Co-operative
35 Dundalk St.
519-923-2014</p> <p>DUNDAS
Monday, Sept. 19
County AG Services Inc.
1377 Highway 5 West
905-628-4488</p> | <p>DUNNVILLE
Monday, Sept. 21
Hessel's Farm Supply
555 Diltz Rd.
905-774-3641</p> <p>GLENCOE
Wednesday, Sept. 21
Parrish and Heimbecker
23312 Dundonald Rd.
519-287-3317</p> <p>GUELPH
Tuesday, Sept. 27
Woodrill Ltd.
7861 Hwy 7 East
519-821-1018</p> <p>HARRISTON
Wednesday, Sept. 21
North Wellington Co-Op
56 Margaret St. S.
519-338-2331</p> <p>HICKSON
Monday, Sept. 19
Oxford Agropro Ltd.
596222 Hwy 59
519-462-2721</p> <p>NEW HAMBURG
Monday, Sept. 26
Silver Creek Ag Ltd.
4693 Road 106
519-656-3344</p> <p>NIAGARA ON THE LAKE
Monday, Sept. 26
Niagara Orchard & Vineyard Corp.
1196 Irvine Rd
905-646-5777</p> | <p>OAKWOOD
Monday, Sept. 26
Sunderland Coop
381 Taylors Rd.
705-953-9660</p> <p>ORANGEVILLE
Tuesday, Sept. 20
Holmes Agro
473088 County Rd. 11
519-941-0450</p> <p>OXFORD STATION
Wednesday, Sept. 21
Harvex Agromart
2109 B County Rd. 20
613-258-3445</p> <p>PAIN COURT
Friday, Sept. 23
Sylvite
6857 Pain Court Line, RR1
519-354-5900</p> <p>PEMBROKE
Tuesday, Sept. 20
M & R Feeds & Farm Supply
2768 Micksburg Rd.
613-476-9183</p> <p>PICTON
Friday, Sept. 23
County Farm Centre
38 Cold Storage Rd.
613-476-9183</p> <p>SCOTLAND
Tuesday, Sept. 20
Scotland Agromart Ltd.
218 Oakland Road, RR#1
519-446-2218</p> | <p>SELBY
Thursday, Sept. 22
TCO Agromart Ltd
11 Pleasant Rd.
613-354-4424</p> <p>ST-ISIDORE
Monday, Sept. 19
Unig Cooperative
4650 Ste-Catherine
613-524-2828</p> <p>TARA
Monday, Sept. 19
Sprucedale Agromart Ltd
3714 Bruce Cty Rd 10
519-934-2340</p> <p>UXBRIDGE
Thursday, Sept. 22
Reesor's Seed and Grain
5309 Durham Road #30
905-640-1583</p> <p>VERNER
Wednesday, Sept. 21
Co-op Regionale de Nipissing-Sudbury
723 Gingras
705-594-1268</p> <p>WALKERTON
Tuesday, Sept. 20
Huron Bay Co-Operative Inc.
1291 Bruce Road # 3
519-881-8490</p> <p>WELLANDPORT
Thursday, Sept. 22
Clark Agri Service
4891 Canborough Rd.
905-386-6293</p> |
|--|--|--|--|

* Next Cleanfarms collection in these areas in 2025.
* For collection dates elsewhere, go to: cleanfarms.ca/materials/unwanted-pesticides-animal-meds/



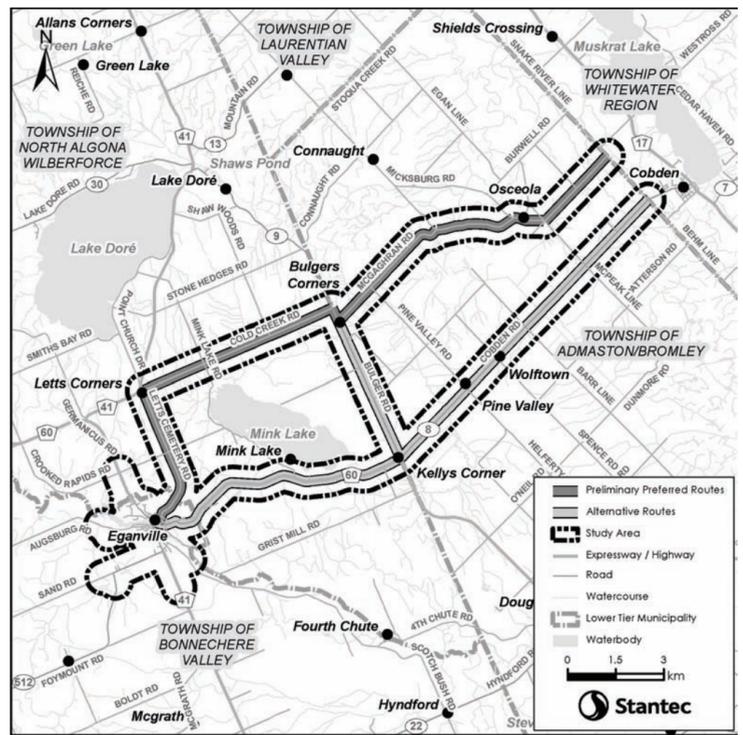
Enbridge Gas Inc. Notice of Study Commencement and Virtual Open House

Eganville Community Expansion Project

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Eganville Community Expansion Project to provide affordable natural gas to the community of Eganville (The Project). The Project will include the construction of new natural gas pipelines to transport natural gas supply from Snake River Line to new distribution system pipelines in Eganville, and distribute natural gas to residential, commercial and industrial customers in Eganville, and along the supply lateral, which is proposed to span the Townships of Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.

The Project consists of a supply lateral of approximately 21 kilometers (km) of a combination of 4-inch steel and of 6- and 8-inch polyethylene (PE), a distribution system of up to 22 km of a combination of 6-inch, 4- inch and 2-inch PE pipeline, and a pressure reducing station along the supply lateral. The supply lateral is proposed to be in service by 2024 with the distribution pipelines proposed to be in service as early as 2025. The preliminary preferred or alternative routes and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

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



As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study for the Project. The Environmental Study will fulfill the requirements of the Ontario Energy Board's (OEB) "Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)". It is anticipated that the Environmental Report for the study will be completed in October 2022 after which Enbridge Gas 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 Q4 of 2023.

Consultation and engagement with Indigenous communities, landowners, government agencies, and other interested persons is an integral component of the planning process. As a result of the on-going COVID-19 pandemic, a Virtual Open House will be held in place of an in-person Open House and hard copies of the materials will be available for review in the community (see below)

The Virtual Open House will be available for two weeks starting on September 26, 2022, and finishing on October 9 2022, at <https://www.solutions.ca/EganvilleEA/>

If you are unable to log onto the Virtual Open House between **September 26 to October 9**, hard copies of the Open House Materials will be available for in-person viewing at the following locations:

- Township of Bonnechere Valley, 49 Bonnechere Street, Eganville (Municipal Office)
- Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office)
- North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville (Municipal Office)

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

Laura Hill, Environmental Scientist
Stantec Consulting Ltd.
Telephone: 613-784-2256
Email: EganvilleEA@stantec.com

Or visit the project website at:
<https://www.Enbridgegas.com/EganvilleProject>



Lumberjack Festival

Gracin Dombroskie looked like a lumberjack as he tosses his axe in the competition on Saturday.



John Foreman, 83, of Bancroft shows his expertise at using the broad axe to square timbers at the annual Killaloe, Hagarty and Richards Loggers' Festival Saturday. His demonstration attracted a lot of interest.

Until October 31



EGANVILLE MINI STORAGE

ONLY \$10 FOR YOUR FIRST MONTH OF STORAGE

CLAIM YOUR UNIT NOW

613 281 8825

eganvilleministorage@gmail.com

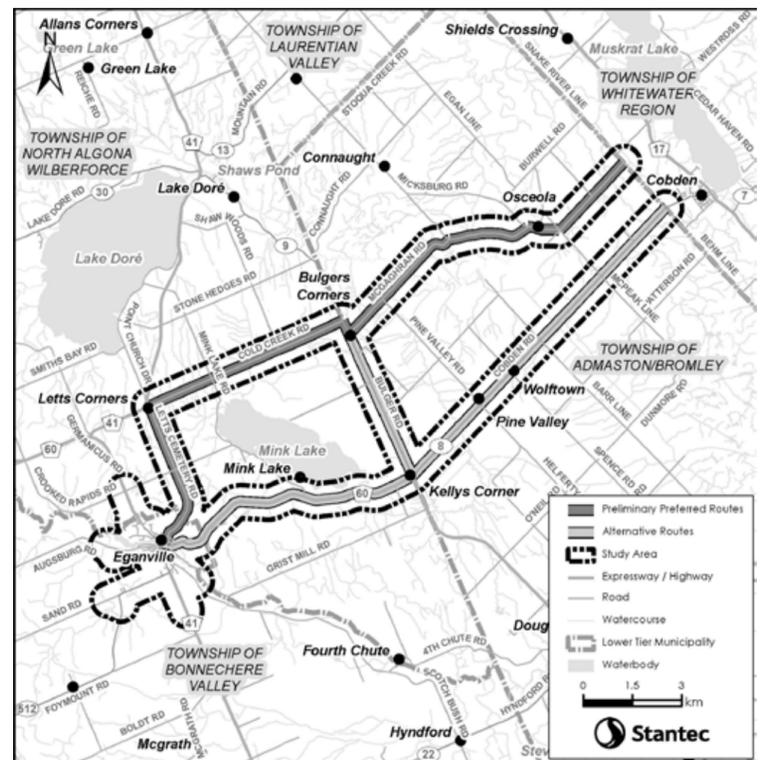
Enbridge Gas Inc. Notice of Study Commencement and Virtual Open House

Eganville Community Expansion Project

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



As part of the planning process, Enbridge Gas has retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Study for the Project. The Environmental Study will fulfill the requirements of the Ontario Energy Board's (OEB) "Environmental Guidelines for the Location, Construction, and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition (2016)". It is anticipated that the Environmental Report for the study will be completed in October 2022 after which Enbridge Gas 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 Q4 of 2023.

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- Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office)
- North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville (Municipal Office)

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

Laura Hill, Environmental Scientist
 Stantec Consulting Ltd.
Telephone: 613-784-2256
Email: EganvilleEA@stantec.com

Or visit the project website at:
<https://www.Enbridgegas.com/EganvilleProject>

Appendix B4: Notification Letters





September 14, 2022

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

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Eganville Community Expansion Project to provide affordable natural gas service to the community of Eganville (the Project). The Project will include the construction of new natural gas pipelines to transport natural gas supply from Snake River Line to new distribution system pipelines in Eganville, and distribute natural gas to residential, commercial and industrial customers in Eganville, and along the supply lateral, which is proposed to span the Townships of Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.

The Project consists of a supply lateral of approximately 21 kilometers (km) of a combination of 4-inch steel and of 6- and 8-inch polyethylene (PE) pipeline. The preliminary preferred route¹ for the supply lateral is proposed to travel from Snake River Line along Mcguinty Road to Mcgaghran Road, north on Bulger Road, and then along Cold Creek Road and Letts Cemetery Road to Eganville. Alternate routes being considered for the supply lateral would travel from Snake River Line along Cobden Road and Highway 60; along Cobden Road and then north on Bulger Road to intercept with the preliminary preferred route; or, from Snake River Line along Mcguinty Road to Mcgaghran Road, south on Bulger Road and west on Highway 60. For further details, please refer to the attached map.

The Project also includes a distribution system of up to 22 km of a combination of 6-inch, 4- inch and 2-inch PE pipeline and a pressure reducing station, will be constructed along the supply lateral.

The Project will be located within existing road allowances, where possible. Permanent easement and temporary working space and laydown areas may be required.

The Project is proposed to be placed into-service in phases, with the supply lateral proposed to be placed into service by Q4 2024 and the distribution pipelines being placed into service beginning as early as 2025.

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

An Environmental Report, summarizing the results of the Environmental Study, will accompany Enbridge Gas' application to the OEB as part of their Leave to Construct (LTC) application. It is anticipated that the Environmental Report for the study will be completed in December 2022, after which Enbridge Gas may file an LTC application. Construction is currently anticipated to begin in Q4 2023.

As an agency with jurisdiction or a potential interest in developments in the area, you are invited to provide or coordinate comments regarding the proposed Project. Specifically, Stantec is seeking information regarding planning principles or guidelines implemented by your agency that may affect routing, construction and/or operation of the proposed Project. Stantec is also seeking collection of primary and secondary data to help compile an environmental and socio-economic inventory. Enbridge Gas has also retained Stantec to complete a Stage 1 Archaeological Assessment, a Cultural Heritage

¹ The preliminary preferred or alternate route and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

September 14, 2022

«FIRST_NAME» «SURNAME», «POSITION»

Page 2 of 3

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

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.**

The Virtual Open House will be available for two weeks starting on **September 26, 2022** and finishing on **October 9, 2022** at <https://solutions.ca/EganvilleEA/>

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

- Township of Bonnechere Valley, 49 Bonnechere Street, Eganville (Municipal Office)
- Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office)
- North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville (Municipal Office)

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

<https://www.Enbridgegas.com/EganvilleProject>

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

We kindly request that any input and comments regarding the Project are provided by October 26, 2022.

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

Yours truly,

Stantec Consulting Ltd.

Laura Hill M.Env.Sc.
Environmental Scientist
Direct: 613-784-2256
EganvilleEA@stantec.com

Attachment: Figure 1 – Study Area

c. George Tatolis, Environmental Permitting Advisor, Enbridge Gas Inc.
Sonia Fazari, Sr. Advisor Municipal and Stakeholder Engagement, Enbridge Gas Inc.

Design with community in mind

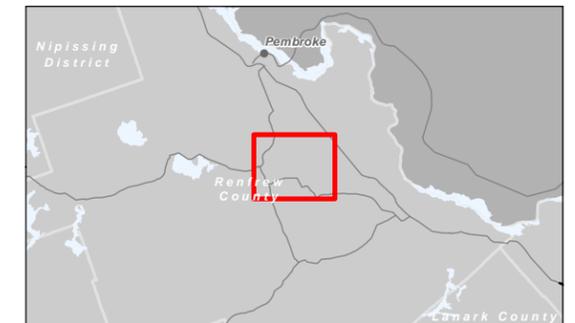


- Legend**
- Study Area
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody
- Proposed Routes**
- Phase 1 - Preliminary Preferred Route
 - Phase 2 - Preliminary Preferred Route
- Alternative Routes**
- Phase 1 - Alternative Route
 - Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3

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



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
 3. Orthoimagery © First Base Solutions, 2022. Imagery Date, 2008.



Project Location: 160951306 REV1
 County of Renfrew
 Prepared by KB on 2022-08-26
 Technical Review by SPE on 2022-08-05

Client/Project:
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 1
 Title
 Study Area



September 7, 2022

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

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Eganville Community Expansion Project to provide affordable natural gas to community of Eganville (the Project). The Project will include the construction of new natural gas pipelines to transport natural gas supply from Snake River Line to new distribution system pipelines in Eganville, and distribute natural gas to residential, commercial, and industrial customers in Eganville, and along the supply lateral, which is proposed to span the Townships of Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.

The Project consists of a supply lateral of approximately 21 kilometers (km) of a combination of 4-inch steel and of 6- and 8-inch polyethylene (PE) pipeline. The preliminary preferred route¹ for the supply lateral is proposed to travel from Snake River Line along Mcguinty Road to Mcgaghran Road, north on Bulger Road, and then along Cold Creek Road and Letts Cemetery Road to Eganville. Alternate routes being considered for the supply lateral would travel from Snake River Line along Cobden Road and Highway 60; along Cobden Road and then north on Bulger Road to intercept with the preliminary preferred route; or, from Snake River Line along Mcguinty Road to Mcgaghran Road, south on Bulger Road and west on Highway 60. For further details, please refer to the attached map.

The Project also includes a distribution system of up to 22 km of a combination of 6-inch, 4- inch and 2- inch PE pipeline and a pressure reducing station, will be constructed along the supply lateral. The Project will be located within existing road allowances, where possible. Permanent easement and temporary working space and laydown areas may be required.

The Project is proposed to be placed into-service in phases, with the supply lateral proposed to be placed into service by Q4 2024 and the distribution pipelines being placed into service beginning as early as 2025.

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

An Environmental Report, summarizing the results of the Environmental Study, would accompany Enbridge Gas' application to the OEB as part of the application requesting leave to construct (LTC). It is anticipated that the Environmental Report for the study will be completed in December 2022, after which Enbridge Gas may file an LTC application. Construction is currently anticipated to begin in Q4 2023.

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 <NATION_NAME> to provide comments and feedback regarding the proposed Project. Specifically, we are seeking information about areas that may be culturally significant to your community in the study area and information about potential effects that the Project may have on asserted or established Aboriginal and treaty rights, and any measures for mitigating those adverse impacts.

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

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

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

The Virtual Open House will be available for two weeks starting on **September 26, 2022** and finishing on **October 9, 2022** at <https://www.solutions.ca/EganvilleEA/>

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

- Township of Bonnechere Valley, 49 Bonnechere Street, Eganville (Municipal Office)
- Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office)
- North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville (Municipal Office)

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

Enbridge Gas is committed to meaningful engagement with Indigenous communities. As such, we would be interested in holding a conference call with the <NATION_NAME> 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 <NATION_NAME> 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 October 26, 2022.

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 Eganville Community Expansion Project, please do not hesitate to contact me directly.

Regards,



Melanie Book

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

Attachment: Figure 1 – Study Area

c. George Tatolis, Environmental Permitting Advisor, Enbridge Gas Inc
Laura Hill, Stantec Consulting Ltd.



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



September 14, 2022

Dear Landowner / Resident

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

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Eganville Community Expansion Project to provide affordable natural gas service to the community of Eganville (the Project). The Project will include the construction of new natural gas pipelines to transport natural gas supply from Snake River Line to new distribution system pipelines in Eganville, and distribute natural gas to residential, commercial and industrial customers in Eganville, and along the supply lateral, which is proposed to span the Townships of Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.

The Project consists of a supply lateral of approximately 21 kilometers (km) of a combination of 4-inch steel and of 6- and 8-inch polyethylene (PE) pipeline. The preliminary preferred route¹ for the supply lateral is proposed to travel from Snake River Line along Mcguinty Road to Mcgaghan Road, north on Bulger Road, and then along Cold Creek Road and Letts Cemetery Road to Eganville. Alternate routes being considered for the supply lateral would travel from Snake River Line along Cobden Road and Highway 60; along Cobden Road and then north on Bulger Road to intercept with the preliminary preferred route; or, from Snake River Line along Mcguinty Road to Mcgaghan Road, south on Bulger Road and west on Highway 60. For further details, please refer to the attached map.

The Project also includes a distribution system of up to 22 km of a combination of 6-inch, 4- inch and 2-inch PE pipeline and a pressure reducing station, will be constructed along the supply lateral.

The Project will be located within existing road allowances, where possible. Permanent easement and temporary working space and laydown areas may be required.

The Project is proposed to be placed into-service in phases, with the supply lateral proposed to be placed into service by Q4 2024 and the distribution pipelines being placed into service beginning as early as 2025.

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

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

¹ The preliminary preferred or alternate route and ancillary facilities have been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final project scope/design that will provide access to natural gas to end-use customers.

An Environmental Report, summarizing the results of the Environmental Study, would accompany Enbridge Gas' application to the OEB as part of the application requesting a Leave to Construct (LTC). It is anticipated that the Environmental Report for the study will be completed in December 2022, after which Enbridge Gas may file an LTC application. Construction is currently anticipated to begin in Q4 2023.

The Virtual Open House will be available for two weeks starting on **September 26, 2022 and finishing on October 9, 2022** at <https://www.solutions.ca/EganvilleEA/>

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

- Township of Bonnechere Valley, 49 Bonnechere Street, Eganville (Municipal Office)
- Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office)
- North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville (Municipal Office)

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

Consultation and engagement with Indigenous communities, landowners, government agencies, and other interested persons is an integral component of the planning process. As a result of the on-going COVID-19 pandemic, a Virtual Open House will be held in place of an in-person Open House and hard copies of the materials will be available for review in the community (as outlined above).

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

We kindly request that any input and comments regarding the Project are provided by October 26, 2022.

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

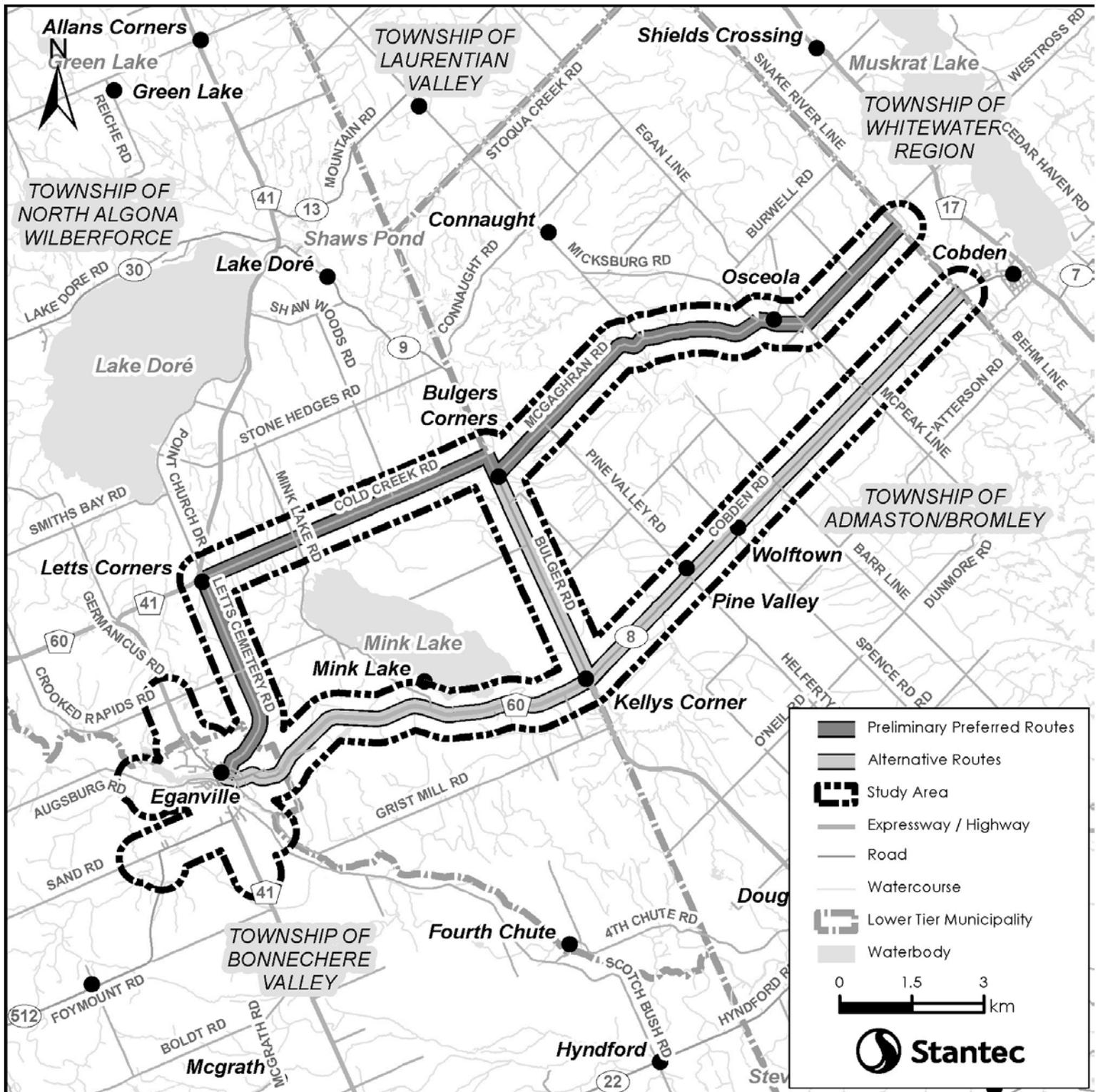
Regards,

Stantec Consulting Ltd.

Laura Hill M.Env.Sc
Environmental Scientist
Direct: 613-784-2256
EganvilleEA@stantec.com

Attachment: Figure 1 – Study Area

c. George Tatolis, Environmental Permitting Advisor, Enbridge Gas Inc
Sonia Fazari, Sr. Advisor Municipal and Stakeholder Engagement, Enbridge Gas Inc.



Appendix B5: Virtual Open House materials





Eganville Community Expansion Project Virtual Open House

Presented on behalf of Enbridge Gas



Eganville Community Expansion Project Virtual Open House



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

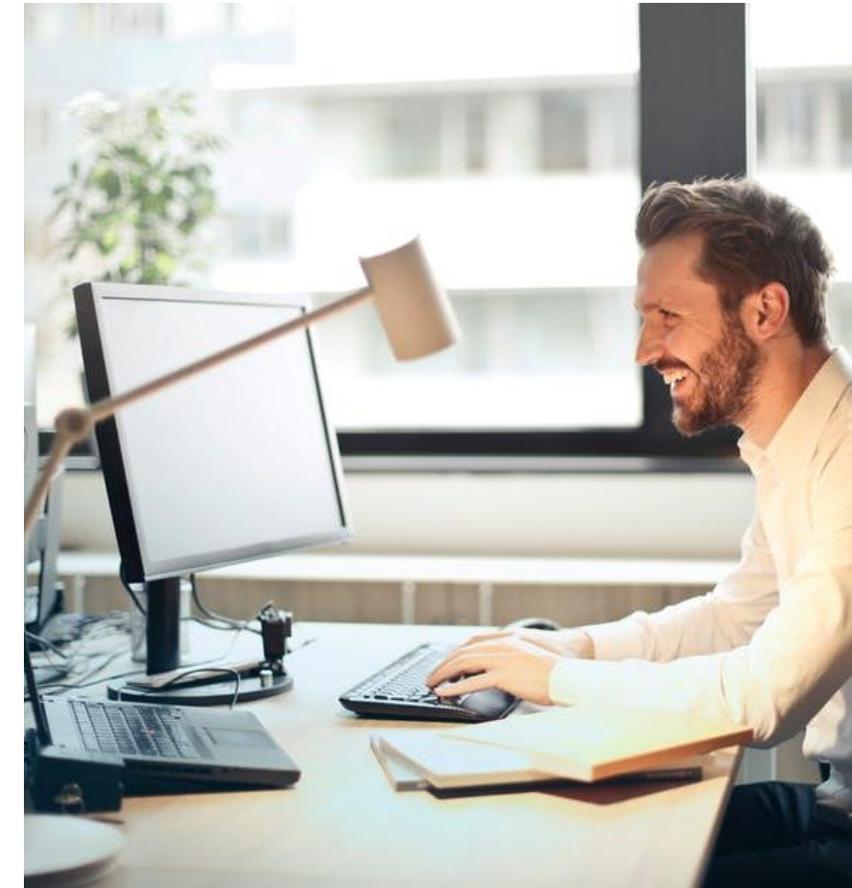


Eganville Community Expansion Project

Virtual Open House

Purpose of the Virtual Open House

- Provide a safe alternative to an in-person meeting due to the on-going COVID-19 pandemic.
- Consult with Indigenous communities, and engage with members of the public, and regulatory authorities regarding the proposed pipeline route, potential impacts, and proposed mitigations.
- Provide an opportunity for these individuals and any affected landowners and the general public to review the proposed Project, and to ask any questions and/or provide comments to representatives from Enbridge Gas and Stantec.
- Print copies of these Open House Materials are also available for in-person review at the following locations
 - Township of Bonnechere Valley, 49 Bonnechere Street, Eganville (Municipal Office)
 - Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office)
 - North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville (Municipal Office)

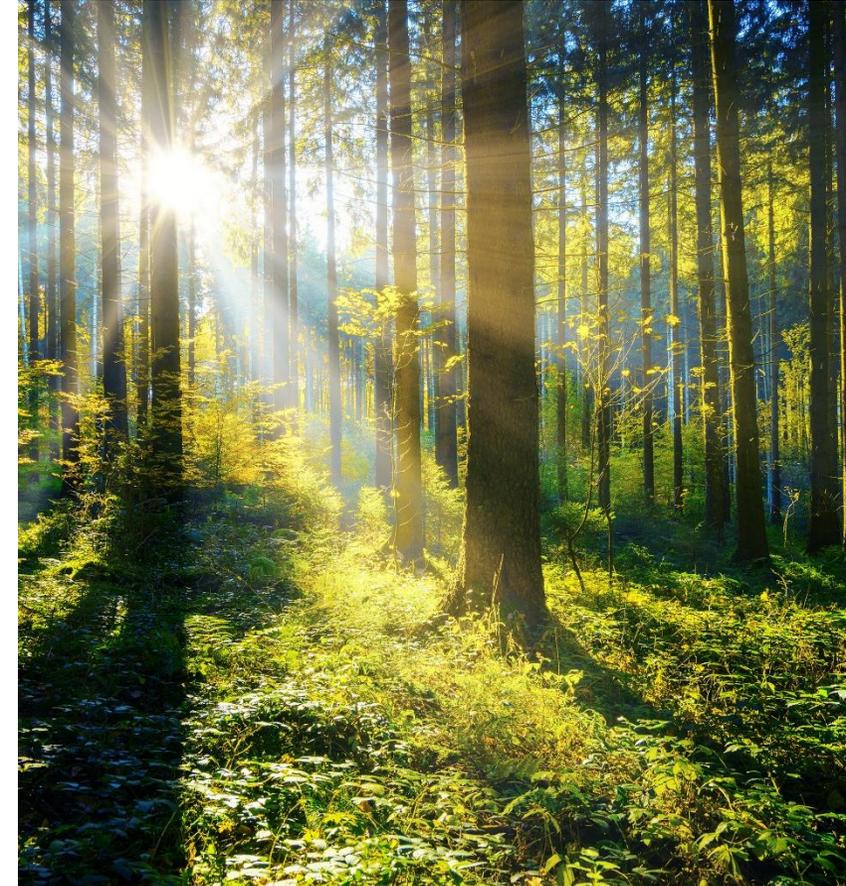


Eganville Community Expansion Project Virtual Open House



Land Acknowledgement

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



Eganville Community Expansion Project

Virtual Open House



Indigenous Peoples Policy

Enbridge Inc. recognizes the diversity of Indigenous peoples who live where we work and operate. We understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge Inc. recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes for Indigenous communities. Enbridge Inc. commits to pursue sustainable relationships with Indigenous Nations and groups in proximity to where Enbridge Inc. conducts business. To achieve this, Enbridge Inc. will govern itself by the following principles:

- We recognize the legal and constitutional rights possessed by Indigenous peoples, and the importance of the relationship between Indigenous Peoples and their traditional lands and resources. We commit to working with Indigenous communities in a manner that recognizes and respects those legal and constitutional rights and the traditional lands and resources to which they apply. We commit to ensuring that our projects and operations are carried out in an environmentally responsible manner.
- We understand the importance of the United Nations Declaration on the Rights of Indigenous Peoples in the context of existing Canadian law and the commitments that the government has made to protecting the rights of Indigenous Peoples.
- We engage in forthright and sincere consultation with Indigenous Peoples about Enbridge Inc. projects and operations through processes that seek to achieve early and meaningful engagement. Indigenous engagement 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 Inc.'s employees and contractors, in order to create better relationships between Enbridge Inc. and Indigenous communities.

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



Eganville Community Expansion Project

Virtual Open House



Project Overview

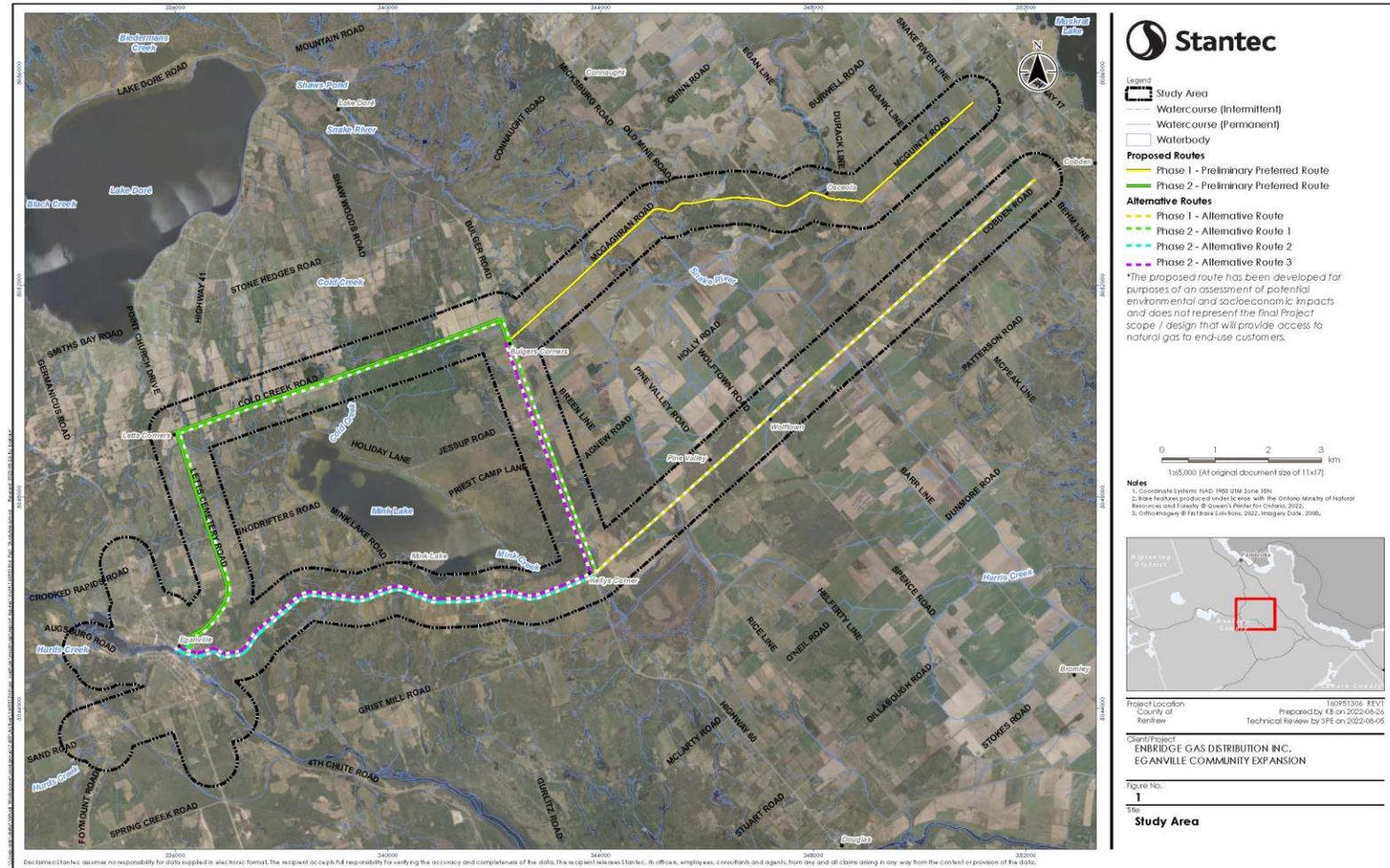
- The Project will involve
 - the installation of supply lateral natural gas pipeline composed of approximately 21 kilometers (km) of a combination of 4-inch steel and of 6- and 8-inch polyethylene (PE) pipeline
 - the installation of the distribution portion of the project includes approximately 22 km of a combination of 6-inch, 4- inch and 2-inch PE pipeline
 - a pressure reducing station located along the supply lateral.
- The preliminary preferred or alternate route and ancillary facilities will be constructed within the Townships of: Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.
- The preliminary preferred route for the supply lateral is proposed to travel from Snake River Line along Mcguinty Road to Mcgaghran Road, north on Bulger Road, and then along Cold Creek Road and Letts Cemetery Road to Eganville.
- Alternate routes being considered for the supply lateral would travel from Snake River Line along Cobden Road and Highway 60; along Cobden Road and then north on Bulger Road to intercept with the preliminary preferred route; or, from Snake River Line along Mcguinty Road to Mcgaghran Road, south on Bulger Road and west on Highway 60.
- The Project is proposed to be placed into-service in phases, with the supply lateral proposed to be placed into service by 2024 and the distribution pipelines being placed into service beginning as early as 2025.



Eganville Community Expansion Project Virtual Open House

Map of Preliminary Preferred Routes and Alternate Routes

- The preliminary preferred or 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.



Eganville Community Expansion Project Virtual Open House



Environmental Study Process

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

The study will:

- Undertake engagement to understand the views of interested and potentially affected parties.
- Consult with Indigenous communities to understand interests and potential impacts.
- Be conducted during the earliest phase of the Project.
- Identify potential impacts of the Project.
- Develop environmental mitigation and protective measures to avoid or reduce potential impacts.
- Develop an appropriate environmental inspection, monitoring, and follow-up program.



Eganville Community Expansion Project Virtual Open House



Ontario Energy Board (OEB) Review and Approval Process

It is anticipated that the Environmental Report for the study will be completed in December 2022, after which Enbridge Gas may file a Leave-to-Construct (LTC) application. The application to the OEB will include the following information on the Project:

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

Additional information about the OEB process can be found at:
www.ontarioenergyboard.ca

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

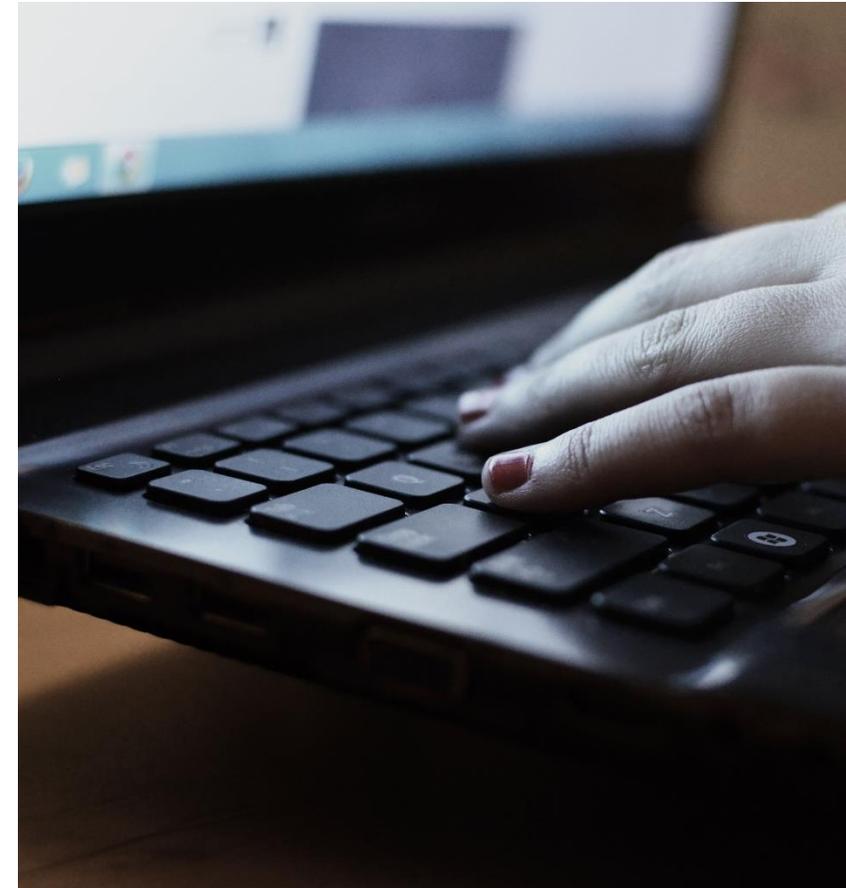


Eganville Community Expansion Project Virtual Open House



Consultation and Engagement

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



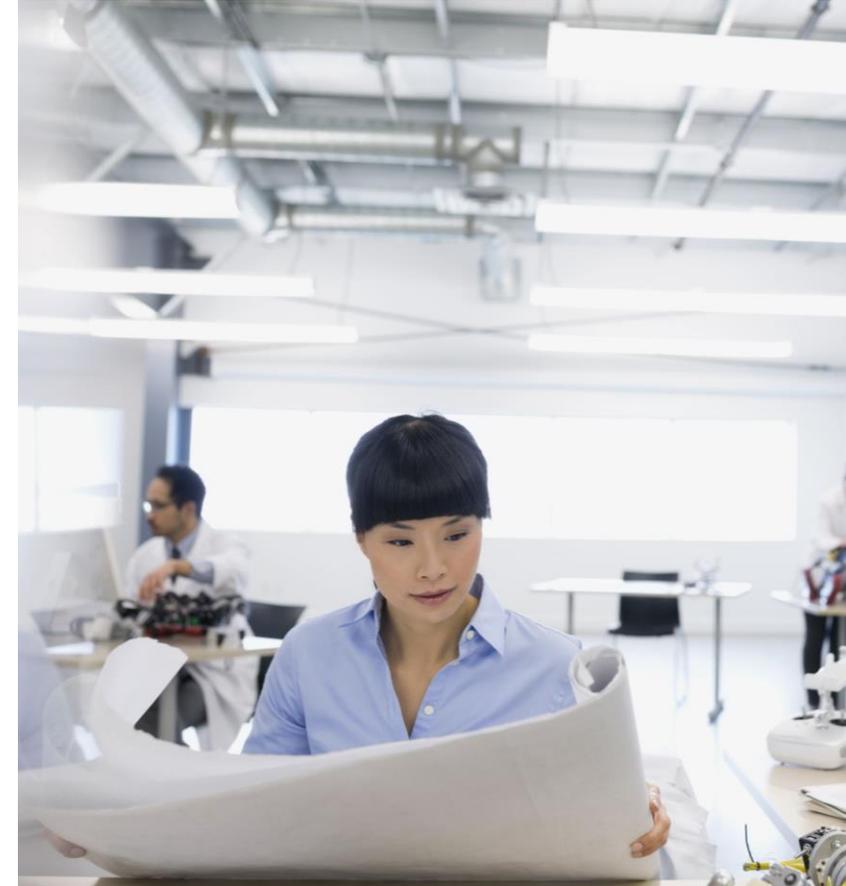
Eganville Community Expansion Project Virtual Open House



Route Selection Process

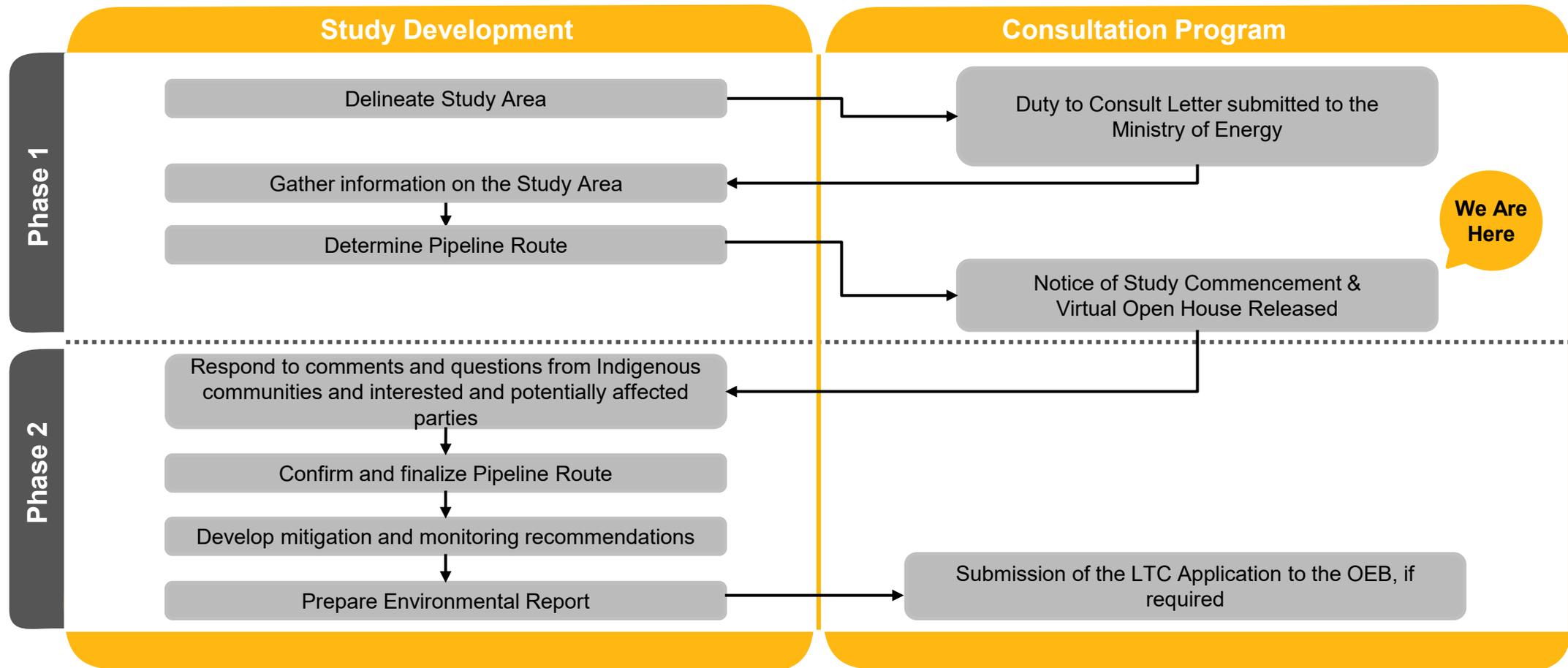
- Pipeline routing constraints include natural environmental features, slope, topography, and socio-economic features and landscapes. Opportunities include the ability to follow existing linear infrastructure such as road right-of-ways (ROWs).
- The proposed Preliminary Preferred and Alternative Routes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

An interactive map that shows the entire proposed Route and the alternative segments can be accessed at: www.solutions.ca/EganvilleEA



Eganville Community Expansion Project Virtual Open House

Environmental Study Process



Eganville Community Expansion Project Virtual Open House



Environment, Health and Safety Policy

Our commitment

- Enbridge Gas is committed to protecting the health and safety of all individuals affected by our activities.
- Enbridge Gas will provide a safe and healthy working environment and will not compromise the health and safety of any individual.
- Our goal is to have no incidents and mitigate impacts on the environment by working with our stakeholders, peers, and others to promote responsible environmental practices and continuous improvement.
- Enbridge Gas is committed to environmental protection and stewardship, and we recognize that pollution prevention, biodiversity, and resource conservation are key to a sustainable environment.
- All employees are responsible and accountable for contributing to a safe working environment, for fostering safe working attitudes, and for operating in an environmentally responsible manner.



Eganville Community Expansion Project

Virtual Open House



Access and Land Requirements

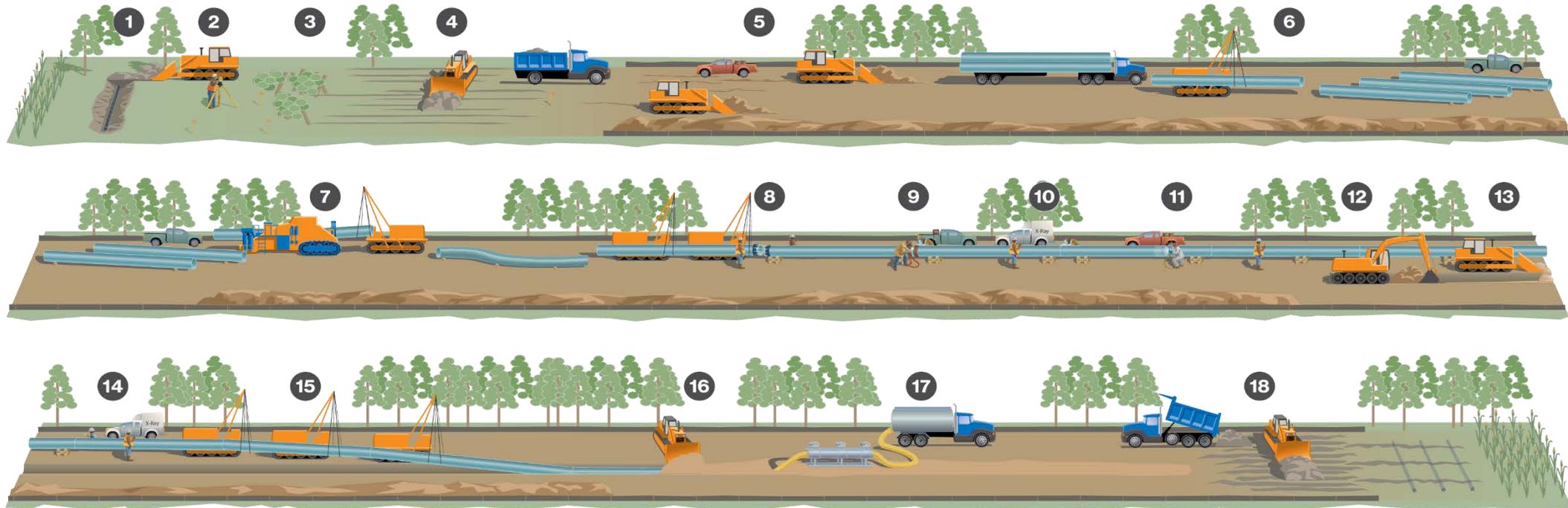
- While the majority of the pipeline route will be constructed within existing road allowances, some circumstances requiring access agreements, permanent easement or temporary working space and laydown areas during construction could result in the need for additional land outside of road allowances,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



Eganville Community Expansion Project Virtual Open House



Constructing an Enbridge Gas Pipeline



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

- 4. Right-of-way topsoil stripping
- 5. Front-end grading
- 6. Stringing pipe

- 7. Field bending pipe
- 8. Lining-up pipe
- 9. Welding process

- 10. X-ray or ultrasonic inspection, weld repair
- 11. Field coating
- 12. Digging the trench

- 13. Padding trench bottom
- 14. Final inspection and coating repair
- 15. Lowering pipe

- 16. Backfilling
- 17. Hydrostatic testing
- 18. Site restoration and post-construction tiling



Eganville Community Expansion Project Virtual Open House



Socio-economic Features

The Project will mainly be constructed in existing road allowances. As a result of construction, private businesses, agricultural operations, residential land and cottages along the pipeline route may be impacted.

Potential Effects

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

Example Mitigation Measures

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



Eganville Community Expansion Project

Virtual Open House



Aquatic Resources

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

Potential Effects

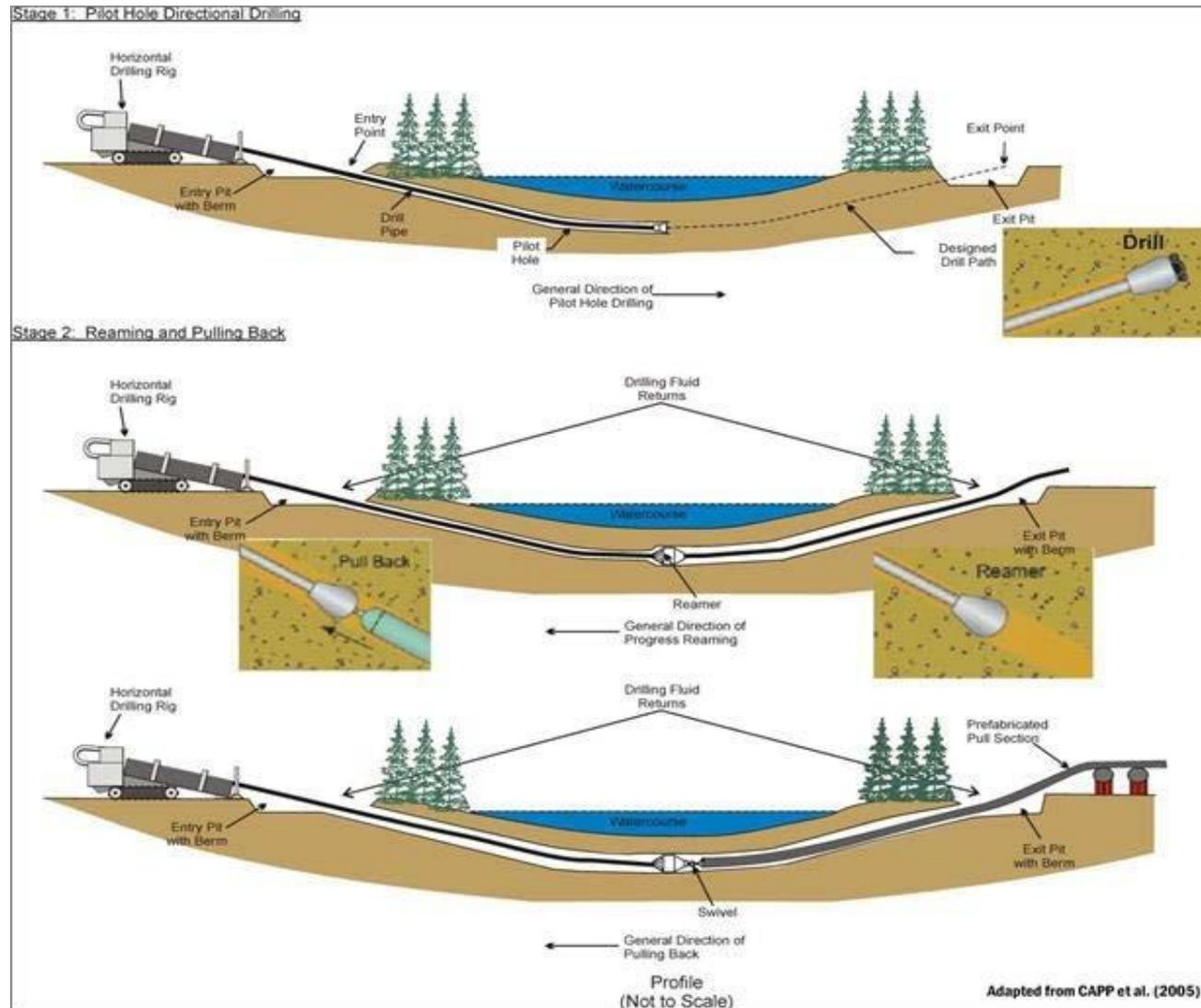
- Disruption and alteration to aquatic species and habitat and/or nuisance effects.
- Increased erosion, sedimentation, and turbidity resulting from removal of vegetation.

Example Mitigation Measures

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



Horizontal Directional Drilling (HDD) Procedures



Eganville Community Expansion Project

Virtual Open House



Terrestrial Resources

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

Potential Effects

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

Example Mitigation Measures

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



Eganville Community Expansion Project

Virtual Open House



Cultural Heritage Resources

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

Potential Effects

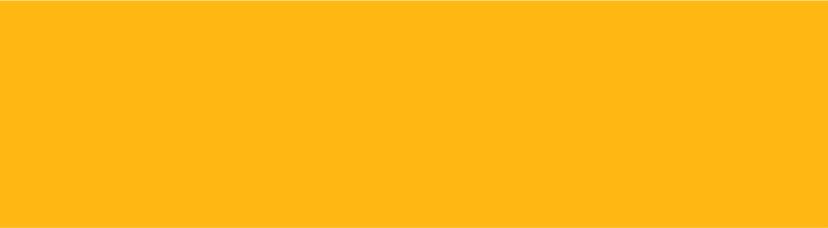
- Damage or destruction of archaeological or historical resources.

Example Mitigation Measures

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



Eganville Community Expansion Project Virtual Open House



Pipeline Design

The high-grade plastic and steel pipeline is designed to meet and/or exceed the regulations of the Canadian Standards Association (Z662 Oil and Gas Pipeline Systems) and the applicable regulations of the Technical Standards & Safety Association (TSSA).

Pipeline Safety and Integrity

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

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

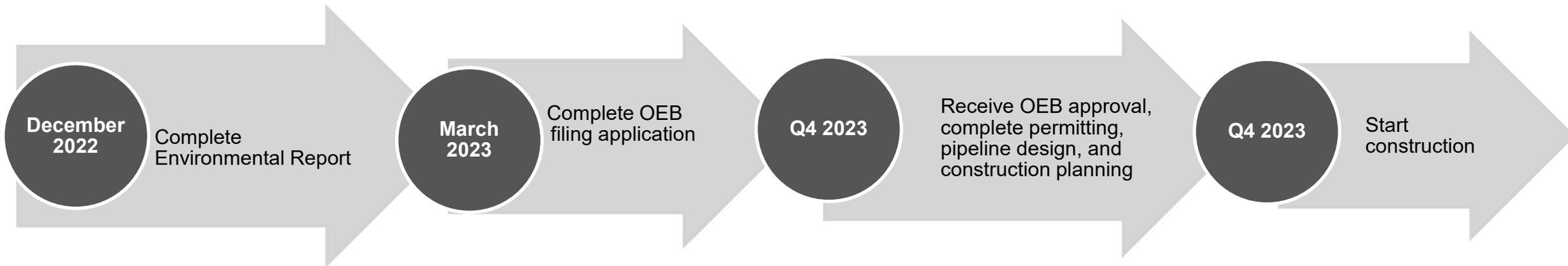


Eganville Community Expansion Project Virtual Open House



Next Steps

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



Eganville Community Expansion Project Virtual Open House



Thank-you!

On behalf of the Project team, thank-you for listening to the Virtual Open House presentation. Please complete the Questionnaire, located in the Resources Tab. Please complete the Questionnaire by October 26, 2022 for your comments to be considered as part of the Environmental Report.

Laura Hill

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For more information about the proposed project, please visit our project website at: <https://www.Enbridgegas.com/EganvilleProject>



Slide #	Slide Theme	Script
1	Title Page	Thank-you for viewing the Virtual Open House for the Eganville Community Expansion Project. This presentation has been prepared by Stantec Consulting Ltd. on behalf of Enbridge Gas.
2	Welcome/ Our Commitment	<p>Welcome</p> <p>Thank-you for viewing the Virtual Open House for the Eganville Community Expansion Project. You may pause the presentation at any time to read over the presentation slides. A copy of the presentation slides is available for download from the Resources Tab. Questions and comments can be submitted using the questionnaire, also found on the Resources tab, and an Enbridge Gas or Stantec representative will respond.</p> <p>If you would like to receive future Project updates, please complete the "Contact Information" section of the questionnaire.</p> <p>Our Commitment</p> <p>Enbridge Gas is committed to involving indigenous communities, agencies, interest groups, and community members in this proposed project by providing you with up-to-date information in an open, honest and respectful manner, and will carefully consider your input.</p> <p>Enbridge Gas provides safe and reliable delivery of natural gas to more than 3.8 million residential, commercial, and industrial customers across Ontario. Enbridge Gas is committed to environmental stewardship and conducts all operations in an environmentally responsible manner.</p>
3	Purpose of the Virtual Open House	<p>The Purpose of the Virtual Open House is to consult with Indigenous communities and engage with members of the public and regulatory authorities regarding the proposed route, potential impacts, and mitigation measures. The Virtual Open House also provides an opportunity for individuals to ask any questions and provide comments to representatives from Enbridge Gas and Stantec. Print copies of these Open House Materials are also available for in-person review at the following locations</p> <ul style="list-style-type: none"> • Township of Bonnechere Valley, 49 Bonnechere Street, Eganville (Municipal Office) • Township of Admaston/Bromley, 477 Stone Road, R.R.2, Renfrew (Municipal Office) • North Algona Wilberforce Township, 1091 Shaw Woods Road, Eganville (Municipal Office)
4	Land Acknowledgement	We respectfully acknowledge that the Project is located in the traditional and treaty territory of the Michi Saagiig (Mississauga) and Chippewa Nations, collectively known as the Williams Treaties First Nations – Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Mississaugas of Scugog Island First Nation, Chippewas of Rama First Nation, Beausoleil First Nation, Chippewas of Georgina Island First Nation, Mohawks of the Bay of Quinte, Algonquins of Ontario and Algonquins of Pikwakanagan.

5	Indigenous Peoples Policy	<p>Enbridge Inc. recognizes the diversity of Indigenous peoples who live where we work and operate. We understand from history the destructive impacts on the social and economic wellbeing of Indigenous Peoples. Enbridge Inc. recognizes and realizes the importance of reconciliation between Indigenous communities and the broader society. Positive relationships with Indigenous peoples, based on mutual respect and focused on achieving common goals, will create positive outcomes for Indigenous communities. Enbridge Inc. commits to pursue sustainable relationships with Indigenous Nations in proximity to where Enbridge Inc. conducts business. To achieve this, Enbridge Inc. will govern itself by the following principles as seen on this slide.</p>
6	Project Overview	<p>The Project will involve</p> <ul style="list-style-type: none"> • the installation of supply lateral natural gas pipeline composed of approximately 21 kilometers (km) of a combination of 4-inch steel and of 6- and 8-inch polyethylene (PE) pipeline • the installation of the distribution portion of the project includes approximately 22 km of a combination of 6-inch, 4- inch and 2-inch PE pipeline • a pressure reducing station located along the supply lateral <p>The preliminary preferred or alternate route and ancillary facilities will be constructed within the Townships of: Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.</p> <p>The preliminary preferred route for the supply lateral is proposed to travel from Snake River Line along Mcguinty Road to Mcgaghran Road, north on Bulger Road, and then along Cold Creek Road and Letts Cemetery Road to Eganville.</p> <p>Alternate routes being considered for the supply lateral would travel from Snake River Line along Cobden Road and Highway 60; along Cobden Road and then north on Bulger Road to intercept with the preliminary preferred route; or, from Snake River Line along Mcguinty Road to Mcgaghran Road, south on Bulger Road and west on Highway 60.</p> <p>The Project is proposed to be placed into-service in phases, with the supply lateral portion (which includes Phases 1 and 2) proposed to be placed into service by 2024 and the distribution pipelines (which include Phases 3 and 4) being placed into service beginning as early as 2025.</p>
7	Project Route Map	<p>This slide shows an image of the preliminary preferred routes and alternate routes being considered.</p> <p>The preliminary preferred route for Phase 1 of the supply lateral is proposed to travel from Snake River Line along Mcguinty Road to Mcgaghran Road; the preliminary preferred route for Phase 2 of the supply lateral is proposed to travel north on Bulger Road, west along Cold Creek Road and south on Letts Cemetery Road to Eganville (Phase 2).</p> <p>One alternate route is being considered for Phase 1 of the supply lateral and would travel from Snake River Line along Cobden Road to Bulger Road. Three alternate routes are being considered for Phase 2 including from Cobden Road west along Highway 60 to Eganville, or from Cobden Road, north along Bulger Road, west along</p>

		<p>Cold Creek Road and south on Letts Cemetery Road to Eganville, or south along Bulger Road from Mcgaghran Road to Highway 60 and then west along Highway 60 to Eganville.</p> <p>The preliminary preferred or 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.</p>
8	Environmental Study Process	<p>The environmental study and Environmental Report will be completed according to the Ontario Energy Board's Environmental Guidelines.</p> <p>The study will:</p> <ul style="list-style-type: none"> • Undertake engagement to understand the views of interested and potentially affected parties. • Consult with Indigenous communities and key stakeholders to understand interests and potential impacts. • Be conducted during the earliest phase of the Project. • Identify potential impacts of the Project. • Develop environmental mitigation and protective measures to avoid or reduce potential impacts; and, • Develop an appropriate environmental inspection, monitoring, and follow-up program.
9	OEB Review and Approval Process	<p>It is anticipated that the Environmental Report for the study will be completed in December 2022, after which Enbridge Gas may file a Leave-to-Construct application. The application to the Ontario Energy Board will include the following information on the Project:</p> <ul style="list-style-type: none"> • The need for the Project • Environmental Report and mitigation measures • Project costs and economics • Pipeline design and construction • Land requirements • Consultation with Indigenous Communities <p>The Ontario Energy Board will then hold a public hearing to review the Project. If the Ontario Energy Board determines that the Project is in the public interest, it will approve construction of the Project. Additional information about the Ontario Energy Board process can be found on their website.</p>
10	Consultation and Engagement	<p>Consultation and engagement are a key component of the Environmental Report being completed as part of the Leave to Construct Application. It helps to identify and address indigenous community and stakeholder concerns in the early stages of a project.</p> <p>Enbridge Gas submits a Project Description to the Ministry of Energy who then use this Project Description to determine potential impacts on aboriginal and treaty rights and identify indigenous communities that Enbridge Gas must consult with during the entirety of the Project.</p>

		<p>Input from this Virtual Open House will be used to help finalize the pipeline route and to create mitigation plans to be implemented in the final design and construction.</p> <p>Once the Leave-to-Construct application is submitted to the Ontario Energy Board, any party with an interest in the Project can participate in their review process.</p>
11	Route Selection Process	<p>Pipeline routing constraints include natural environmental features, slope, topography, and socio-economic features and landscapes. Opportunities include the ability to follow existing linear infrastructure such as road right-of-ways (ROWs).</p> <p>The proposed Preliminary Preferred and Alternative Routes follow existing linear infrastructure such as existing municipal road ROWs and avoid, to the extent possible, existing environmental and socio-economic features.</p> <p>An interactive map that shows the entire proposed Route and the alternative segments can be accessed at: www.solutions.ca/EganvilleEA</p>
12	Environmental Study Process	<p>This slide shows the environmental study process that Enbridge Gas follows as part of the Ontario Energy Board's Environmental Guidelines. Enbridge Gas is currently nearing the end of Phase 1.</p>
13	Environment, Health and Safety Policy	<p>Enbridge Gas is committed to protecting the health and safety of all individuals affected by our activities.</p> <p>Enbridge Gas will provide a safe and healthy working environment and will not compromise the health and safety of any individual.</p> <p>Our goal is to have no incidents and mitigate impacts on the environment by working with our stakeholders, peers, and others to promote responsible environmental practices and continuous improvement.</p> <p>Enbridge Gas is committed to environmental protection and stewardship, and we recognize that pollution prevention, biodiversity, and resource conservation are key to a sustainable environment.</p> <p>All employees are responsible and accountable for contributing to a safe working environment, for fostering safe working attitudes, and for operating in an environmentally responsible manner.</p>
14	Access and Land Requirements	<p>While the majority of the pipeline route will be constructed within municipal road allowances, some circumstances requiring access agreements, permanent easement or temporary working space during construction could result in the need for additional land outside of road allowances.</p> <p>Enbridge Gas has a comprehensive Landowner Relations Program that uses a dedicated Lands Advisor who would:</p> <ul style="list-style-type: none"> • Provide direct contact & liaison between landowners and Enbridge Gas. • Be available to the landowner during the length of the Project and throughout construction activities. • Address the concerns and questions of the landowner.

		<ul style="list-style-type: none"> • Act as a singular point of contact for all landowners. • Address any landowner questions and any legal matters relating to temporary use of property, access agreements, permanent easements, and impacts or remedy to property.
15	Pipeline Construction	This slide shows an infographic of typical pipeline construction procedures. Please press “pause” to review these procedures. When you are ready to move onto the next slide, please press “next”.
16	Socio-economic Features	<p>The Project will mainly be constructed in existing road allowances. As a result of construction, private businesses, agricultural operations, residential land and cottages along the pipeline route may be impacted.</p> <p>Potential socio-economic effects of construction include temporary increases in noise, dust and air emissions, increased construction traffic, temporary impairment of residential and/or cottage property use and vegetation clearing.</p> <p>Some of the mitigation measures that could be implemented during construction include providing access across construction areas, restricting construction to daylight hours, adhering to applicable noise by-laws, implementing a water well monitoring program, and re-vegetating cleared areas. Additional examples are provided on this slide for your review.</p>
17	Aquatic Resources	<p>Enbridge Gas understands the importance of protecting watercourses, wetlands, and associated wildlife during construction and therefore will implement recognized mitigation measures to reduce possible environmental effects.</p> <p>Potential Effects to aquatic environments include disruption and alteration to aquatic species and habitat, increased erosion, sedimentation, and turbidity resulting from removal of vegetation.</p> <p>The following are examples of mitigation measures that may be implemented to minimize the potential effects of construction:</p> <ul style="list-style-type: none"> • Install erosion and sediment control measures. • Obtaining all agency permits and approvals. • Conform to fish timing window guidelines, • Horizontal Directional Drill and/or trenchless drill within or near environmentally sensitive features. • For in-channel construction, protect aquatic species through methods such as flow diversion and/or dewatering, fish rescue planning etc., and manage sedimentation and turbidity. • Restore and seed disturbed areas to establish habitat and reduce erosion, if necessary; and • Replant vegetation along waterways.
18	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 onto the next slide, please press “next”.

19	Terrestrial Resources	<p>During construction, natural environmental features such as wildlife habitat and vegetated or wooded areas will need to be crossed. Potential effects include damage of vegetation and wildlife in the construction area.</p> <p>Prior to construction, surveys (including Species at Risk surveys) will be conducted to determine opportunities for wildlife habitat to exist. Tree removals will be conducted outside of migratory bird windows (typically from April 1 – August 31), to the extent possible. Construction areas will be clearly marked to avoid accidental damage and affected areas will be restored or seeded to establish habitat and reduce erosion. Permits from conservation authorities, municipalities, and agencies will be secured as required, and conditions outlined will be followed in order to minimize damage and disturbance to vegetation and wildlife.</p>
20	Cultural Heritage Resources	<p>During construction, cultural heritage features such as archaeological finds, buildings, fences, and landscapes may be encountered. Detailed field surveys will be conducted by independent, third-party archaeologists and cultural heritage professionals prior to construction, if required.</p> <p>As outlined on this slide, there are several mitigation measures that will be employed to minimize the potential effects construction could have on cultural heritage, as approved by the Ministry of Tourism, Culture and Sports.</p>
21	Pipeline Design	<p>The high-grade plastic and steel pipeline is designed to meet or exceed the regulations of the Canadian Standards Association and the applicable regulations of the Technical Standards & Safety Association.</p> <p>Enbridge Gas takes many steps to ensure safe, reliable operation of the network of natural gas pipelines, such as designing, constructing, and testing pipelines to meet or exceed requirements set by industry standards and regulatory authorities, continuously monitoring the entire network, and perform regular field surveys to detect leaks and confirm corrosion prevention methods are working as intended.</p>
22	Next Steps	<p>Serving hundreds of communities in Ontario, we at Enbridge Gas consider ourselves strong community partners who believe in and are committed to consultation and engagement.</p> <p>During the planning stages for this Project, we have consulted and will continue to consult with Indigenous Communities and engage with local landowners, government agencies and other interested parties that could be impacted by the Project.</p> <p>After this Virtual Open House is complete, we plan to complete our Environmental Report. When complete, we may submit it to the Ontario Energy Board along with other Leave-to-Construct documents. If a Leave-to-Construct is required, we anticipate we'll receive a response from the Ontario Energy Board by Q4 of 2023. Permitting, pipeline design, and construction planning will then take place. We would plan to start construction in Q4 of 2023 and be in service by 2025.</p>

23	Thank-you	<p>On behalf of the Project team, thank-you for listening to the Virtual Open House presentation for the Eganville Community Expansion Project.</p> <p>If you have any questions or comments, or you would like to be kept up to date on the Project please complete the Questionnaire located in the Resources Tab. Please complete the Questionnaire by October 26, 2022, to be considered as part of the Environmental Report that will be submitted to the Ontario Energy Board. Please note that comments will still be received after this date and will be reviewed and considered during the planning and design phase, as applicable.</p> <p>To return to a specific slide, please press the “menu” button and select the slide you wish to review. To close the presentation, please press the “save and exit” button.</p> <p>For more information about the proposed project, please visit our project website at the website link shown on this slide.</p>
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Eganville Community Expansion Project Virtual Open House Questionnaire



Thank you for attending the Eganville Community Expansion Project Virtual Open House! We hope the session was informative and we would appreciate your comments and feedback. If you require any assistance or clarification while completing this questionnaire, please send an email to EganvilleEA@stantec.com or call (613) 784-2256 and leave a detailed message. If you have a question that requires a response, please fill out the **Contact Information** section at the end of this form and a representative will respond as soon as possible.

Please complete this questionnaire by **October 26, 2022**, 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.

Eganville Community Expansion Project Virtual Open House Questionnaire

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

Yes

No

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

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

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

Newspaper Advertisement

Project Notification Letter

Word of Mouth

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?

Eganville Community Expansion Project Virtual Open House Questionnaire

Thank you for completing this questionnaire. If you would like to be informed of Project updates, please provide us with your full contact information. If you have a question about the Project that has not been addressed or for which you would like more information, please email us at: EganvilleEA@stantec.com or call (613) 784-2256 and leave a detailed message.

Contact Information

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

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

Appendix B6: Environmental Consultation Log



Correspondence Tracking - Agencies and Municipalities

Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
See Appendix B1	Former Ministry of Energy (MOE)	N/A	Email	13-Apr-22	Submission of a Project description to the Ministry of Energy (MOE), formerly the Ministry of Energy, Northern Development and Mines (MENDM) to provide details on the Project location and to determine the requirements of the duty to consult.	N/A	N/A
See Appendix B1 and B2	All agencies and municipalities on the Project's Contact Lists	N/A	Email	14-Sep-22	Notice of Study Commencement and Virtual Open House.	N/A	N/A
1	Department of Fisheries and Oceans Canada	Kyle Mataya Biologist fisheriesprotection@dfo-mpo.gc.ca	Email	14-Sep-22	The DFO provided confirmation of receipt and noted that if a review is required from DFO then a Request for Review form must be submitted.	N/A	N/A
2	Technical Standards and Safety Authority (TSSA)	Kourosh Manouchehri	Email	14-Sep-22	TSSA noted that along with submission of LTC to OEB, for review of this project by TSSA, there is need for submission of Application for Review of Pipeline Project to TSSA. Also shared the link to the application taht would need to be submitted by the pipeline operator or other parties on behalf of the pipeline operator	N/A	N/A
3	Ministry of Environment, Conservation and Parks (MECP)	Conservation and Source Protection Branch Conor Gamelin Program and Services Delivery Intern	Email	16-Sep-22	The Source Protection Program Branch of the MECP shared that natural gas pipelines are not identified as a threat to drinking water sources under the Clean Water Act, 2006. MECP also provided information to guide identification and assessment of impacts to drinking water, aquifers, and Intake-Protection Zones. It was requested by the MECP, that the environmental report indefinity the following: - demonstrate how source protection mitigation measures will be implemented - demonstrate how sensitive hydrologic features including current or future sources of drinking water not explicitly addressed in source protection plans, will be protected during the construction and maintenance of the Project.	N/A	N/A
4	Infrastructure Ontario (IO)	Valerie Naso valerie.naso@infrastructureontario.ca	Email	28-Sep-22	IO acknowledged the receipt and noted that two properties identified within and adjacent to the Study Area are owned by the Minister of Government and Consumer Services. IO listed the possible owners of the provincial government property and	N/A	N/A



Comment Number	Stakeholder Group	Stakeholder Representative Name	Method of Communication	Date of Communication	Summary of Comment	Date of Response	Summary of Response
					the proponent is to verify if provincial government property is within the Study Area.		
5	Ministry of Transportation (MTO)	Alexander Gitkow	Email	3-Oct-22	MTO shared their comments in a letter where MTO noted that the routes that would be crossing or running parallel to Hwy 60 were of their interest. MTO further noted in the letter that "For Phase 2 - alternative route 2 and Phase 2 - alternative route 3, the Hwy 60 route is very rocky, and Enbridge will not be allowed to deviate from the setback requirement and depth as the MTO requirements will not permit it and placing the line in the shoulder as shown to them in a meeting with Enbridge representative on June 7, 2022 will not be permitted."	N/A	N/A
6	Ministry of Citizenship and Multiculturalism (MCM)	Joseph Harvey	Email	18-Oct-22	MCM shared a letter with guidelines on how to incorporate consideration of cultural heritage in the above-mentioned planning activities and expands on sections 4.3 and 5.3 of the Guidelines by outlining the technical cultural heritage studies and level of detail required to address cultural heritage in pipeline and facilities projects.	N/A	N/A
7	Ministry of Natural Resources and Forestry (MNRF)	Sam Short	Email	2-Nov-22	MNRF confirmed the receipt of a copy of the Notice of Study Commencement. MNRF provided information to guide identification and assessment of natural features and resources as required by applicable policies and legislation. General information provided in their email included: > links and resources for natural heritage and natural resource GIS data layers -> information on MNRF Natural Hazard technical guides -> Link to Ontario Oil, Gas and Salt Resources library website for well records by MNRF. Information on procedures should an unanticipated well be encountered during development of the project. -> Link to mineral aggregate resources to locate active pits and quarries. -> Information on Licensing requirements to Collect Fish and wildlife outside of the Study Area and relocate for Scientific Purposes under the Fish and Wildlife Conservation Act -> Public Lands Act or Lakes and River Improvement Act, if the project is subject to the provisions of the Act.	N/A	N/A

Note: N/A – Not Available



Correspondence Tracking - Indigenous Communities

Comment Number	Community	Community Representative Name	Method of Communication	Date of Communication	Summary of Comment
See Appendix B1 and B2	All communities on contact list	N/A	Email	22-Jul-22	Notice of Study Commencement and Virtual Open House letter and map sent to all communities and contacts on the Indigenous Communities contact list.
See Appendix B1 and B2	All communities on contact list	N/A	Email	7-Sep-22	A reminder email for the virtual open house that is currently taking place for Hidden Valley Community Expansion Project was sent to all communities and contacts on the Indigenous Communities contact list.
1	Curve Lake First Nation	Kayla Wright	Email	7-Sep-22	The nation noted that Curve Lake Nation will not be engaging in the VOH as the project is within the Algonquin territory and slightly in Alderville's Treaty 27 1/4.
2	Algonquins of Pikwàkanagàn First Nation	Don Bilodeau	Email	8-Sep-22	The nation noted that the nation is working out a capacity agreement specific to this project to deal with our review of the EA, Archaeology, Briefing Chief and Council and ensuring Community inputs from our AOPFN Advisory Committee
3	Algonquins of Ontario	Daniel Charbonneau	VOH Questionnaire	25-Oct-22	The nation noted that they will need proper capacity funding to fully participate into this project consultation project and we understand that a meeting is being organized to address this matter. The AOO noted that a request will be made to Enbridge to provide capacity funding to undertake through a third-party technical consultant an Algonquin Knowledge and Land Use Study to help identify the potential adverse effects of the Project on the AOO's Section 35 rights and interest including land title rights and identify adequate and meaningful mitigation and accommodation measures.

Note: N/A – Not Available



Correspondence Tracking - Landowner and Public

Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
N/A - Not Applicable	Directly affected landowner	Stantec on the behalf of Enbridge Gas	Mail	N/A	N/A		Notice of Study Commencement mailed September 13, 2022 and delivered to mailboxes by September 21, 2022	N/A	N/A
1	Landowner	██████████ ██████████	Voicemail	N/A	██████████	15-Sep-22	Landowner asked if properties surrounding Mink Lake area included in the proposed Project. Requested a return call.	26-Sep-22	<p>Stantec called the landowner and noted that the landowner's community was not included in the submission to the OEB for Natural Gas Expansion Program funding. Stantec noted that community expansion projects are driven by municipal interest and that the focus of this project is on the expansion of natural gas to the area of Eganville.</p> <p>The landowner noted that they would be asking their municipal government representative to bring forward a request to the municipality for natural gas service around Mink Lake.</p>
3	Landowner	██████████ ██████████	Email	████████████████████	N/A	15-Sep-22	Landowner acknowledged the receipt of the notice of study commencement and expressed interest in receiving natural gas.	13-Oct-22	<p>Stantec thanked them for providing a response to the Eganville Community Expansion Project. The Representative explained that the final pipeline route has not yet been confirmed and the Representative encouraged the landowner to email ceapplications@enbridge.com or call the number 1-833-356-2689 to express their interest in receiving natural gas.</p>



Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
2	Landowner	██████ ██████	Voicemail	N/A	██████████	16-Sep-22	Landowner asked if properties along Point Church Drive are included in the proposed Project. Requested a return call.	27-Sep-22	Stantec called the landowner and noted that the landowner's community was not included in the submission to the OEB for Natural Gas Expansion Program funding. Stantec noted that community expansion projects are driven by municipal interest and that the focus of this project is on the expansion of natural gas to the area of Eganville
4	Landowner	██████ ██████	Voicemail	N/A	██████████	22-Sep-22	Landowner called and noted they have questions regarding the Project. Requested a return call.	26-Sep-22	Stantec called the business owner and left a voicemail providing call-back contact information. 17-Oct-22, the Stantec representative followed-up with the business owner. The representative answered the business owner's questions regarding if the pipeline was proposed to traverse John Street (where their business is located – at ██████████) and answered their concerns on if the pipeline is to impact the nearby hydro power dam near Bridge Street and the Eganville Centennial Park. The Stantec representative confirmed that neither the Preliminary Preferred Route or Alternative Route is proposed to traverse Johns Street. However, as their business on John Street is located within the Study Area, there is a potential that one of the distribution lines may be located within the road right-of-way in front of their business. The representative confirmed that all construction will occur within the road right-of-way and would therefore, not interfere with the dam or local Park, and that the pipeline would be below ground. The



Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
									landowner thanked Stantec for the call and noted they have no other concerns/questions.
5	Public	█████ █████	Email	████████████████████	██████████	26-Sep-22	Individual requested for the link to the VOH website and inquired about the potential to pursue the feasibility of a joint use trench with Enbridge.	28-Sep-22	Stantec provided the appropriate link to the VOH website and forwarded their inquiry to Enbridge.
6	Public	█████ █████	Voicemail	████████████████████	██████████	6-Oct-22	Landowner left a voicemail requesting that a Project representative share additional details on the pipeline route and expressed interest in receiving natural gas. Specifically, the landowner expressed interest in Enbridge Gas extending the proposed running line down Augsburg Road to bring natural gas service to their residence.	13-Oct-22	<p>A Stantec Project Representative called the landowner back and thanked them for providing a response to the Eganville Community Expansion Project and answered the respondents' questions on how to get connected to the natural gas line and the location of the Preferred Route. The Representative explained that the final pipeline route has not yet been confirmed and as such, no confirmation on if the pipeline will extend to the landowners' home was provided. The Representative encouraged the landowner to email ceapplications@enbridge.com or call the number 1-833-356-2689 to express their interest in receiving natural gas.</p> <p>The Representative followed up the phone call with an email to the landowner summarizing the information discussed on the call and a link to the Enbridge Gas Project webpage was shared.</p>
7	Public	█████ █████	Email	████████████████████	N/A	10-Oct-22	Individual expressed support for the	13-Oct-22	Stantec thanked them for providing a response to the Eganville Community



Comment Number	Stakeholder Group	Name	Method of Communication	Email	Phone Number	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
							project and receiving natural gas.		Expansion Project and answered the respondents' questions on how to get connected to the natural gas line and the location of the Preferred Route. The Representative explained that the final pipeline route has not yet been confirmed and as such, no confirmation on if the pipeline will extend to the landowners' home was provided. The Representative encouraged the landowner to email ceapplications@enbridge.com or call the number 1-833-356-2689 to express their interest in receiving natural gas.
8	Public	██████████ ██████████	Voicemail	N/A	██████████	25-Oct-22	Individual requested a copy of the questionnaire.	25-Oct-22	Stantec called the individual and left a voicemail providing callback information
9	Public	██████████ ██████████	Email	████████████████████	██████████	25-Oct-22	Individual expressed concerns related to water wells and environmental contamination that may result from the construction.	20-Mar-23	Stantec thanked them for providing a response to the Eganville Community Expansion Project. The Representative explained that the final pipeline route has not yet been confirmed. Stantec noted that community expansion projects are driven by municipal interest and that the focus of this project is on the expansion of natural gas to the area of Eganville. The Representative encouraged the landowner to email ceapplications@enbridge.com or call the number 1-833-356-2689 to express their interest.

Note: N/A – Not Available



Correspondence Tracking - Virtual Open House Questionnaire Responses

Comment Number	Stakeholder Group	Correspondent	Address	Email	Phone Number	Method of Communication	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
See copy of the questionnaire provided in Appendix B5	N/A	Stantec on the behalf of Enbridge Gas	N/A	N/A	N/A	Virtual Open House Questionnaire		See Appendix B5 for a blank copy of the questionnaire provided during the Virtual Open House (VOH).	N/A	N/A
1	N/A	[REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	Virtual Open House Questionnaire	27-Sep-22	Landowner expressed interest in receiving natural gas and requested more information on how to expedite the process of connecting to natural gas.	17-Oct-22	Stantec thanked them for providing a response to the Eganville Community Expansion Project. The Representative explained that the final pipeline route has not yet been confirmed and the Representative encouraged the landowner to email ceapplications@enbridge.com or call the number 1-833-356-2689 to express their interest in receiving natural gas.
2	N/A	[REDACTED]	[REDACTED] [REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED]	Virtual Open House Questionnaire	2-Oct-22	Landowner expressed interest in receiving natural gas and requested that for regular status updates for the project.	17-Oct-22	Stantec thanked them for providing a response to the Eganville Community Expansion Project and encouraged the landowner to email ceapplications@enbridge.com or call the number 1-833-356-2689 to express their interest in receiving natural gas. Stantec also noted that the landowners contact information and interest



Comment Number	Stakeholder Group	Correspondent	Address	Email	Phone Number	Method of Communication	Date of Correspondence	Summary of Comment	Date Response Provided	Summary of Response
										in the Project has been recorded and will be passed along to the Enbridge Project Representatives.
3	N/A	██████████ ██████████	██████████ ██████████ ██████████	N/A	██████████ ██████████	Virtual Open House Questionnaire	26-Oct-22	Resident expressed interest in receiving natural gas and inquired about the route of the pipeline in the village of Eganville.	N/A	N/A
4	N/A	██████████	██████████ ██████████ ██████████	██████████ ██████████	██████████ ██████████	Virtual Open House Questionnaire	27-Oct-22	Resident expressed interest in natural gas conversion	N/A	N/A
5	N/A	██████████ ██████████	██████████ ██████████ ██████████	██████████ ██████████	██████████ ██████████	Virtual Open House Questionnaire	28-Oct-22	Municipal employee expressed concerns over the maintenance activities once the pipeline is installed. Additionally, the municipal employee requested further details on the route evaluation and selection process.	N/A	N/A

Note:
N/A - Not Available



Appendix B7: Enbridge's Indigenous Engagement



Enbridge Gas Inc. Indigenous Engagement Log

Log updated as of February 21, 2023

Alderville First Nation (AFN)

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas
1.0	July 22, 2022	Email	An Enbridge Gas representative emailed the AFN representative providing a Project notification letter for the Eganville Community Expansion Project (the "Project"). The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
1.1	August 2, 2022	Email	-	An AFN representative emailed the Enbridge Gas representative requesting a map of the proposed line installation for the Project. AFN representative inquired about any water crossing or if an archaeological study would be conducted.	Enbridge Gas advised they were working with the Project team to provide the information requested by AFN. Enbridge Gas provided AFN with a map for the Project on September 7, 2022, and the draft Stage One Archaeological Assessment ("AA") via email on November 11, 2022.
1.2	August 3, 2022	Email	An Enbridge Gas representative emailed the AFN representative advising that they would follow up to provide the map and answer the question regarding the water crossing. Additionally, the Enbridge Gas representative advised that they would provide an AA when it was completed.	-	-
1.3	August 11, 2022	Email	An Enbridge Gas representative emailed the AFN representative suggesting they arrange a monthly conference call to provide updates on ongoing Enbridge Gas Projects.	-	-
1.4	September 7, 2022	Email	An Enbridge Gas representative emailed the AFN representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022, and provided a website link.	-	-
1.6	October 25, 2022	Email	An Enbridge Gas representative emailed the AFN representative requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022.	-	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas
1.7	October 25, 2022	Email	-	An AFN representative emailed the Enbridge Gas representative to confirm receipt of the email. The AFN representative advised the only concern they may have would be around archeology study, and species at risk.	-
1.8	November 11, 2022	Email	An Enbridge Gas representative emailed the AFN representative providing a Project overview and draft Stage One AA Report. The Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
1.8	November 14, 2022	Email	-	An AFN representative emailed the Enbridge Gas representative requesting to be updated on new developments and the results of any archaeological studies done and new developments.	Enbridge Gas confirmed they would provide additional information regarding new developments and any archaeological studies completed for the site.
1.9	November 14, 2022	Email	The Enbridge Gas representative confirmed they would provide new information if it became available.	-	-

Algonquins of Ontario (AOO)

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.0	July 22, 2022	-	An Enbridge Gas representative emailed the AOO representatives providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
2.1	August 4, 2022	-	-	An AOO representative emailed the Enbridge Gas representative advising they would review the Project materials provided on July 22, 2022, and September 8, 2022, and noted they may be interested in archaeology. The AOO representative requested a map and confirmation whether Enbridge Gas received a duty to consult delegation letter, and if so, inquired if it could be provided.	Enbridge Gas provided a map and a copy of the duty to consult delegation letter to AOO via email on August 10, 2022.
2.2	August 8, 2022	Email	An Enbridge Gas representative emailed the AOO representative advising them they would follow up with virtual open house information.	-	-
2.3	August 10, 2022	Email	An Enbridge Gas representative emailed the AOO representative providing a map. The Enbridge Gas representative also inquired about which portion of the duty to consult letter was requested.	-	-
2.4	August 10, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative confirming receipt of the email and that they would review the map.	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.5	August 17, 2022	Email	-	<p>An AOO representative emailed Enbridge Gas representative advising that they assert unextinguished and constitutionally protected Algonquin Aboriginal rights, including title to unceded lands and waterways within the Algonquin Traditional Territory covering approximately 9,000,000 acres within the watersheds of the Ottawa and Mattawa Rivers in Ontario, where the Project is located. Since the Project is located on asserted Algonquin Aboriginal land title, the Project has the potential to infringe such rights and title if such infringement is not appropriately mitigated and accommodated. AOO further advised they are interested in participating in Project consultation to ensure consultation is meaningful and to identify and mitigate impacts on rights. AOO advised they were interested in social, cultural, environmental, archaeological and economic benefits such as training, job creation, procurement and subcontracting, business development, and equity sharing on the asset or other forms of revenue sharing.</p> <p>AOO requested a meeting to discuss the Project and asked that Enbridge Gas provide more detailed Project information including a detailed map of the Project's location, showing all water crossings, existing municipal rights-of-ways, road allowances, and the location of the anticipated permanent easement requirements including information related to the technical engineering, environmental and financial aspects of the Project.</p>	<p>AOO expressed an interest in social, cultural, environmental, archaeological and economic benefits such as training, job creation, procurement and subcontracting, business development, and equity sharing on the asset or other forms of revenue sharing.</p> <p>AOO also requested a meeting to discuss the Project and asked for more detailed Project information including a detailed map of the Project's location, showing all water crossings, existing municipal rights-of-ways, road allowances, and the location of the anticipated permanent easement requirements including information related to the technical engineering, environmental and financial aspects of the Project.</p> <p>Enbridge Gas met with AOO on October 4, 2022.</p> <p>Enbridge Gas followed up with AOO representatives on January 19, 2023, to ask for further clarification on the AOO's interest in social, cultural, environmental, archaeological and economic benefits such as training, job creation, procurement and subcontracting, business development.</p>
2.6	August 23, 2022	Email	Email from an Enbridge Gas representative to AOO representative confirming receipt of their August 17, 2022, email. An Enbridge Gas representative advised they were available for a meeting and noted they would provide information regarding the virtual open house once it was available.	-	-
2.7	August 23, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to ask if they were available to meet on October 4, 2022.	-
2.8	August 24, 2022	Email	Email from an Enbridge Gas representative to AOO representative to advise that they were available for a meeting on October 4, 2022.	-	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.9	September 7, 2022	Email	An Enbridge Gas representative emailed the AOO representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022, and provided a website link.	-	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.10	October 4, 2022	In-person Meeting	<p>Enbridge Gas representatives had a conference call with AOO representatives regarding the Project. AOO advised them they were interested in equity sharing. AOO inquired about capacity funding. Enbridge Gas advised they could provide capacity funding for participation in the Project. AOO noted traditional studies and archaeology studies were important, and Enbridge Gas advised they wished to continue discussions regarding those topics. AOO raised a concern regarding upfront consultation and being considered uniquely as a stakeholder. Enbridge Gas advised they were interested in establishing a meaningful relationship with AOO and all potentially affected Indigenous communities. AOO raised a concern regarding timing for test digs. Enbridge Gas advised they were confirming the timeline and would follow up. AOO raised a concern regarding regulatory requirements, and Enbridge Gas' contractor's qualifications regarding socio-economic factors.</p>	-	<p>AOO raised a concern regarding upfront consultation and being considered uniquely as a stakeholder.</p> <p>Enbridge Gas advised they were interested in establishing a meaningful relationship with AOO and all Indigenous communities.</p> <p>AOO raised a concern regarding timing for test digs for the Project.</p> <p>Enbridge Gas provided a map via email on December 13, 2022.</p> <p>AOO raised a concern regarding regulatory requirements for the Project.</p> <p>Enbridge Gas provided an overview of the duty to consult and the environmental assessment processes on November 21, 2022.</p> <p>AOO raised a concern regarding Enbridge Gas contractor's qualifications regarding socio-economic factors.</p> <p>Enbridge Gas provided an overview of their environmental consultants on November 21, 2022.</p> <p>AOO inquired about capacity funding for the Project.</p> <p>Enbridge Gas advised they could provide capacity funding for participation in the Project.</p> <p>AOO advised that traditional studies and archaeology studies were important.</p> <p>Enbridge Gas advised they wish to continue discussions regarding those topics.</p> <p>AOO advised they were interested in equity sharing on the Project.</p> <p>Enbridge Gas advised that due to the Provincial regulations we are unable to create equity sharing opportunities but look to provide capacity in other ways.</p>

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.11	October 12, 2022	Email	An Enbridge Gas representative emailed the AOO representatives providing meeting notes from their October 4, 2022, conference call. The Enbridge Gas representative provided an overview of the discussed items including various Project items including scope of AOO's participation and capacity funding. The Enbridge Gas representative confirmed that Enbridge Gas is prepared to provide capacity funding and that information would be provided.	-	-
2.12	October 13, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative confirming receipt of the meeting notes from the October 4, 2022, virtual meeting. AOO noted they had inquired about how much Crown land would be impacted by the Project, to which Enbridge Gas advised no federal or private lands would be impacted. AOO requested clarification regarding provincial land impacts. AOO noted they also inquired about the portion of the Project that would be greenfield type.	<p>AOO inquired about how much Crown land would be impacted by the Project and requested clarification regarding the impacts to provincial land.</p> <p>Enbridge Gas advised no federal or private lands would be impacted but provincial and municipal lands could be.</p> <p>AOO inquired about the portion of the Eganville Community Expansion Project that would be greenfield type.</p> <p>The Enbridge Gas representative and AOO representative discussed greenfield at the October 19, 2022, meeting and that the Enbridge Gas representative would follow up with the environment team to confirm.</p>
2.13	October 14, 2022	Email	An Enbridge Gas representative emailed the AOO representative to advise them they would try and call them later.	-	-
2.14	October 19, 2022	Phone Call Meeting	An Enbridge Gas representative met with the AOO representatives regarding the Project. Topics of discussion included arranging a future meeting to discuss environmental matters related to the Project.	-	-
2.15	October 25, 2022	Email	An Enbridge Gas representative mailed the AOO representative requesting their availability for a meeting to discuss environmental matters related to the Project.	-	-
2.16	October 25, 2022	Email	An Enbridge Gas representative emailed the AOO representative requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022. The Enbridge Gas representative noted capacity funding was available.	-	-
2.17	October 25, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to advise that they completed the online questionnaire offering feedback on the Project. Additionally, the AOO representative advised the Enbridge Gas representative to remove one of the AOO representatives as they were no longer on the Project. The AOO representative advised that they would continue to be on the Project and that they would like to arrange a meeting and discuss capacity funding agreements.	<p>AOO expressed an interest in discussing the environmental assessment process for the Project and in capacity funding.</p> <p>Enbridge Gas' representative confirmed that capacity funding was available for the Project. The Enbridge Gas representative wanted to meet to discuss a capacity funding agreement.</p> <p>Enbridge Gas provided billing information for the Project on January 19, 2023.</p>
2.18	October 25, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to provide meeting times to discuss the Environmental Assessment process regarding the Project.	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.19	October 31, 2022	Email	An Enbridge Gas representative emailed the AOO representative to confirm November 8, 2022, as a time to discuss the Project.	-	-
2.20	October 31, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to provide them with a meeting link for the scheduled meeting November 8, 2022.	-
2.21	November 1, 2022	Email	An Enbridge Gas representative emailed the AOO representative to confirm receipt of the meeting link.	-	-
2.22	November 1, 2022	Email	An Enbridge Gas representative emailed the AOO representative to advise that the scheduled November 8, 2022, meeting would no longer work due to Scheduling conflicts and proposed November 14, 2022, as a new meeting time.	-	-
2.23	November 3, 2022	Email	An Enbridge Gas representative emailed the AOO representative to follow up on the November 1, 2022, email regarding the scheduling conflicts for their November 8, 2022, meeting about the Project.	-	-
2.24	November 3, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to advise that the requested date for the rescheduling of the November 8, 2022, meeting to November 14, 2022, would work.	-
2.25	November 3, 2022	Email	An Enbridge Gas representative emailed the AOO representative to advise them that the November 14, 2022, date would no longer work as other Enbridge Gas representatives would not be able to attend. The Enbridge Gas representative proposed November 17 or 18, 2022 as a new meeting date. Additionally, the Enbridge Gas representative asked if there were any additional questions that could be addressed to ensure that the other Enbridge Gas representatives could have the opportunity to answer them at the meeting.	-	-
2.26	November 3, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to advise the two new proposed meeting dates would not work due to scheduling conflicts and proposed November 21, 2022, as a new meeting date.	-
2.25	November 3, 2022	Email	An Enbridge Gas representative emailed the AOO representative to advise that the proposed November 21, 2022, meeting date would work and wanted to confirm if afternoon would work.	-	-
2.26	November 3, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to confirm that date would work.	-
2.27	November 3, 2022	Email	An Enbridge Gas representative emailed the AOO representative to confirm and advise how the meeting would be set up.	-	-
2.27	November 3, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to advise that they will cancel the original meeting invite and re-invite them to the appropriate meeting date and time.	-
2.27	November 3, 2022	Email	An Enbridge Gas representative emailed the AOO representative to confirm the meeting.	-	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.28	November 3, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to provide the virtual meeting link.	-
2.29	November 11, 2022	Email	An Enbridge Gas representative emailed the AOO representative providing a Project overview and draft Stage One AA Report. The Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
2.30	November 17, 2022	Email	An Enbridge Gas representative emailed the AOO representatives providing presentation slides for their November 21, 2022, meeting.	-	-
2.31	November 21, 2022	Virtual Meeting	An Enbridge Gas representative met with AOO representatives regarding the Project. Topics of discussion included an overview of the Project scope and timeline, leave to construct, duty to consult process, environmental assessment process and environmental report, and archaeology.	-	-
2.32	November 21, 2022	Email	An Enbridge Gas representative emailed the AOO representative providing their availability for a meeting the week of December 12, 2022. An Enbridge Gas representative advised they would provide information and options for capacity funding.	-	-
2.33	November 24, 2022	Email	-	AOO representative emailed the Enbridge Gas representative providing their availability for a meeting to discuss capacity funding on December 13, 2022, or in January 2023. AOO representative advised that they would like to ensure both short and long-term Algonquin capacity and presence in the Project.	AOO expressed an interest in receiving both short- and long-term Algonquin capacity and presence in the Project. Enbridge Gas and AOO scheduled a meeting to discuss a capacity funding agreement in January 2023. Enbridge Gas representative provided billing details for the Project on January 19, 2023.
2.34	November 28, 2022	Email	An Enbridge Gas representative emailed the AOO representative confirming their availability for a meeting on December 13, 2022.	-	-
2.35	November 28, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative and advised they would not be available until January 2023.	-
2.36	November 28, 2022	Email	An Enbridge Gas representative emailed the AOO representative to confirm a meeting for some time in January 2023.	-	-
2.37	November 28, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to confirm that January 2023 would be a good date.	-
2.38	November 28, 2022	Email	An Enbridge Gas representative emailed the AOO representative to ask if they wanted to send over a date a time for the meeting.	-	-
2.39	November 28, 2022	Email		An AOO representative emailed the Enbridge Gas representative to advise that they would schedule in 2023.	-
2.40	November 28, 2022	Email	An Enbridge Gas representative emailed the AOO representative to confirm receipt of this email.	-	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.41	November 29, 2022	Email	An Enbridge Gas representative emailed the AOO representative to thank them for joining last week's meeting regarding the Project. Additionally, the Enbridge Gas representative wanted to confirm that they are still working on the mapping related to the test digs and pipeline route and will provide it as soon as it is completed. The Enbridge Gas representative also wanted to offer a meeting to chat about capacity funding for the Project.	-	-
2.42	December 1, 2022	Email	An Enbridge Gas representative emailed the AOO representatives providing a reminder that the draft Stage One AA Report for the Project was out for review. Enbridge Gas representative noted capacity funding was available.	-	-
2.43	December 1, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative to confirm receipt of the email and they are in the process of reviewing the draft Stage One AA. Additionally, the AOO representative advised that one of the AOO representatives has moved on and to remove the contact information.	-
2.44	December 2, 2022	Email	An Enbridge Gas representative emailed the AOO representatives to confirm receipt of the email and will remove the other AOO representative contact.	-	-
2.46	December 8, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative providing a letter regarding AOO's expectations for archaeological projects, noting they had indicated they were interested in archaeological work on the Project but had not received an invitation to participate in the Stage One Archaeological Assessment work. AOO provided a reminder of their request for an archaeological impact map and the test digs. The AOO representative advised they were waiting on Enbridge Gas regarding their request to see the archaeological potential map created as part of the Stage 1 and the location of Enbridge Gas's proposed test digs overlaid on top.	AOO representative advised they were waiting on Enbridge Gas regarding their request to see the archaeological potential map created as part of the Stage 1 and the location of Enbridge Gas's proposed test digs overlaid on top. On December 13, 2022, the Enbridge Gas representative provided a map showing the test pits for the Project that are currently in progress.
2.46	December 8, 2022	Email	An Enbridge Gas representative emailed the AOO representative and advised they should have followed up to ask for comments on the Project as a whole. The Enbridge Gas representative wanted to confirm that the Stage One AA was a desktop review and therefore no fieldwork had been completed, noting they would follow up with confirmation. The Enbridge Gas representative thanked them for the comments on the Stage One AA and advised AOO would have the opportunity to participate in upcoming fieldwork, and that a map was being developed.	-	-
2.47	December 9, 2022	Email	-	An AOO representative emailed the Enbridge Gas representative advising the draft Stage One AA Report indicated Enbridge contractor was on site on August 25 and September 1, 2022, for a site inspection.	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
2.48	December 9, 2022	Email	An Enbridge Gas representative emailed the AOO representative to confirm the field surveys were desktop studies and included driving along the route, noting no digging took place. The Enbridge Gas representative requested an in-person meeting to discuss ongoing Enbridge Projects at their earliest convenience.	-	-
2.49	December 13, 2022	Email	An Enbridge Gas representative emailed the AOO representative providing a map that included the test pits for the Project, noting they were all within the municipal right-of-way. The Enbridge Gas representative provided an overview of their archaeology contingency plan.	-	-
2.50	January 10, 2023	Email	An Enbridge Gas representative emailed the AOO representative providing a revised draft Stage One AA. The Enbridge Gas representative wanted to advise that if they have any questions or concerns to follow up so that they can be addressed.	-	-
2.51	January 10, 2023	Email	-	An AOO representative emailed the Enbridge Gas representative to confirm receipt of the email and they will provide a response by January 27, 2023.	-
2.52	January 10, 2023	Email	An Enbridge Gas representative emailed the AOO representative to confirm receipt of the email.	-	-
2.53	January 19, 2023	Email	An Enbridge Gas representative emailed the AOO representative to follow up regarding social, cultural, environmental, archaeological and economic benefits and that Enbridge Gas were wanting to work on these items. They wanted to set up a meeting with other Enbridge Gas representatives to create these opportunities. The Enbridge Gas representative wanted to also provide billing information for the Project and advise that they could access capacity funding by billing Enbridge Gas in the meantime. The Enbridge Gas representative also advised they are still working on the answer to the AOO's question regarding greenfield.	-	-

Algonquins of Pikwàkanagàn First Nation

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
3.0	July 22, 2022	Email	An Enbridge Gas representative emailed the Algonquins of Pikwàkanagàn First Nation ("AOPFN") representatives providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
3.1	August 3, 2022	Email	-	An AOPFN representative emailed the Enbridge Gas representative requesting a meeting to discuss the Project.	-
3.2	August 8, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative confirming that they were available for a meeting to discuss the Project.	-	-
3.3	September 7, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative to provide a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022 and provided a website link.	-	-
3.4	September 8, 2022	Email	-	An AOPFN representative emailed the Enbridge Gas representative advising they could not provide feedback on the Project by the October 26, 2022, deadline due to capacity constraints and much of the community not being available in October as traditional hunting takes priority and many of those, they rely upon are not available to provide input at this time. They requested an extension to November 2022 and an interest in negotiating a capacity funding agreement.	AOPFN advised that they had limited capacity to provide feedback by October 26, 2022 and they requested an extension as well as an interest in negotiating a capacity funding agreement. Enbridge Gas representative emailed January 17, 2023, to set up a meeting regarding a capacity funding agreement. The Enbridge Gas representative provided billing information for the Project.
3.5	September 15, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative confirming receipt of their September 8, 2022, email and suggested comments could be received later in the process, such as through the virtual open house.	-	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
3.6	October 17, 2022	Email	-	An AOPFN representative emailed the Enbridge Gas representative requesting a capacity funding agreement for the Project, noting they would provide a first draft. The AOPFN representative suggested a meeting on November 14 or 18, 2022, to discuss and revise the draft capacity agreement.	-
3.7	October 25, 2022	Email	An Enbridge Gas representative emailed the AOPFN representatives acknowledging their request for a capacity funding agreement and confirming their availability the week of November 14, 2022, to discuss the draft agreement.	-	-
3.8	October 25, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022.	-	-
3.9	November 11, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative Project overview and draft Stage One AA Report. Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
3.10	November 15, 2022	Email	-	An AOPFN representative emailed the Enbridge Gas representative stating they were interested in participating in the Project and engaging in consultation on the Environmental assessment elements of the Project; however, they cannot comment more deeply until they have had an opportunity to dive into the EA and route plans, archaeology, etc. AOPFN noted they were developing a capacity funding agreement to support meaningful input and advised they would follow their approved Consultation Protocol and fee structure when preparing the Agreement.	-
3.11	November 16, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative confirming receipt of their email.	-	-
3.12	November 24, 2022	In-person Meeting	An Enbridge Gas representative and an AOPFN representative met to discuss capacity funding for the Project and that they can bill Enbridge Gas in the meantime while a draft capacity agreement is being created.	-	-
3.13	November 28, 2022	Email	-	An AOPFN representative emailed the Enbridge Gas representative providing a draft capacity funding agreement.	-
3.14	December 1, 2022	Email	An Enbridge Gas representative emailed the AOPFN representatives providing a reminder that the draft Stage One AA Report for the Project was out for review. Enbridge Gas representative noted capacity funding was available.	-	-
3.15	December 1, 2022	Email	-	An AOPFN representative emailed the Enbridge Gas representative advising them they did not have the capacity to review the Project, and indicated the Project did not present a need for their attention at that time. The AOPFN representative advised the capacity funding agreement would allow them to support their engagement on the Project.	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
3.16	December 1, 2022	Email	-	An AOPN representative emailed the Enbridge Gas representative to follow up on the previous email to request clarification regarding the review of the draft Stage One AA Report.	-
3.17	December 2, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative to provide clarification regarding the review of the Stage One AA Report.	-	-
3.18	December 8, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative suggesting they bill Enbridge Gas for work regarding the Project until a capacity funding agreement was in place.	-	An Enbridge Gas representative noted they were reviewing the draft capacity agreement provided by AOPFN and suggested AOPFN bill Enbridge Gas for work regarding the Project until the capacity funding agreement was in place.
3.19	December 8, 2022	Email	-	An AOPFN representative emailed the Enbridge Gas representative to confirm receipt of the email.	-
3.20	December 13, 2022	Email	An Enbridge Gas representative emailed the AOPFN representative to follow up on the December 8, 2022, email about billing Project work.	-	-
3.21	January 17, 2023	Email	An Enbridge Gas representative emailed the AOPFN representative to provide them with billing information for the Project to ensure capacity funding can still be accessed while a draft capacity funding agreement is being created.	-	-
3.22	January 18, 2023	Email	An Enbridge Gas representative emailed the AOPFN representative to follow up on the draft capacity funding agreement and if they can set up a meeting to finalize the details regarding this.	-	-
3.23	January 18, 2023	Email	-	An AOPFN representative emailed the Enbridge Gas representative to advise that they will call them soon to discuss this.	-

Beausoleil First Nation (BFN)

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
4.0	July 22, 2022	Email	An Enbridge Gas representative emailed the Beausoleil First Nation (BFN) representatives providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
4.1	August 11, 2022	Email	An Enbridge Gas representative emailed the BFN representative suggesting they arrange a monthly conference call to provide updates on going Enbridge Gas Projects.	-	-
4.2	September 7, 2022	Email	An Enbridge Gas representative emailed the BFN representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022 and provided a website link.	-	-
4.3	October 25, 2022	Email	An Enbridge Gas representative emailed the BFN representatives requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022.	-	-
4.4	November 11, 2022	Email	An Enbridge Gas representative emailed the BFN representative providing a Project overview and draft Stage One AA Report.	-	-
4.5	December 1, 2022	Email	An Enbridge Gas representative emailed the BFN representative providing a reminder that the draft Stage One AA Report for the Project was out for review. Enbridge Gas representative noted capacity funding was available.	-	-
4.6	January 9, 2023	Email	An Enbridge Gas representative emailed the BFN representative providing a reminder that the draft Stage One AA Report for the Project was out for review and that they could extend the date required by if BFN wanted to still review.	-	-

Chippewas of Georgina Island (CGIFN)

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
5.0	July 22, 2022	Email	An Enbridge Gas representative emailed the CGIFN representatives providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
5.1	September 7, 2022	-	An Enbridge Gas representative emailed the CGIFN representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022 and provided a website link.	-	-
5.2	October 25, 2022	Email	An Enbridge Gas representative emailed the CGIFN representatives requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022.	-	-
5.3	November 11, 2022	Email	An Enbridge Gas representative emailed the CGIFN representative providing a Project overview and draft Stage One AA Report. Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
5.4	December 1, 2022	Email	An Enbridge Gas representative emailed the CGIFN representatives providing a reminder that the draft Stage One AA Report for the Project was out for review. Enbridge Gas representative noted capacity funding was available.	-	-
5.5	January 9, 2023	Email	An Enbridge Gas representative emailed the CGIFN representative providing a reminder that the draft Stage One AA Report for the Project was out for review and that they could extend the date required by if CGIFN wanted to still review.	-	-
5.6	January 9, 2023	Email	-	A CGIFN representative emailed the Enbridge Gas representative to advise they have no comment on the draft Stage One AA.	-
5.7	January 10, 2023	Email	An Enbridge Gas representative emailed the CGIFN representative to confirm receipt of the email.	-	-

Chippewas of Rama First Nation (CRFN)

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
6.0	July 22, 2022	Email	An Enbridge Gas representative emailed the CRFN representative providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
6.1	August 11, 2022	Email	An Enbridge Gas representative emailed the CRFN representative to suggest they arrange a monthly conference call to provide updates on the ongoing Enbridge Project.	-	-
6.2	September 7, 2022	Email	An Enbridge Gas representative emailed the CRFN representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022 and provided a website link.	-	-
6.3	October 25, 2022	Email	An Enbridge Gas representative emailed the CRFN representatives requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022.	-	-
6.4	November 8, 2022	Email	-	A CRFN representative emailed the Enbridge Gas representative advising them they had no comments on the Project.	-
6.5	November 9, 2022	Email	An Enbridge Gas representative emailed the CRFN representative confirming receipt of their email from the previous day.	-	-
6.6	November 11, 2022	Email	An Enbridge Gas representative emailed the CRFN representative providing a Project overview and draft Stage One AA Report. Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
6.7	November 14, 2022	Email	-	A CRFN representative emailed the Enbridge Gas representative advising them they had no comments or concerns regarding the draft Stage One AA Report. Enbridge Gas confirmed receipt of their email.	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
6.8	November 14, 2022	Email	An Enbridge Gas representative emailed the CRFN representative to confirm receipt that CRFN would not be providing comments or concerns regarding the draft Stage One AA. The Enbridge Gas representative confirmed that they would continue to send information as it is received.	-	-

Curve Lake First Nation (CLFN)

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
7.0	December 2, 2021	Phone Call	An Enbridge Gas representative emailed the CLFN representative providing a Project update. Enbridge Gas advised they would provide a Project notification letter for the Project in January 2022. The Enbridge Gas representative advised they would provide a Project notification letter for the Project in January 2022.	-	-
7.1	December 9, 2021	Email	An Enbridge Gas representative emailed the CLFN representative providing minutes from their December 2, 2021, meeting.	-	-
7.2	February 8, 2022	Virtual Meeting	An Enbridge Gas representative had a conference call with CLFN representatives regarding the Project. Topics of discussion included Project updates, an overview of the engagement process, and Enbridge Gas' point of contact.	-	-
7.3	February 9, 2022	Email	An Enbridge Gas representative emailed the CLFN representatives providing the presentation slides and meeting notes from the February 8, 2022, Relationship Framework meeting regarding the Project.	-	-
7.4	July 22, 2022	Email	An Enbridge Gas representative emailed CLFN representatives providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
7.5	July 28, 2022	Email	-	A CLFN representative emailed the Enbridge Gas representative advising them they would not be engaging in the Project as the Project was out of their treaty territory, and they did not feel it was a priority at this time.	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
7.6	July 29, 2022	Email	An Enbridge Gas representative emailed the CLFN representative confirming receipt of their email from the previous day and confirmed that they would continue to provide Project related information.	-	-
7.7	September 7, 2022	Email	An Enbridge Gas representative emailed the CLFN representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022 and provided a website link. CLFN advised they would not be engaging on the Project. Enbridge Gas confirmed receipt of their email.	-	-
7.8	November 11, 2022	Email	An Enbridge Gas representative emailed the CLFN representative providing a Project overview and draft Stage One AA Report. Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
7.9	December 1, 2022	Email	An Enbridge Gas representative emailed the CLFN representatives providing a reminder that the draft Stage One AA Report for the Project was out for review. Enbridge Gas representative noted capacity funding was available.	-	-

Hiawatha First Nation (HFN)

Line Item	Date	Method	Summary of Enbridge Gas Inc. (“Enbridge Gas”) Engagement Activity	Summary of Community’s Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
8.0	July 22, 2022	Email	An Enbridge Gas representative emailed the HFN representatives providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
8.1	August 11, 2022	Email	An Enbridge Gas representative emailed the HFN representatives suggesting they arrange a monthly conference call to provide updates on the Project.	-	-
8.2	September 7, 2022		An Enbridge Gas representative emailed the HFN representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022 and provided a website link.	-	-
8.3	October 25, 2022	Email	An Enbridge Gas representative emailed the HFN representatives requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022.	-	-
8.4	November 11, 2022	Email	An Enbridge Gas representative emailed the HFN representative providing a Project overview and draft Stage One AA Report. Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
8.5	December 1, 2022	Email	An Enbridge Gas representative emailed the HFN representatives providing a reminder that the draft Stage One AA Report for the Project was out for review. Enbridge Gas representative noted capacity funding was available.	-	-
8.6	January 9, 2023	Email	An Enbridge Gas representative emailed the HFN representative providing a reminder that the draft Stage One AA Report for the Project was out for review and that they could extend the date required by if HFN wanted to still review.	-	-
8.7	January 17, 2023	Email	-	An HFN representative emailed the Enbridge Gas representative to advise they are behind on reviews but intend to review the draft Stage One AA by the end of January 2023.	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
8.8	January 17, 2023	Email	An Enbridge Gas representative emailed the HFN representative to advise that the end of the month was okay for the review.	-	-
8.9	January 17, 2023	Email	-	An HFN representative emailed the Enbridge Gas representative to confirm receipt of the email.	-

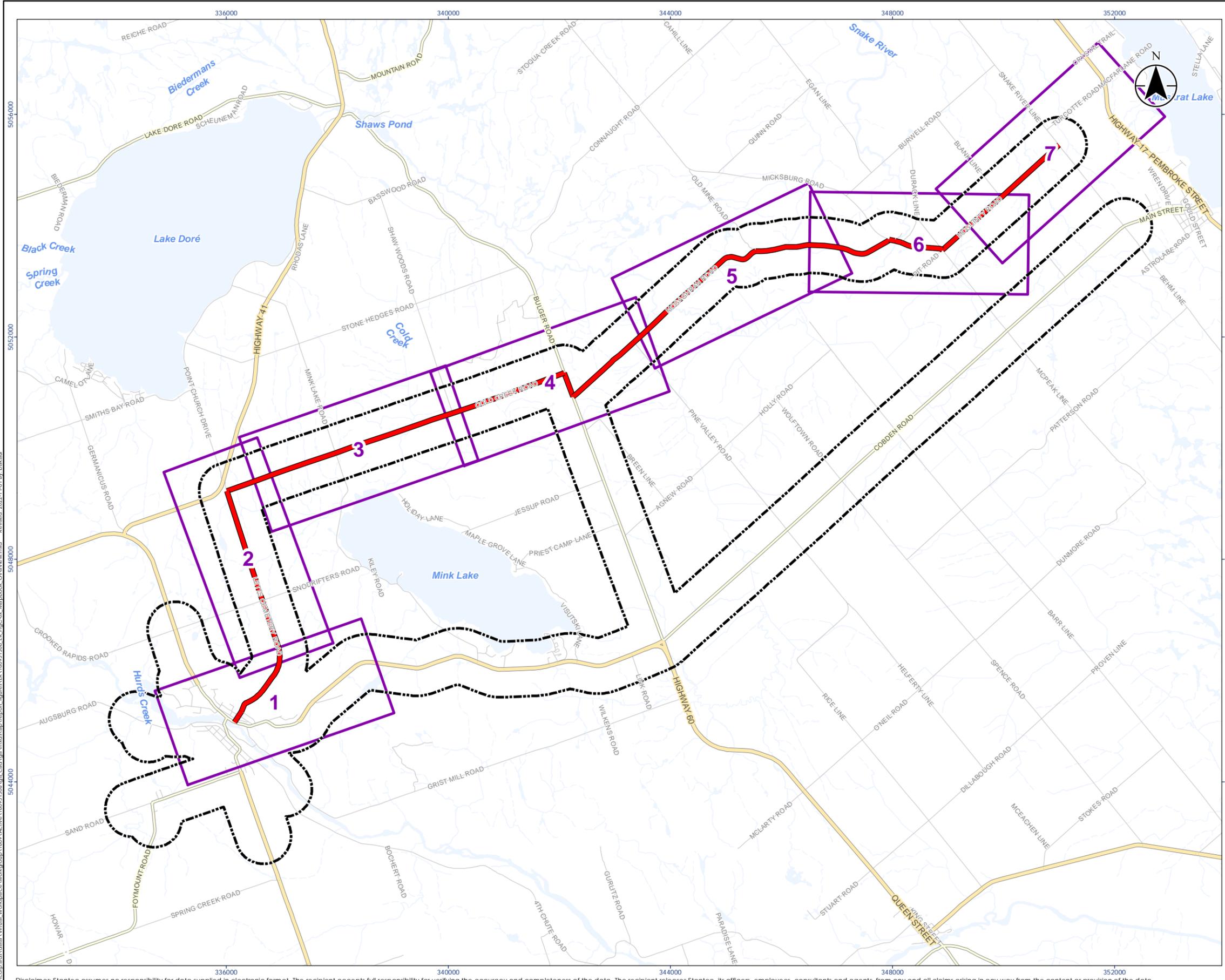
Mississaugas of Scugog Island First Nation (MSIFN)

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
9.0	April 25, 2022	Email	An Enbridge Gas representative emailed the MSIFN representatives providing April 2022 Project updates for ongoing Enbridge Gas Projects.	-	-
9.1	April 27, 2022	Email	-	An MSIFN representative emailed the Enbridge Gas representative confirming receipt of their April 25, 2022, email.	-
9.2	April 28, 2022	Email	An Enbridge Gas representative emailed the MSIFN representative advising them they could provide additional information regarding the April 2022 updates, if needed.	-	-
9.3	May 26, 2022	Email	-	An Enbridge representative emailed the MSIFN representatives providing May 2022 Project updates for ongoing Enbridge Gas Projects.	-
9.4	July 22, 2022	Email	An Enbridge Gas representative emailed the MSIFN representatives providing a Project notification letter for the Project. The letter provided an overview of the proposed Project, a list of potential authorizations required, and contact information for the Ministry of Energy. The letter advised an Environmental Study of construction and operation activities would be undertaken. The letter requested community feedback on the proposed Project to avoid, minimize or mitigate potential adverse impacts on Aboriginal or Treaty rights.	-	-
9.5	August 5, 2022	Email	-	An MSIFN representative emailed the Enbridge Gas representative requesting a map inclusive of planned water crossings, information on federal permits and approvals, and a list of Indigenous communities involved in consultation for the Project.	MSIFN requested a map inclusive of planned water crossings, information on federal permits and approvals and a list of Indigenous communities involved in consultation for the Project. Enbridge Gas provided a notice of study commencement on September 7, 2022, that included a map and a website link to a virtual open house.
9.6	August 8, 2022	Email	An Enbridge Gas representative emailed the MSIFN representative confirming receipt of their email and advising them they would follow up.	-	-

Line Item	Date	Method	Summary of Enbridge Gas Inc. ("Enbridge Gas") Engagement Activity	Summary of Community's Engagement Activity	Issues or Concerns raised and how addressed by Enbridge Gas including any substantive Attachments
9.7	August 11, 2022	Email	An Enbridge Gas representative emailed the representatives, and IBA Braiding, representing MSIFN, suggesting they arrange a monthly conference call to provide updates on the Project.		
9.8	August 24, 2022	Email	-	An Enbridge Gas representative emailed the MSIFN representatives providing August 2022 Enbridge Gas Project updates.	-
9.9	September 7, 2022	Email	Enbridge Gas representative emailed the MSIFN representative providing a notice of study commencement and virtual open house information for the Project. The letter provided an overview of the Project and its purpose, a map, and an overview of Environmental Study requirements and activities. The letter noted construction was planned to occur in quarter four of 2023. The letter requested community feedback on the proposed Project and suggestions for mitigation of potential adverse impacts on Aboriginal or Treaty rights by October 26, 2022. The letter advised a virtual open house would be held from September 26 to October 9, 2022, and provided a website link.	-	-
9.10	October 25, 2022	Email	An Enbridge Gas representative emailed an MSIFN representatives requesting feedback regarding the Project virtual open house that was available from September 26 to October 9, 2022.	-	-
9.11	November 2, 2022	Email	An Enbridge Gas representative emailed the MSIFN representatives providing November 2022 Enbridge Gas Project updates for the Project. The Enbridge Gas representative advised capacity funding was available for fieldwork participation and document reviews.	-	-
9.12	November 11, 2022	Email	An Enbridge Gas representative emailed the MSIFN representative providing a Project overview and draft Stage One AA Report. Enbridge Gas representative requested they review and provide feedback by December 9, 2022.	-	-
9.13	November 29, 2022	Email	An Enbridge Gas representative emailed the MSIFN representative providing additional November 2022 Enbridge Gas Project updates for the Project.	-	-
9.14	December 1, 2022	Email	An Enbridge Gas representative emailed the MSIFN representatives providing a reminder that the draft Stage One AA Report for the Project was out for review. Enbridge Gas representative noted capacity funding was available.	-	-
9.15	January 9, 2023	Email	An Enbridge Gas representative emailed the MSIFN representative providing a reminder that the draft Stage One AA Report for the Project was out for review and that they could extend the date required by if MSIFN wanted to still review.	-	-

Appendix C Existing Conditions Figures

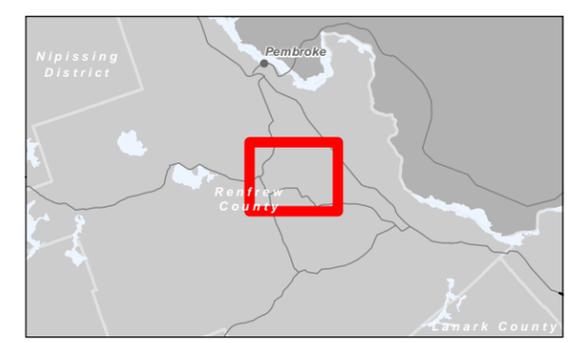




- Legend**
- Preliminary Preferred Route
 - Study Area (500m)
 - Expressway / Highway
 - Major Road
 - Minor Road
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Mapbook Index
 - Waterbody



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.



Project Location: County of Renfrew
 Prepared by BK on 2022-11-01
 Technical Review by SPE on 2022-10-31

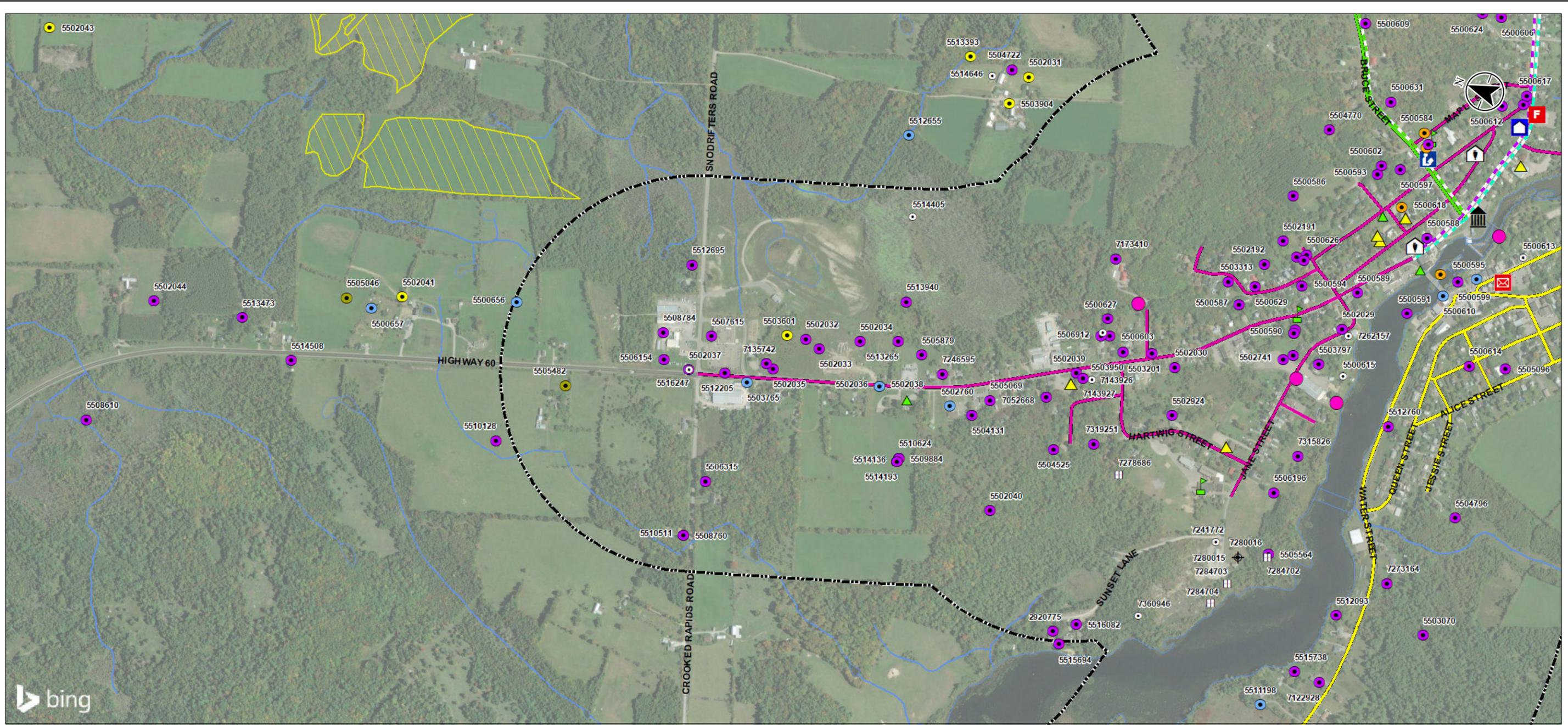
Client/Project:
ENBRIDGE GAS DISTRIBUTION INC.
EGANVILLE COMMUNITY EXPANSION

Figure No.
C.1

Title
Mapbook Overview Map

\\corp.ads\data\Virtual_Workspace\workgroup\160951306\160951306_Vis_Cad_Vis_Vmxd\report_figures\ER\160951306_ER_FigC.01_Mapbook_Overview.mxd Revised: 2022-11-01 By: bakaur

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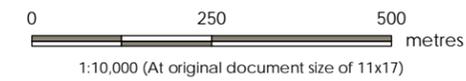
Notes

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022, CanVec, 2022.
3. MECP Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2022.
4. Orthoimagery © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS, Date of Imagery, unknown.
5. *The proposed route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Systematic Tile Drainage
 - Waterbody
- Proposed Routes**
- Phase 2 Preliminary Preferred Route (PPR2)
 - Phase 3 - Community Expansion*
 - Phase 4 - Community Expansion*
- Alternate Routes**
- Alternate Route 1 (AR1)
 - Alternate Route 2 (AR2)
 - Alternate Route 3 (AR3)

- Socio Economic Features**
- Bed and Breakfast
 - Civic Building
 - Fire Station
 - Library
 - Museum
 - Place of Worship
 - Post Office
 - Recreation
 - Residential Community
- MECP Water Well (Well ID)**
- Commercial
 - Public
 - Irrigation
 - Livestock
 - Test Hole
 - Monitoring and Test Hole
 - Well use not identified
- School**

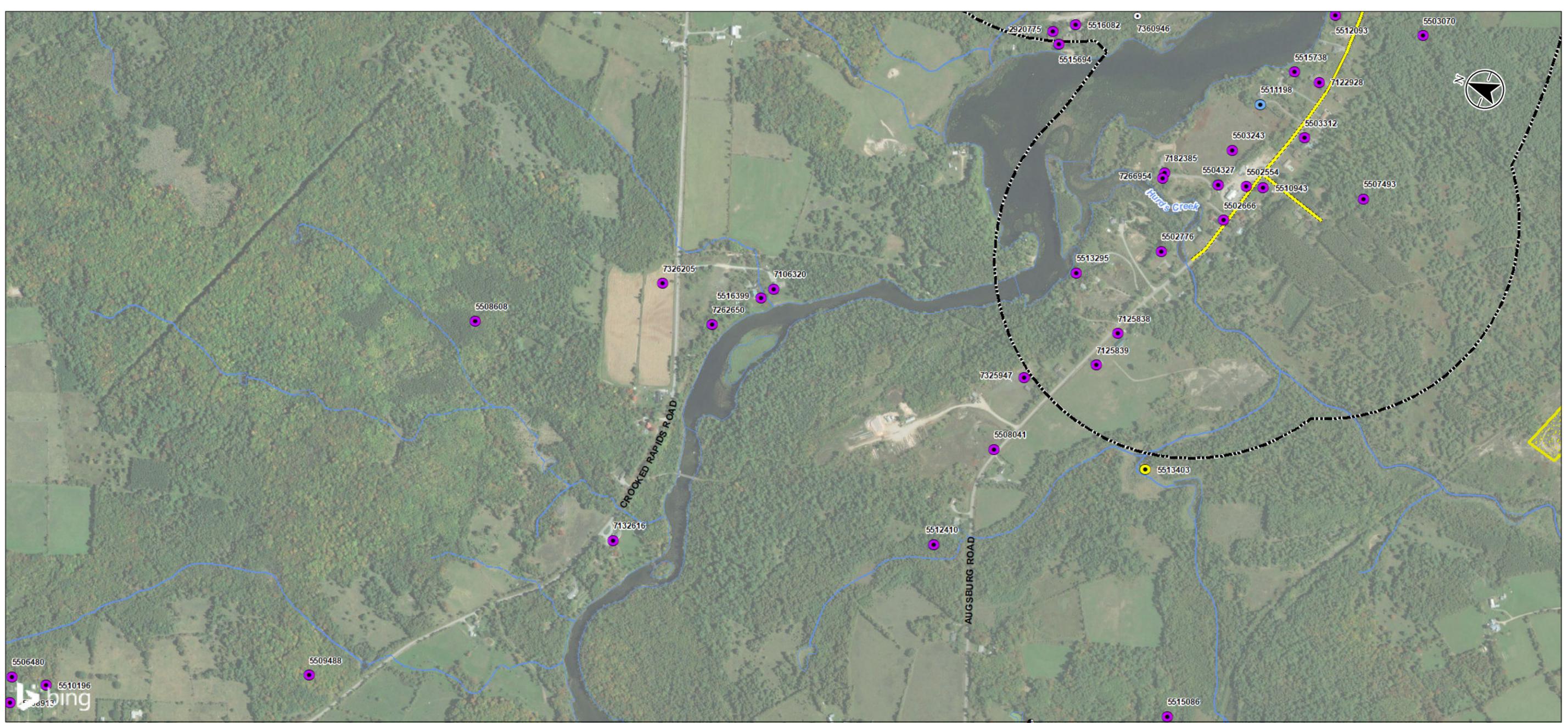


Project Location: 160951306 REVA
 County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

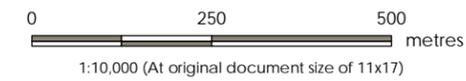
Figure No.: C.1.1

Title: Socio - Economic Features



Legend

- Study Area (500m)
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Aggregate Site - Active
- Waterbody
- Proposed Routes**
- Phase 4 - Community Expansion*
- MECP Water Well (Well ID)**
- Commercial
- Domestic
- Livestock
- Monitoring
- Well use not identified



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31
 160951306 REVA

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.2

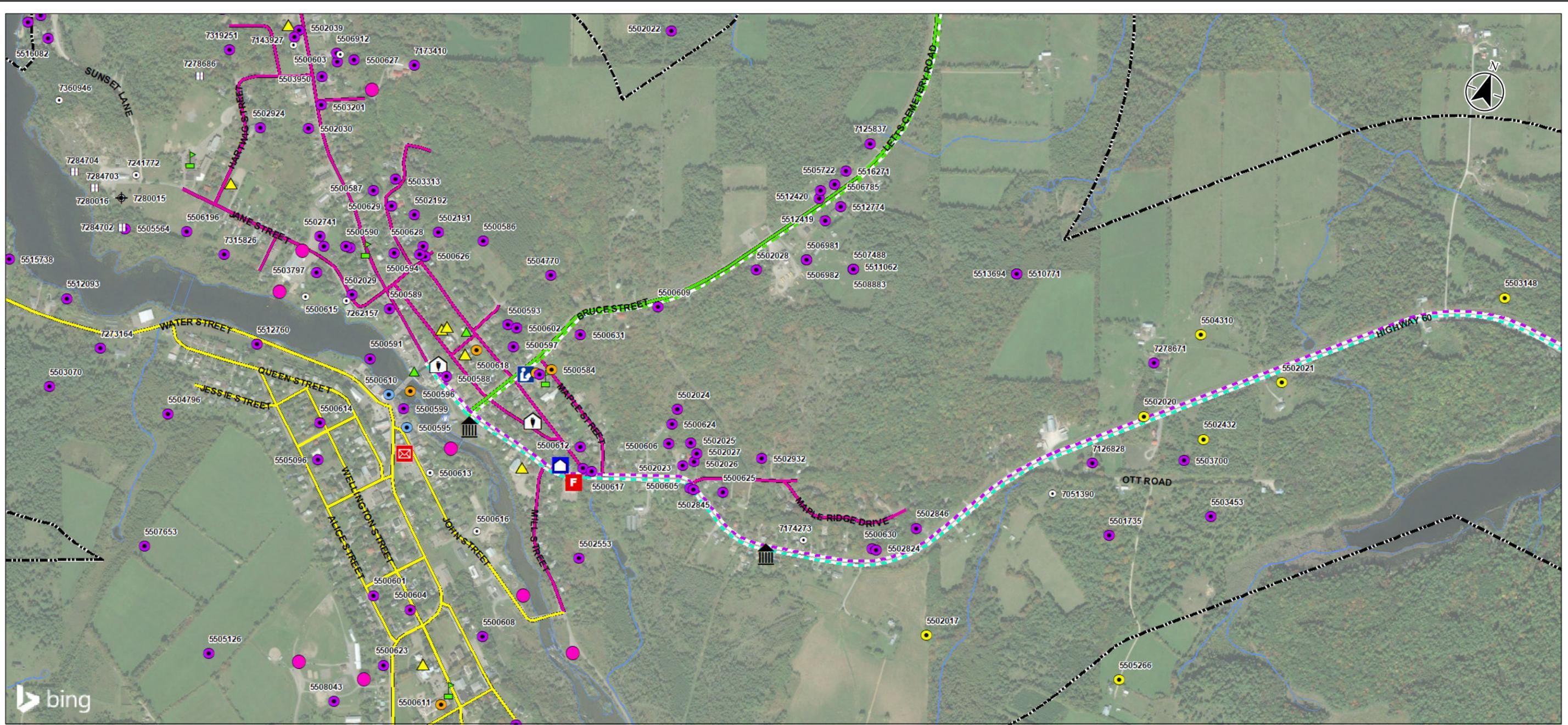
Title: Socio - Economic Features

Notes

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base Features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022, CanVec, 2022.
3. MECP Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2022.
4. Orthoimagery © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS, Date of Imagery, unknown.
5. *The proposed route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

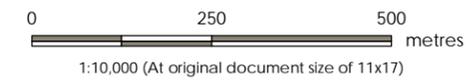
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Legend

- Study Area (500m)
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Waterbody
- Proposed Routes**
- Phase 2 Preliminary Preferred Route (PPR2)
- Phase 3 - Community Expansion*
- Phase 4 - Community Expansion*
- Alternative Routes**
- Alternate Route 1 (AR1)
- Alternate Route 2 (AR2)
- Residential Community
- School
- Bed and Breakfast
- Civic Building
- Fire Station
- Library
- Museum
- Place of Worship
- Post Office
- Recreation
- MECP Water Well (Well ID)
- Commercial
- Public
- Domestic
- Livestock
- Test Hole
- Monitoring and Test Hole
- Well use not identified



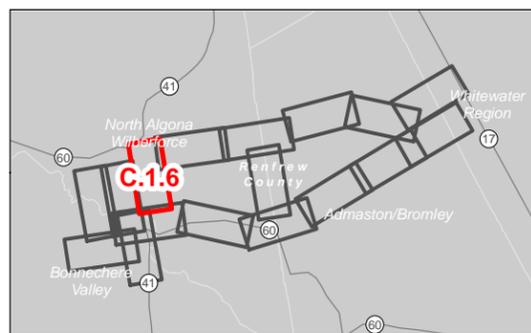
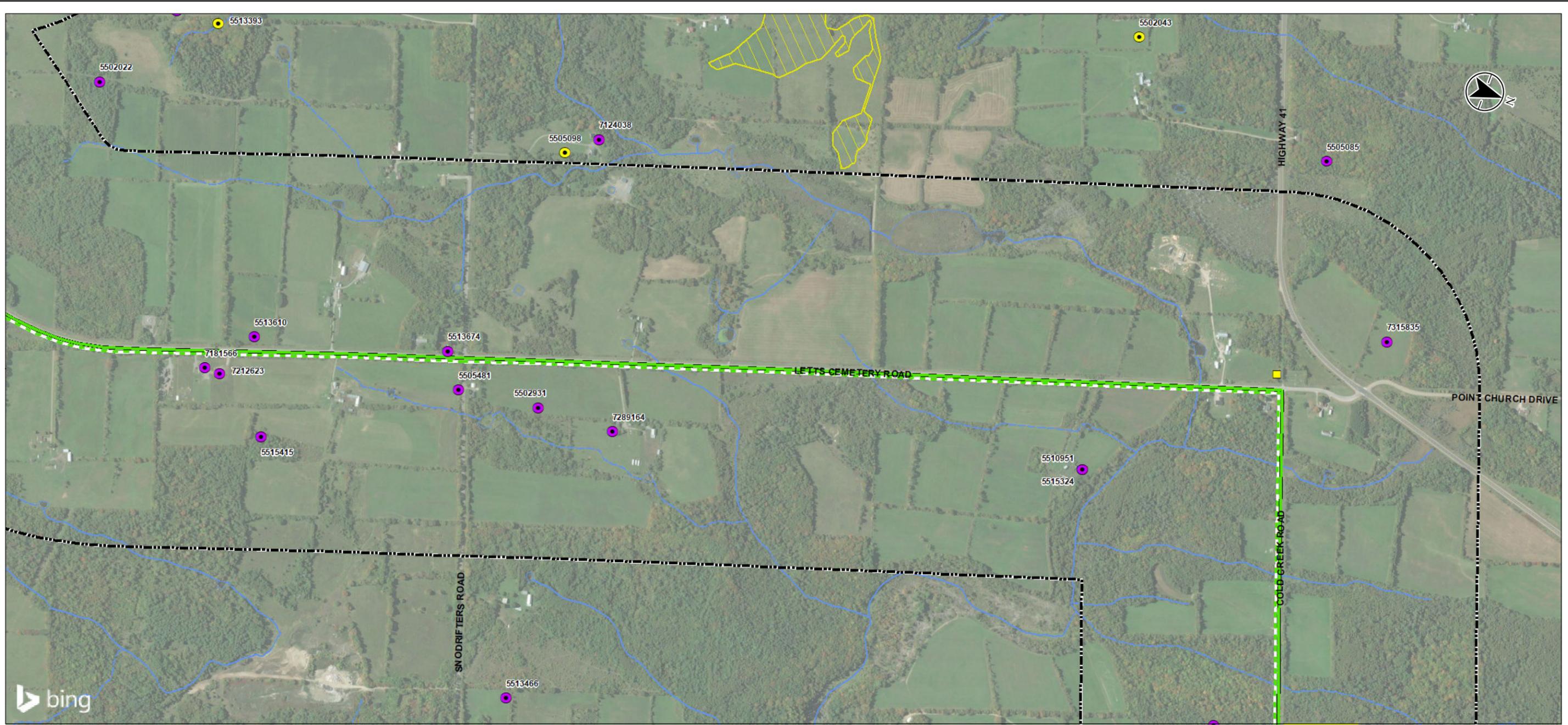
Project Location: 160951306 REVA
 County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

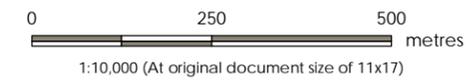
Figure No.: C.1.5

Title: Socio - Economic Features

Notes
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Systematic Tile Drainage
 - Waterbody
 - Proposed Routes**
 - Phase 2 Preliminary Preferred Route (PPR2)
 - Alternate Route 1 (AR1)
 - Socio Economic Features**
 - Cemetery
- MECP Water Well (Well ID)**
- Domestic
 - Livestock



Project Location: 160951306 REVA
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.6

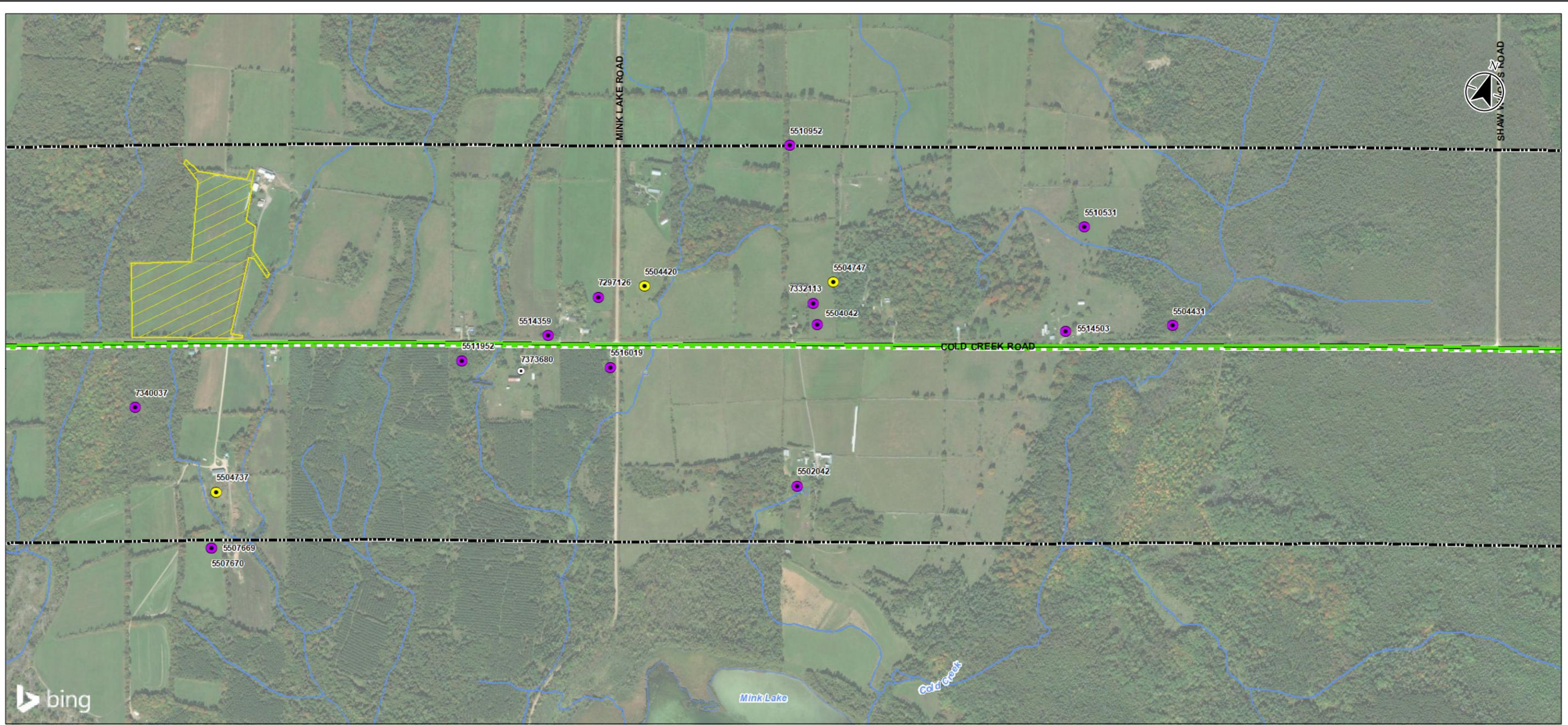
Title: Socio - Economic Features

Notes

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Legend

- Study Area (500m)
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Systematic Tile Drainage
- Waterbody
- Proposed Routes**
- Phase 2 Preliminary Preferred Route (PPR2)
- Alternative Routes**
- Alternate Route 1 (AR1)
- MECP Water Well (Well ID)**
- Domestic
- Livestock
- Well use not identified



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.7

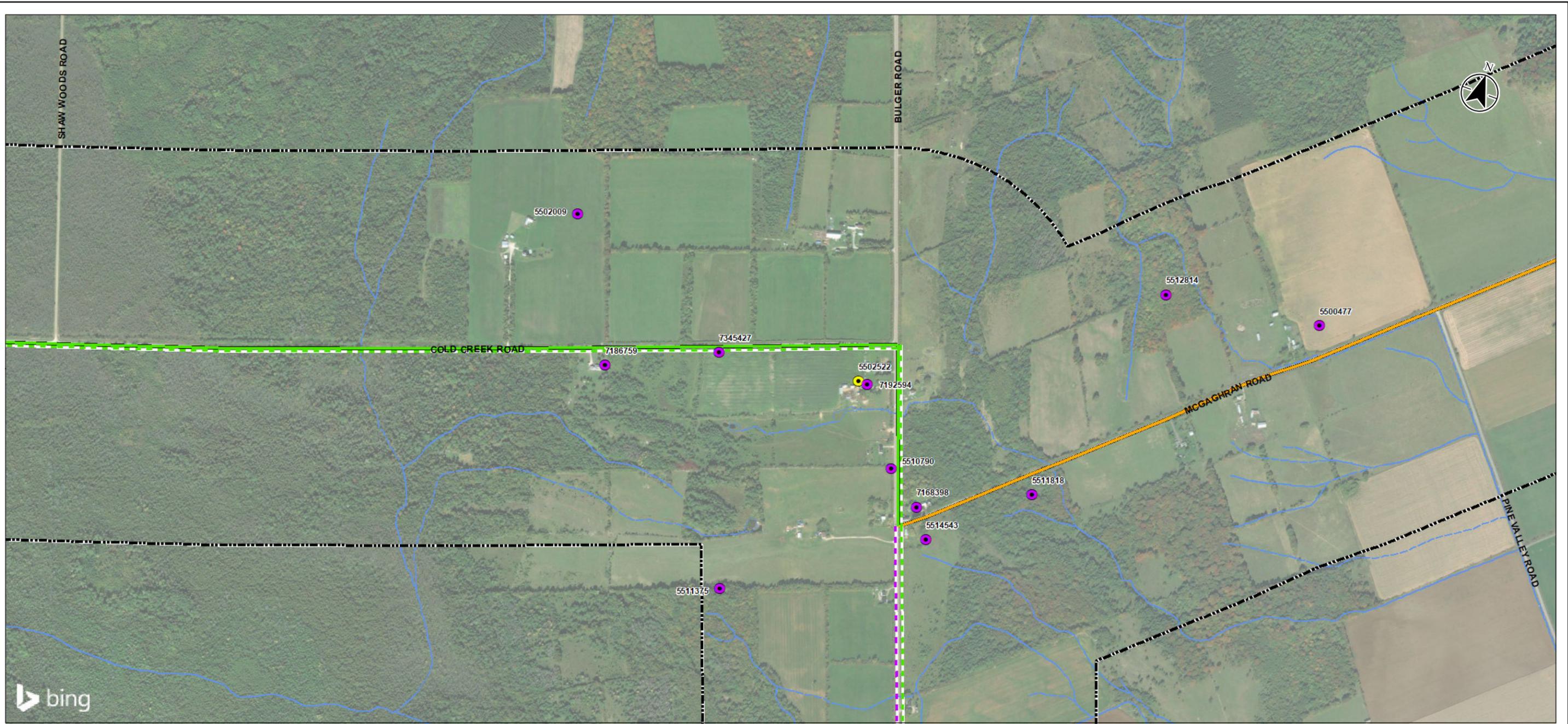
Title: Socio - Economic Features

Notes

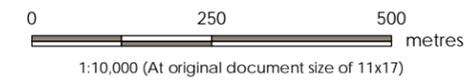
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Waterbody
 - Proposed Routes**
 - Phase 1 Preliminary Preferred Route (PPR1)
 - Phase 2 Preliminary Preferred Route (PPR2)
 - Alternative Routes**
 - Alternate Route 1 (AR1)
 - Alternate Route 3 (AR3)
 - MECP Water Well (Well ID)**
 - Domestic
 - Livestock



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31
 160951306 REVA

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.8

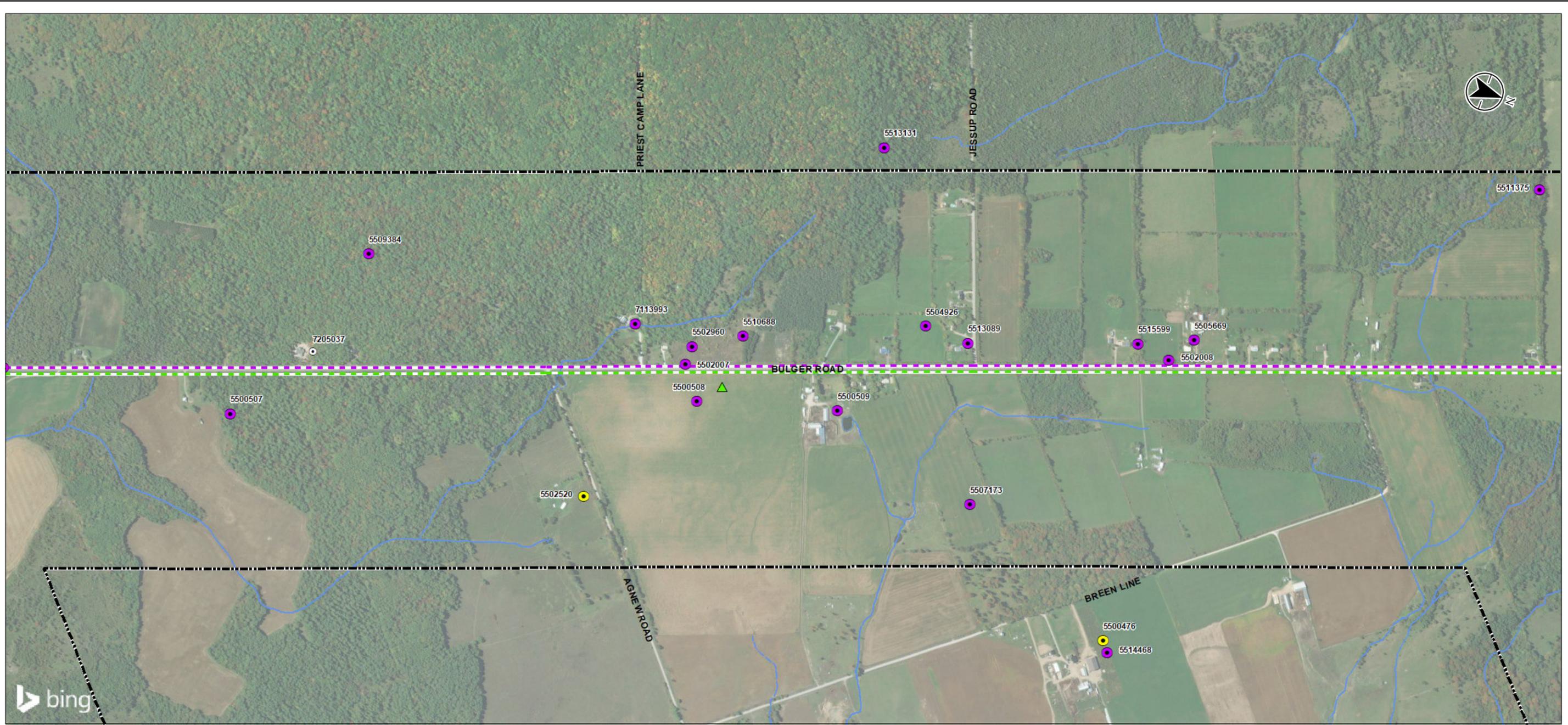
Title: Socio - Economic Features

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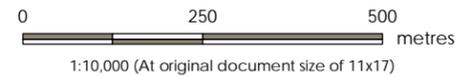


- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody
 - Alternative Routes**
 - Alternate Route 1 (AR1)
 - Alternate Route 3 (AR3)
 - Socio Economic Features**
 - Bed and Breakfast
 - MECP Water Well (Well ID)**
 - Domestic
 - Livestock
 - Well use not identified

Notes

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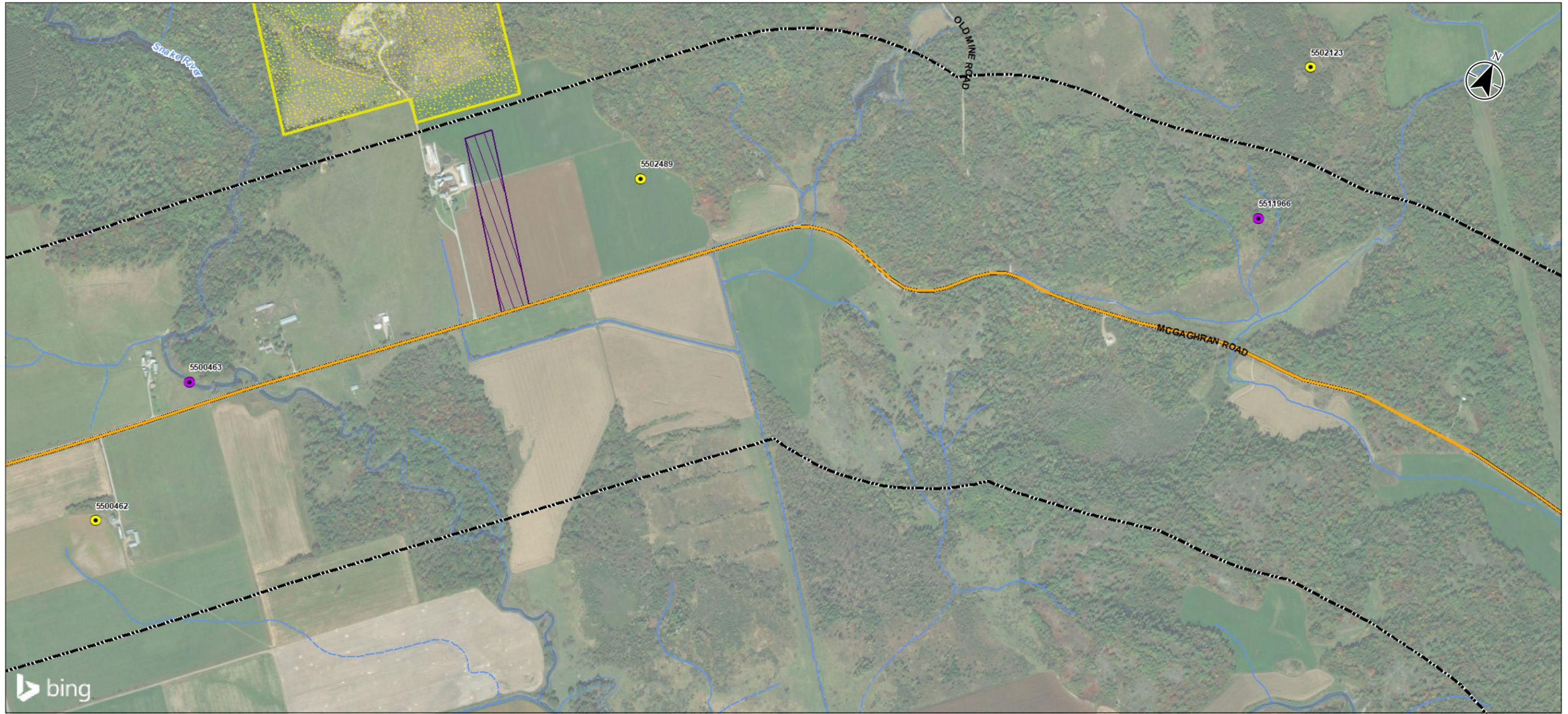
Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

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 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.9

Title: Socio - Economic Features



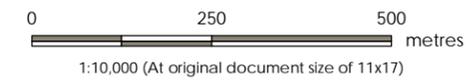


- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Aggregate Site - Active
 - Random Tile Drainage
 - Waterbody
 - Proposed Routes**
 - Phase 1 Preliminary Preferred Route (PPR1)
 - MECP Water Well (Well ID)**
 - Domestic
 - Livestock

Notes

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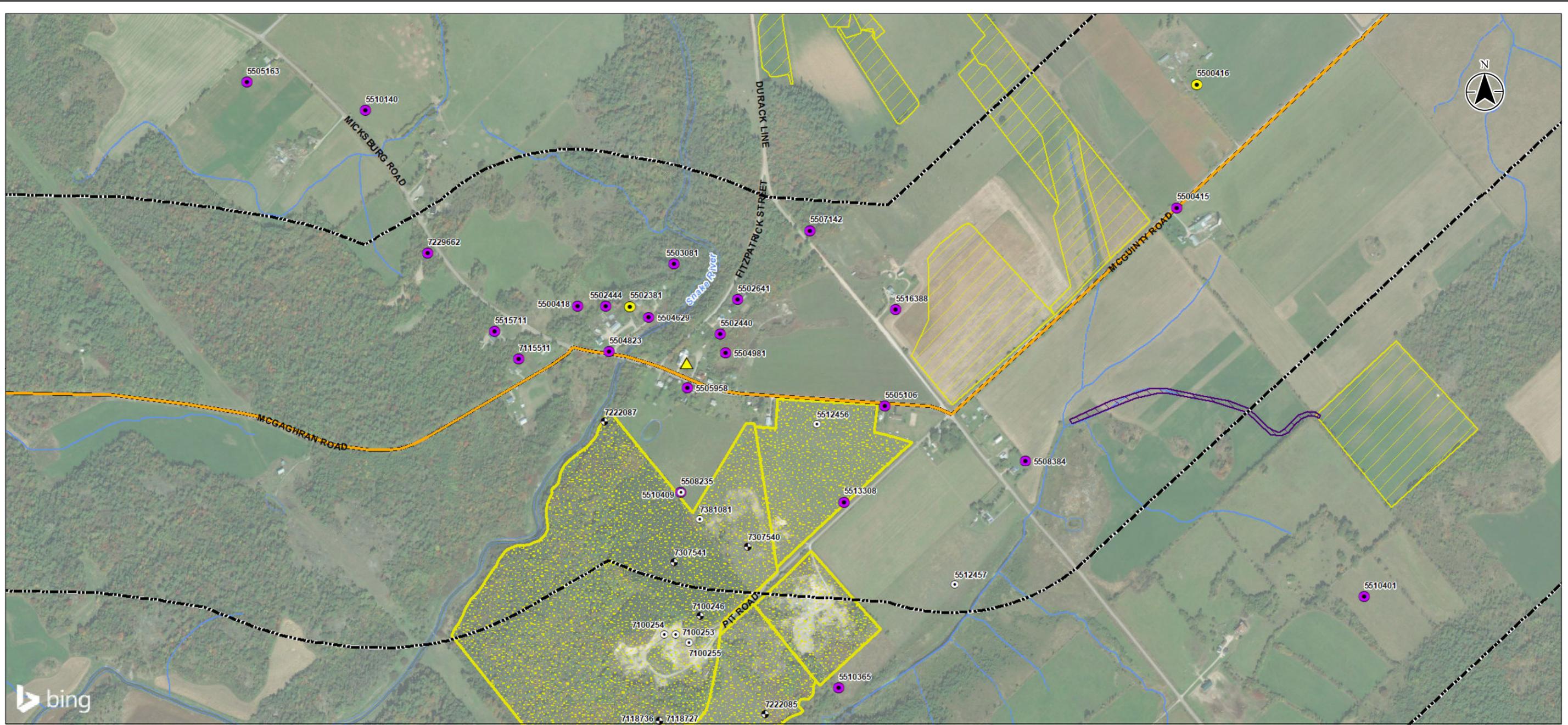


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Figure No.: C.1.10
 Title: Socio - Economic Features

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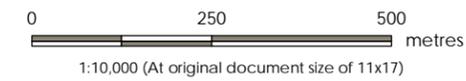


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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Aggregate Site - Active
 - Random Tile Drainage
 - Systematic Tile Drainage
 - Waterbody
 - Proposed Routes**
 - Phase 1 Preliminary Preferred Route (PPR1)
 - Socio Economic Features**
 - Place of Worship

- MECP Water Well (Well ID)**
- Domestic
 - Livestock
 - Monitoring
 - Well use not identified

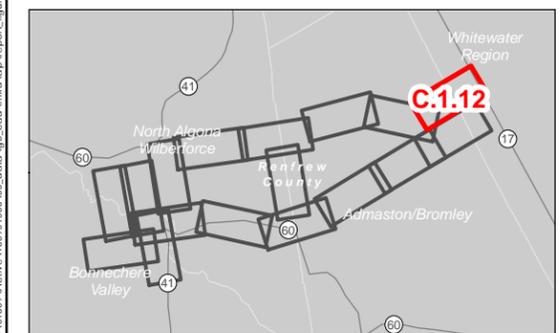
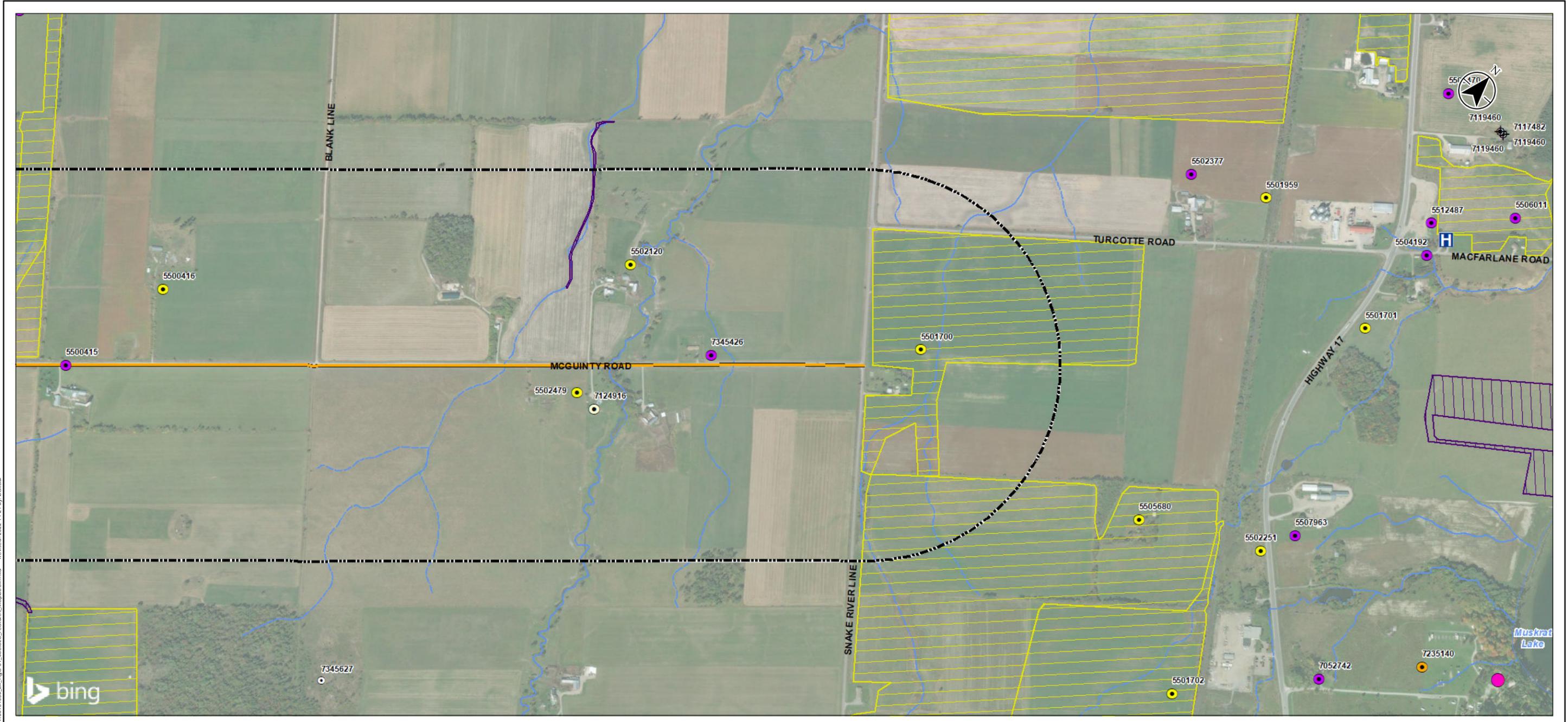


Project Location: 160951306 REVA
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

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Figure No.: C.1.11
 Title: Socio - Economic Features

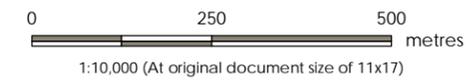
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Legend

- Study Area (500m)
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Random Tile Drainage
- Systematic Tile Drainage
- Waterbody
- Proposed Routes**
- Phase 1 Preliminary Preferred Route (PPR1)
- Socio Economic Features**
- Hospital
- Recreation

- MECP Water Well (Well ID)**
- Public
 - Domestic
 - Cooling And AC
 - Livestock
 - Monitoring and Test Hole
 - Well use not identified



Project Location: County of Renfrew
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Figure No.: C.1.12

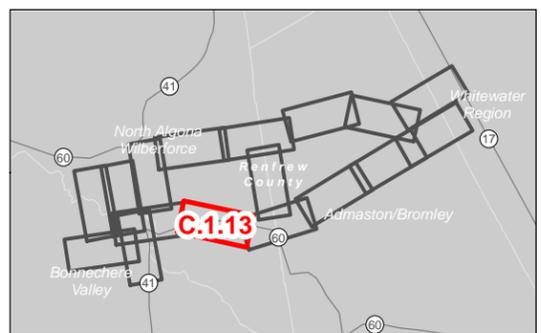
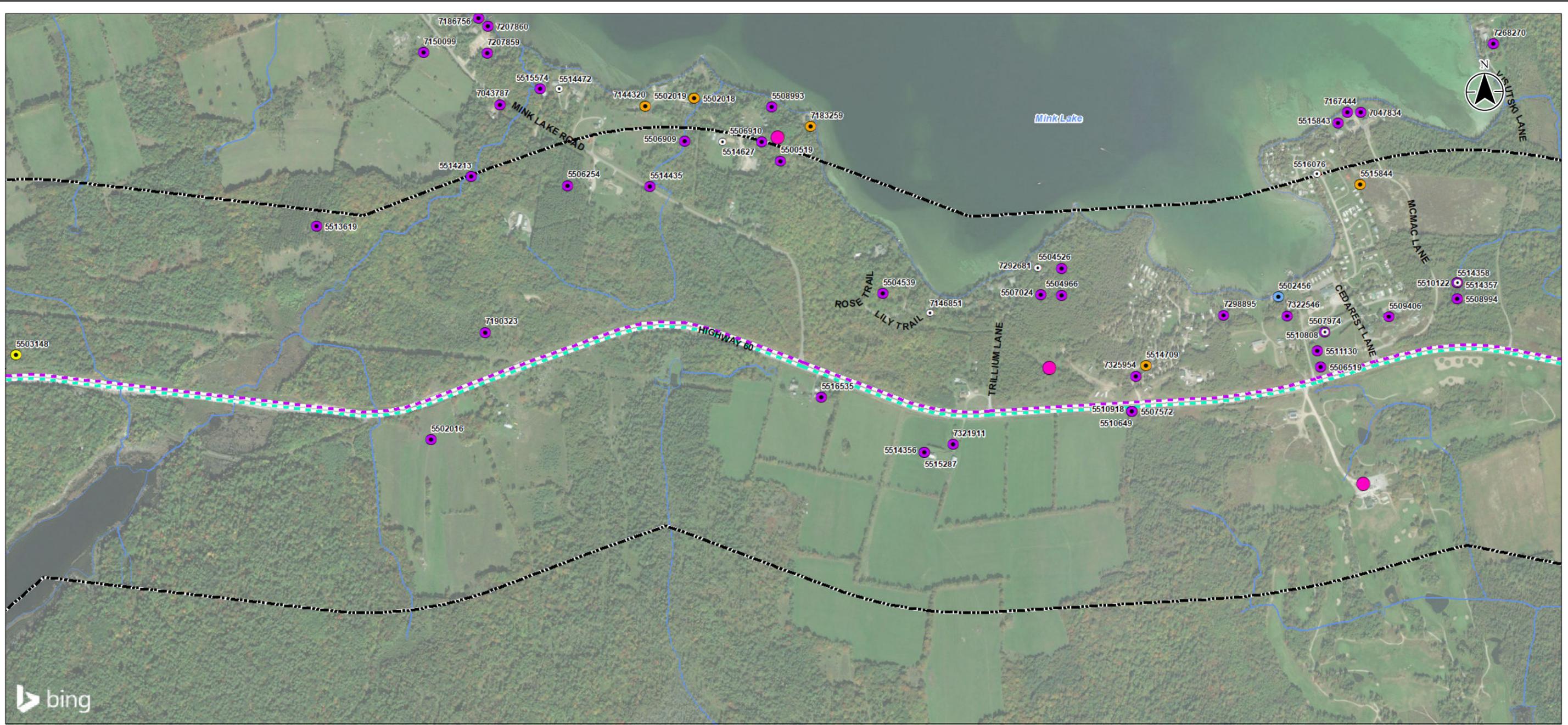
Title: Socio - Economic Features

Notes

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 Reviewed: 2022-11-21 By: bakaur



- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody
 - Alternative Routes**
 - Alternate Route 2 (AR2)
 - Alternate Route 3 (AR3)
 - Socio Economic Features**
 - Recreation
 - MECP Water Well (Well ID)**
 - Commercial
 - Public
 - Domestic
 - Livestock
 - Well use not identified



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
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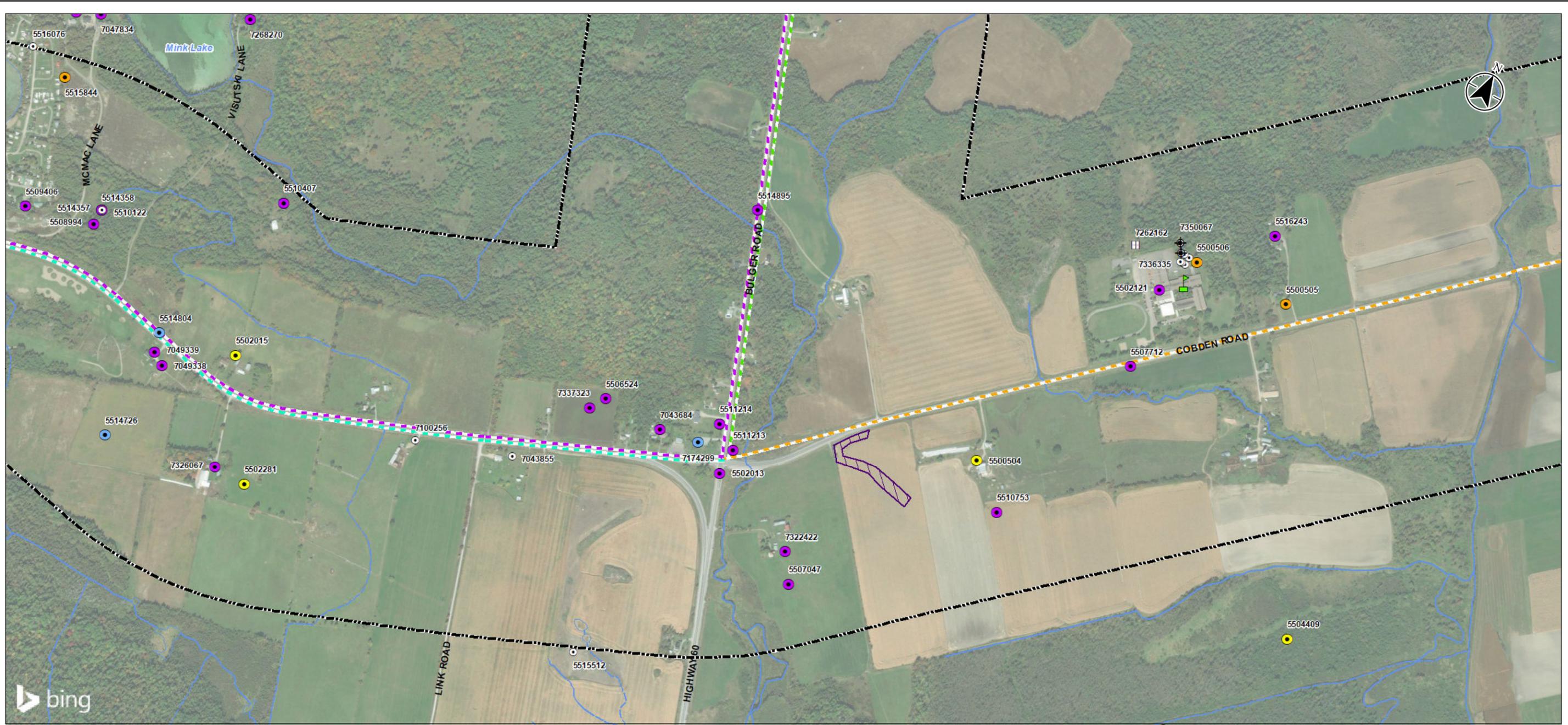
Figure No.: C.1.13
 Title: Socio - Economic Features

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 Revised: 2022-11-21 By: bakaur



- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Random Tile Drainage
 - Waterbody
 - Alternative Routes**
 - Alternate Route (AR0)
 - Alternate Route 1 (AR1)
 - Alternate Route 2 (AR2)
 - Alternate Route 3 (AR3)
 - Socio Economic Features**
 - School
- MECP Water Well (Well ID)**
- Commercial
 - Public
 - Domestic
 - Livestock
 - Test Hole
 - ⊕ Monitoring and Test Hole
 - Well use not identified



Project Location: 160951306 REVA
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

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 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.14

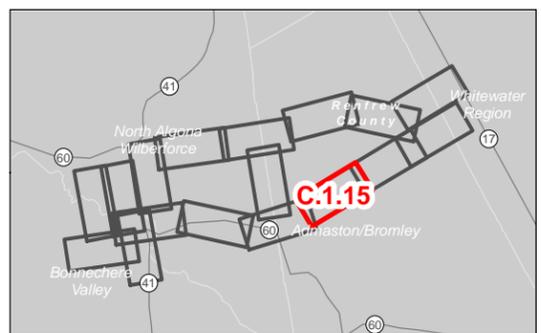
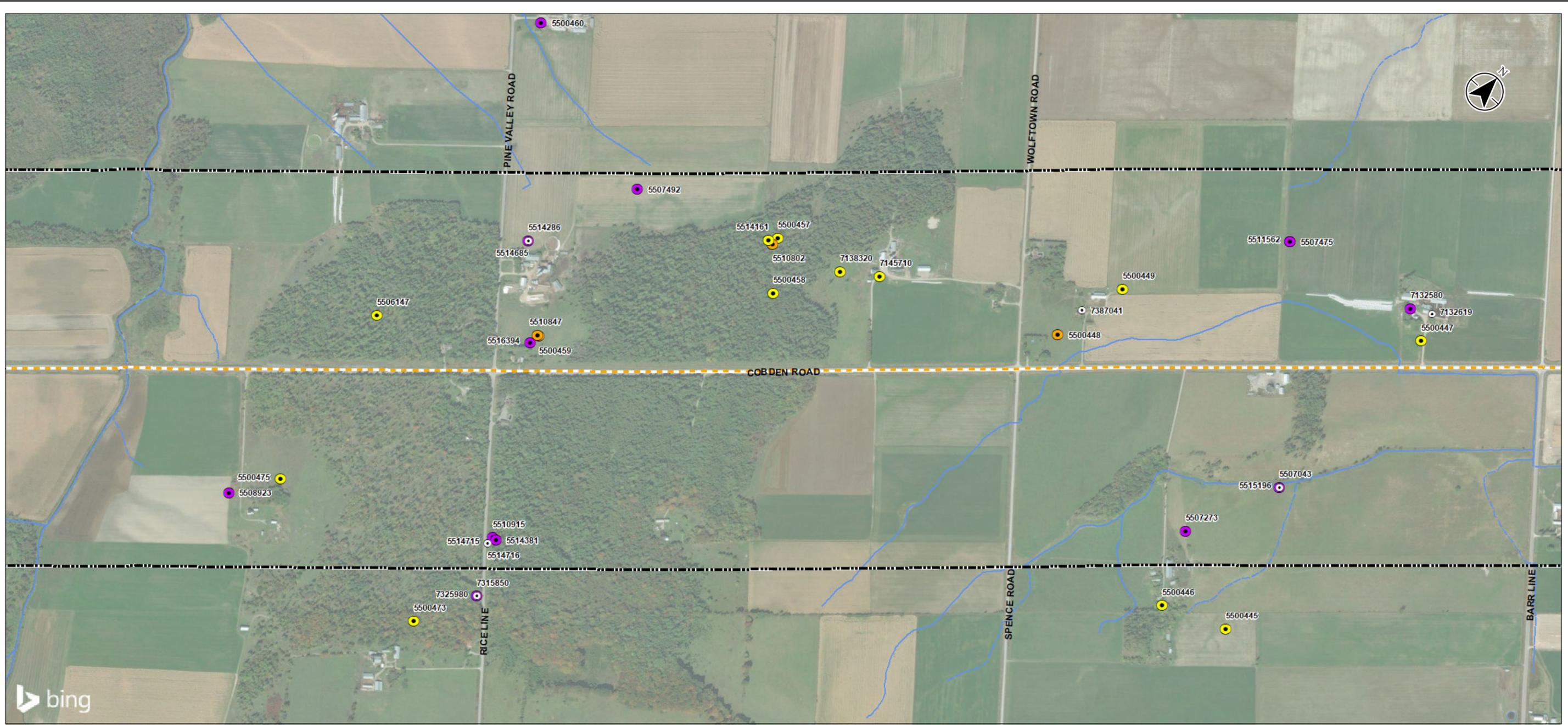
Title: Socio - Economic Features

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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody
 - Alternative Routes**
 - Alternate Route (AR0)
 - MECP Water Well (Well ID)**
 - Public
 - Domestic
 - Livestock
 - Well use not identified



Project Location: 160951306 REVA
 County of Renfrew Prepared by BK on 2022-11-21
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Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.15

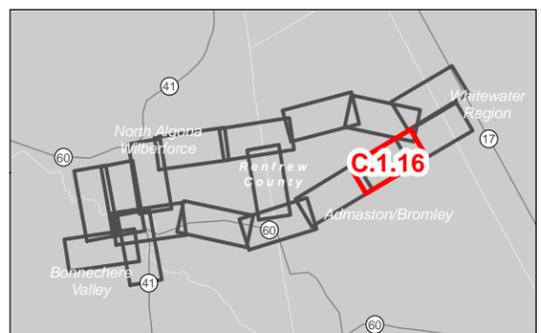
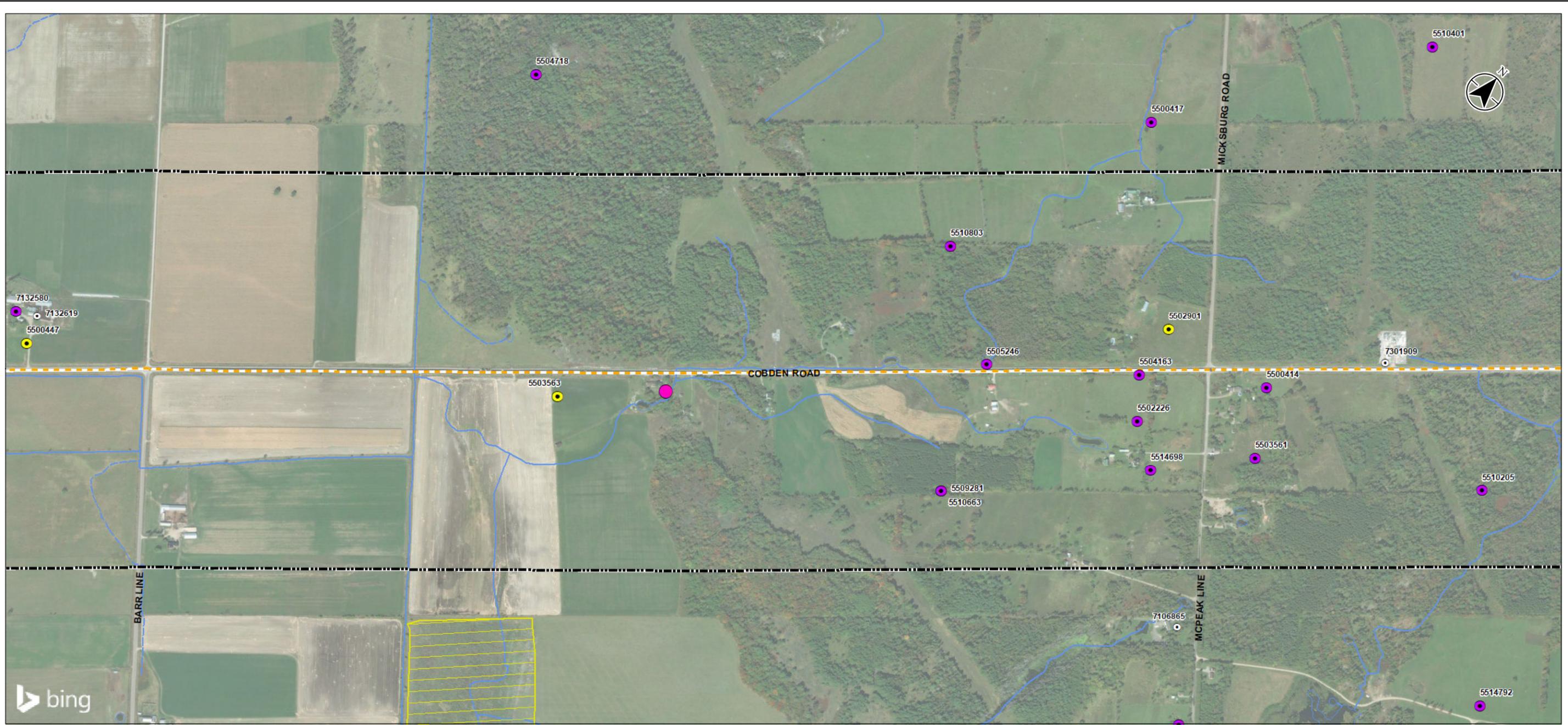
Title: Socio - Economic Features

Notes

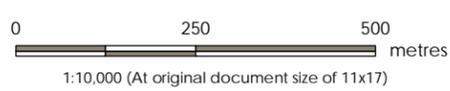
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Systematic Tile Drainage
 - Waterbody
 - Alternative Routes**
 - Alternate Route (AR0)
 - Socio Economic Features**
 - Recreation
 - MECP Water Well (Well ID)**
 - Domestic
 - Livestock
 - Well use not identified



Project Location: 160951306 REVA
 County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
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Figure No.: C.1.16

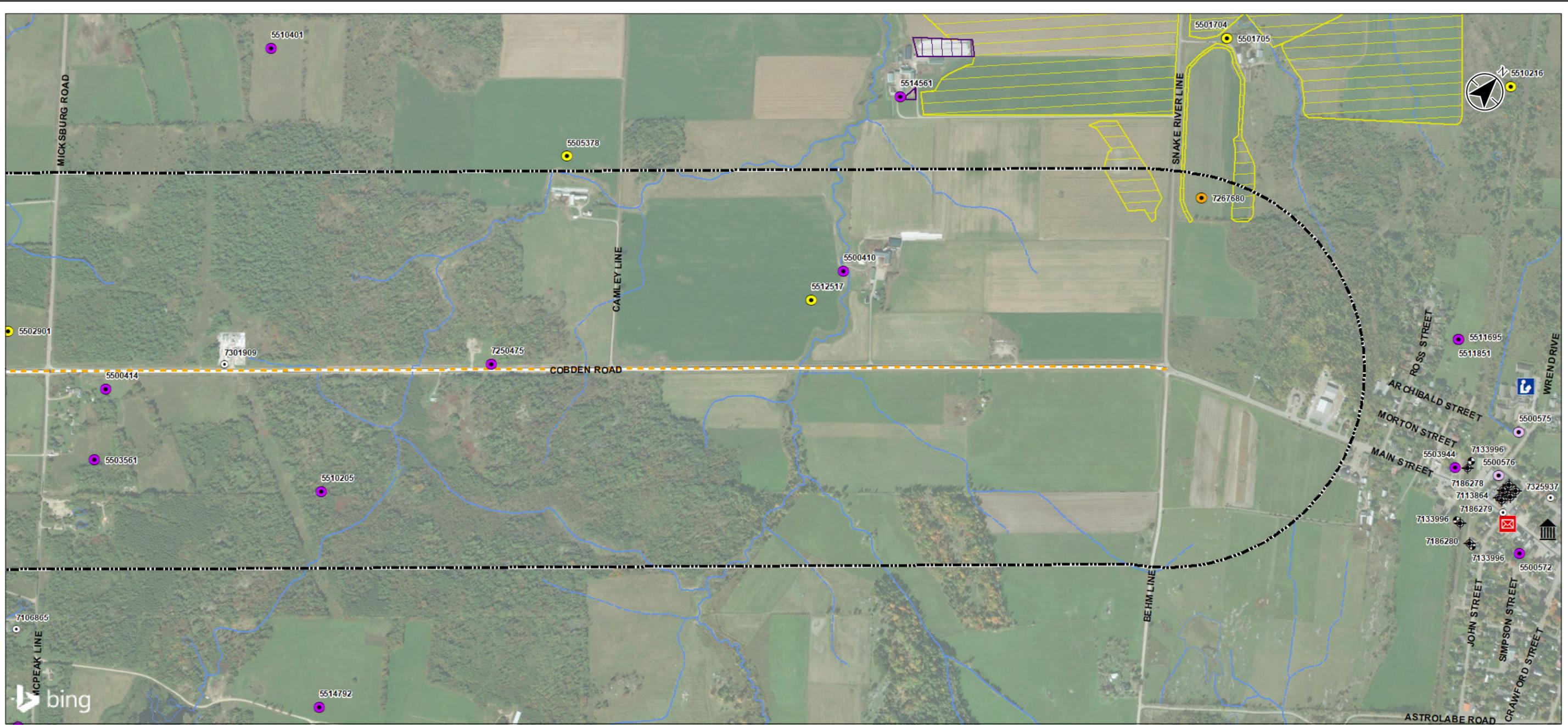
Title: Socio - Economic Features

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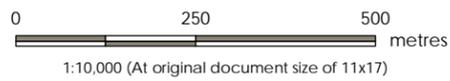


- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Random Tile Drainage
 - Systematic Tile Drainage
 - Waterbody
 - Alternative Routes**
 - Alternate Route (AR0)
 - Socio Economic Features**
 - Civic Building
 - Library
 - Post Office
 - MECP Water Well (Well ID)**
 - Municipal
 - Public
 - Domestic
 - Livestock
 - Monitoring
 - Monitoring and Test Hole
 - Well use not identified

Notes

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- MECP Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2022.
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- *The proposed route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

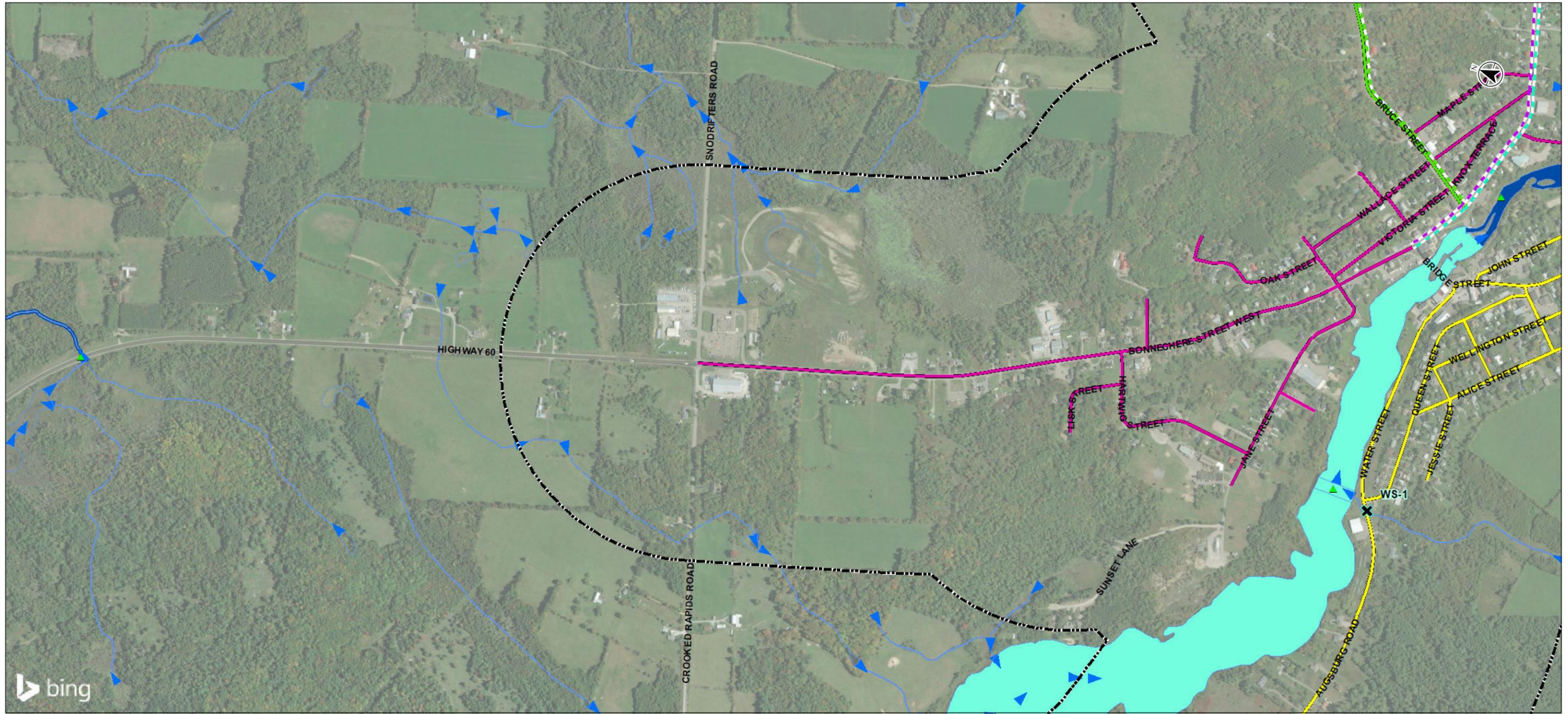
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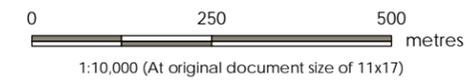
Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.1.17
 Title: Socio - Economic Features



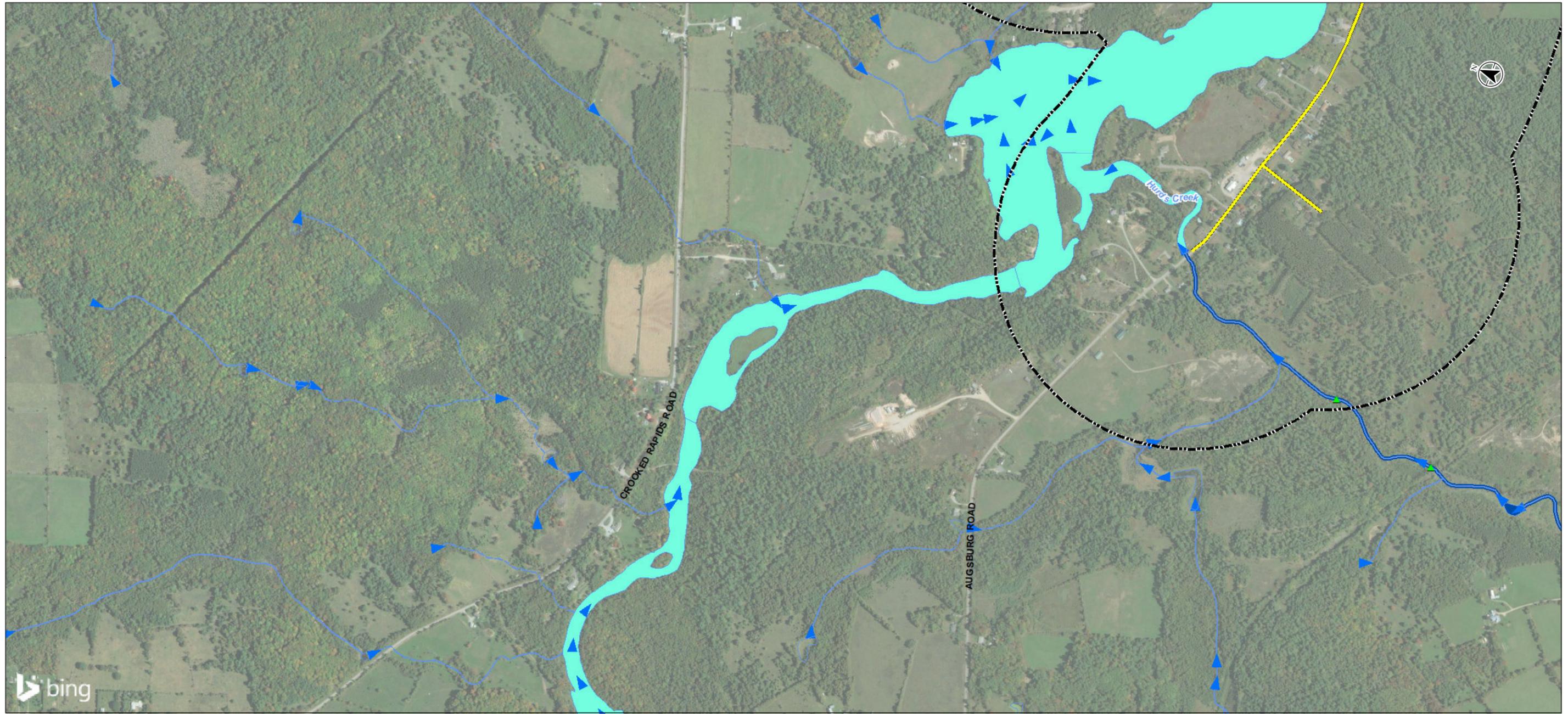
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 4. The proposed route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

- Legend**
- Study Area (500m)
 - MNRF Fish Survey Point (ARA)
 - Flow Direction
 - Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Waterbody
 - Proposed Routes**
 - Phase 2 - Preliminary Preferred Route
 - Phase 3 - Community Expansion*
 - Phase 4 - Community Expansion*
 - Alternative Routes**
 - Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



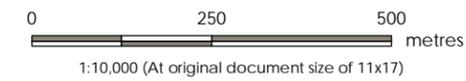
Project Location: County of Renfrew
 Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION
 Figure No.: C.2.1
 Title: Watercourse Crossing Locations and Existing Conditions Data

160951306 REVA
 Prepared by BK on 2022-11-21
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- Legend**
- Study Area (500m)
 - MNRF Fish Survey Point (ARA)
 - Flow Direction
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Waterbody

- Proposed Routes**
- Phase 4 - Community Expansion*



Project Location: County of Renfrew
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Figure No.: C.2.2

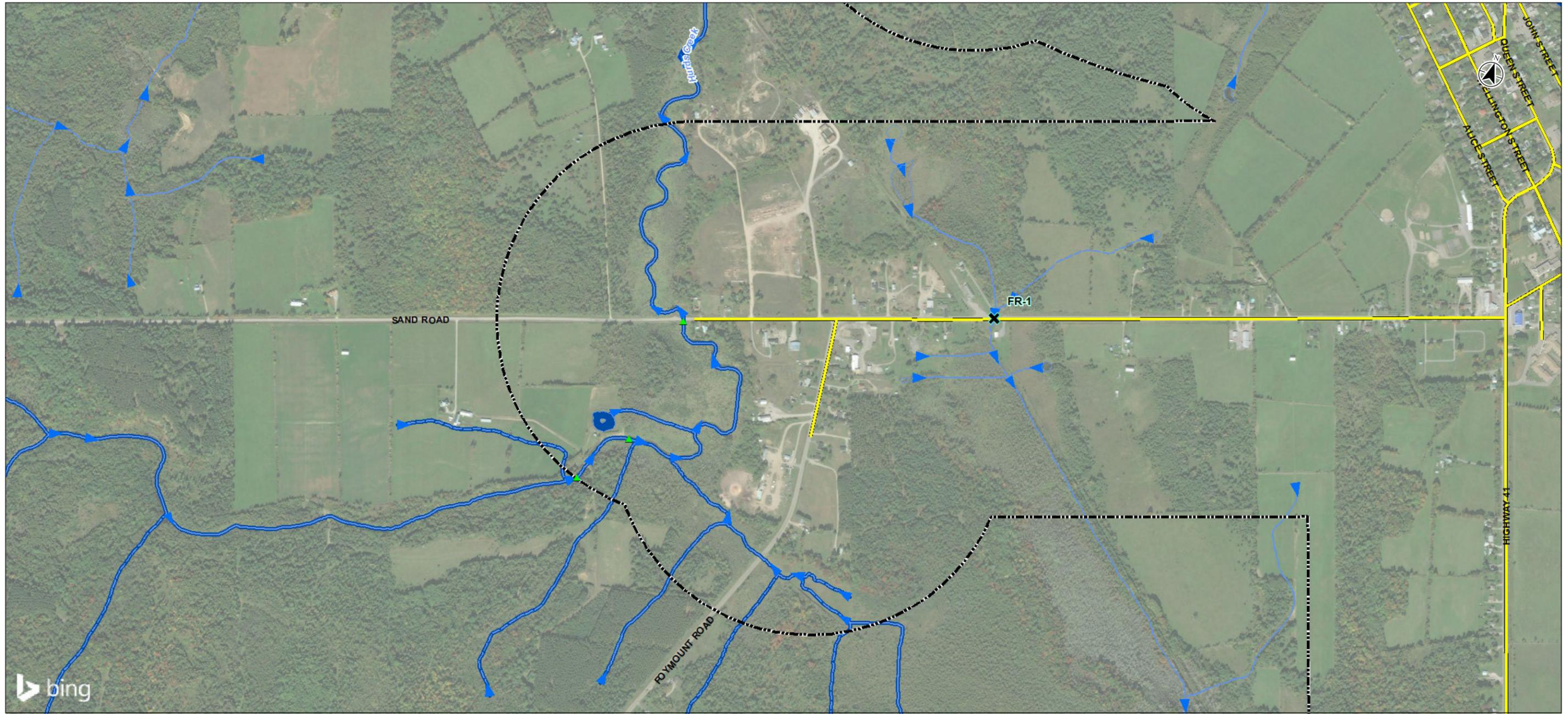
Title: Watercourse Crossing Locations and Existing Conditions Data

Notes

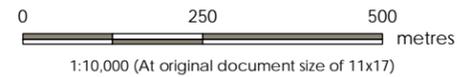
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- Legend**
- Study Area (500m)
 - ▲ MNRF Fish Survey Point (ARA)
 - ▶ Flow Direction
 - ✕ Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Waterbody
 - Proposed Routes
 - Phase 4 - Community Expansion*



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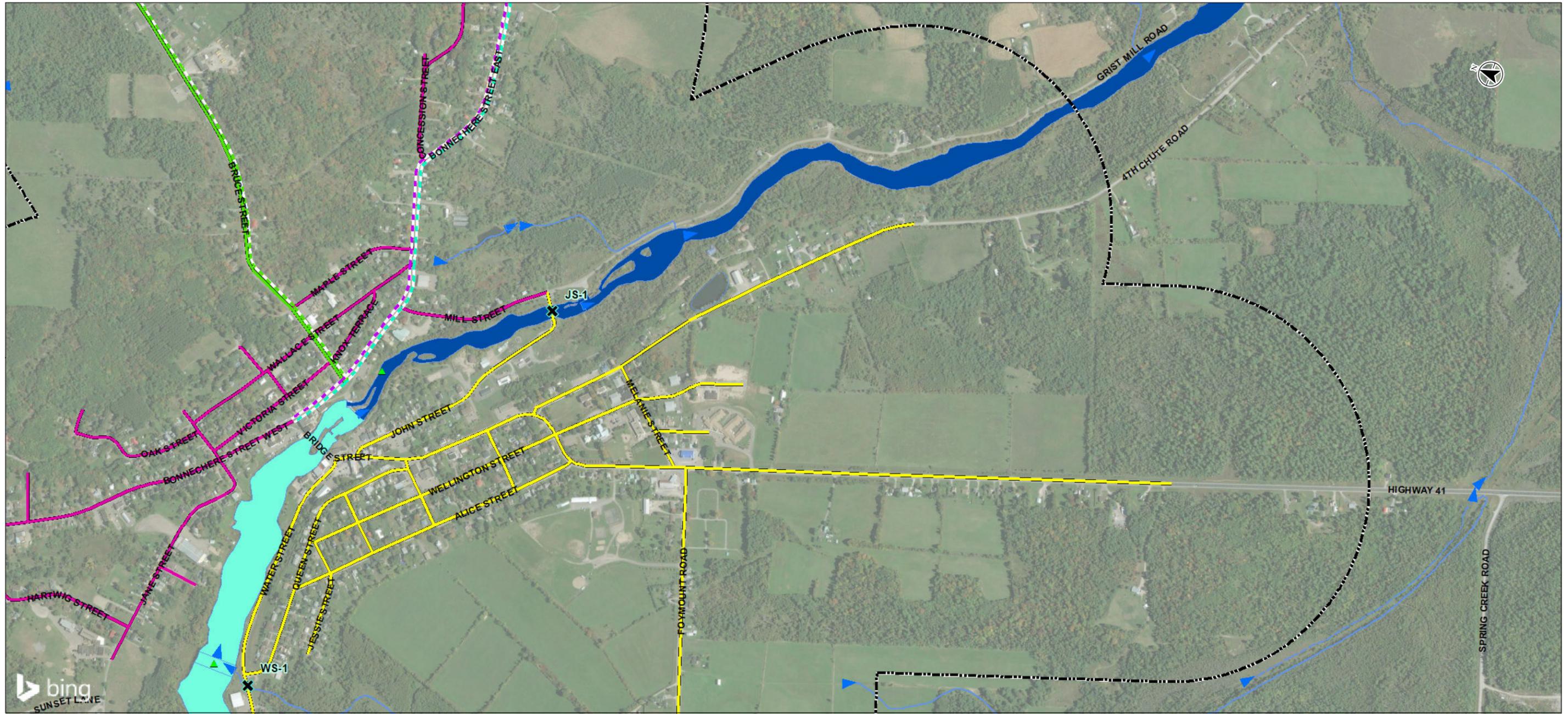
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Figure No.: C.2.3

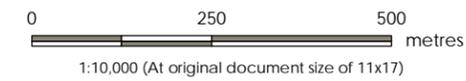
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- Legend**
- Study Area (500m)
 - ▲ MNRF Fish Survey Point (ARA)
 - ▶ Flow Direction
 - ✕ Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Waterbody
 - Proposed Routes**
 - Phase 2 - Preliminary Preferred Route
 - Phase 3 - Community Expansion*
 - Phase 4 - Community Expansion*
 - Alternative Routes**
 - Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



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Figure No.: C.2.4

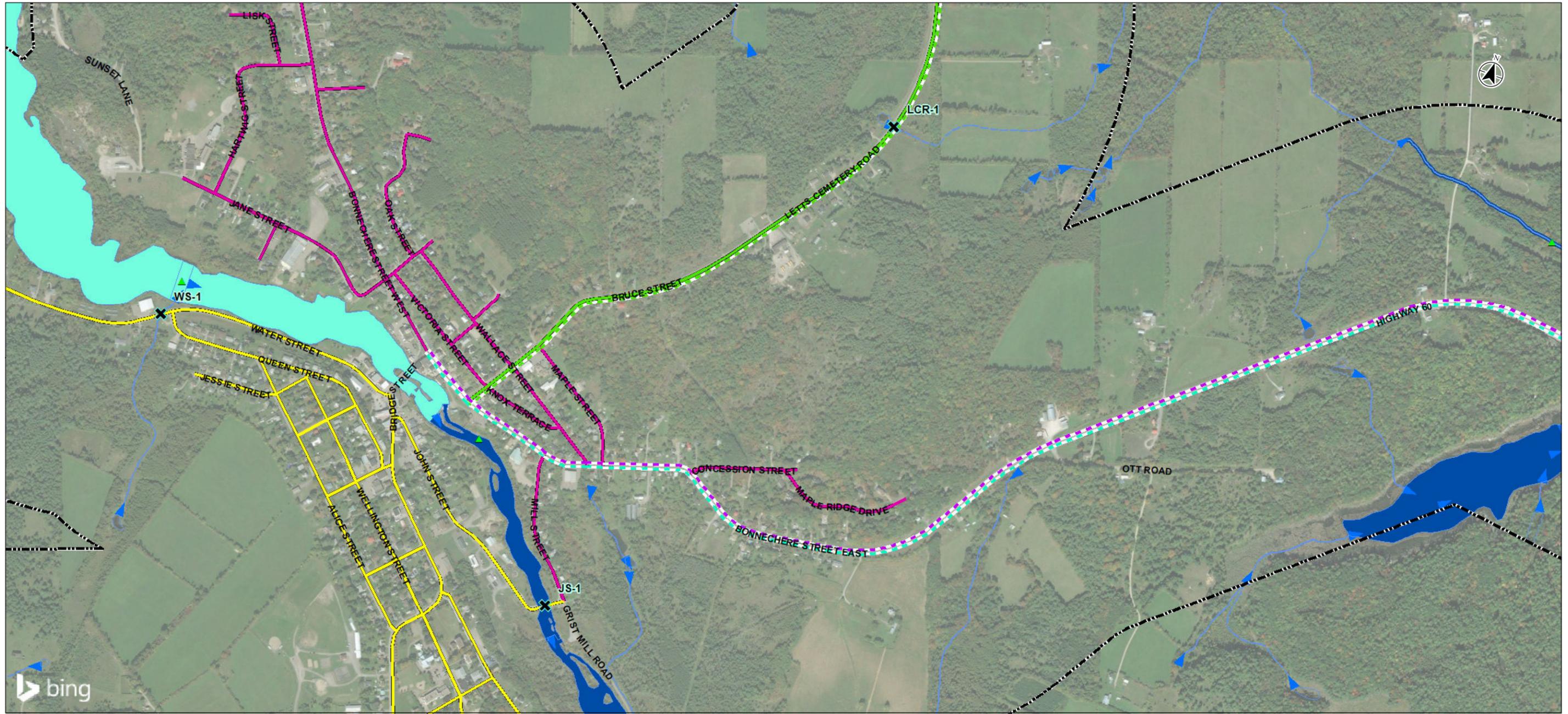
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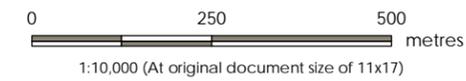
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Legend

- Study Area (500m)
- MNR Fish Survey Point (ARA)
- Flow Direction
- Proposed Watercourse Crossing
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Coldwater Thermal Regime
- Waterbody
- Proposed Routes**
 - Phase 2 - Preliminary Preferred Route
 - Phase 3 - Community Expansion*
 - Phase 4 - Community Expansion*
- Alternative Routes**
 - Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 3



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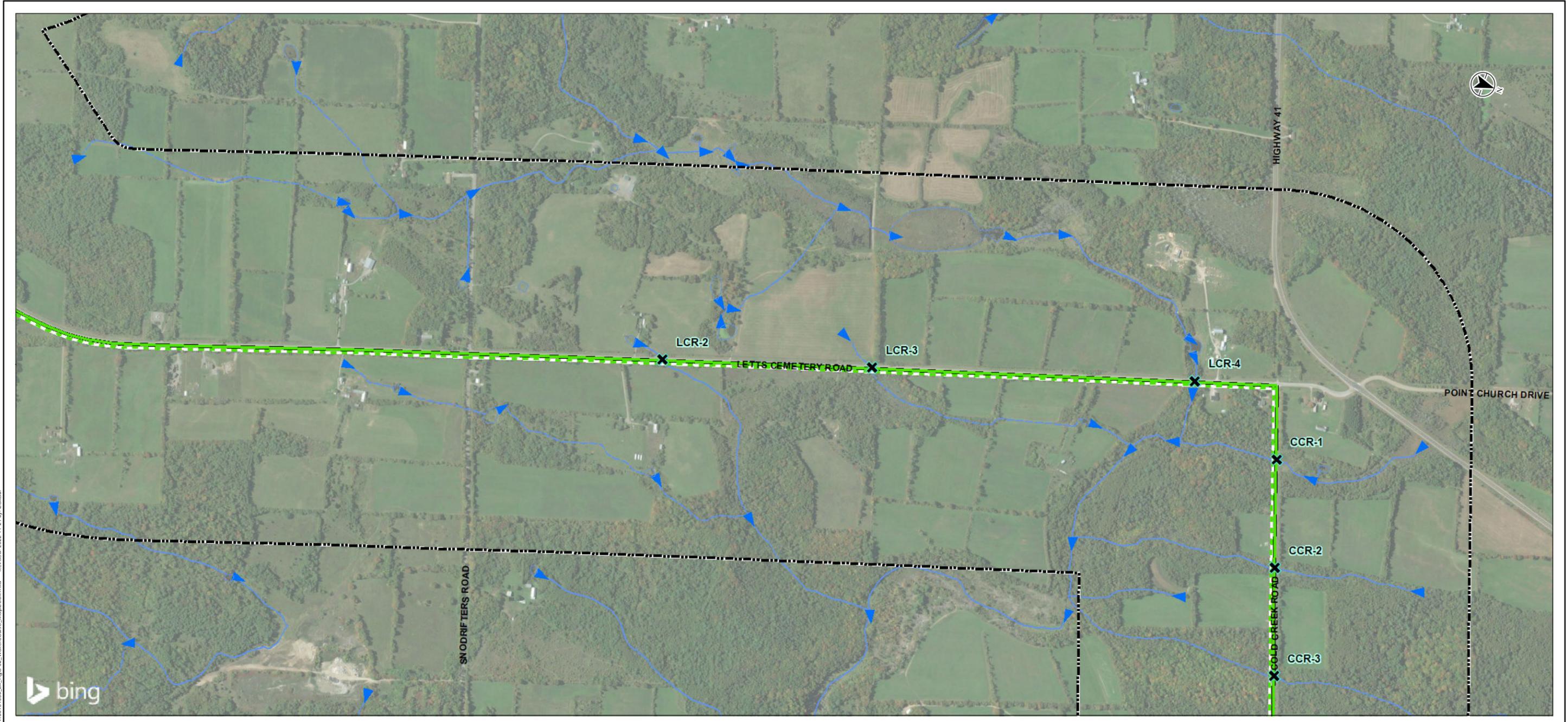
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Figure No.: C.2.5

Title: Watercourse Crossing Locations and Existing Conditions Data

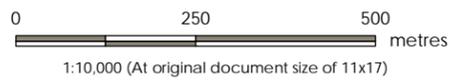
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- Legend**
- Study Area (500m)
 - ▶ Flow Direction
 - ✕ Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody
 - Proposed Routes
 - Phase 2 - Preliminary Preferred Route

- Alternative Routes**
- Phase 2 - Alternative Route 1



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION

Figure No.: C.2.6

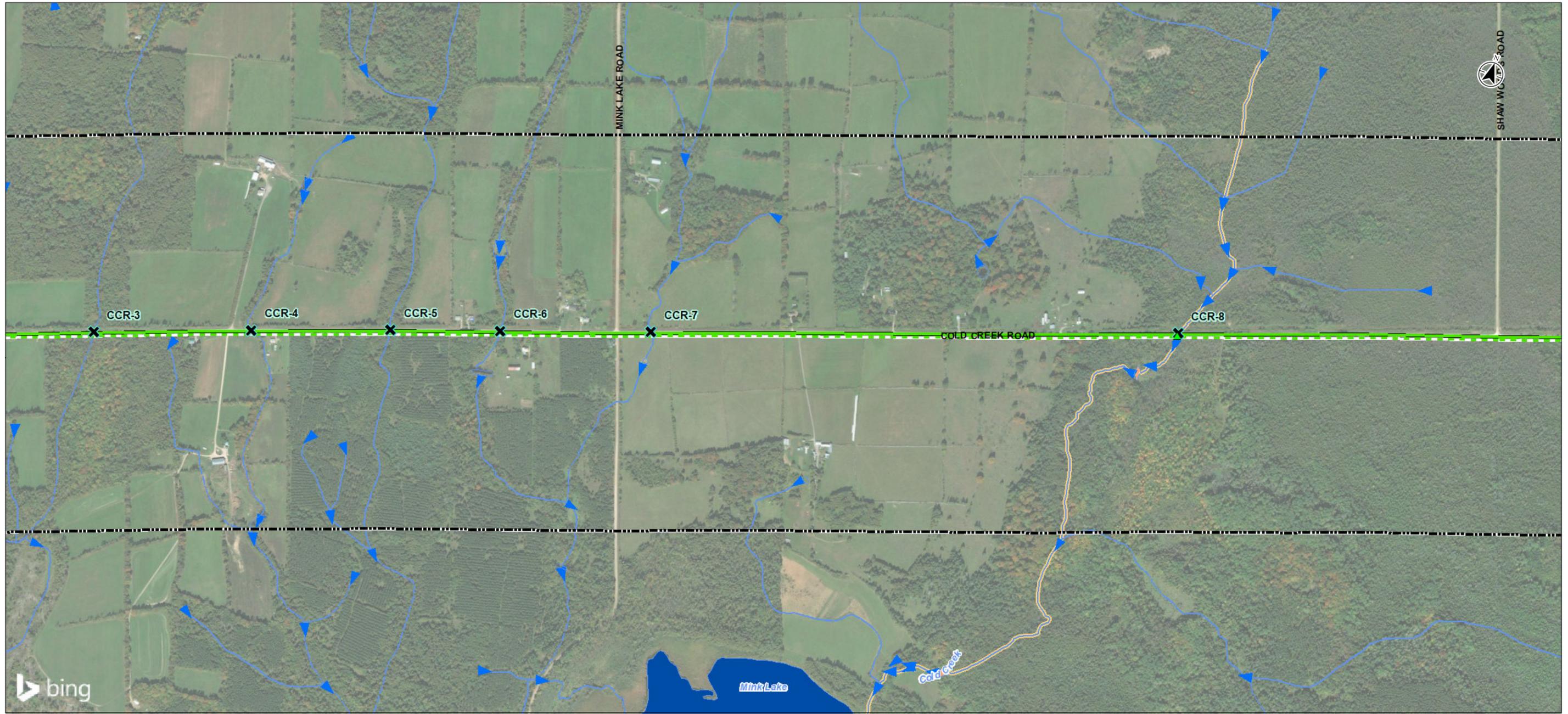
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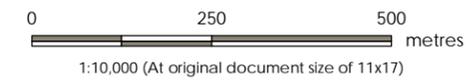
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- Legend**
- Study Area (500m)
 - ▲ MNRF Fish Survey Point (ARA)
 - ▶ Flow Direction
 - ✕ Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Warmwater Thermal Regime
 - Waterbody
 - Proposed Routes
 - Phase 2 - Preliminary Preferred Route
 - Phase 2 - Alternative Route 1



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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Figure No.: C.2.7

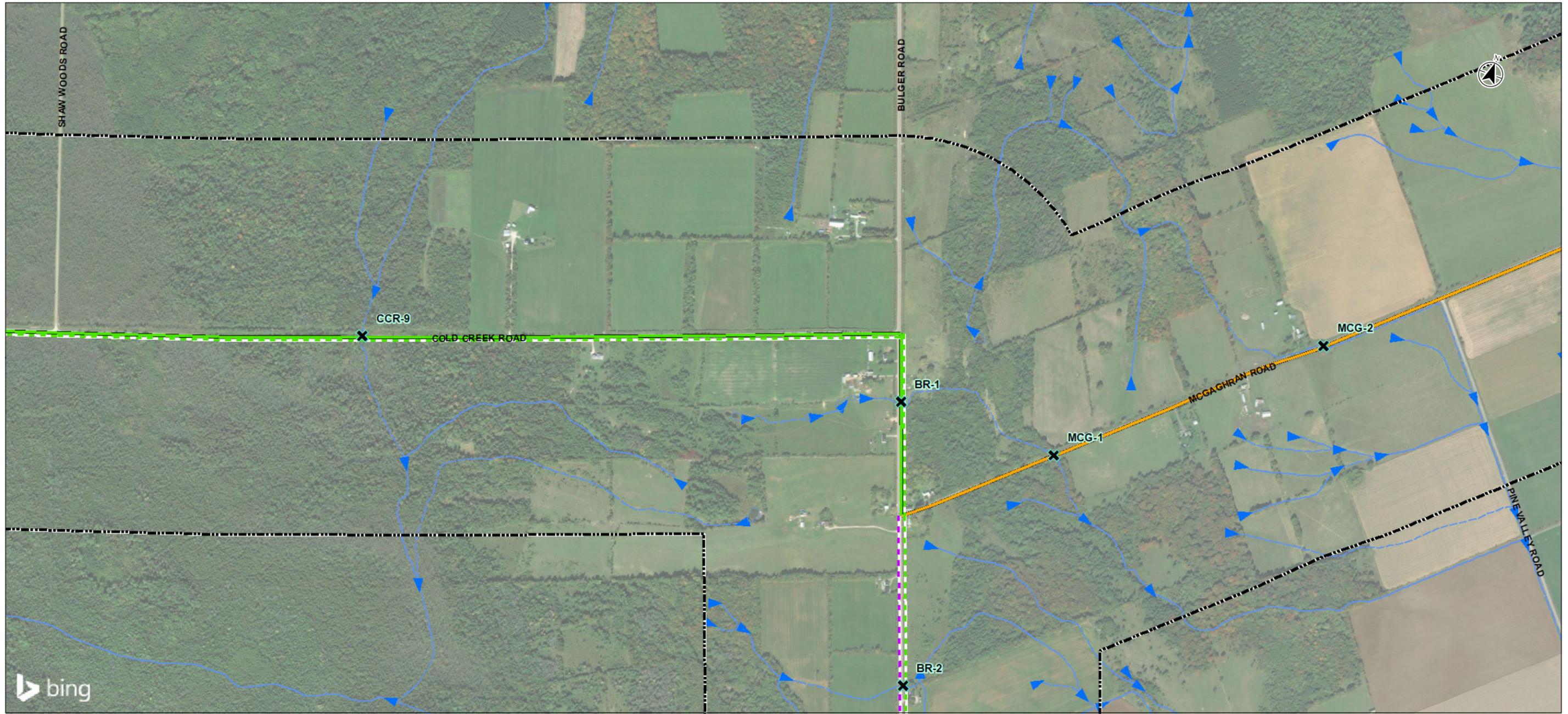
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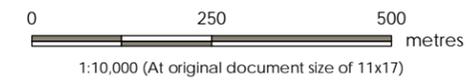
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4. The proposed route has been developed for purposes of an assessment of potential environmental and socioeconomic impacts and does not represent the final Project scope / design that will provide access to natural gas to end-use customers.

- Legend**
- Study Area (500m)
 - Flow Direction
 - Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Waterbody
- Proposed Routes**
- Phase 1 - Preliminary Preferred Route
 - Phase 2 - Preliminary Preferred Route
- Alternative Routes**
- Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 3



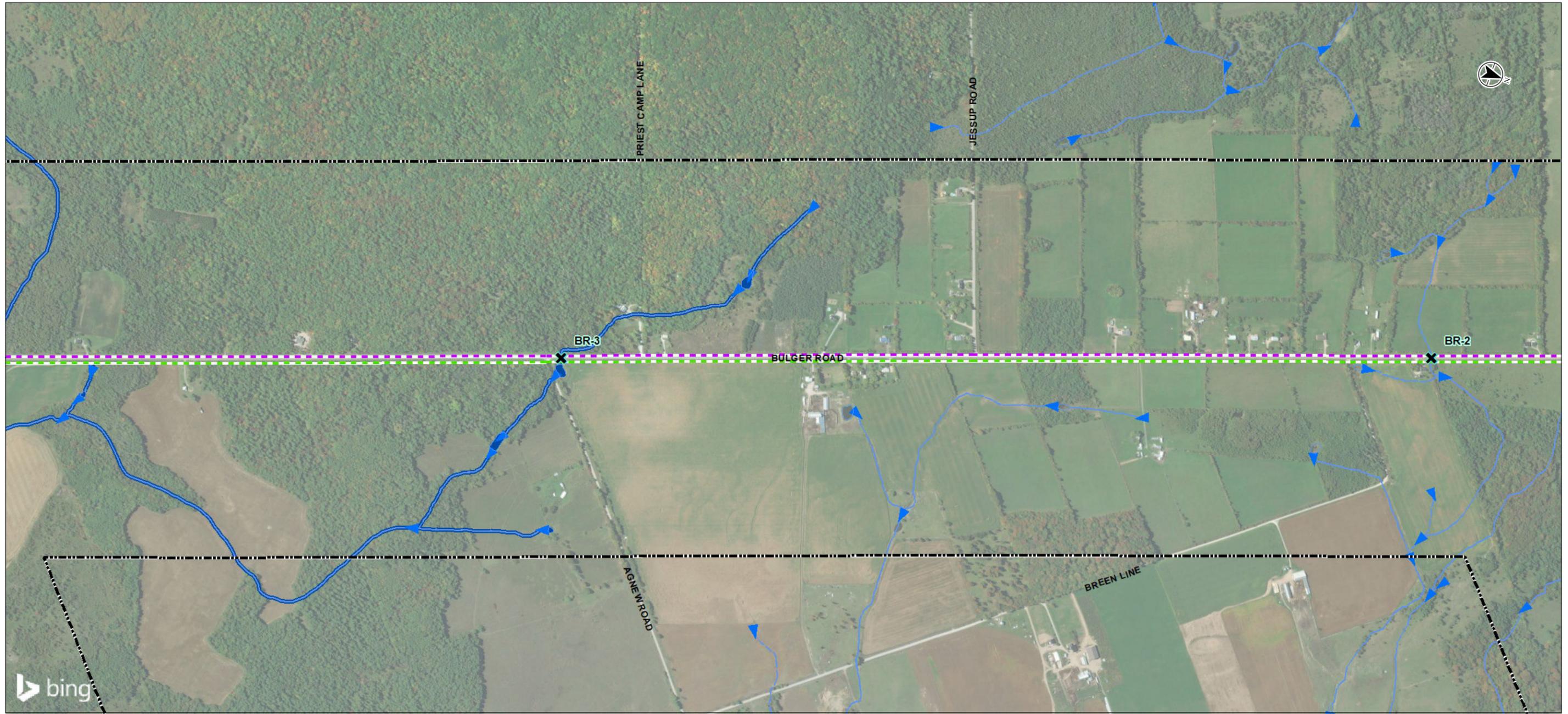
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Figure No.: C.2.8

Title: Watercourse Crossing Locations and Existing Conditions Data

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- Legend**
- Study Area (500m)
 - Flow Direction
 - Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Waterbody
- Alternative Routes**
- Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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Figure No.: C.2.9

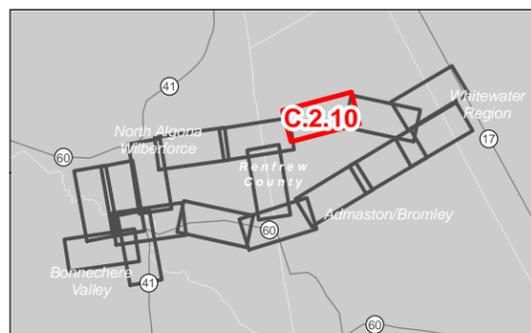
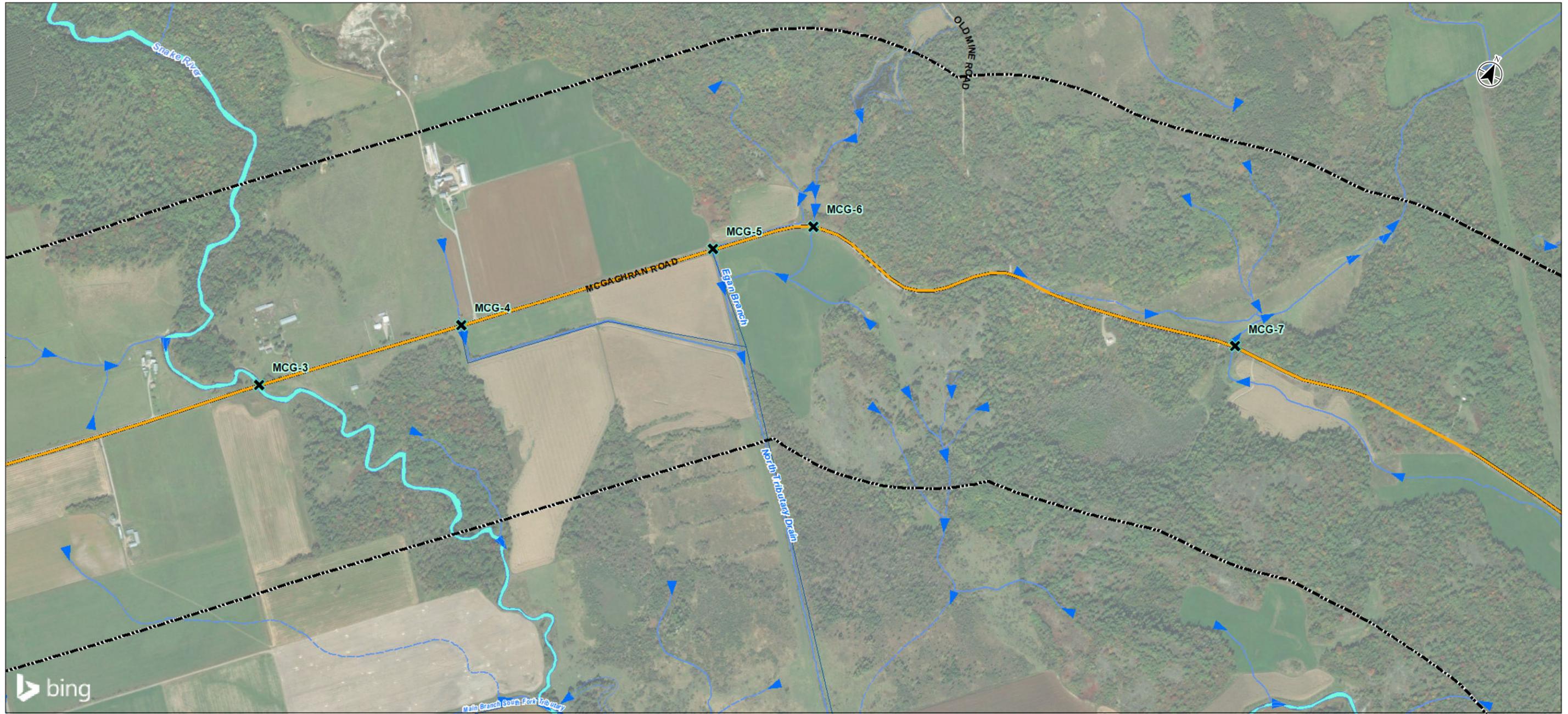
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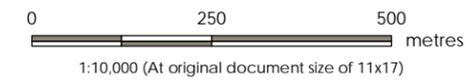
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- Legend**
- Study Area (500m)
 - Flow Direction
 - Proposed Watercourse Crossing
 - Constructed Drain
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody

- Proposed Routes**
- Phase 1 - Preliminary Preferred Route



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

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Figure No. C.2.10

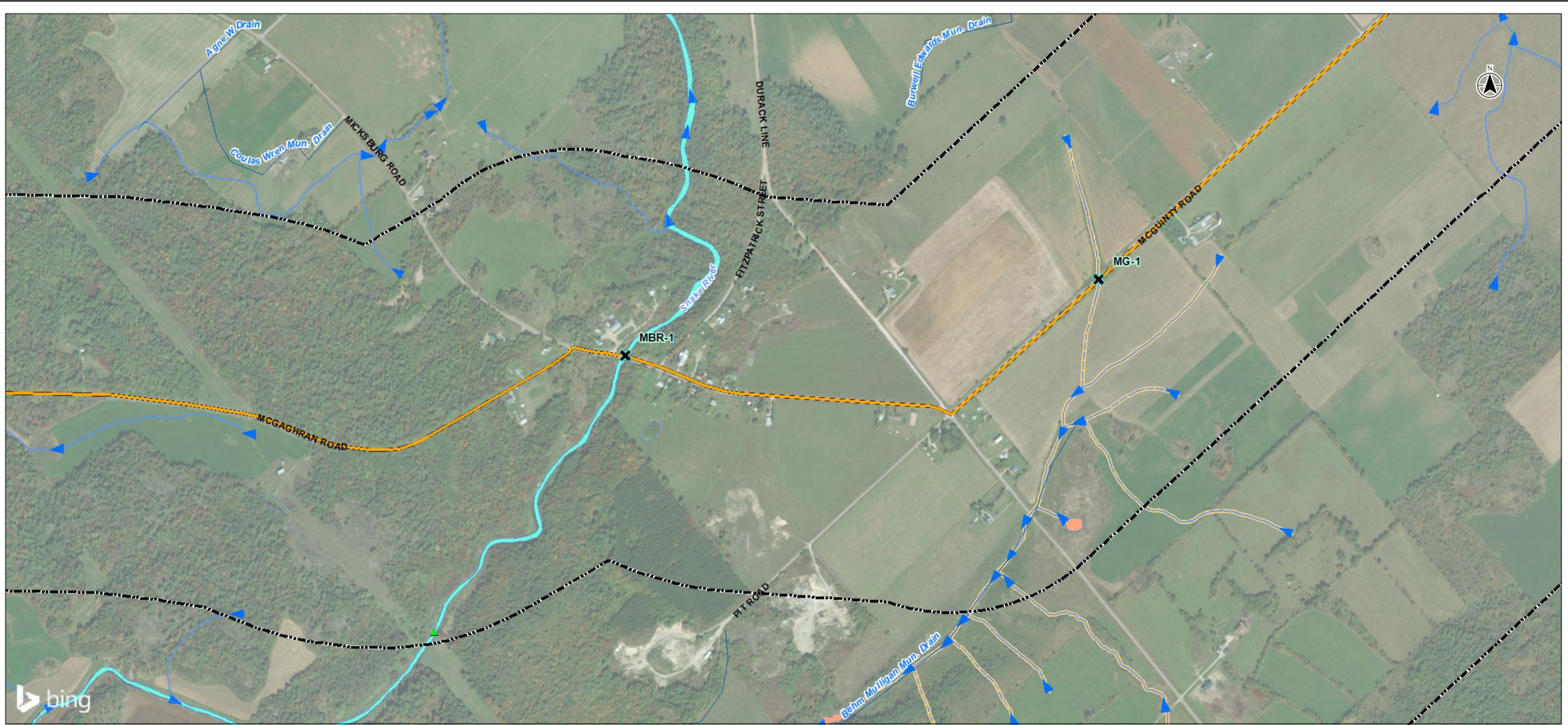
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Notes

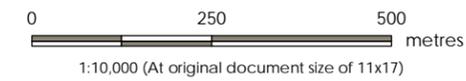
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- Legend**
- Study Area (500m)
 - ▲ MNR Fish Survey Point (ARA)
 - ▶ Flow Direction
 - ✕ Proposed Watercourse Crossing
 - Constructed Drain
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Warmwater Thermal Regime
 - Warmwater Thermal Regime
 - Waterbody
 - Proposed Routes
 - Phase 1 - Preliminary Preferred Route



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.2.11

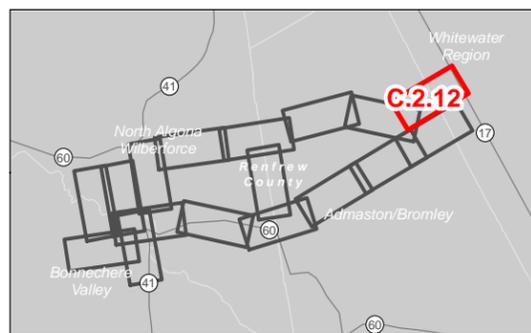
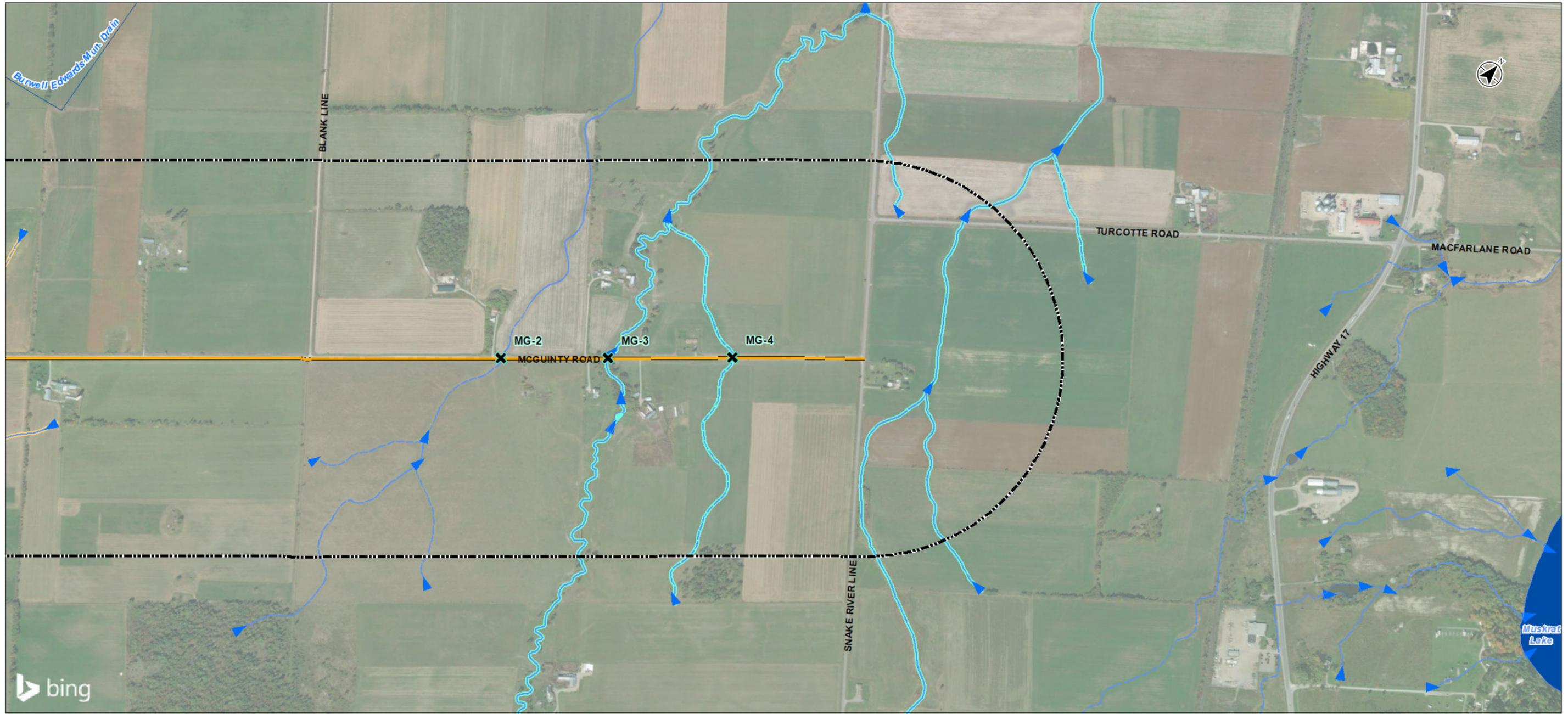
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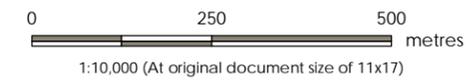
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Legend

- Study Area (500m)
- Flow Direction
- Proposed Watercourse Crossing
- Constructed Drain
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Coolwater Thermal Regime
- Warmwater Thermal Regime
- Waterbody
- Proposed Routes
- Phase 1 - Preliminary Preferred Route



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION

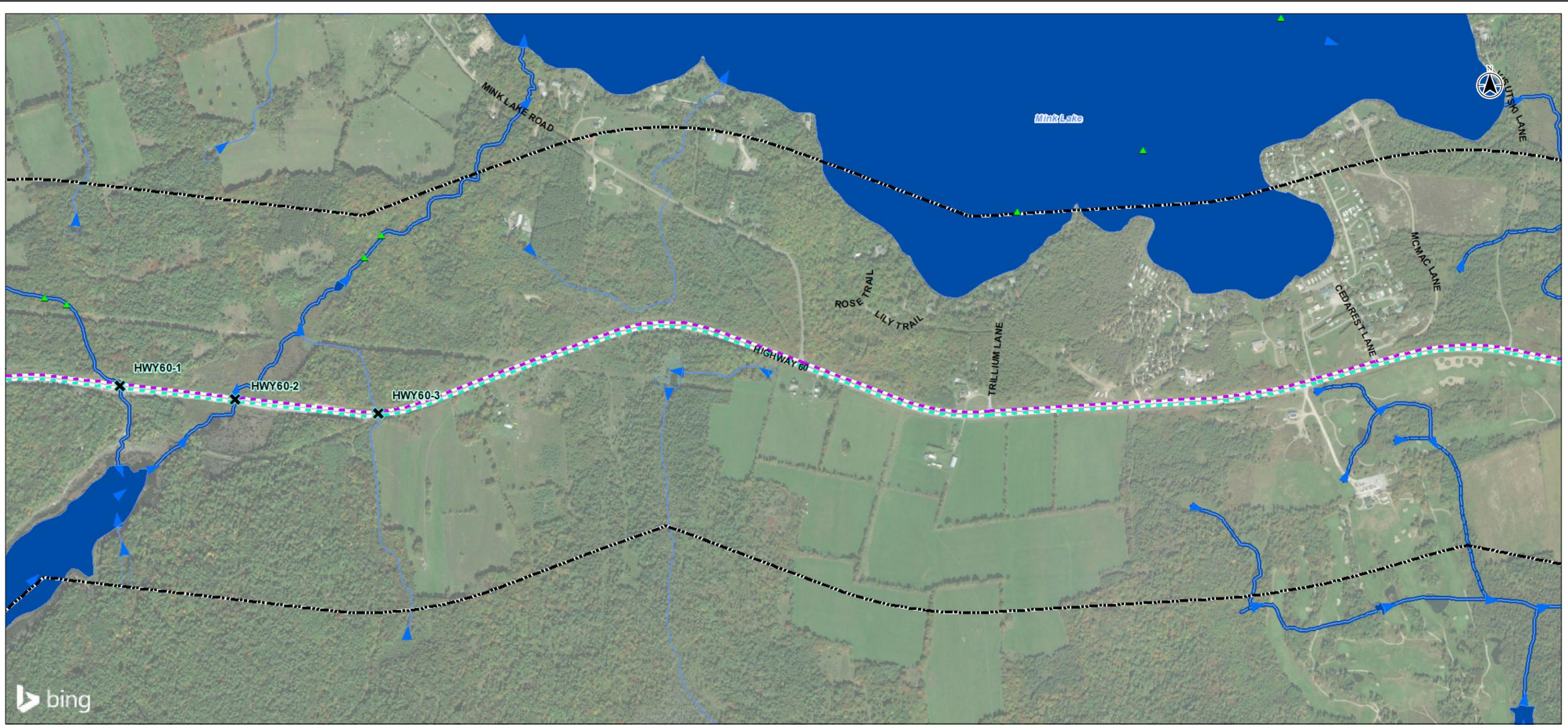
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Title: Watercourse Crossing Locations and Existing Conditions Data

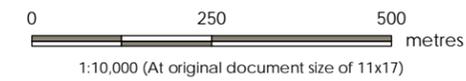
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- Legend**
- Study Area (500m)
 - MNRF Fish Survey Point (ARA)
 - Flow Direction
 - Proposed Watercourse Crossing
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Waterbody
 - Alternative Routes**
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION

Figure No.: C.2.13

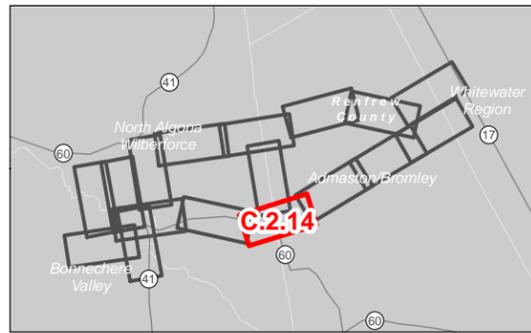
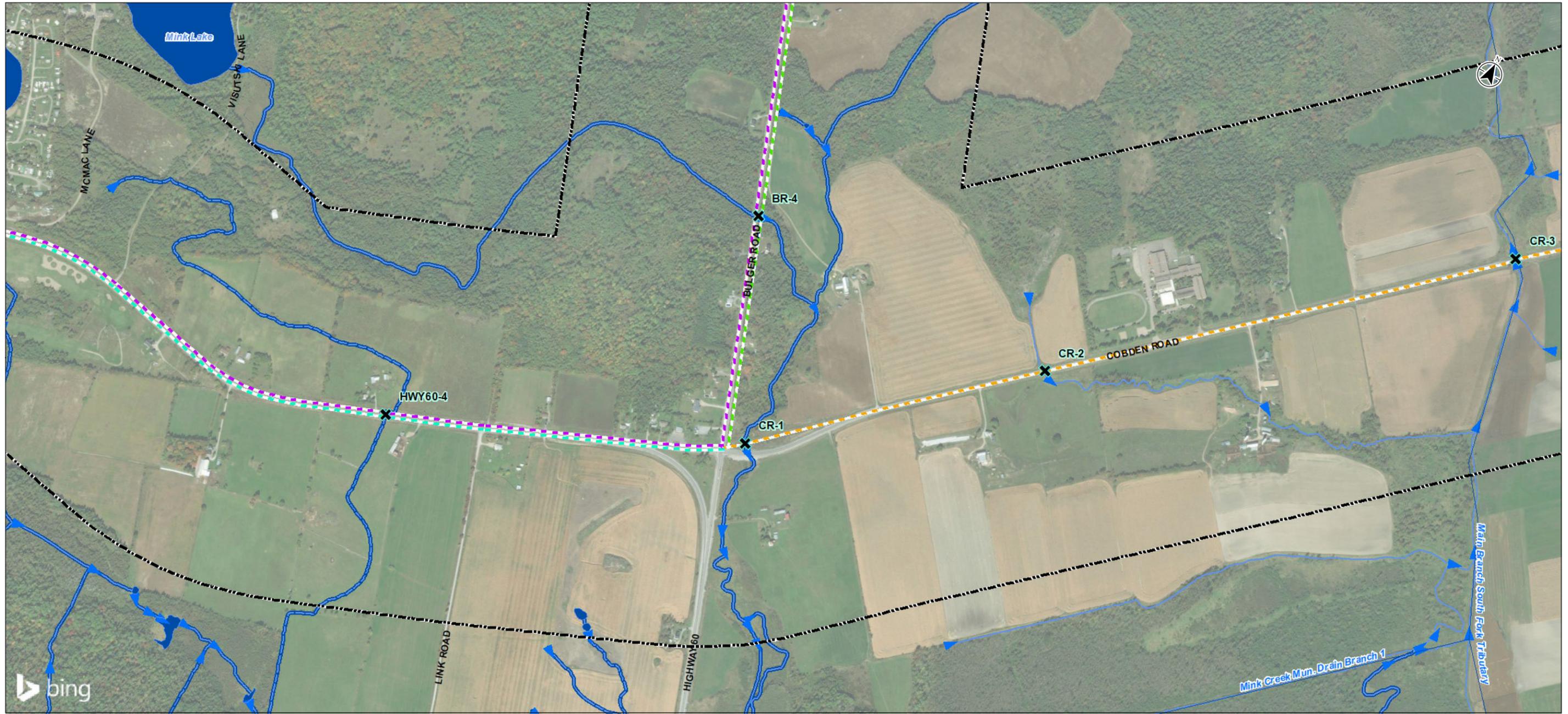
Title: Watercourse Crossing Locations and Existing Conditions Data

Notes

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

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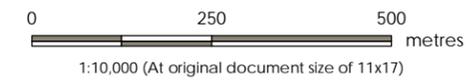


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Legend

- Study Area (500m)
 - Flow Direction
 - Proposed Watercourse Crossing
 - Constructed Drain
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Waterbody
-
- Phase 1 - Alternative Route
 - Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



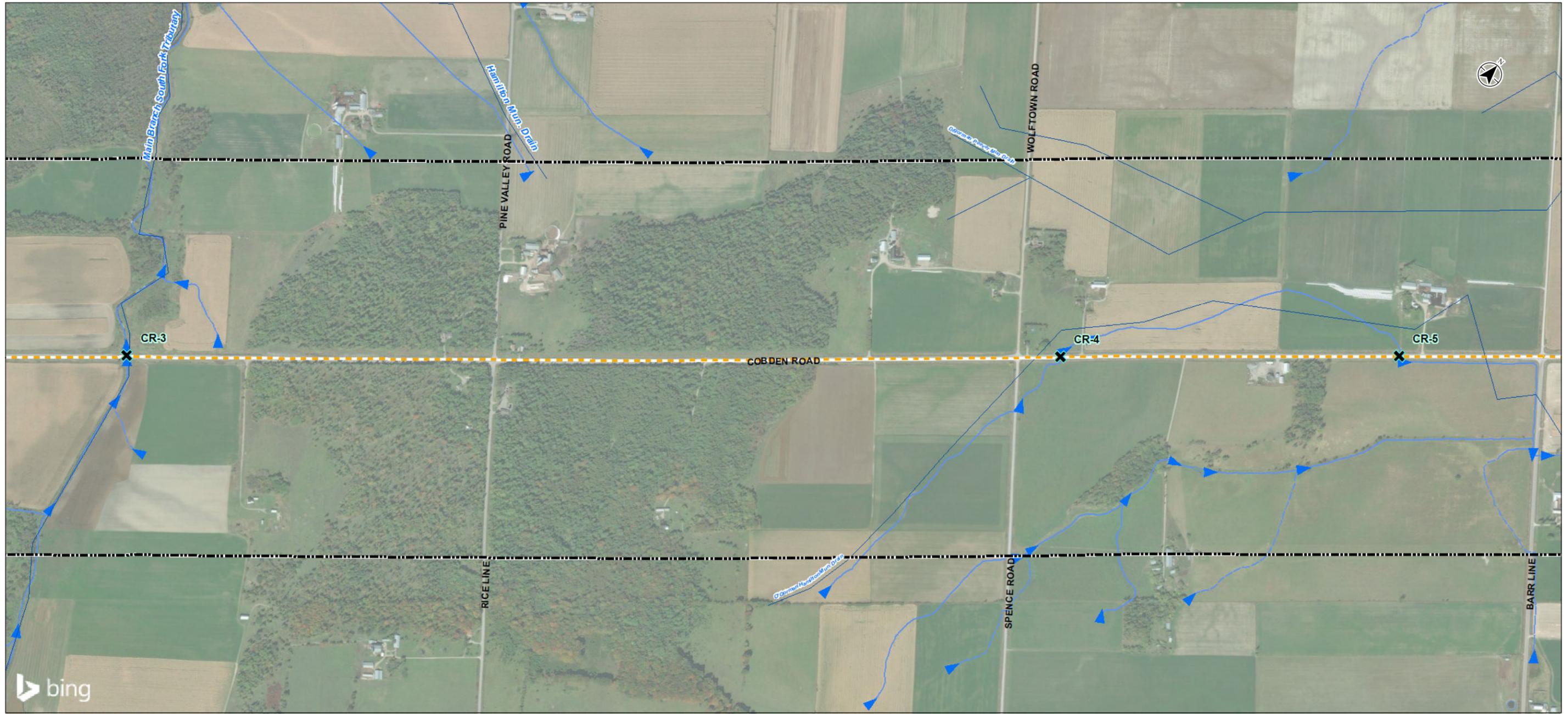
Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION

Figure No.: C.2.14

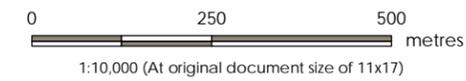
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- Legend**
- Study Area (500m)
 - Flow Direction
 - Proposed Watercourse Crossing
 - Constructed Drain
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Waterbody

- Alternative Routes**
- Phase 1 - Alternative Route



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.2.15

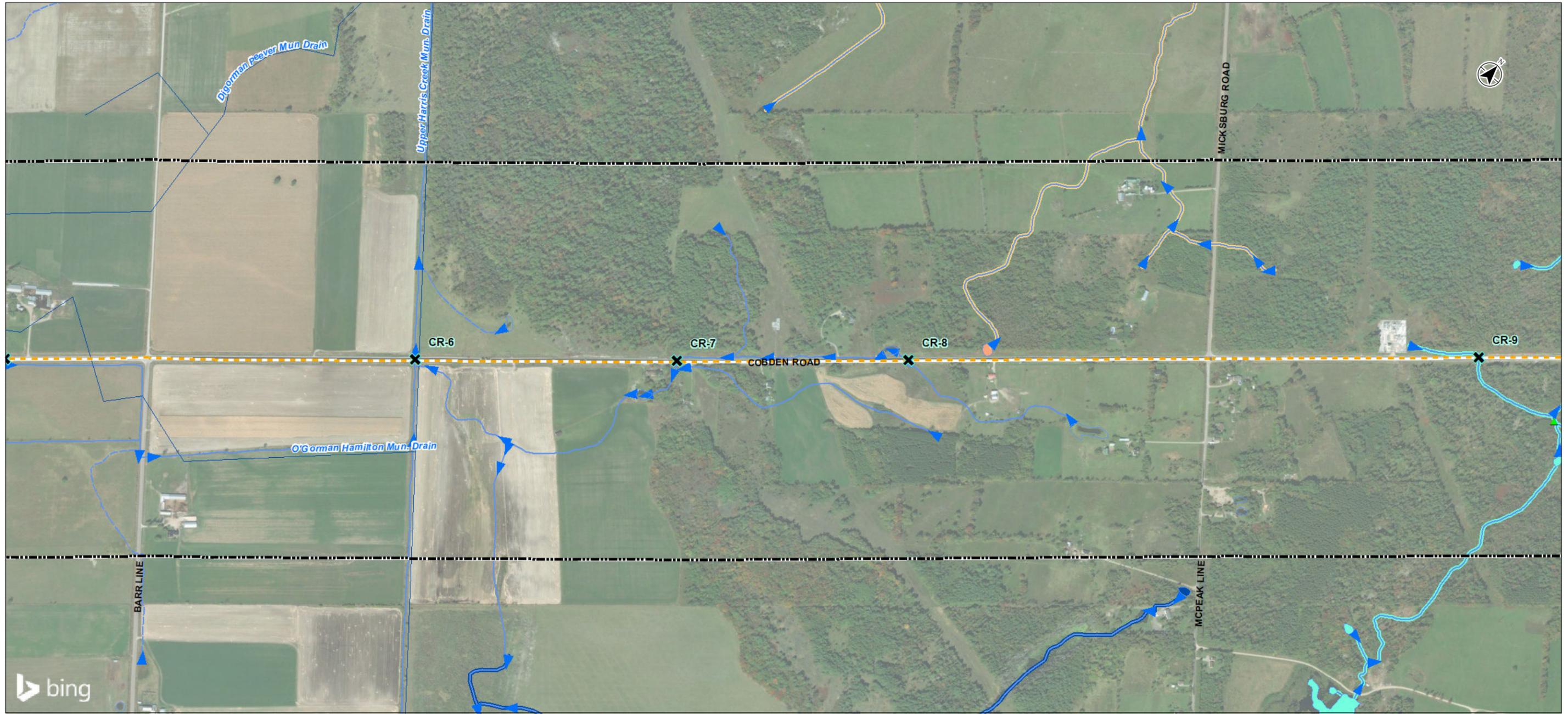
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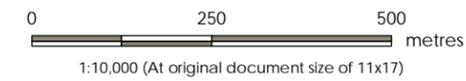
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- Legend**
- Study Area (500m)
 - ▲ MNR Fish Survey Point (ARA)
 - ▶ Flow Direction
 - ✕ Proposed Watercourse Crossing
 - Constructed Drain
 - - - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Coolwater Thermal Regime
 - Warmwater Thermal Regime
 - Warmwater Thermal Regime
 - Waterbody
 - - - Phase 1 - Alternative Route



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION

Figure No.: C.2.16

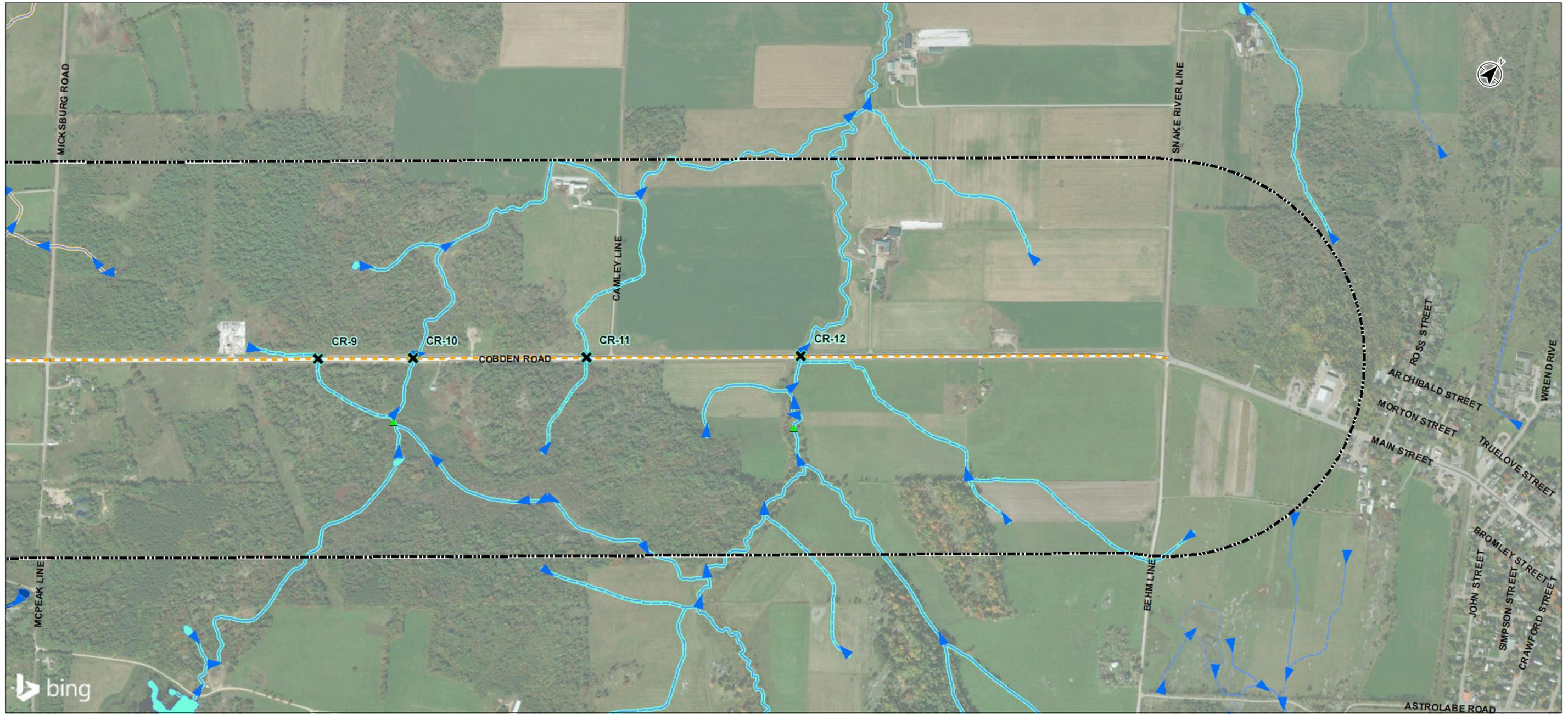
Title: Watercourse Crossing Locations and Existing Conditions Data

Notes

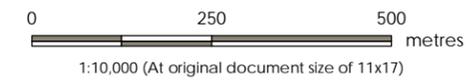
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- Legend**
- Study Area (500m)
 - ▲ MNRF Fish Survey Point (ARA)
 - ▶ Flow Direction
 - ✕ Proposed Watercourse Crossing
 - Constructed Drain
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Coldwater Thermal Regime
 - Coolwater Thermal Regime
 - Warmwater Thermal Regime
 - Waterbody
 - Phase 1 - Alternative Route



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-31

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.2.17

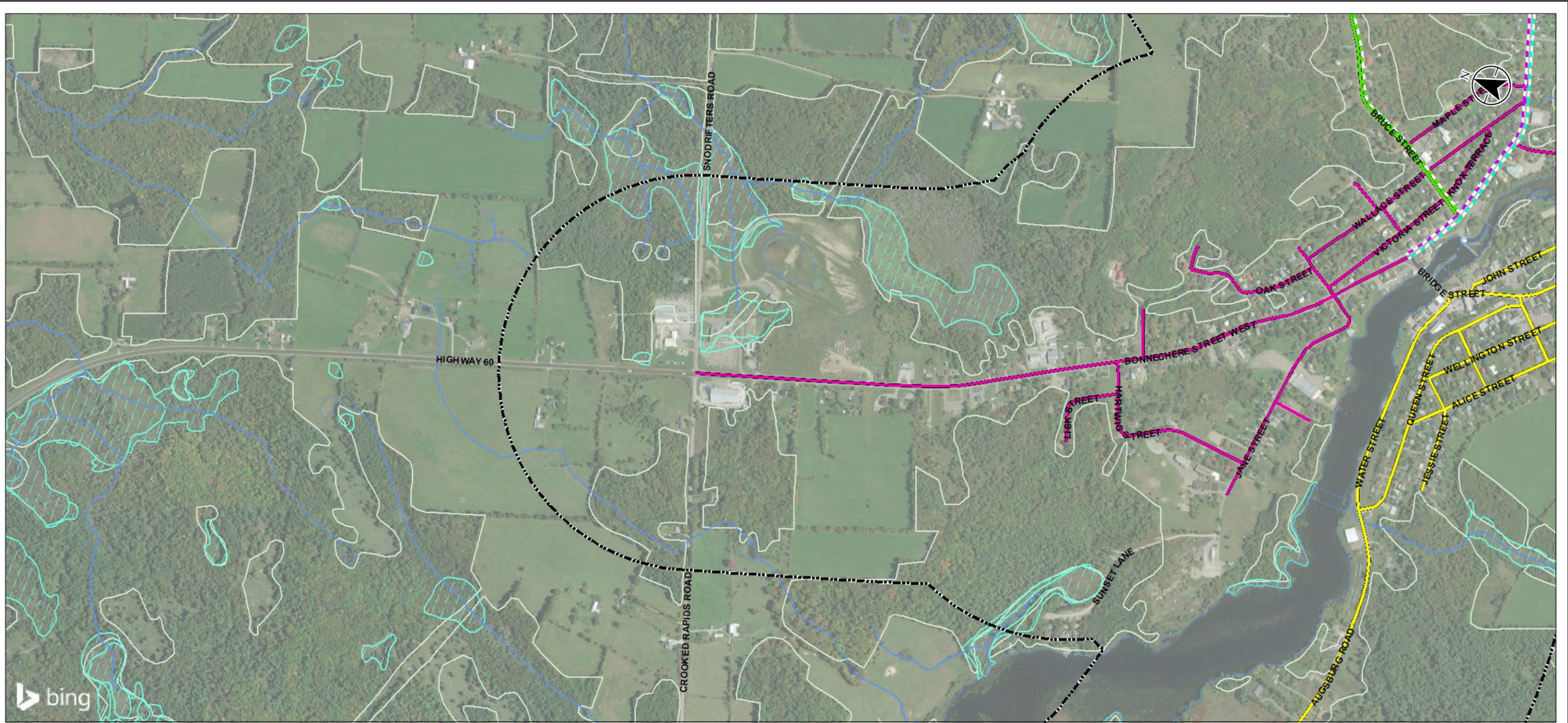
Title: Watercourse Crossing Locations and Existing Conditions Data

Notes

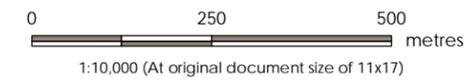
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Proposed Routes**
- Phase 2 - Preliminary Preferred Route
 - Phase 3 - Community Expansion*
 - Phase 4 - Community Expansion*
- Alternative Routes**
- Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-28

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.3.1

Title: Natural Environment Features

Notes

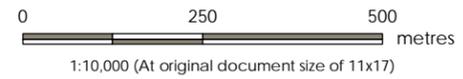
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Proposed Routes**
- Phase 4 - Community Expansion*



Project Location: 160951306 REVA
 County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-28

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.3.2

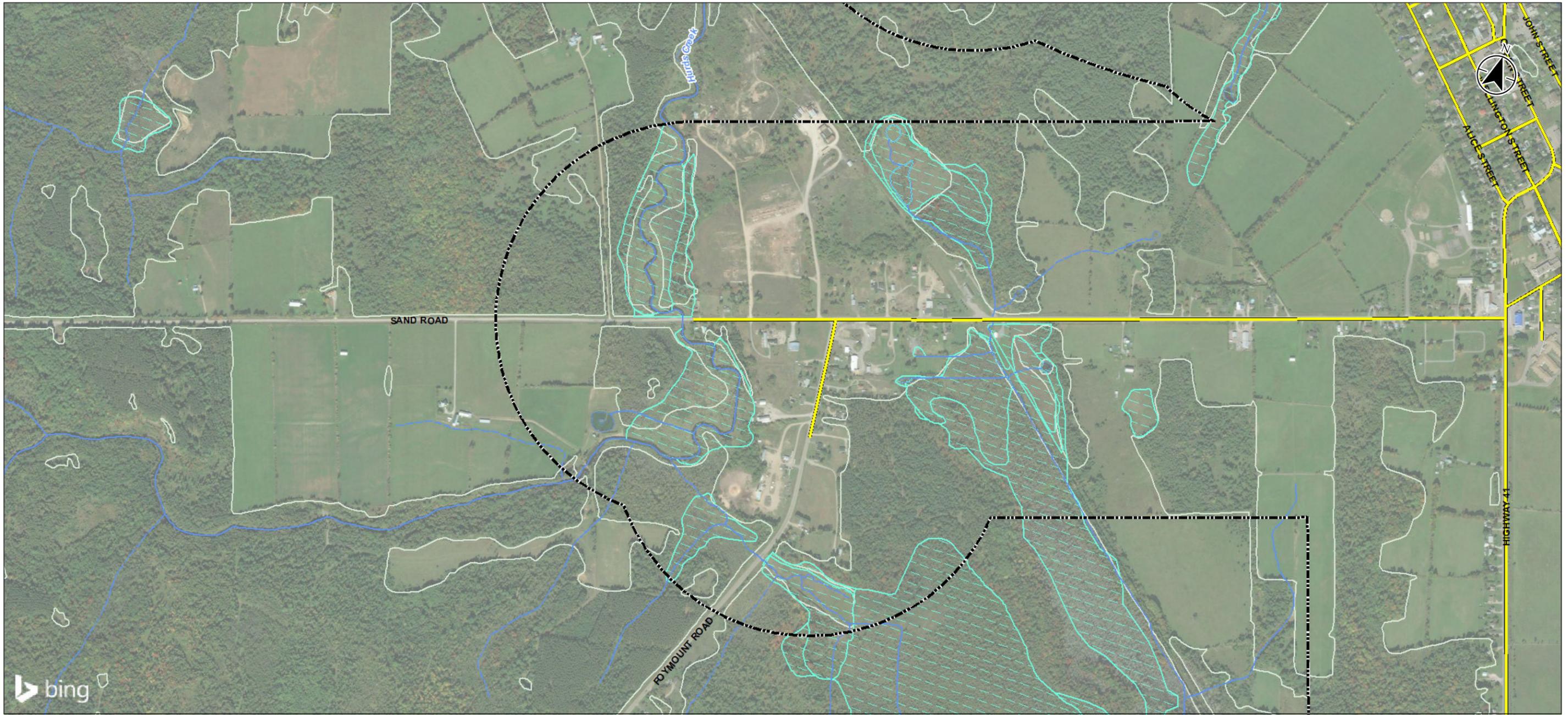
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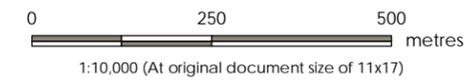
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
 - Proposed Routes**
 - Phase 4 - Community Expansion*



Project Location: 160951306 REVA
 County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-28

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.3.3

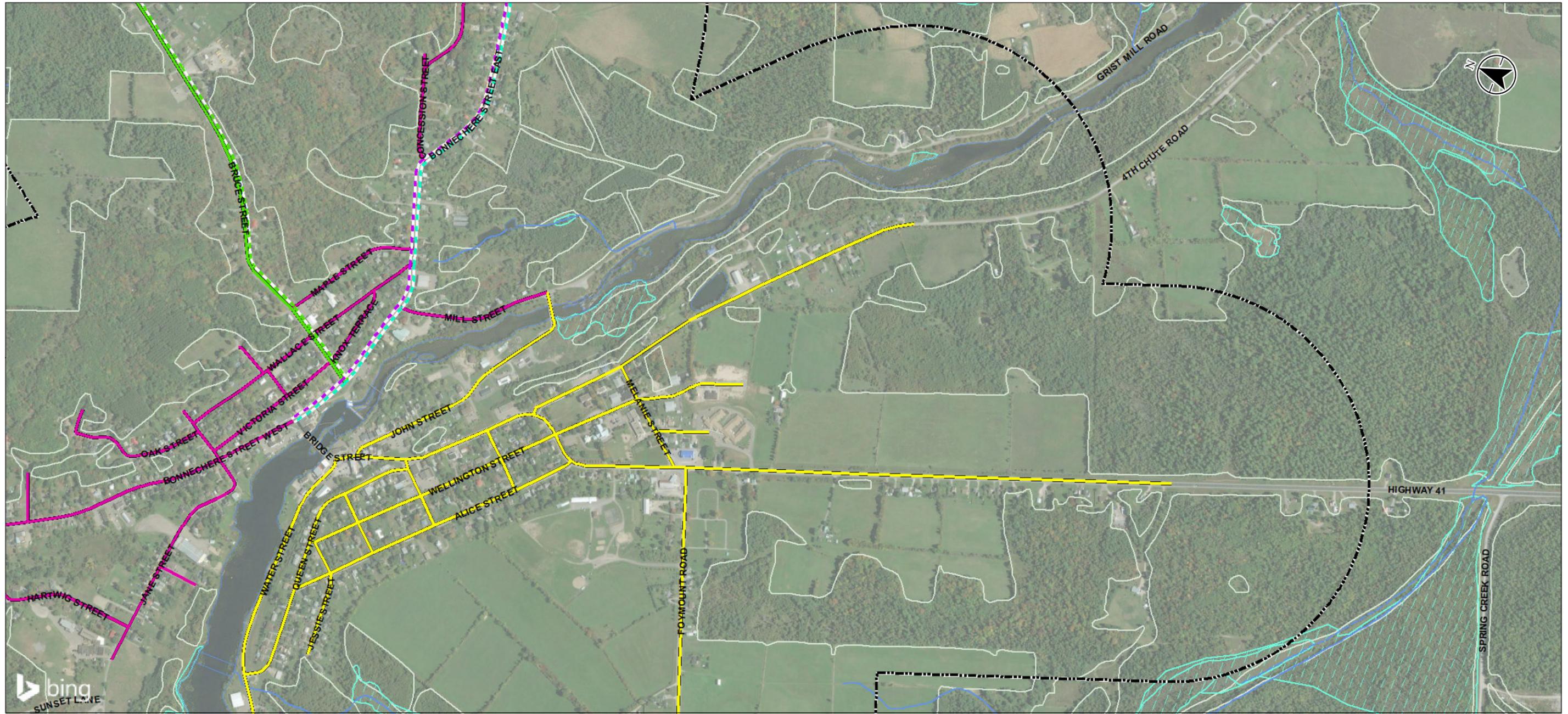
Title: Natural Environment Features

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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Proposed Routes**
- Phase 2 - Preliminary Preferred Route
 - Phase 3 - Community Expansion*
 - Phase 4 - Community Expansion*
- Alternative Routes**
- Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

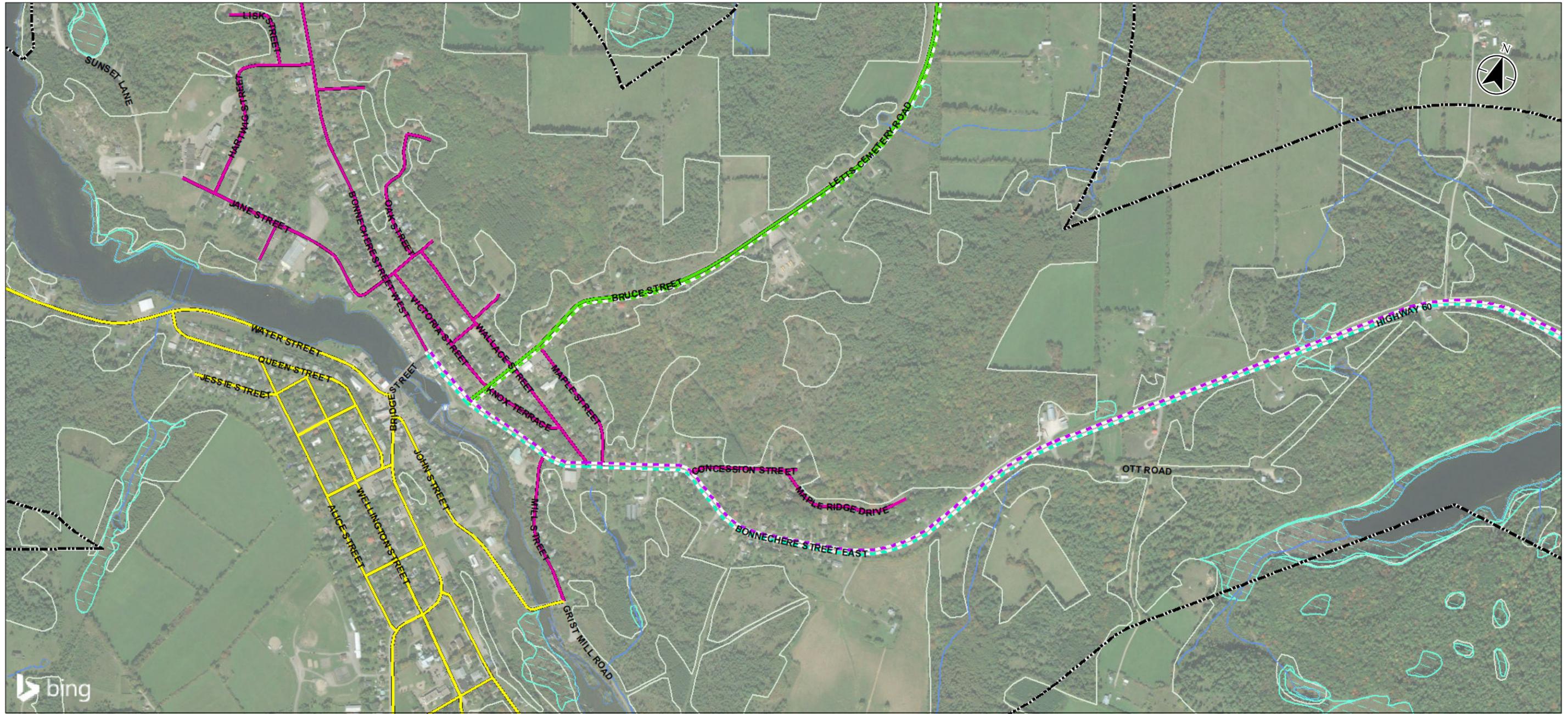
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Notes

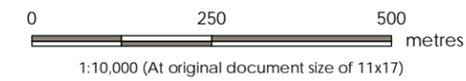
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Proposed Routes**
- Phase 2 - Preliminary Preferred Route
 - Phase 3 - Community Expansion*
 - Phase 4 - Community Expansion*
- Alternative Routes**
- Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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 160951306 REVA

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
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Figure No.: C.3.5

Title: Natural Environment Features

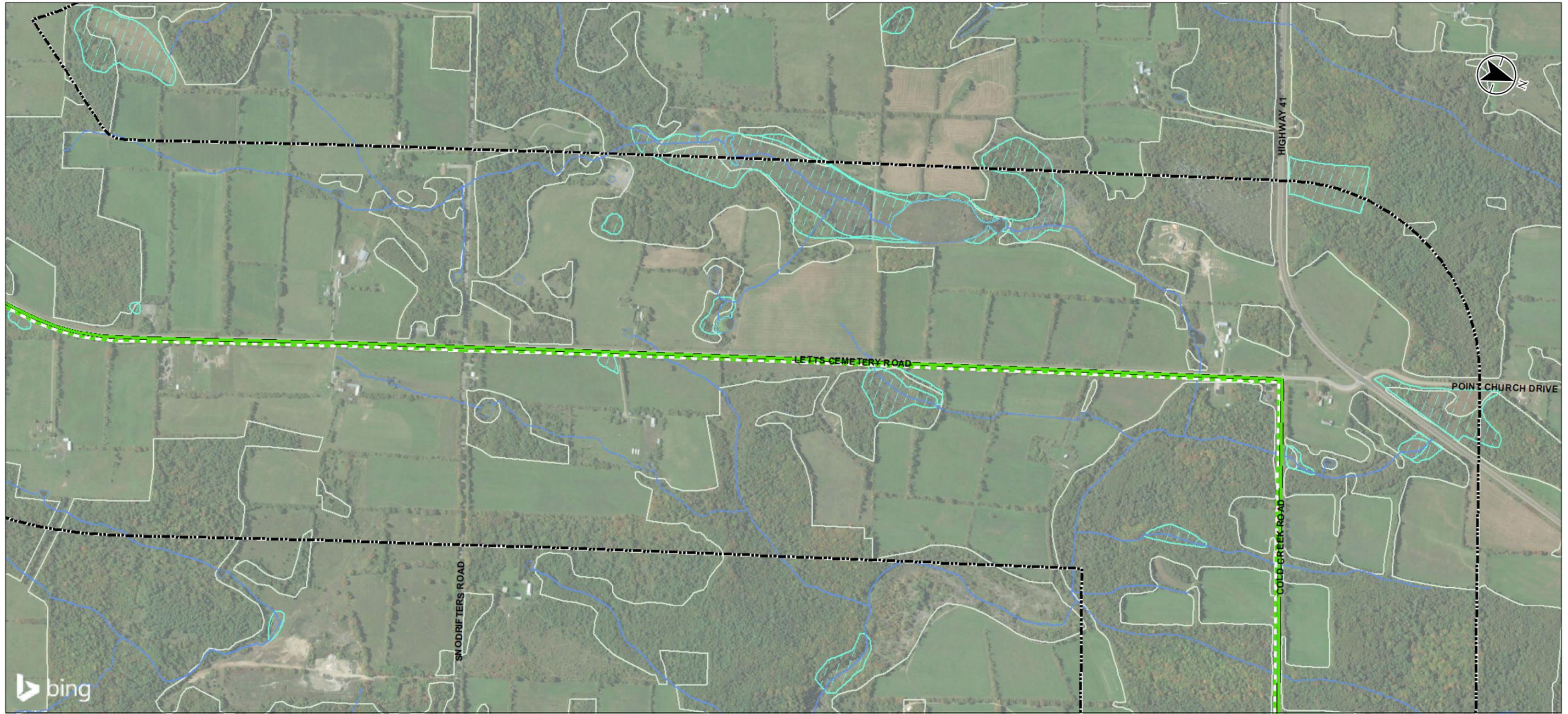
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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Proposed Routes**
- Phase 2 - Preliminary Preferred Route
 - Phase 2 - Alternative Route 1
- Alternative Routes**
- Phase 2 - Alternative Route 1



Project Location: 160951306 REVA
 County of Renfrew Prepared by BK on 2022-11-21
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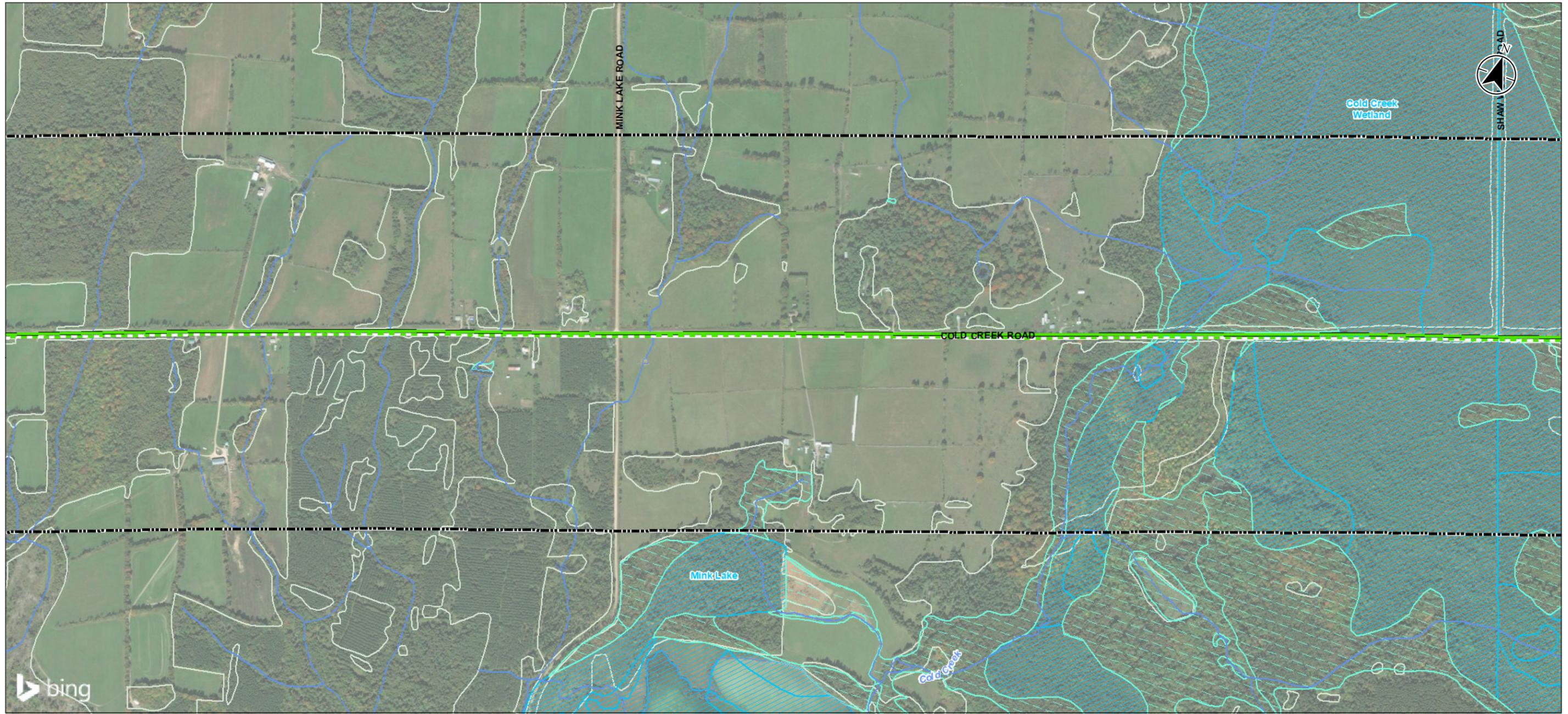
Figure No.: C.3.6

Title: Natural Environment Features

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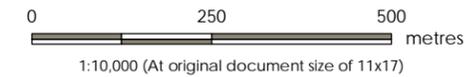
- Study Area (500m)
- Watercourse (Intermittent)
- Watercourse (Permanent)
- Other/Locally Significant Wetland
- Unevaluated Wetland (per OWES)
- Waterbody
- Wooded Area

Proposed Routes

- Phase 2 - Preliminary Preferred Route

Alternative Routes

- Phase 2 - Alternative Route 1



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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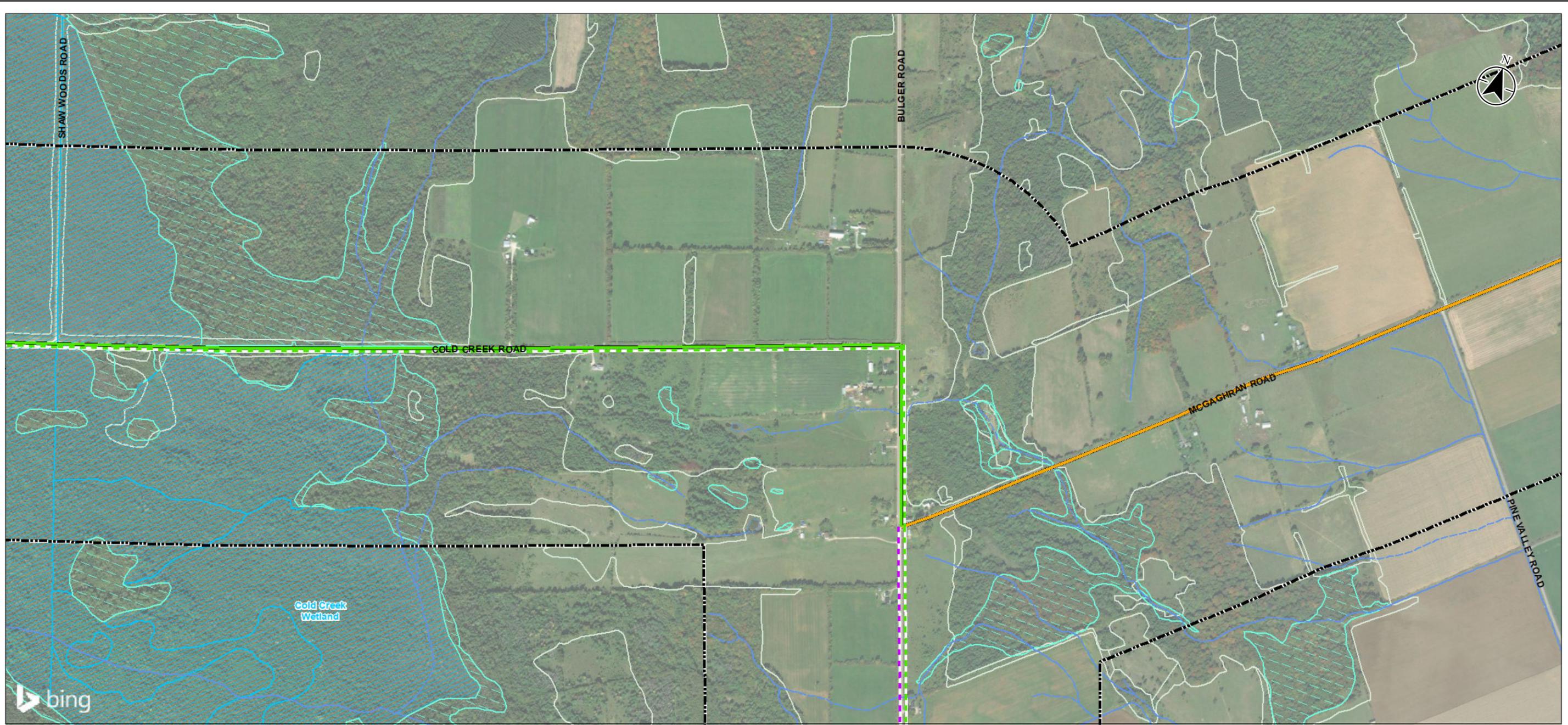
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Figure No.: C.3.7

Title: Natural Environment Features

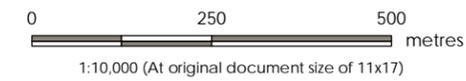
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Legend

- Study Area (500m)
- Watercourse (Intermittent)
- Other/Locally Significant Wetland
- Unevaluated Wetland (per OWES)
- Waterbody
- Wooded Area
- Proposed Routes
- Phase 2 - Preliminary Preferred Route
- Phase 2 - Alternative Route 1
- Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 160951306 REVA
 Prepared by BK on 2022-11-21
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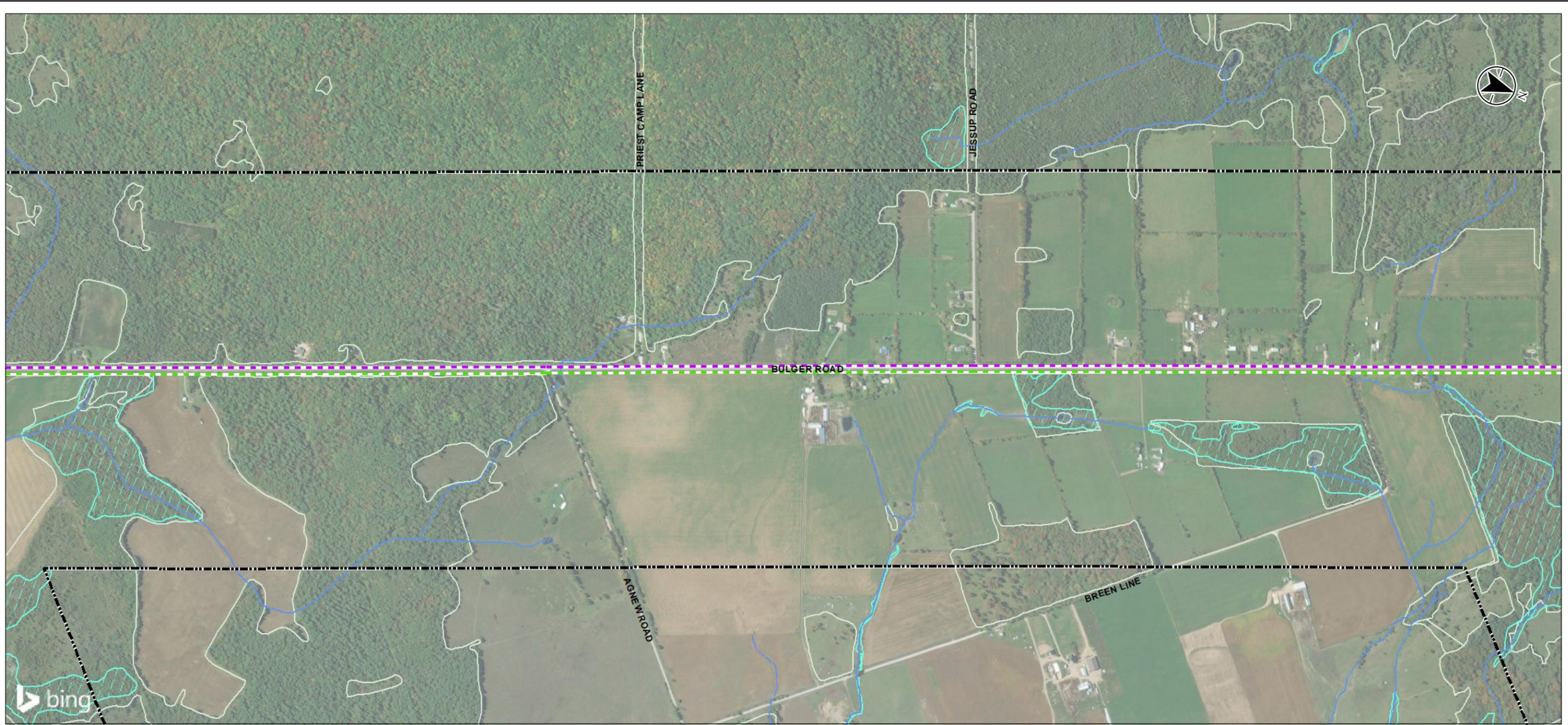
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Figure No.: C.3.8

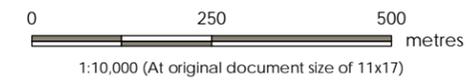
Title: Natural Environment Features

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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
 - Alternative Routes**
 - Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
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 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.3.9

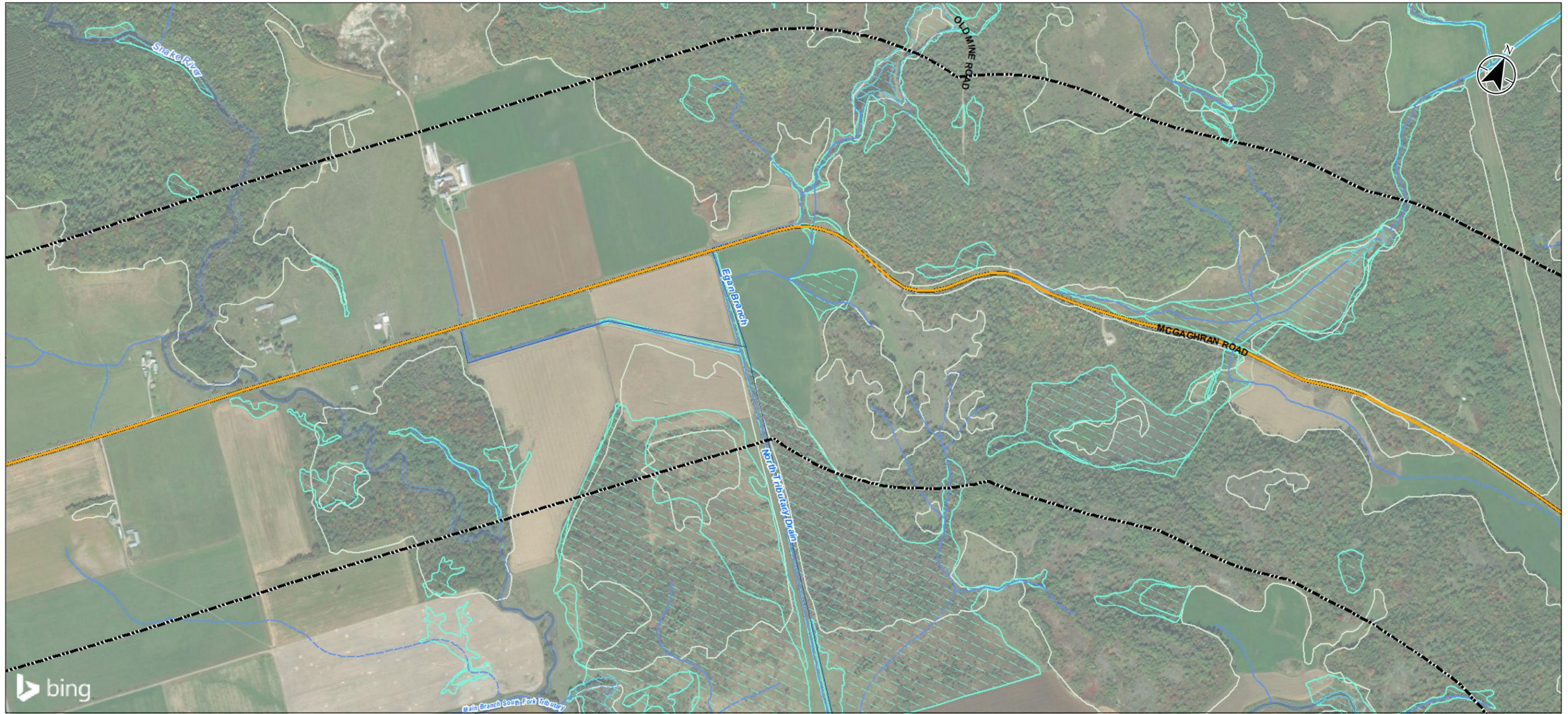
Title: Natural Environment Features

Notes

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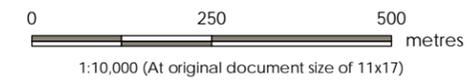
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- Legend**
- Study Area (500m)
 - Constructed Drain
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Proposed Routes**
- Phase 1 - Preliminary Preferred Route

Notes

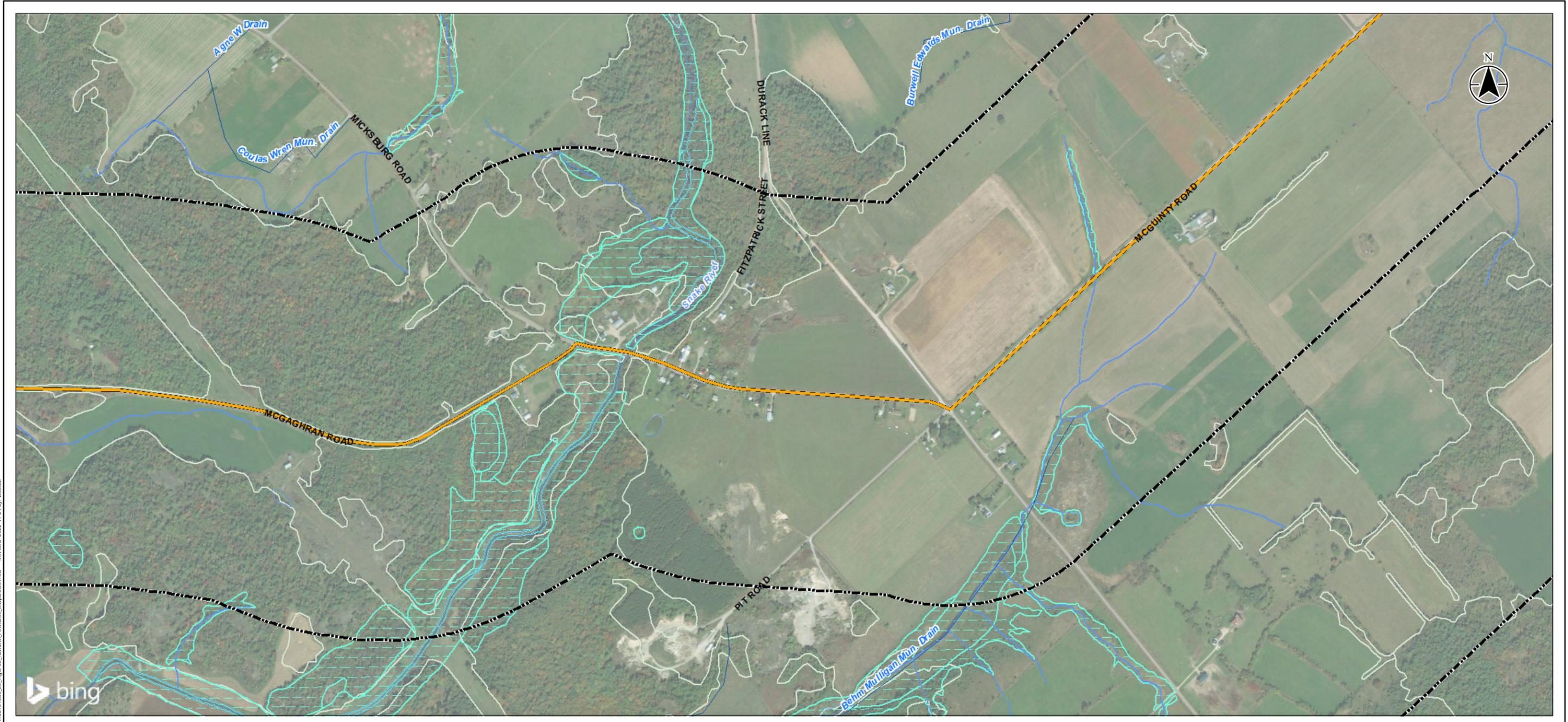
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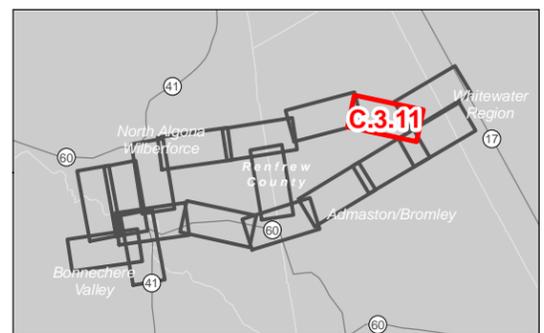
Project Location: County of Renfrew
 Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION
 Figure No.: C.3.10
 Title: Natural Environment Features

160951306 REVA
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-28

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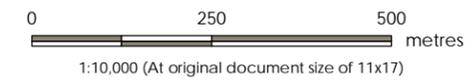
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- Legend**
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 - Wooded Area
- Proposed Routes**
- Phase 1 - Preliminary Preferred Route

Notes

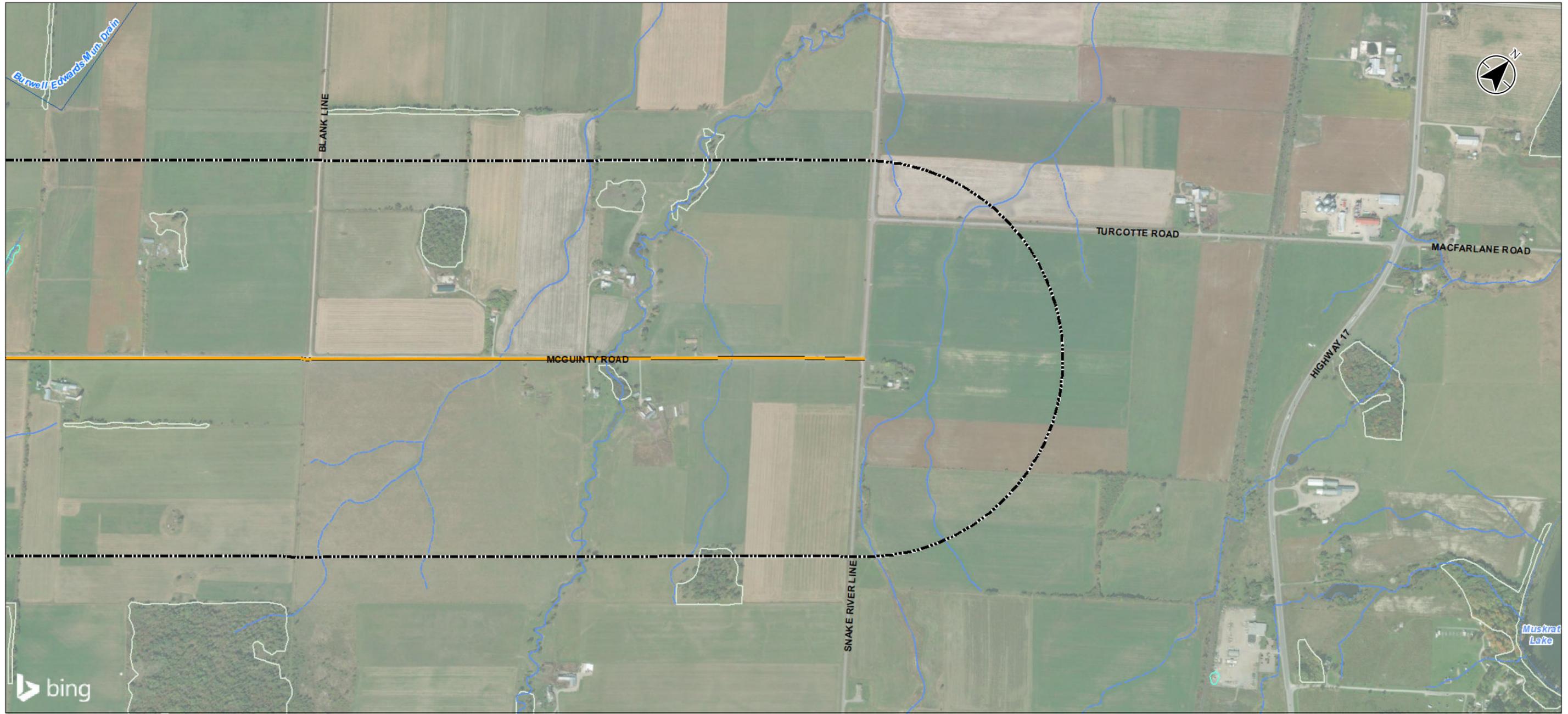
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 Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION
 Figure No.: C.3.11
 Title: Natural Environment Features

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 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-28

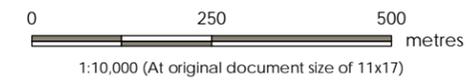
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 - Wooded Area
- Proposed Routes**
- Phase 1 - Preliminary Preferred Route

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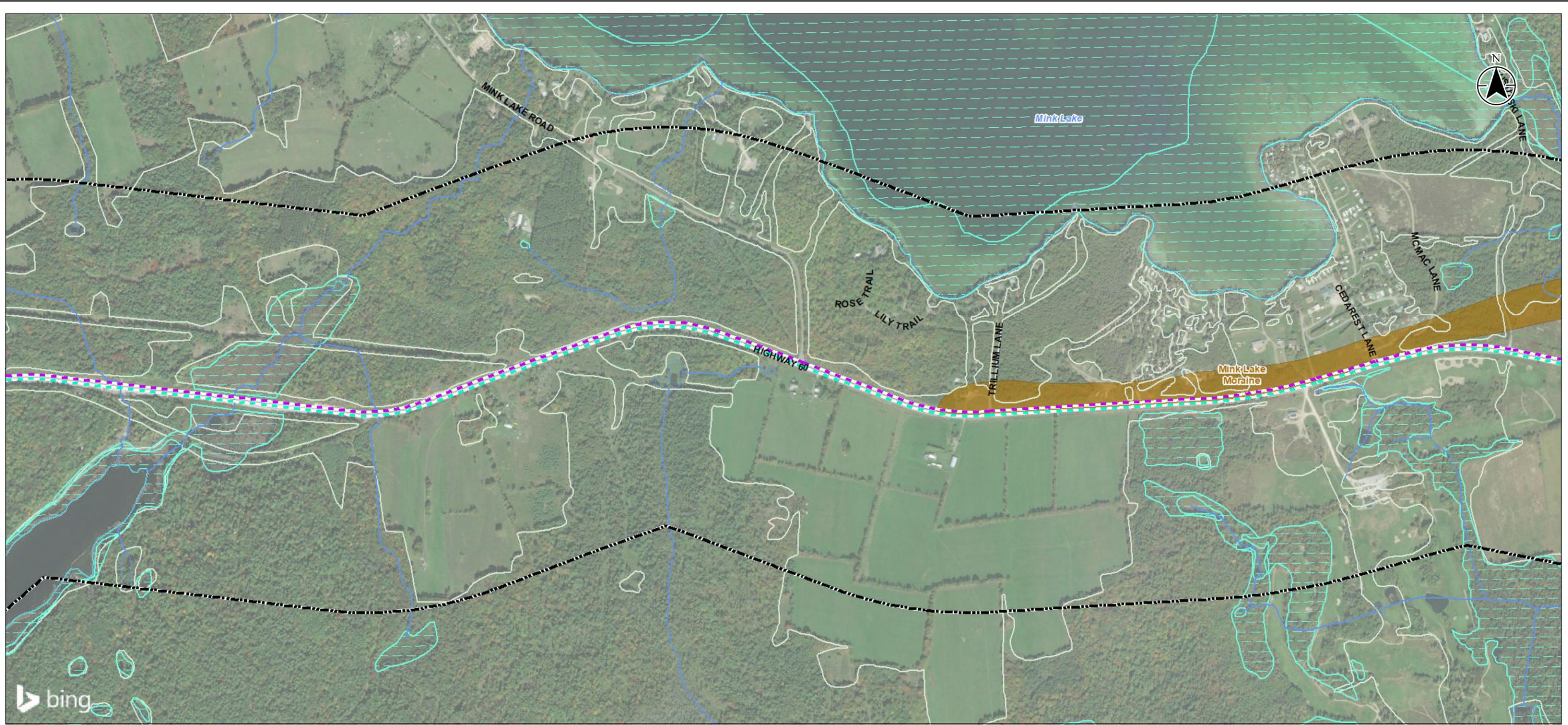
Project Location: County of Renfrew
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 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.3.12

Title: Natural Environment Features

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- Legend**
- Study Area (500m)
 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - ANSI, Earth Science:Regional
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Alternative Routes**
- Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SPE on 2022-10-28

Client/Project: ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.: C.3.13

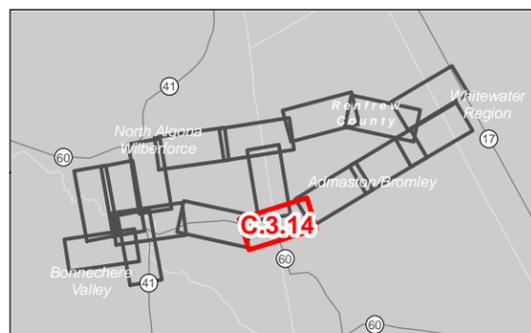
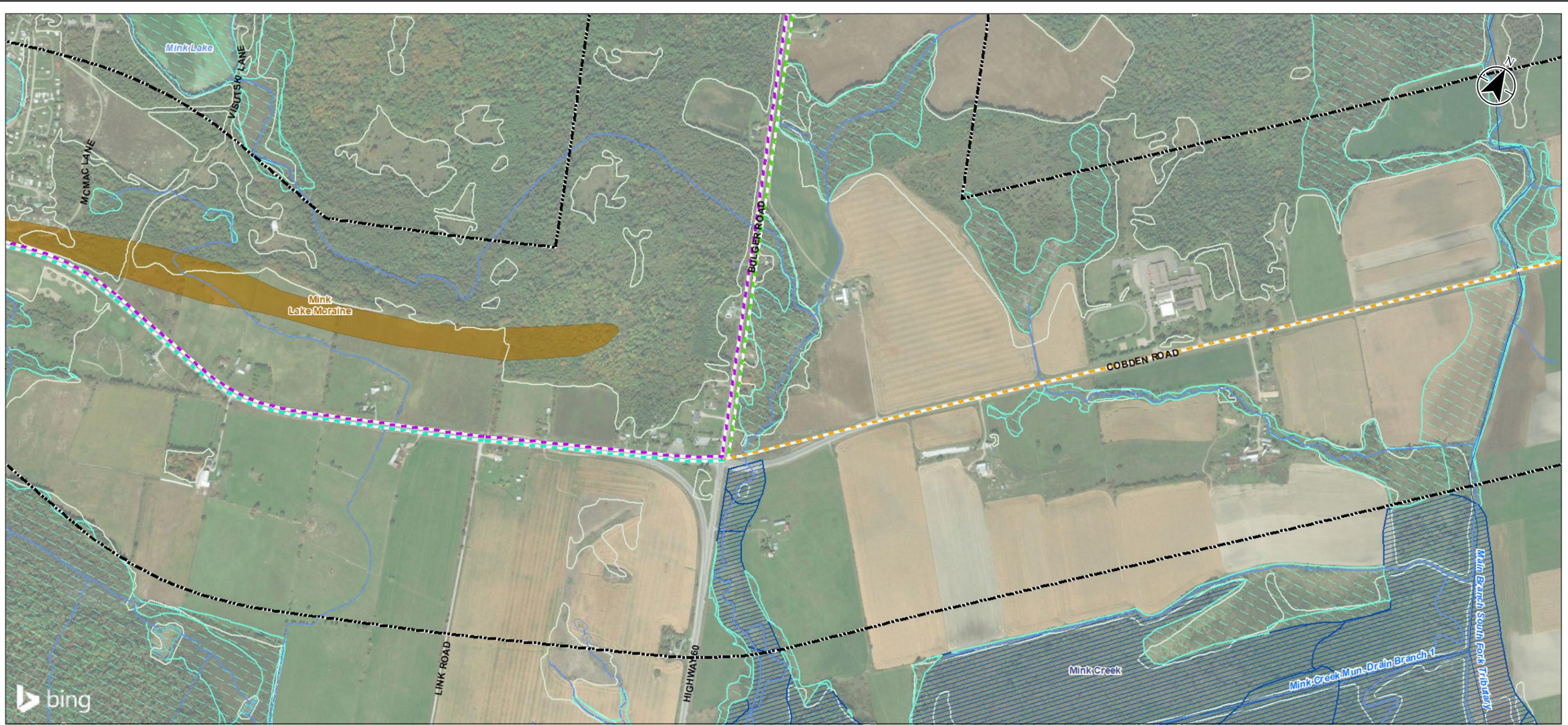
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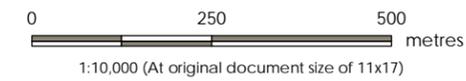
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- Legend**
- Study Area (500m)
 - Constructed Drain
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 - Watercourse (Permanent)
 - ANSI, Earth Science:Regional
 - Provincially Significant Wetland
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Alternative Routes**
- Phase 1 - Alternative Route
 - Phase 2 - Alternative Route 1
 - Phase 2 - Alternative Route 2
 - Phase 2 - Alternative Route 3



Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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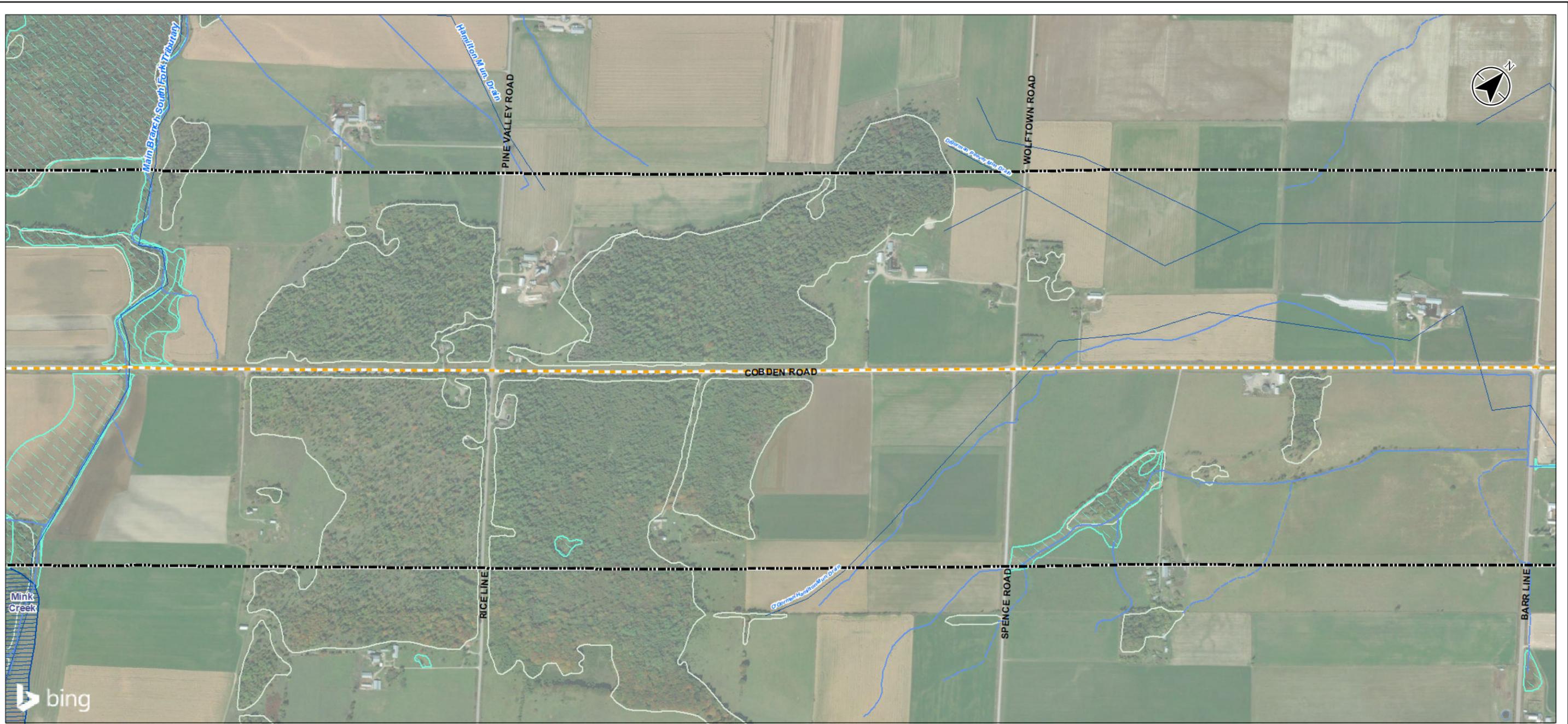
Figure No.: C.3.14
 Title: Natural Environment Features

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- Legend**
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 - Watercourse (Intermittent)
 - Watercourse (Permanent)
 - Provincially Significant Wetland
 - Unevaluated Wetland (per OWES)
 - Waterbody
 - Wooded Area
- Alternative Routes**
- Phase 1 - Alternative Route

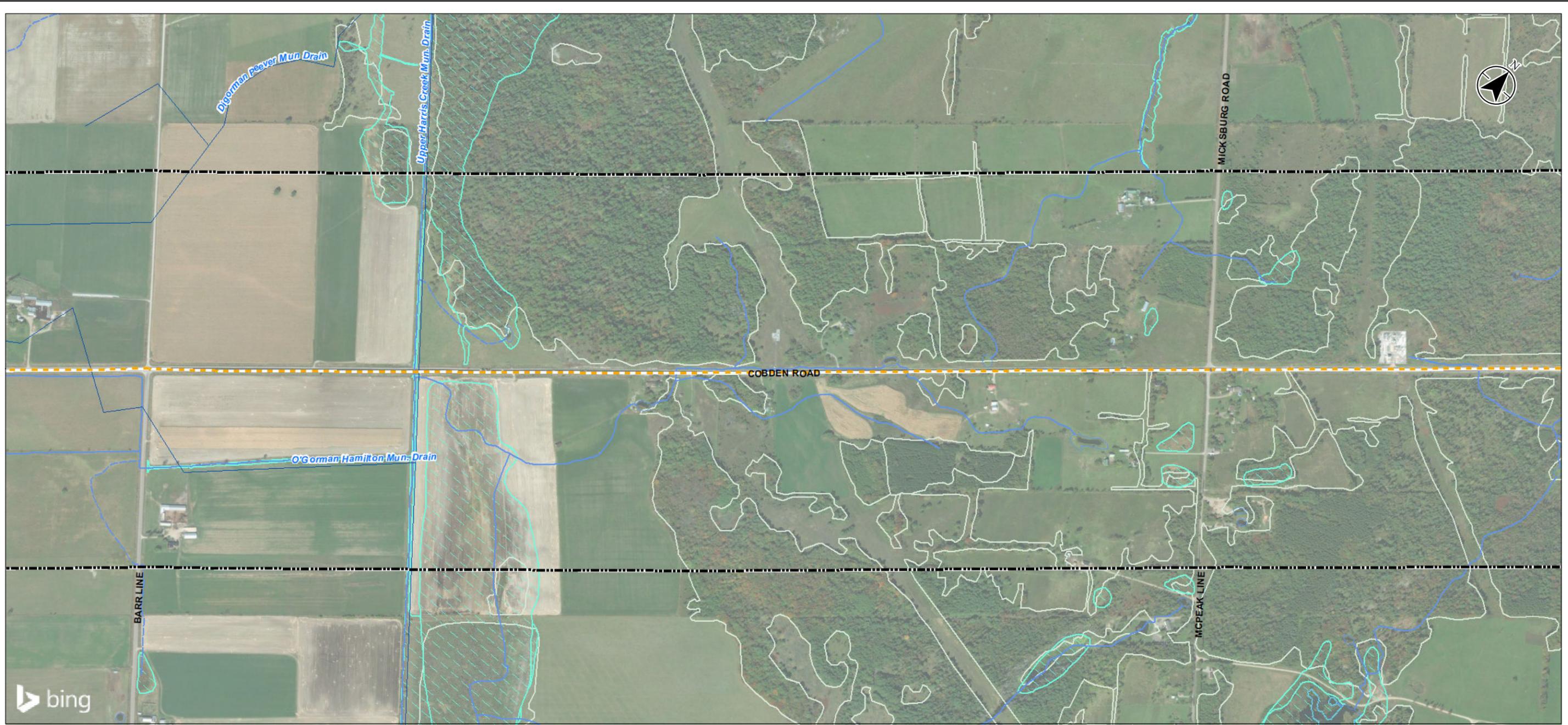
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Project Location: County of Renfrew
 Client/Project: ENBRIDGE GAS DISTRIBUTION INC. EGANVILLE COMMUNITY EXPANSION
 Figure No.: C.3.15
 Title: Natural Environment Features

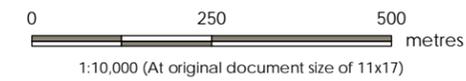
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 - Phase 1 - Alternative Route

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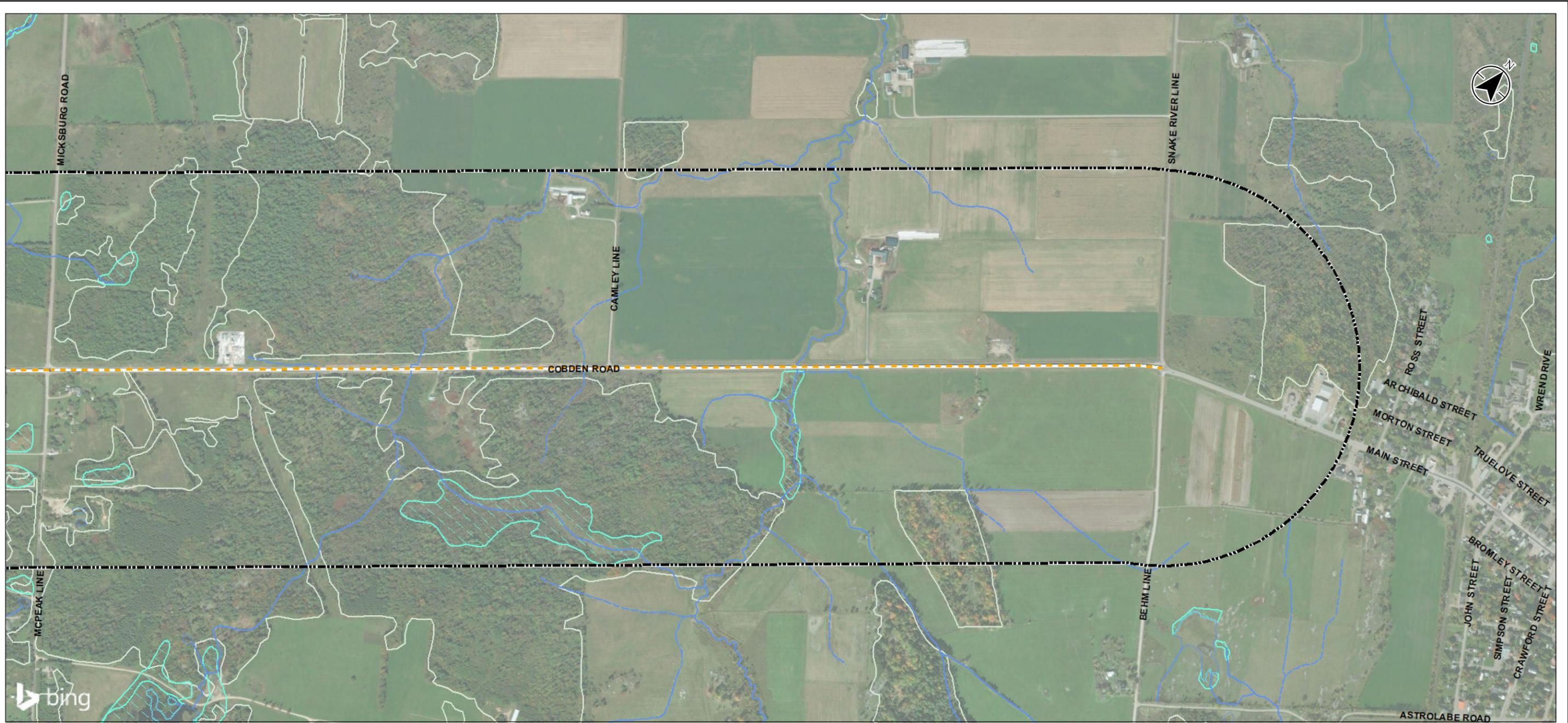
Project Location: County of Renfrew
 Prepared by BK on 2022-11-21
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Figure No.: C.3.16

Title: Natural Environment Features

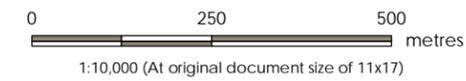
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 - Watercourse (Intermittent)
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 - Unevaluated Wetland (per OWES)
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- Alternative Routes**
- Phase 1 - Alternative Route

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Figure No.: C.3.17

Title: Natural Environment Features

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**Appendix D Significant Wildlife Habitat Assessment for the
Eganville Community Expansion Project
(Ecoregions 5E & 6E)**



Appendix D: Significant Wildlife Habitat Assessment for the Eganville Expansion Project (Ecoregions 5E & 6E)

Table D-1: Significant Wildlife Habitat Assessment

Significant Wildlife Habitat Category	Wildlife Habitat Type	Ecoregion	Criteria	Results of Desktop and Field Habitat Assessment
Seasonal Concentration Areas	Waterfowl Stopover and Staging Area (Terrestrial and Aquatic)	5E & 6E	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.	Candidate SWH potentially present at Mink Lake (AR2 & AR3), Mink Creek PSW (AR0), Bonnechere River (Phase 3, 4), Snake River (PPR1), Cold Creek Wetland (PPR2 & AR1), and various wetland in the Study Area.
	Shorebird Migratory Stopover Area	5E & 6E	Beaches and un-vegetated shorelines of lakes, rivers, and wetlands.	Candidate SWH potentially present at Mink Lake (AR2 & AR3).
	Raptor Wintering Area	5E & 6E	Combination of fields and woodland (>20 ha).	Candidate SWH potential present due to abundant forested landscape interspersed with meadows present in the Study Area (All Routes).
	Bat Hibernacula	5E & 6E	Hibernacula may be found in caves, mine shafts, underground foundations and karsts.	Candidate SWH not considered present due to the absence of known caves, mine shafts and karsts in the Study Area.
	Bat Maternity Colonies	5E & 6E	Maternity colonies considered significant wildlife habitat are found in forested ecosites.	Candidate SWH potentially present within forested areas of the Study Area (All Routes).
	Turtle Wintering Areas	5E & 6E	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 Mink Lake (AR2 & AR3), Cold Creek Wetland (PPR2 & AR1), Mink Creek PSW (AR0), and other various wetlands (swamps and marshes) throughout the Study Area (All Routes).
	Reptile Hibernaculum	5E & 6E	Rock piles or slopes, stone fences, crumbling foundations.	Candidate SWH potentially present within the Study Area (All Routes).
	Colonial-Nesting Bird Breeding Habitat (Bank and Cliff)	5E & 6E	Eroding banks, sandy hills, steep slopes, rock faces or piles.	Candidate SWH potentially present within the Study Area along banks of Bonnechere River (Phase 3, 4), Snake River (PPR1) and Mink Creek (AR0).
	Colonial-Nesting Bird Breeding Habitat (Tree/Shrubs)	5E & 6E	Dead trees in large marshes and lakes, flooded timber, and shrubs, with nests of colonially nesting heron species.	Candidate SWH potentially present in Cold Creek Wetland, Mink Lake, and various other large marshes in the Study Area of AR0, Phase 2 AR2 & AR3, and PPR2 & AR1.
	Colonial-Nesting Bird Breeding Habitat (Ground)	5E & 6E	Rock islands and peninsulas in a lake or large river.	SWH identified by NHIC within Study Area of PPR2 & AR1.
Migratory Butterfly Stopover Area	6E	Combination of field and forest (>10 ha) within 5 km of Lake Ontario. Fields and meadows with an abundance of preferred nectar plants and woodland edge providing shelter.	Candidate SWH not considered present, Study Area more than 5 km from Lake Ontario.	

Appendix D: Significant Wildlife Habitat Assessment for the Eganville Expansion Project (Ecoregions 5E & 6E)

Significant Wildlife Habitat Category	Wildlife Habitat Type	Ecoregion	Criteria	Results of Desktop and Field Habitat Assessment
	Landbird Migratory Stopover Area	6E	Woodlots (>10 ha) within 5 km of Lake Ontario. Variety of habitats, forest, grasslands and wetland complexes.	Candidate SWH not considered present, Study Area more than 5 km from Lake Ontario.
	Deer Yarding or Winter Congregation Areas	5E & 6E	Deer winter congregation's areas are mapped by NDMNRF and species use surveys are not required.	SWH identified by NHIC within Study Area of AR2 & AR3, PPR2 & AR1, Phase 3, and Phase 4.
Rare Vegetation Communities	Sand Barren, Alvar, Cliffs and Talus Slopes	5E & 6E	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.	To be confirmed during future ELC surveys.
	Beach/ Beach Ridge/ Bar/ Sand Dunes	5E	Any identified beach, beach ridge, or sand dune. Vegetation can vary from patchy and barren to tree cover (<60%), characterised by unstable sand.	To be confirmed during future ELC surveys.
	Shallow Atlantic Coastal Marsh	5E	Shallow marsh occurs on shallow mineral (sand) or mineral organic (sandy peat) shoreline subject to low wave energy, on inland lakes and beaver ponds particularly those that experience fluctuating water levels from year to year (i.e., some years with exposed shorelines in summer /fall).	To be confirmed during future ELC surveys.
	Old-growth Forest	5E & 6E	Relatively undisturbed, structurally complex; dominant trees >140 years' old.	To be confirmed during future ELC surveys.
	Bog	5E	Any size G126, G137-138 community.	To be confirmed during future ELC surveys.
	Tallgrass Prairie and Savannah	5E & 6E	Open canopy habitats (tree cover < 60%) dominated by prairie species.	To be confirmed during future ELC surveys.
	Other Rare Vegetation Communities	5E & 6E	Provincially Rare S1, S2 and S3 vegetation communities listed by the NHIC.	To be confirmed during future ELC surveys.
Specialized Habitat for Wildlife	Waterfowl Nesting Area	5E & 6E	Upland habitats adjacent to wetlands (within 120 m).	Candidate SWH potentially present at Cold Creek Wetland (PPR2 & AR1), Mink Lake (AR2 & AR3), Mink Creek PSW (AR0), Bonnechere River (Phase 3, 4), Snake River (PPR1), and various wetland in the Study Area (All Routes).
	Bald Eagle and Osprey nesting, Foraging, and Perching Habitat	5E & 6E	Treed communities adjacent to rivers, lakes, ponds, and other wetlands with stick nests of Bald Eagle or Osprey.	Candidate SWH potentially present at Mink Lake (AR2 & AR3), Cold Creek Wetland (PPR & AR1), Bonnechere River (Phase 3, 4), Snake River (PPR1), and various wetland in the Study Area (All Routes).
	Woodland Raptor Nesting Habitat	5E & 6E	Forested ELC communities >30 ha with 10 ha of interior habitat.	Candidate SWH potentially present within the forested areas of the Study Area (All Routes).

Appendix D: Significant Wildlife Habitat Assessment for the Eganville Expansion Project (Ecoregions 5E & 6E)

Significant Wildlife Habitat Category	Wildlife Habitat Type	Ecoregion	Criteria	Results of Desktop and Field Habitat Assessment
	Turtle and Lizard Nesting Areas	5E & 6E	Exposed soil, including sand and gravel in open sunny areas near wetlands.	Candidate SWH potentially present at the various wetlands throughout the Study Area (All Routes). Turtle nesting confirmed at Cold Creek Wetland (PPR2 & AR1) and Mink Creek PSW (AR0) during April 2022 surveys (old nests and eggshells observed).
	Seeps and Springs	5E & 6E	Any forested area with groundwater at surface within the headwaters of a stream or river system.	Candidate SWH potentially present within the forested areas of the Study Area (All Routes).
	Aquatic Ungulate Feeding Habitat	5E	Habitats may be found in all forested ecosites adjacent to water sources.	Candidate SWH potentially present at the various wetlands and watercourses throughout the Study Area (All Routes).
	Ungulate Mineral Licks	5E	Habitats may be found in all forested ecosites adjacent to water sources.	Candidate SWH potentially present at the various wetlands and watercourses throughout the Study Area (All Routes).
	Denning Sites for Mink, Otter, Marten, Fisher and Eastern Wolf	5E	Habitats may be found in all forested ecosites.	Candidate SWH potentially present within the forested areas of the Study Area (All Routes).
	Amphibian Breeding Habitat (Woodland and Wetland)	5E & 6E	Treed uplands with vernal pools, and wetland ecosites.	Candidate SWH potentially present within forested areas and wetlands in the Study Area (All Routes).
	Mast Producing Area	5E	Mature forests >0.5 ha containing numerous large beech and red oak trees that supply the energy-rich mast that wildlife prefer	Candidate SWH potentially present within forested areas in the Study Area (All Routes).
	Area-sensitive Bird Breeding Habitat	6E	Interior (at least 200 m from forest edge), mature forest >30 ha.	Candidate SWH potentially present within large, forested areas in PPR2 & AR1.
Habitat For Species of Conservation Concern	Marsh Bird Breeding Habitat	5E & 6E	Wetlands with shallow water and emergent aquatic vegetation.	Candidate SWH potentially present within wetlands in the Study Area (All Routes).
	Open Country Bird Breeding Habitat	5E & 6E	Large grasslands and fields (>30 ha).	Candidate SWH potentially present within open meadow, pasture and hayfields in the Study Area (All Routes). Eastern Meadowlark observed at multiple locations (All Routes) during April 2022 survey.
	Shrub/Early Successional Bird Breeding Habitat	5E & 6E	Large shrub and thicket habitats (>10 ha).	Candidate SWH potentially present within shrub and thicket habitats in the Study Area (All Routes).
	Special Concern and Rare Wildlife Species	5E & 6E	All plant and animal Special Concern and Provincially Rare (S1-S3, SH) element occurrences (EO) within a 1 or 10km grid.	Candidate SWH potentially present within the Study Area (All Routes).
	Terrestrial Crayfish	6E	Only found within SW Ontario. Wet meadow and edges of shallow marshes.	Candidate SWH not considered present, Study Area outside of species range.

Appendix D: Significant Wildlife Habitat Assessment for the Eganville Expansion Project (Ecoregions 5E & 6E)

Significant Wildlife Habitat Category	Wildlife Habitat Type	Ecoregion	Criteria	Results of Desktop and Field Habitat Assessment
Species Of Conservation Concern ¹ Animal Movement Corridors	Amphibian Movement Corridor	5E & 6E	Corridors may be found in all ecosites associated with water. Determined based on identifying significant amphibian breeding habitat (wetland).	Candidate SWH potentially present due to the potential amphibian breeding habitat (wetland and/or woodland) within forested areas and wetlands in the Study Area (All Routes).
	Deer Movement Corridors	5E & 6E	Corridors may be found in all forested ecosites.	Candidate SWH potentially present especially AR2 & AR3, PPR2 & AR1, Phase 3, and Phase 4 where Deer Wintering Areas are identified.
	Furbearer Movement Corridors	5E	All forested habitat adjacent to or within shoreline habitats.	Candidate SWH potentially present within the forested areas of the Study Area (All Routes).

¹ See Table 3.2 in the body of the report for details on candidate SOCC

Appendix E Stage 1 Archaeological Assessment





**STAGE 1 ARCHAEOLOGICAL
ASSESSMENT: EGANVILLE COMMUNITY
EXPANSION PROJECT**

Various Lots and Concessions in the
Geographic Township of Wilberforce, now
Township of North Algona Wilberforce,
Geographic Township of Grattan, now
Township of Bonnechere Valley,
and Geographic Township of Bromley, now
Township of Admaston/Bromley,
Renfrew County, Ontario

February 21, 2023

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Project Number:
160951306

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License Number: P415
Project Information Form Number:
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ORIGINAL REPORT

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Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Enbridge Gas Inc. (Enbridge) to complete Stage 1 archaeological assessment for the Eganville Community Expansion Project (the Project). Enbridge is proposing to construct a network of pipelines to supply the community of Eganville and surrounding area with natural gas. The Project involves the installation of approximately 43 kilometres (km) of new pipelines. The Project is anticipated to stay mainly within the existing municipal road Rights-of-Way (ROWs), with some additional Temporary Work Spaces (TWS) potentially required outside the ROWs for lay-down, storage, and excess soils management to be identified prior to the construction phase.

This Stage 1 archaeological assessment was conducted in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition* (OEB 2016). The study area for the Stage 1 assessment of the proposed Project is approximately 798.4 hectares (ha) of part of various lots and concessions, in the Geographic Township of Wilberforce, now Township of North Algona Wilberforce, Geographic Township of Grattan, now Township of Bonnechere Valley, and Geographic Township of Bromley, now Township of Admaston/Bromley, Renfrew County, Ontario.

Initial background research compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on August 25 and September 1, 2022, by Patrick Hoskins (P415) under Project Information Form (PIF) number P415-0393-2022 issued to Patrick Hoskins, MA by the Ministry of Citizenship and Multiculturalism (MCM).

The Stage 1 archaeological assessment of the study area for the Project determined that portions of the study area retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is recommended for any portion of the Project's anticipated construction which impacts an area of archaeological potential.**

The study area crosses the Bonnechere River, a historically important waterway, at two points within the town of Eganville. This portion of the study area containing the Bonnechere River retains potential for the identification of marine archaeological resources. While no impacts to the Bonnechere River are anticipated, the final study area will be finalized as part of the Project's detailed design phase. Thus, **it is further recommended that potential for marine archaeological resources be evaluated using the MCM's *Criteria for Evaluating Marine Archaeological Potential Checklist*.**

The Stage 1 archaeological assessment also determined that portions of the study area retain low to no archaeological potential due to extensive disturbance or permanently low and wet conditions. These portions of the study area retain low to no potential for the identification or recovery of archaeological resources. In addition, portions of the study area have been previously assessed. In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant*



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Archaeologists (Government of Ontario 2011), **Stage 2 archaeological assessment is not recommended for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential or which has been previously assessed.**

The MCM is asked to review the results presented and to accept this report into the *Ontario Public Register of Archaeological Reports*.

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Project Personnel

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Acknowledgements

Enbridge Gas Inc.:	George Tatolis – Environmental Permitting Advisor
Ministry of Citizenship and Multiculturalism:	Robert von Bitter – Archaeological Data Coordinator



1 Project Context

Enbridge Gas Inc. (Enbridge Gas) is proposing to construct the Eganville Community Expansion Project to provide affordable natural gas service to the community of Eganville (the Project). The Project will include the construction of new natural gas pipelines to transport natural gas supply from Snake River Line to new distribution system pipelines in Eganville, and distribute natural gas to residential, commercial and industrial customers in Eganville, and along the supply lateral, which is proposed to span the Townships of Admaston/Bromley, Bonnechere Valley, and North Algona Wilberforce.

The Project involves the installation of approximately 64 kilometres (km) of new pipelines. The Project consists of a supply lateral of approximately 21 kilometers (km) of a combination of 4-inch steel and of 6- and 8-inch polyethylene (PE) pipeline. The preliminary preferred route for the supply lateral is proposed to travel from Snake River Line along McGuinty Road to McGaghran Road, north on Bulger Road, and then along Cold Creek Road and Letts Cemetery Road to Eganville. Alternate routes being considered for the supply lateral would travel from Snake River Line along Cobden Road and Highway 60; along Cobden Road and then north on Bulger Road to intercept with the preliminary preferred route; or, from Snake River Line along McGuinty Road to McGaghran Road, south on Bulger Road and west on Highway 60 (Figure 1).

The Project also includes a distribution system of up to 22 km of a combination of 6-inch, 4- inch and 2- inch PE pipeline and a pressure reducing station, will be constructed along the supply lateral near the intersection of McGuinty Road and Snake Rive Line. The Project will be located within existing road allowances, where possible. Permanent easement and temporary working space (TWS) and laydown areas may be required.

This Stage 1 archaeological assessment was conducted in accordance with the provisions of the *Ontario Heritage Act* (Government of Ontario 1990a) and the requirements of Section 4.3.4 of the Ontario Energy Board's (OEB) *Environmental Guidelines for the Location, Construction and Operation of Hydrocarbon Pipelines and Facilities in Ontario, 7th Edition* (OEB 2016). The study area for the Stage 1 assessment of the proposed Project is approximately 798.4 hectares (ha) of part of various lots and concessions, in the Geographic Township of Wilberforce, now Township of North Algona Wilberforce, Geographic Township of Grattan, now Township of Bonnechere Valley, and Geographic Township of Bromley, now Township of Admaston/Bromley, Renfrew County, Ontario.

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the Ministry of Citizenship and Multiculturalism's (MCM) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 1 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.



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- To recommend appropriate strategies for Stage 2 survey.

To meet these objectives, Stantec archaeologists employed the following research strategies:

- A review of relevant archaeological, historical, and environmental literature pertaining to the study area.
- A review of the land use history, including pertinent historical maps.
- An examination of the *Ontario Archaeological Sites Database* to determine the presence of registered archaeological sites in and around the study area.
- A query of the *Ontario Public Register of Archaeological Reports* to identify previous archaeological work completed within, or within 50 metres of, the study area.
- A property inspection of the study area by a licensed archaeologist.

Permission to enter private lands associated with the study area was not obtained by Enbridge to facilitate a full property inspection. As a result, the property inspection was limited to municipal road ROWs and public property.

1.2 Historical Context

1.2.1 Post-contact Indigenous Resources

“Contact” is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. 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 early 17th century (Loewen and Chapdelaine 2016).

The Ottawa River and its major drainage tributaries were controlled by the various Algonquin bands that occupied the Ottawa River Valley (Day and Trigger 1978; Whiteduck 2002). The region north of the Bonnechere River and west of the Ottawa River, centred around the Muskrat Lake area, was occupied in the early 17th century by a group led by an individual named Nibachis (Croft 2006; Day and Trigger 1978; Hessel 1987). Samuel de Champlain met Nibachis while traveling along (present-day) Muskrat Lake. When Champlain made his journey up the Ottawa River in 1613, he was taken along a route that crossed from the Ottawa River north of Lac des Chats to Codrington Lake and from there up the chain of lakes along the Muskrat River north to Muskrat Lake (Croft 2006). Nibachis’ group has typically been associated with the Kinouchepirini (People of the Pickerel), alternatively known as the Keinouche (Day and Trigger 1978). However, Hessel (1987) asserts that the Kinouchepirini resided further downstream along the Ottawa River at the Kinonge River, to the east of Montebello, Quebec. Other than Champlain’s mention of Nibachis’ people in his journals of 1613 and 1615 there is no documentary evidence of the inhabitants of the Muskrat Lake area (Hessel 1987).

Even before direct contact had been made with Europeans, the Algonquin had been active in the fur trade, acting as intermediaries between Indigenous procurers of furs in the north and west and those Indigenous groups that were in direct contact with European traders (Holmes 1993). This role was one that was already in place before the European fur trade was initiated, given their position along, and control over, a major water transportation route (Morrison 2005). The Huron traded corn, cornmeal, and fishing nets in exchange for dried fish and furs, the latter of which the Algonquin secured from Ojibway



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and Cree living further north (Morrison 2005). The growing fur trade and the designation of animal skins as money led to changes in economic and social organization patterns. After the initial excursions of Champlain into the Algonquin territory in 1613 until 1615 the Algonquin played a major role in the trade between the Huron and the French, and actively worked against Champlain making a trip to the Huron territory (Day and Trigger 1978). When direct trade between the Huron and French eventually occurred, and the Huron and French were permitted to use the Ottawa River as a travel route, they were subject to tolls by the Kichesippirini, who occupied the region around present-day Morrison Island and controlled water traffic up and down the river from their position at those narrows (Hessel 1993; Morrison 2005).

Increased trade along the Ottawa River brought attention from other Iroquois groups from south of the St. Lawrence River. However, the alliance of Algonquin, Huron, and French minimized Iroquois raiding, and various treaties were enacted between the Algonquin and the Mohawk during the 1620s and 1630s (Day and Trigger 1978). In the latter part of the 1630s, however, the Algonquin attempted to trade directly with the Dutch, who had been trading partners with the Mohawk, and this led to a new outbreak of hostilities between Mohawk and Algonquin (Day and Trigger 1978). After 1639, the Mohawk began accumulating English, and then Dutch, firearms that gave them considerable advantage over the Algonquin, whose French trade partners, who had initially determined that they would only provide firearms to those who had been baptized (Trigger 1985). Conflict continued to greater and lesser degrees throughout the 1640s, but by the early 1650s most of the Ottawa River Valley Algonquin had either sought refuge in Quebec, such as at Trois Rivières, or had removed themselves to the upper parts of their territory, in present day Algonquin Park (Hessel 1987).

In 1649, the Huron-French fur trade collapsed, and the Five Nations Iroquois raided and destroyed the French mission at Ste. Marie and several Huron villages. Huronia was abandoned, with the surviving Huron destroying their own remaining villages and moving further inland, now located within the province of Quebec. The Algonkian-speaking communities were briefly replaced as middlemen by the Odawa people, who were later in turn replaced by the French *coureur de bois*. Further colonization of eastern Ontario and Quebec led to more changes in the fur trade. However, after the merger of the Northwest Company and Hudson's Bay Company in 1821, the fur trade routes were diverted north to Hudson's Bay (Kennedy 1961:6).

At the turn of the 18th century, French interests in the fur trade had been sufficiently disrupted to a level that a conclusion of a treaty with the Iroquois was required, and Algonquin and Nipissing representatives were on hand in Montreal when that treaty was made (Holmes 1993). While this should have allowed for the resumption of Algonquin occupation of the whole of the Ottawa River again, the protracted hostilities with the Iroquois and the effects of the European-based disease epidemics had resulted in a population decline that had caused significant changes to social organization (Morrison 2005). During the first part of the 1700s there were Algonquin settlements along the Gatineau River and there were seasonal occupants around Lake of Two Mountains, near Montreal (Holmes 1993). By 1740, a map of Indigenous peoples in the known Canada identified the Nipissings on their namesake lake, Algonquins on the Liève River in present day Quebec and Algonquins, Nipissings and Mohawks at Lake of Two Mountains (Holmes 1993). No other Indigenous groups, Algonquin or otherwise, were identified as living in the Ottawa River valley (Holmes 1993).



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At the conclusion of the Seven Years War in 1763, the sphere of European influence in the Algonquin homeland passed from the French to the British, who imposed restrictions on travel along the Ottawa River above Carillon (Morrison 2005). Nevertheless, the Algonquin continued to consider the river their territory and claims and petitions to that regard were made to the British colonial government (Holmes 1993). The *Proclamation of 1763* was supposed to protect the Algonquin territory from further settlement by Euro-Canadians; however, the British loss in the American Revolutionary War, and the resultant influx of loyalists to the British Crown after the war, meant that new lands were required for settling these loyalists and land was purchased in what is now eastern Ontario. This purchase was made with the Mississauga, and not the Algonquin (Morrison 2005:31).

Even though the lands had supposedly been 'surrendered' by the Mississauga, early Euro-Canadian settlers along the Ottawa River documented the continued presence of Algonquins throughout the territory (Hessel 1987:70). In 1819, Alexander McDonnell signed a treaty with some Algonquin that allowed him to cut timber between the Indian and Mississippi rivers and to float the resultant log rafts down the Bonnechere and Madawaska rivers. In 1837, a government Order-in Council acknowledged both the continued presence of Algonquins within the lower Ottawa valley and their historical claim to a large territory. In 1840, Reverend William Bell, a Presbyterian circuit preacher, met an Algonquin settlement along the Madawaska River near present-day Stewartville. These and other encounters testify to the continued occupation of the valley by Algonquin populations.

Despite the attempts to limit the movement of Algonquin people through their traditional territory and encouragement to permanently settle in one location (i.e., at Oka), at the start of the 19th century Algonquins were still largely living on the land and practicing their traditional livelihood of hunting and trapping (Black 1989:64). For the most part, they were on the land of all but a brief period of two to three months of the year when they would gather at Oka (Black 1989:65), including even those who had converted to Christianity (Morrison 2005:31). At Oka, it was noted that the Iroquoian population was heavily involved in agriculture and the wage labour economy, but only Algonquin women and elderly men were involved in cultivation pursuits, and in only a limited way at that (Black 1989:64). During the early part of the 19th century, tensions between Algonquin, Nipissing and Iroquoian inhabitants increased at Oka (McGregor 2004:167).

In 1820, French traders from Montréal opened a trading post where the Desert River (Kitigan Zibi) met the Gatineau River. For many Algonquin families it was preferable to conduct their trade at this post and spend their summer months in that region, rather than continue to Oka (McGregor 2004:163). Beginning in the 1830s, those Algonquin families who were spending time in that region began clearing some small parcels of land to settle on when they were not in the bush (McGregor 2004:167). Eventually, the Crown was petitioned for a reserve of approximately 60,000 acres (24,000 hectares) in the Kitigan Zibi area, largely due to the efforts of Chief Luc-Antoine Pakinawatik, who had to indicate to government officials that the land was needed for farming as hunting and trapping were on the decline (McGregor 2004:172).

The decline of hunting and trapping was precipitated by the increase in farming and lumbering activities practiced by Euro-Canadian settlers within the Ottawa River valley, which drastically altered the landscape (Black 1989:65). Nevertheless, Algonquin hunters and trappers continued to ply their traditional trades. As the fur trade continued to decline in importance through the 19th century, the closure



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or amalgamation of trading posts within the Ottawa River drainage resulted in the movement of families to new post locations, and band membership through the latter part of the 19th century became very fluid, and congregation at more favourable locations increased (Black 1989:66-67).

One of those more favourable locations was at Golden Lake (Pikwakanagan), on the Bonnechere River, which was a summer gathering place within the wider winter hunting grounds (Morrison 2005:33). In September 1857, the Crown Lands Agent sent the government a petition from several Algonquin families for a grant of 200 acres per family along the shores of the lake. In 1864, the government approved the sale of 1,561 acres (631 hectares) of land, which became the community of Pikwakanagan (Hessel 1987:72).

Although the Algonquin continued to become increasingly congregated in fewer locations throughout the Ottawa River drainage area (Hessel 1987:85), traditional activities, such as canoe building, carried on into the early 20th century at Algonquin communities such as Pikwakanagan, Kitigan Zibi, and Lac Barrière (Gidmark 1988:75). These canoes were used to facilitate traditional hunting and trapping, and for transportation over long distances (Gidmark 1988:75). Despite the continuity of traditional pursuits practiced by some, by the start of the 20th century, many Algonquin had become incorporated into the wage labour economy (Black 1989:62). While urban and industrial development were slower to affect the lands where reserves had been established, by the 1950s the ecological changes wrought by lumbering and mining, in conjunction with the drop in prices for furs and other traditional products, the change to a wage labour model had become firmly established (Montpetit 1996:214). Additionally, the opportunities for wage labour on reserves was in general underdeveloped, resulting in either a high degree of underemployment or the need to seek opportunities off-reserve, including, for some, settling in urban centres (Montpetit 1996:215).

Combined with the continual growth in large and small urban centres along the Ottawa River, the relationship of the Algonquin to their traditional territory began to be harder to identify among non-Indigenous populations. However, in 1983 the Algonquins of Pikwàkanagàn First Nation initiated a land claim process, formally submitting a petition and supporting research to the Government of Canada in 1983 and the Government of Ontario in 1985. The Province of Ontario accepted the claim for negotiations in 1991, and the Government of Canada joined the negotiations in 1992 (Algonquins of Ontario [AOO] no date [n.d.] a). Moreover, the Algonquin have become increasingly involved in the land development process in the Ottawa Valley, and in the urban National Capital Region, raising both the knowledge of Algonquin ties to the land and the Algonquin profile in the wider community (AOO n.d.b).

To open the land up for settlement and the lumber and mining industries, treaties were negotiated between the Government (the Crown) and First Nations. The land within the current study area is governed by the Treaty 27, the Robinson-Huron Treaty, and the Williams Treaty.

Treaty 27 is illustrated by the letter “S” on Figure 2. Treaty 27 was enacted in 1819 between John Ferguson of Kingston and the Mississauga Nation for a parcel of land:

Commencing at the north west angle of the Township of Rawdon; thence along the division line between the Midland District and the District of Newcastle, north 16 degrees



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west, 33 miles; then north 74 degrees east, 61 miles more or less to a division line produced north 16 degrees west from the north east angle of the Township of Bedford; then north 16 degrees west to the Ottawa or Grand River; then down the said River to the north west angle of the Township of Nepean; then south 16 degrees east, 15 miles more or less to the north east angle of the Township of Marlborough; then south 54 degrees west to the north west angle of the Township of Crosby; then south 74 degrees west 61 miles more or less to the place of beginning.

Morris (1943:26)

The Robinson-Huron Treaty between the Crown and the Ojibwa is part of “two agreements signed in September of 1850...and secured virtually the whole of the Upper Canadian northwest for government use” (Surtees 1986:19). This agreement includes:

The eastern and northern shores of Lake Huron from Penetanguishene to Sault Ste. Marie, and thence to Batchewanaung Bay on the northern shore of Lake Superior, together with the Islands in said lakes, opposite to the shores thereof and inland to the height of land which separates the territory covered by the Charter of the Honorable Hudsons Bay Company from Canada, as well as all unconceded lands within the limits of Canada West, to which they have any just claim of the other part.

(Morris 1943:31)

Today, this treaty is identified as Treaty Number 61, illustrated by the letter “Z” on Figure 2, and includes a portion of the later Williams Treaty, illustrated by the letter “AF” on Figure 2. Twenty-one First Nations reserves were included in the treaty, the locations of which could be chosen by the chiefs. The negotiation of the treaty was largely prompted by the promotion of mining activity in the area (Surtees 1986:20).

The Williams Treaty between the Crown and the Chippewas and Mississaugas in this area is part of “[t]hree separate and large parcels of land in southern and central Ontario...acquired by the Government of Canada in 1923” (Surtees 1986:1) and “...contains 17,600 square miles more or less” (Morris 1943:61). The study area is located within the second parcel, labeled “AF” in Figure 2. This part of the Williams Treaty was enacted October 31 and November 15, 1923, and includes a “very large tract lying between Lake Huron and the Ottawa River bounded on the north by the Mattawa River-Lake Nipissing and French Line, and on the south by earlier treaties concluded in 1818 and 1819” (Surtees 1986:1) It is also worth noting that this area also “included substantial portions of land that had been the object of previous land cession treaties” (Surtees 1986:1) such as the Robinson Treaty.

However, there is an outstanding Algonquin land claim for the traditional Algonquin territory, including the study area, within those lands that remain unceded because the Algonquin were not consulted during the treaty negotiations. At the time of the treaty negotiations, the Ottawa River was in fact still occupied by Algonquin people and was not a part of the Mississauga territory (Hessel 1987). An Agreement-in-Principle for a modern-day treaty was signed between the Algonquins of Ontario (AOO) and the Governments of Canada and Ontario in 2016.



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1.2.2 Euro-Canadian Resources

The earliest record of Euro-Canadian travel along the Ottawa River-Georgian Bay route appears to have been by Etienne Brule in 1610. Brule travelled along the canoe route to spend the winter of 1610 with the Huron (Kennedy 1961:2). Champlain first traveled up the Ottawa River in 1613, during which time he visited Algonquin villages located near present day Cobden on Muskrat Lake and at Morrison Island, on the portion of the Ottawa River known as Lower Allumette Lake (Croft 2006). Champlain noted that there were wooden structures at Morrison Island.

The Northwest Company established a trading post at the confluence of the Ottawa and Mattawa Rivers in 1784, likely at the site of an old French trading post (Voorhis 1930). In 1837, the Hudson's Bay Company expanded this trading post building, which was known as Mattawa House (Ontario Heritage Trust 2008:2). However, after the merger of the Northwest Company and Hudson's Bay Company in 1821, the fur trade routes were diverted north to Hudson's Bay and both the Mattawa River and Ottawa River routes came to be utilized for the logging industry rather than for the fur trade (Kennedy 1961:6).

In 1791, the Provinces of Upper Canada and Lower Canada were created from the former Province of Quebec by an act of British Parliament. At this time, Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing the new province, directing its settlement and establishing a constitutional government modelled after that of Britain. In 1792, Simcoe divided Upper Canada into 19 counties consisting of previously settled lands, new lands opened for settlement, and lands not yet acquired by the Crown. These new counties stretched from Essex in the west, to Glengarry in the east.

1.2.2.1 County of Renfrew

Initial Euro-Canadian activity in Renfrew County is linked to the fur trade based out of Quebec (Price and Kennedy 1961:25). By the early 19th century, furs had become scarcer in the area and most fur trade activity began to move northward. Following the decline of the fur trade, the lumber industry became the predominant economic activity (Price and Kennedy 1961:39). Renfrew County was originally located in the Bathurst District, which included the present-day counties of Lanark and Renfrew. In 1849, the district system was abolished, and counties became the unit of division for municipal, judicial, and parliamentary purposes (Spragge 1967:40). In 1850, the United Counties of Renfrew and Lanark was established (County of Renfrew 2022). Settlement in the area was sparse at the time of the establishment of the United Counties and the area encompassing Renfrew County contained a population of 6,892, consisting mostly of transient laborers employed in the lumber industry (Price and Kennedy 1961:59).

In 1861, the United Counties of Lanark and Renfrew was dissolved, and Renfrew County became a provisional county. Controversy surrounding the selection of a county seat delayed Renfrew gaining full county status. In 1866, Renfrew was elevated to full county status following the completion of the courthouse at Pembroke (Price and Kennedy 1961:59-60). The County of Renfrew developed slowly during the 19th century. Many settlers in Renfrew County found themselves disappointed with the quality of land available for agriculture and the lack of good roadways and nearby markets (Murray 2018:69). The population of Renfrew County was recorded as 27,977 in 1871, increasing to 38,482 in 1881 and to



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46,977 in 1891 (Dominion Bureau of Statistics 1953). After the turn of the 20th century, however, the rate of population increased slowed.

1.2.2.2 Township of Grattan

The Township of Grattan was formed in 1851 and surveyed in 1853 (Association of Ontario Land Surveyors [AOLS] 1997; Price and Kennedy 1961:100) (Figure 3). The Bonnechere River forms the northern border of Grattan Township, giving the township an irregular shape. The Opeongo Road was constructed in 1854 to facilitate the settlement of Renfrew County and stretched from Farrell's (also spelled Ferall's) Point at the Ottawa River west to the settlement of Renfrew and on up to Barry's Bay on the Madawaska River (Price and Kennedy 1961:113-115). The township is named in honour of Henry Grattan, an Irish politician who was opposed to the unification of Ireland and Great Britain (Gardiner 1899:87; Price and Kennedy 1961:100). Lumber was initially the most important industry, centred on the Bonnechere River. Gradually, as more land was cleared, agriculture became an important industry as well. By 1871, a total of 27,332 acres of land was occupied in Grattan Township, according to the 1871 Agricultural Census (Census of Canada 1871). The township contained a total of 187 farmsteads, most between 50 to 200 acres in size. Crops grown in the township included wheat, barley, oats, rye, peas, beans, buckwheat, corn, potatoes, turnips, and hay (Census of Canada 1871).

1.2.2.3 Township of Wilberforce

The Township of Wilberforce was formed and surveyed in 1851 (Price and Kennedy 1961:107; AOLS 1997) (Figure 4). The Bonnechere River forms the southern border of the township, giving the township an irregular shape. In addition to regular lots and concessions, the township contains two lettered concessions (A and B) which fronted the route of a military road between Wilberforce and Bromley Townships (now Bulger Road) (Price and Kennedy 1961:107). Wilberforce Township is named in honour of William Wilberforce, an English politician who strongly advocated for the abolition of slavery in the British Empire (Gardiner 1899:88; Price and Kennedy 1961:107). Lumber was initially the most important industry in the township, and the Bonnechere River served as the main route to float logs to the Ottawa River. Gradually, as more land was cleared, agriculture grew in importance. In 1871, 36,862 acres of land were occupied in Wilberforce Township and the township contained 273 farmsteads. During the late 19th century, a variety of crops were grown in the township including wheat, barley, oats, rye, peas, beans, buckwheat, corn, potatoes, turnips, and hay (Census of Canada 1871).

One cemetery was identified within the Township of Wilberforce. Lett's Corner Cemetery is located at 166 Smith's Bay Road, Lot 16, Concession 11, Geographic Township of Wilberforce. The earliest grave marker dates to 1854 and the cemetery is still in use (Bereavement Authority of Ontario [BAO] Public Register [2022]; Find a Grave [2022]).

1.2.2.4 Township of Bromley

The Township of Bromley was surveyed in 1843 (Figure 5). The name derives from Bagot's Bromley in Staffordshire, England, the former residence of Sir Charles Bagot, Governor of Canada in 1842 and 1843 (Green 1956). The earliest settlers of Bromley Township were mainly migrant workers involved in the



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lumber industry. As land was cleared, agriculture became a feasible industry. Much of the agricultural production went to support nearby lumber camps, and several of the lumber company owners established farms in the township (Green 1956). However, with the eventual decline of the local lumber industry, many part-time farms became uneconomical and were abandoned. By 1850, Bromley Township had three schools, two sawmills, and a small settlement at Douglas (formerly called Palmerston). However, the population of the township was small, only 640 inhabitants. By 1870, a second post office opened at Osceola, which had been settled primarily by Irish Catholics. Other settlers in the township included Scots and Germans. Settlement increased slowly over the latter part of the 19th century, but the lack of productive agricultural land limited population expansion.

1.2.2.5 Eganville

Eganville is located along the Bonnechere River in both Grattan and Wilberforce Townships. The community started as a lumber depot in the 1820s and in 1837 was purchased by John Egan. In 1853, Egan had the area surveyed into a town plot, which became Eganville. The 1863 map of Renfrew County shows a grid like layout on both sides of the river (Walling 1863) (Figure 6, inset map). On the northeast bank of the river was the Free Church, J. Reeves Store, a sawmill, and two temperance halls. A bridge across the Bonnechere River connected the northeast bank to the southwest bank, where there were several blacksmith shops, a grist mill, two schoolhouses, several temperance halls, stores, the Division Court House, a hotel, carpenter, and Catholic Church.

The Eganville Bridge is a listed heritage property (Township of Bonnechere Valley 2022). In January 1891, Eganville incorporated as a Village and had a population of 710 (Price and Kennedy 1961:93-94; Dominion Bureau of Statistics 1953). In 1893, railway service via the Canadian Pacific Railway and the Ottawa, Arnprior and Parry Sound Railway arrived in Eganville. Within Grattan Township, the railway tracks of both lines were located just south of the Bonnechere River (Gilhuly 2015). There is one designated heritage property in Eganville within the study area under Part IV of the *Ontario Heritage Act*: the Old Post Office (Ontario Heritage Trust 2022).

There are six cemeteries identified within Eganville which are within or adjacent to the study area. The St. Luke's Lutheran Cemetery, Melville United Church Cemetery, and Grace Lutheran Cemetery are located on Jane Street. The cemeteries are adjacent to one another and are within Lot 20, Concession 8, Geographic Township of Wilberforce. Melville United Cemetery's earliest grave marker dates to 1881, Grace Lutheran Cemetery's earliest grave marker dates to 1896, and St. Luke's Lutheran Cemetery's earliest grave marker dates to 1903. The three cemeteries remain active (BAO Public Register [2022]; Find a Grave [2022]).

St. James Roman Catholic Old Cemetery is located at Highway 41 and Melanie Street, on part of Lot 20, Concession 21, Geographic Township of Grattan. The cemetery lands were donated by John Egan and James Bonfield, early settlers of Eganville. The earliest grave maker is 1839 and the most recent is 1932. The cemetery is no longer active (BAO Public Register [2022]; Find a Grave [2022]).

St. James Roman Catholic New Cemetery is located at Highway 41 and Foymount Road, on part of Lot 21, Concession 20, Geographic Township of Grattan. When the St. James Roman Catholic Old Cemetery became full, land was purchased across the road from James Turner and was called Turner's Grove. It



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became the primary Catholic cemetery in 1914. The earliest grave marker dates to 1894 and is still active (BAO Public Register [2022]; Find a Grave [2022]).

St. John's Anglican Cemetery is located on Campbell Street, on part of Lot 18, Concession 8, Geographic Township of Wilberforce. The earliest grave marker dates to 1847 and the cemetery is still in use (BAO Public Register [2022]; Find a Grave [2022]).

1.2.2.6 Historical Map Review

The 1853 survey map of Grattan Township (Figure 3) shows several clearances with associated squatter and/or landowner names and structures, particularly around what would become Eganville and Perrault (Hamilton 1852). The settlers in the area around Eganville are indicated as J. Egan, Coyne, R. Turner, Mrs. Turner, and W. Jessop. Numerous trails are depicted throughout the township, connecting cleared areas. Bridges are illustrated at Eganville and at Fourth Chute.

The 1851 survey map of Wilberforce Township (Figure 4) depicts numerous trails, represented by dashed lines, throughout the study area (Robertson 1851). Portions of one of these trails appears to follow parts of what is now Highway 60 west and south of Mink Lake. Another crosses Mink Lake as a "Winter Road". No landowners are noted, but several land clearances, either for timber or homesteading, are noted throughout the study area. In particular, several clearances are located along Bulger Road, and structures illustrated within them. This settlement later became known as Bulgers Corners. At the eventual location of Eganville on the Bonnechere River, a bridge is depicted as having already been built, along with a sawmill on the southwest side of the river, owned by J. Egan. Several trails branch out from this location. A narrow strip along the northeast bank of the river is noted as "Reserve".

The 1842 survey map of Bromley Township (Figure 5) depicts the Snake River, Mink Creek, and some of their tributaries (McNaughton 1842). The names of landowners have been added to the map sometime after its creation. Several of the lots are marked as either Clergy Reserves (grey) or Canada Company lands (pink).

Walling's 1863 map of Renfrew County (Figure 6.1 and 6.2) shows that the road network and numerous settlements had been established, including Eganville, Cobden, and Osceola in the region of the study area. Several roads are depicted as planned but were never built, or other roads are no longer in their original locations and follow alternate routes today. Owners and structures are indicated for some properties. Settlement and structures are concentrated along established roads. Table 1 provides a summary of landowner information. Only those lots with landowners depicted are listed in the table.

Table 1: Landowner Information from the 1863 Map of Renfrew County

Township	Lot	Concession	Parcel	Landowner / Resident	Comments
Grattan	20	21	-	Not applicable (n/a)	Town plot of Eganville. Catholic Church in south part of lot.
Grattan	21	21	-	n/a	Town plot of Eganville. Hotel is labelled in the lot.



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Township	Lot	Concession	Parcel	Landowner / Resident	Comments
Grattan	22	21	-	J. Cine	Structure in north part of lot.
Grattan	20	20	-	R. Turner	Structure in north part of lot.
Grattan	21	20	-	R. Turner	Structure in southeast corner of lot
Grattan	22	20	-	J. Beatle	Structure in northeast corner of lot.
Grattan	20	19	-	W. Bolton	Structure in northwest part of lot. Temperance Hall in northeast corner of loc
Wilberforce	9	A	-	D. Bulger	Structure in northeast corner of lot.
Wilberforce	8	A	-	M. Sexton	Structure in southeast part of lot
Wilberforce	7	A	-	C. Comptois	Structure in east side of lot.
Wilberforce	6	A	-	P. McMannus	Structure in northeast corner of lot.
Wilberforce	5	A	-	P. Maloney	Structure in southeast corner of lot.
Wilberforce	4	A	-	P. Maney	Structure in northeast corner of lot.
Wilberforce	3	A	-	J. McCourt	Structure in east side of lot.
Wilberforce	2	A	-	M. O'Shaughnessy	Structure in southeast corner of lot.
Wilberforce	1	A	-	M. Gannon	Structure in east side of lot
Wilberforce	8	12	-	P. Driscoll	Structure in north part of lot.
Wilberforce	9	12	-	J. Hunt	Structure in north part of lot.
Wilberforce	10	12	-	J. Price	Structure in southwest corner of lot.
Wilberforce	11	12	-	J. Price	Structure in southeast corner of lot.
Wilberforce	12	12	-	J. Price	Structure in central part of lot.
Wilberforce	13	12	-	J. McKibbin	Structure in southwest part of lot.
Wilberforce	15	12	-	R. Lett	--
Wilberforce	16	12	North	J. Greer	Structure in northeast corner of lot
Wilberforce	16	12	South	M.E. Church (Methodist Episcopal)	Structure in southeast corner of lot
Wilberforce	9	11	-	J. Paragen	Structure in northwest part of lot. North shore of Mink Lake in south part of lot.
Wilberforce	10	11	-	W. Armstrong	Structure in north part of lot. North shore of Mink Lake in south part of lot.
Wilberforce	11	11	North	J. McKibbin	Structure in northeast corner of lot.
Wilberforce	11	11	South	P. Rogan	Structure in south part of lot. Creek flowing into Mink Lake and lakeshore road depicted.
Wilberforce	12	11	-	C. Stewart	Structure in north part of lot.
Wilberforce	13	11	-	F. Martin	Structure in north part of lot.
Wilberforce	15	11	-	T. Sherden	Structure in north part of lot. Creek crosses lot.



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Township	Lot	Concession	Parcel	Landowner / Resident	Comments
Wilberforce	16	11	-	T. Thomas	Structure in central part of lot.
Wilberforce	15	10	-	J. McMellen	Structure in west side of lot.
Wilberforce	16	10	-	R. Martin	Structure in northeast central part of lot. Temperance Hall in southeast corner of lot.
Wilberforce	19	10	-	T.B. Lett	Structure in northwest corner of lot.
Wilberforce	20	10	-	L. Faught	Structure in central west part of lot.
Wilberforce	15	9	-	J. Jessop	Structure in southeast corner of lot.
Wilberforce	16	9	-	R. Mills	Structure in northwest part of lot. Temperance Hall in northeast corner of lot.
Wilberforce	1	8	-	J. Breen	Structure in southeast corner of lot.
Wilberforce	8	8	-	R. Saddler	Structure on the shore of Mink Lake.
Wilberforce	9	8	-	T. McKibbin	Structure on the shore of Mink Lake.
Wilberforce	11	8	-	H. McKibbin	Structure in north part of lot.
Wilberforce	18	8	-	Not applicable (n/a)	Town plot of Eganville. Structure in south part of lot.
Wilberforce	19	8	-	n/a	Town plot of Eganville.
Wilberforce	1	7	-	J. Foley	Structure in north part of lot.
Wilberforce	2	7	-	Wm. Burgess	Structure in north part of lot.
Wilberforce	4	7	-	Wm. Rutledge	Structure on the shore of Mink Lake.
Wilberforce	5	7	-	J. Saddler	Structure on the shore of Mink Lake.
Wilberforce	6	7	-	A. McIntyre	Two structures in lot along road. A. McIntyre resides in west structure.
Wilberforce	15	7	-	Mrs. McCabe	Structure in centre of lot.
Wilberforce	16	7	-	J. Armstrong	No structure depicted.
Bromley	19	1	-	M. McIntyre	Structure in north central part of lot. Creek crosses lot.
Bromley	15	1	-	T. Camley	Structure in southeast corner. Creek crosses lot.
Bromley	18	2	Northwest corner	W. Bowes	Structure in northwest corner.
Bromley	18	2	West side	M. Mulligan	Structure on west side of lot.
Bromley	16	2	-	H. McPeake	Structure in northwest corner. School house in southwest corner.
Bromley	15	2	North	P. McPeake	Structure in northwest corner.
Bromley	15	2	South	P. Welch	Structure in southwest corner.
Bromley	21		North	D. Fuffie	
Bromley			South	John McLaren	



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Township	Lot	Concession	Parcel	Landowner / Resident	Comments
Bromley	19	3	-	n/a	Osceola townplot with several structures depicted. Snake River crosses north part of lot.
Bromley	18	3	-	J. Ruddy	Structure on east side of lot.
Bromley	16	3	North	F. Billings	Structure in north central part of lot.
Bromley	16	3	South	J. Riley	Structure in southeast corner of lot.
Bromley	23	4	-	P. Salmon	Structure in east side of lot.
Bromley	16	4	-	J. Griss	Structure in west side of lot.
Bromley	15	4	-	C. Ristut	Structure in west side of lot.
Bromley	15	5	-	A. Frood	Structure in west side of lot.
Bromley	23	6	-	O. Connally	Structure in west side of lot.
Bromley	22	6	-	J. Connally	Structure in west side of lot.
Bromley	16	6	-	J. Peever	Structure in west side of lot.
Bromley	23	7	North	P. Gannon	Structure in west side of lot.
Bromley	23	7	South	D. Gorman	Structure in southeast part of lot.
Bromley	22	7	-	J. O'Neill	Structure in north side of lot.
Bromley	21	7	-	J. Gorman	Structure in north side of lot.
Bromley	16	7	-	D. Hamilton	Structure in east side of lot.
Bromley	22	8	North	J. McMannus	Structure in northeast corner of lot. School house in northwest corner of lot.
Bromley	22	8	South	P. McNamara	Structure in southwest part of lot.
Bromley	21	8	-	P. Gorman	Structure on west side of lot.
Bromley	20	8	-	J. McGaghran	Structure on west side of lot.
Bromley	19	8	-	T. O'Shaughnessy	Structure on west side of lot.
Bromley	18	8	-	M. O'Shaughnessy	Structure on west side of lot.
Bromley	17	8	-	M. McNamara	Structure in centre of lot.

No landowners are provided in the Belden (1881) *Map of the County of Renfrew* supplement to the Canadian Dominion of Canada historical atlas. However, the map depicts villages, the existing road network, schools and churches, and some waterbodies (Figure 7.1 and 7.2). The communities of Eganville, Osceola, and Cobden are illustrated. Four churches are illustrated at Eganville: three on the northeast side of Bonnechere River, and one on the southwest side. Within the study area, schoolhouses are depicted at the intersections of Letts Cemetery Road and Cold Creek Road, Mink Lake Road and what is now Highway 60, and Bulger Road and McGaghran Road. In addition to the Bonnechere River, Hurd's Creek, Mink Lake, and Snake River are illustrated in the study area. The Pembroke Railway is depicted just west of the village of Cobden.

Historical county atlases produced as supplements to the Canadian Dominion Atlas' of 1880 and after (including the 1881 Renfrew County supplement) were funded by subscriptions fees and prepared



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primarily to identify factories, public buildings such as schools and churches, and residences and landholdings of subscribers; therefore, landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

1.3 Archaeological Context

1.3.1 Natural Environment

The study area is located within three physiographic regions. The western part of the study area, including Eganville, the Bonnechere River Valley, and the Mink Lake area, is located in the Algonquin Highlands physiographic region. The Algonquin Highlands region is described as:

...broadly dome shaped, the crown standing 1,600 to 1,800 feet a.s.l. sloping down to 900 feet, more or less, in the west and 600 feet in the east. Locally, the relief is rough, rounded knobs and ridges standing up usually 50 to 200 feet but with occasional ridges 500 feet high. There are frequent outcrops of bare rock but they do not amount to more than 5% of the total area. The soils are generally shallow but thickness over the bedrock varies greatly over short distances. Also, they are stony, sandy, and acid, so they are mostly submarginal for agriculture. Many of the valleys are floored with outwash sand and gravel. The frequent swamps and bogs in hollows also detract from their usefulness for farming.

(Chapman and Putnam 1984:211)

The eastern part of the study area, primarily that portion within the Geographic Township of Bromley, is located within the Ottawa Valley Clay Plains physiographic region (Chapman and Putnam 1984:205-208). The Ottawa Valley Clay Plains:

...consists of clay plains interrupted by ridges of rock or sand. It is naturally divisible into two parts, above and below Ottawa, each having its own distinctive traits. In the upper section there is a broad valley with rocky Laurentian uplands rising on either side. The sediments are deep silty clays that likely derive from the Canadian Shield...The clay plains of Renfrew County support a general agricultural economy...In the lower part, east of Ottawa, the clay plains are in the floors of eroded channels and the clays are finer in texture and have poor drainage.

(Chapman and Putnam 1984:205-208)

A small portion of the study area along Highway 8, west of Cobden, is located within the Muskrat Lake Ridges physiographic region (Chapman and Putnam 1984:210). The Muskrat Lake Ridges region is described as:

The Ottawa valley is interrupted in several places by prominent rocky ridges which are the protruding crests of fault blocks...These high fault blocks are all composed of



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Precambrian rock [and] escaped being covered with clay. The scanty overburden being predominantly sand and gravel. These ridges, in the main, are non-agricultural.

(Chapman and Putnam 1984:210)

The study area contains several different soil types. In the area around Eganville, soils are predominantly Eganville loam. East of Eganville and north of Mink Lake, the study area contains an area of White Lake gravelly sandy loam and muck. East of Eganville and south of Mink Lake, soils are classified as Tweed sandy loam. Between Mink Lake and Cobden, the study area crosses Manotick sandy loam, Renfrew clay, Ste. Rosalie clay, Rubicon sandy loam, and Monteagle sandy loam. Table 2 provides a summary of soil types based on Gillespie *et al.* (1964).

Table 2: Soils Within the Study Area

Soil	Parent Material	Topography	Drainage	Agricultural Potential
Eganville loam	calcareous till over limestone bedrock	gently sloping	Good	Good, among the best soils in the county. Used today for hay, oats, and corn
White Lake gravelly sandy loam	Calcareous coarse gravel	Moderately to steeply sloping	Good	Unsuitable
Muck	Decomposed organic material	Depressional	Very poor	Unsuitable
Tweed sandy loam	Calcareous till	Irregular, moderately to steeply sloping	Good	Unsuitable
Manotick sandy loam	Non-calcareous sand over clay	Gently sloping	Good	Suitable for some crops but requires fertilizer
Renfrew clay	Lacustrine or marine clay	Nearly level	Imperfect	Good, used today for cereal grains, hay, and pasture
Ste. Rosalie clay	Lacustrine or marine clay	Nearly level	Poor	Adequate, used today for cereal grains, hay, and pasture. Improved with fertilizer
Rubicon sandy loam	Non-calcareous sand	Nearly level	Imperfect	Suitable for some crops but requires fertilizer
Monteagle sandy loam	Non-calcareous till	Irregular, moderately to steeply sloping	Good	Unsuitable



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The Algonquins of Ontario's (AOO 2017) relic shorelines model was reviewed as part of the background research. The relic shorelines model was prepared to facilitate archaeological research within the Algonquin Traditional Territory in order to inform indicated archaeological potential based on relic shorelines of paleo waterbodies such as the Champlain Sea. In reviewing this model as well as other soils data (above), the eastern portion of the study area was found to be within the maximum extent of the Champlain Sea, which suggests that relic shorelines would have formed within the study area as the Champlain Sea levels decreased (AOO 2017, Figure 11, 21).

Numerous water sources are located within or close to the study area. Among them are the Bonnechere River, which crosses the study area at Eganville, Hurds Creek west of Eganville, Mink Lake east of Eganville, Cold Creek, Mink Creek, and Snake River, all of which cross the study area. Numerous tributaries of these water courses are also present within the study area.

1.3.2 Pre-contact Indigenous Resources

It has been demonstrated that Indigenous people began occupying eastern Ontario as the Laurentide glacier receded, as early as 11,000 years ago (Ellis and Ferris 1990:13). Much of what is understood about the lifeways of these Indigenous peoples is derived from archaeological evidence and ethnographic analogy. In Ontario, Indigenous culture prior to the period of contact with European peoples has been distinguished into cultural periods based on observed changes in material culture. These cultural periods are largely based in observed changes in formal lithic tools, and separated into the Early Paleo-Indian, Late Paleo-Indian, Early Archaic, Middle Archaic, and Late Archaic periods. Following the advent of ceramic technology in the Indigenous archaeological record, cultural periods are separated into the Early Woodland, Middle Woodland, and Late Woodland periods, based primarily on observed changes in formal ceramic decoration. It should be noted that these cultural periods do not necessarily represent specific cultural identities but are a useful paradigm for understanding changes in Indigenous culture through time.

Overall, archaeological research in many parts of eastern Ontario has been fairly limited, at least compared to adjoining areas in southern Ontario and northern New York State, resulting in only a limited understanding of the cultural processes that occurred in this part of the province. The following summary of the pre-contact occupation of eastern Ontario is based on syntheses in Archaeologix Inc. (2008), Ellis and Ferris (1990), Jacques Whitford (2008), Pilon (1999), St-Pierre (2009), and Wright (1995). A generalized cultural chronology for eastern Ontario is provided in Table 3. The provided time periods are based on the "Common Era" calendar notation system, i.e., Before Common Era (BCE) and Common Era (CE).

Table 3: Generalized Indigenous Cultural Chronology

Archaeological Period	Time	Characteristics
Early Paleo	9000 – 8400 BCE	Caribou and extinct Pleistocene mammal hunters, small camps.
Late Paleo	8400 – 8000 BCE	Smaller but more numerous sites.



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Archaeological Period	Time	Characteristics
Early Archaic	8000 – 6000 BCE	Slow population growth, emergence of woodworking industry, development of specialized tools.
Middle Archaic	6000 – 2500 BCE	Environment similar to present, fishing becomes important component of subsistence, wide trade networks for exotic goods.
Late Archaic	2000 – 1800 BCE	Increasing site size, large chipped lithic tools, introduction of bow hunting.
Terminal Archaic	1800 – 1500 BCE	Emergence of true cemeteries with inclusion of exotic trade goods.
Early Woodland	1500 – 1100 BCE	Introduction of pottery, continuation of Terminal Archaic settlement and subsistence patterns.
Middle Woodland	1100 – 950 BCE	Increased sedentism, larger settlements in spring and summer, dispersed smaller settlement in fall and winter, some elaborate mortuary ceremonialism.
Transitional Woodland	950 – 400 BCE	Incipient agriculture in some locations, seasonal hunting and gathering.
Early Late Woodland	400 BCE – 500 CE	Limited agriculture, development of small village settlement, small communal longhouses.
Middle Late Woodland	500 – 800 CE	Shift to agriculture as major component of subsistence, larger villages with large longhouses, increasing political complexity.
Late Late Woodland	800 – 1650 CE	Very large villages with smaller houses, politically allied regional populations, increasing trading network.

Identifiable human occupation of Ontario begins just after the end of the Wisconsin Glacial period. The first human settlement can be traced back 11,000 years, when this area was settled by Indigenous groups that had been living to the south of the emerging Great Lakes. This initial occupation is referred to as the “Paleo-Indian” archaeological culture.

Early Paleo-Indian (EPI) (*circa* [ca.] 9000 – 8400 BCE) settlement patterns suggest that small groups, or “bands”, followed a pattern of seasonal mobility extending over large territories. Many (although by no means all) of the EPI sites were located on former beach ridges associated with Lake Algonquin and research/evidence indicates that the vegetative cover of these areas would have consisted of open spruce parkland, given the cool climatic conditions. Sites tend to be located on well-drained loamy soils, and on elevations in the landscape, such as knolls. The fact that assemblages of artifacts recovered from EPI sites are composed exclusively of stone skews our understanding of the general patterns of resource extraction and use. However, the taking of large game, such as caribou, mastodon, and mammoth, appears to be of central importance to the sustenance of these early inhabitants. Moreover, EPI site location often appears to be in areas which would have intersected with migratory caribou herds. In the Ottawa Valley it appears that the Paleo-environment had not recovered sufficiently from the former glaciations to have allowed an EPI occupation. There is, however, some evidence of EPI incursion to the Rideau Lakes area.

The Late Paleo-Indian (LPI) period (ca. 8400 – 8000 BCE) is poorly understood compared to the EPI, the result of less research focus than the EPI. As the climate warmed, the spruce parkland was gradually replaced, and the vegetation of southern Ontario began to be dominated by closed coniferous forests. As



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a result, many of the large game species that had been hunted in the EPI period either moved north with the more open vegetation or became locally extinct. Like the EPI, LPI peoples covered large territories as they moved around to exploit different resources. Environmental conditions in eastern Ontario and the Ottawa Valley were sufficient to allow for a Late Paleo-Indian occupation, although the evidence of such is still very limited. There is some evidence of LPI occupation on Thompson Island, in the St. Lawrence River near the junction of Ontario, Quebec and New York State.

The transition from the Paleo-Indian period to the Archaic archaeological culture of Ontario is evidenced in the archaeological record by the development of new tool technologies, the result of utilizing an increasing number of resources as compared to peoples from earlier archaeological cultures and developing a broader based series of tools to more intensively exploit those resources. During the Early Archaic period (ca. 8000 – 6000 BCE), the jack and red pine forests that characterized the LPI environment were replaced by forests dominated by white pine with some associated deciduous elements. Early Archaic projectile points differ from Paleo-Indian forms most notably by the presence of side and corner notching on their bases. A ground stone tool industry, including celts and axes, also emerges, indicating that woodworking was an important component of the technological development of Archaic peoples. Although there may have been some reduction in the degree of seasonal mobility, it is still likely that population density during the Early Archaic was low and band territories large.

The development of more diversified tool technology continued into the Middle Archaic period (ca. 6500 – 2500 BCE). The presence of grooved stone net-sinkers suggests an increase in the importance of fishing in subsistence activities. Another new tool, the bannerstone, also made its first appearance during this period. Bannerstones are ground stone weights that served as counterbalance for "atlatls" or spear-throwers, again indicating the emergence of a new technology. The increased reliance on local, often poor-quality chert resources for chipped stone tools suggests that in the Middle Archaic groups inhabited smaller territories lacking high quality raw materials. In these instances, lower quality materials which had been glacially deposited in local tills and river gravels were used.

This reduction in territory size appears to have been the result of gradual region-wide population growth, which forced a reorganization of subsistence patterns, as a larger population had to be supported from the resources of a smaller area. Stone tools designed specifically for the preparation of wild plant foods suggest that subsistence catchment was being widened and new resources being more intensively exploited. A major development of the later part of the Middle Archaic period was the initiation of long-distance trade. In particular, native copper tools manufactured from sources near Lake Superior were being widely traded. Two of the most notable sites in Ontario are located along the Ottawa River. What makes these sites notable is the large concentration of copper artifacts that have been recovered. The Morrison's Island and Allumette Island sites have produced over 1,000 copper artifacts. The copper artifacts consisted of fishhooks, awls, gorges, socketed axes, knives, and spear points. The source of the copper has been traced to Lake Superior, approximately 1,000 kms away. In addition to the copper artifacts, other lithic sources from over 500 kms to the south have been found indicating participation in a large interaction network.

During the late part of the Middle Archaic (ca. 3500 – 2500 BCE) a distinctive occupation, or tradition, known as the Laurentian Archaic, appears in southeastern Ontario, western Quebec, northern New York,



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and Vermont. Laurentian Archaic sites are found only within the transitional zone between the deciduous forests to the south and coniferous forests to the north known as the Canadian Biotic Province and are identifiable through the association of certain diagnostic tool types, including ground slate semi-lunar knives (or “ulus”), plummets for use in fishing, ground slate points and knives, and ground stone gouges, adzes, and grooved axes. It is thought that there was less reliance on plant foods and a greater reliance on hunting and fishing in this region than for Archaic peoples in southern and southwestern Ontario. Laurentian Archaic sites have been found in the middle Ottawa River valley at Morrison and Allumette islands, along the Petawawa River and Trent River watersheds and at Brockville.

The trend towards decreased territory size and a broadening subsistence base continued during the Late Archaic (ca. 2000 – 1800 BCE). Late Archaic sites are far more numerous than either Early or Middle Archaic sites. It appears that the increase in numbers of sites at least partly represents an increase in population. However, around 4500 BCE water levels in the Great Lakes began to rise, taking their modern form.

The appearance of the first true cemeteries occurs during the Late Archaic. Prior to this period, individuals were interred close to the location where they died. However, with the advent of the Late Archaic and local cemeteries, individuals who died at a distance from the cemetery would be returned for final burial at the group cemetery often resulting in disarticulated skeletons, occasionally missing minor bone elements (i.e., finger bones). The emergence of local group cemeteries has been interpreted as being a response to both increased population densities and competition between local groups for access to resources, in that cemeteries would have provided symbolic claims over a local territory and its resources.

Increased territoriality and more limited movement are also consistent with the development of distinct local styles of projectile points. The trade networks which began in the Middle Archaic expand during this period and begin to include marine shell artifacts (such as beads and gorgets) from as far away as the Mid-Atlantic coast. These marine shell artifacts and native copper implements show up as grave goods, indicating the value of the items. Other artifacts such as polished stone pipes and slate gorgets also appear on Late Archaic sites. One of the more unusual of the Late Archaic artifacts is the “birdstone”, small, bird-like effigies usually manufactured from green banded slate.

The Early Woodland period (ca. 1500 – 1100 BCE) is distinguished from the Late Archaic period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. The first pots were very crudely constructed, thick walled, and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil. These vessels were not easily portable, and individual pots must not have enjoyed a long use life. There have also been numerous Early Woodland sites located at which no pottery was found, suggesting that these poorly constructed, undecorated vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of this rather limited ceramic technology, the lifeways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have “pop-eyes” which protrude from



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the sides of their heads. Likewise, the thin, well-made projectile points which were produced during the terminal part of the Archaic period continue in use. However, the Early Woodland variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance. The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shell during the Early Woodland period. These trade items were included in increasingly sophisticated burial ceremonies, some of which involved construction of burial mounds.

In terms of settlement and subsistence patterns, the Middle Woodland (ca. 1100 – 950 BCE) provides a major point of departure from the Archaic and Early Woodland periods. While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish were becoming an even more important part of the diet. Middle Woodland vessels are often heavily decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable.

It is also at the beginning of the Middle Woodland period that rich, densely occupied sites appear along the margins of major rivers and lakes. While these areas had been utilized by earlier peoples, Middle Woodland sites are significantly different in that the same location was occupied off and on for as long as several hundred years. Because this is the case, rich deposits of artifacts often accumulated. Unlike earlier seasonally utilized locations, these Middle Woodland sites appear to have functioned as base camps, occupied off and on throughout the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed from the Middle Archaic and provides a prelude to the developments that follow during the Late Woodland period.

There are three complexes of Middle Woodland culture in Ontario. The complex specific to eastern Ontario is known as “Point Peninsula” most notably represented by ceramics decorated with a stamped zigzag pattern applied at various angles to the exterior of the vessel, known as “pseudo scallop shell”. Another common decorative style is the dentate stamp, a comb-like tool creating square impressions.

The relatively brief period of the Transitional Woodland period is marked by the acquisition of cultivar plants species, such as maize and squash, from communities living south of the Great Lakes. The appearance of these plants began a transition to food production, which consequently led to a much reduced need to acquire naturally occurring food resources. Sites were thus occupied for longer periods and by larger populations. Transitional Woodland sites have not been discovered in eastern Ontario.

The Late Woodland period in southern Ontario is traditionally divided into three temporal components: Early, Middle, and Late Late Woodland. In eastern Ontario, especially in the Ottawa River Valley, there is considerable overlap of people continuing to practice a hunting and gathering economy and those using limited horticulture as a supplement to gathered plants. For the most part, however, classic Late Woodland sites in eastern Ontario are limited to an area at the east end of Lake Ontario and along the St. Lawrence River valley. Early Late Woodland components have been identified near Pembroke on the Muskrat River; however, there is evidence for only limited use of cultivated plants. Middle Late Woodland sites have not been identified east of the Kingston area.



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During the Late Late Woodland period a distinctive material culture emerges at the east end of Lake Ontario and along the St. Lawrence River up to Québec City, as associated with the St. Lawrence Iroquois (SLI). SLI sites are characterized by large semi-permanent villages and associated satellite settlements. The inhabitants of these villages and satellites practiced horticulture of staple crops which made up the bulk of their diet. Other food resources were hunted, fished, and gathered. SLI village sites can be extensive, up to 10 acres or more in size and composed of several longhouse structures. Special purpose satellite settlements, such as hunting and fishing camps, are smaller in area and in the number and size of structures within the settlement. While the early contact period descendants of the Late Woodland SLI and Huron used the Ottawa River and its tributaries as transportation routes between the St. Lawrence River and the interior, Late Late Woodland village sites have not been identified.

In the Late Late and Terminal Woodland (immediately prior to the early contact period) there are several instances of Late Late Woodland pottery types typically associated with Iroquoian groups (e.g., the Middle Late Woodland Middleport archaeological culture and Late Late Woodland/contact period Huron and Onondaga) on what would otherwise be considered Algonquian archaeological sites throughout the Ottawa River valley (*cf.* Mitchell 1975, 1990, 1996; Saint-Germain 1999; von Gernet 1992, 1993). There has been some debate about what the presence of these purportedly Iroquoian ceramic artifacts in an Algonquin context might indicate. Interpretations include incursion of Iroquoian peoples into Algonquin territory; ceramics as trade items between Iroquoian and Algonquins; the presence of Iroquoian women in Algonquin societies, either as wives or captives, who continued to manufacture ceramics according to their ethnic traditions; or Algonquin manufacture of ceramics that simulate Iroquoian ceramic types (Pendergast 1999). Each of these possible interpretations suggests a close interaction sphere between Algonquin and Iroquoian peoples, which is further supported by evidence of Iroquoian and Algonquin trade relationships in the early contact period. It has also been suggested that Algonquin and Iroquoian peoples may have “shared in a common Late Woodland cultural stratum” which included common elements such as ceramics (von Gernet 1992). Taking the point further, Fox and Garrad (2004) suggest that Huron and Algonquin shared not only a territory in the southern Georgian Bay area (traditional “Huronian”), but also shared a material culture, and may have cohabited in settlements to a greater degree than as simply visitors.

1.3.3 Registered Archaeological Sites and Surveys

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the curvature of the earth. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario, adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lower case letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MCM who maintain the *Ontario Archaeological Sites Database*. The project area is located within Borden blocks BjGg and BjGf.



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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 eight archaeological sites are registered within a one-kilometre radius of the project area (Government of Ontario 2022a). One site, the Turner Cabin Site (BjGg-12), a Euro-Canadian artifact scatter identified by Past Recovery in 2014, is located within the study area. Further details regarding this site are provided below. Table 4 provides a summary of the sites registered with one kilometre of the study area.

Table 4: Registered Archaeological Sites within One Kilometre of the Study Area

Borden	Site Name	Cultural Affinity / Time Period	Site Type
BjGf-1	Faught	Indigenous, Pre-Contact	Findspot
BjGf-3	James	Indigenous, Pre-Contact	Scatter
BjGf-5	Sammon	Indigenous, Pre-Contact	Findspot
BjGf-8	Osceola Dump	Indigenous, Early Archaic	Beach, camp, scatter
BjGg-12	Turner Cabin Site	Euro-Canadian	Scatter
BjGg-13	Mink Lake	Indigenous, Archaic	Camp, scatter
BjGg-3	J. R. 1	Unknown	Unknown
BjGg-6	Eganville	Indigenous, Pre-Contact	Scatter

A query of the *Ontario Public Register of Archaeological Reports* found four previous archaeological assessments within 50 metres of the study area (Government of Ontario 2022b). Table 5 provides a summary of these assessments.

Table 5: Archaeological Assessments within 50 Metres

Company	Title	Date	Project Information Form (PIF) Number
Archaeological Services Inc. (ASI)	Preliminary Design EA of Hwy. 60, From the E Limits of the Village of Eganville, E to the E Limits of Hamlet of Douglas, Twp. of N Algona-Wilberforce & Twp. of Adamston/Bromley, Renfrew County, ON (W.P. 263-98-00)	2002a	2000-113-002
ASI	Stage 2 Archaeological Assessment for the Realignment of Highway 60 at Kellys Corner, Renfrew County (WP 263-98-00)	2002b	2001-053-007
ASI	Stage 2 Archaeological Resource Assessment, Highway 60 Improvements, Town of Eganville Easterly to the East Limits of Hamlet of Douglas, Renfrew County, Ontario, G.W.P. 263-98-00	2004	P049-053, P057-057



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Past Recovery	Stage 1 and 2 Archaeological Assessment, River Run Ridge Subdivision, Part Lot 20, Concession 20, Geographic Township of Grattan, Now Bonnechere Valley Township, Eganville, Renfrew County	2014	P111-0013-2014, P111-0014-2014
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In 2002, ASI (2002a) completed Stage 1 archaeological assessment for proposed upgrades to Highway 60 from Eganville to Douglas. Portions of the study area were determined to retain archaeological potential, and Stage 2 archaeological assessment was recommended (ASI 2002a). ASI conducted Stage 2 archaeological assessment of the proposed realignment of Highway 60 at Kellys Corners in 2002 (ASI 2002b). No archaeological resources were documented. Portions of the ASI (2002b) Stage 2 assessment areas overlap with the current study area (see Figure 9-11).

The Stage 2 archaeological assessment of the rest of the Highway 60 study area was conducted in 2004 (ASI 2004). No archaeological resources were documented during Stage 2 assessment. Portions of the ASI (2004) Stage 2 assessment areas overlap with the current study area (see Figures 9-3, 9-10, and 9-11).

In 2014, Past Recovery completed Stage 1-2 archaeological assessment of a proposed subdivision in Eganville. Parts of the Past Recovery (2014) assessment overlap with the current study area (see Figure 9-1). Past Recovery (2014) determined that the study area retained archaeological potential and conducted Stage 2 archaeological assessment. During Stage 2 assessment, Past Recovery (2014) documented five findspots, one of which retained further cultural heritage value and interest and was registered with the MCM as the Turner Cabin site (BjGg-12). This site is located within the current study area. It is represented by a scatter of 217 Euro-Canadian artifacts, representing a mid-19th century occupation. Based on historical documentation and the recovery of structural artifacts, Past Recovery (2014) interprets the site to represent the remains of an early structure associated with the historical Robert Turner farmstead. Stage 3 archaeological assessment was recommended by Past Recovery (2014) for the Turner Cabin site (BjGg-12) and the site retains cultural heritage value and interest.

1.3.4 Existing Conditions

The Stage 1 archaeological assessment was completed under PIF number P415-0393-2022 issued to Patrick Hoskins, MA by the MCM. Overall, the study area comprises approximately 798.4 ha within various lots and concessions in the Geographic Township of Wilberforce, now Township of North Algona Wilberforce, Geographic Township of Grattan, now Township of Bonnechere Valley, and Geographic Township of Bromley, now Township of Admaston/Bromley, Renfrew County, Ontario. The proposed pipeline is anticipated to be within existing, disturbed municipal road ROWs and ditches. Outside of these ROWs, the study area includes disturbed gravel and asphalt laneways, as well as manicured lawns associated with residential and commercial areas, woodlot and scrubland, wetland, and agricultural field.



2 Field Methods

Prior to the start of the Stage 1 archaeological assessment, Enbridge provided AutoCAD files which illustrated the proposed pipeline route. The pipeline, and associated construction, is expected to be located primarily within municipal road ROWs. The final construction easement/footprint and any further TWS requirements for the Project will be determined by Enbridge at a later date. Since additional TWS may be required during construction, the Stage 1 study area was developed to capture the pipeline route and municipal road ROWs plus a 50-metre buffer on either side. The files were then geo-referenced by Stantec's Geographic Information Services (GIS) team and a digital file (i.e., a shape file) was created of the Project's study area. The digital file was uploaded to handheld devices for use in the field. Overall, the study area comprises approximately 798.4 ha within various lots and concessions in the Geographic Township of Wilberforce, now Township of North Algona Wilberforce, Geographic Township of Grattan, now Township of Bonnechere Valley, and Geographic Township of Bromley, now Township of Admaston/Bromley, Renfrew County, Ontario.

Initial background research compiled information concerning registered and/or potential archaeological resources within the study area. A property inspection was conducted on August 25 and September 1, 2022, by Patrick Hoskins (P415) under PIF number P415-03930-2022 issued to Patrick Hoskins, MA by the MCM in accordance with Section 1.2 of the MCM's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

Permission to conduct the Stage 1 visual assessment of the study area was provided by Enbridge. However, access to private lands for the purposes of the archaeological assessment was not obtained. Thus, photo documentation undertaken for the Stage 1 visual assessment was completed from the municipal road ROWs and public lands. The property inspection involved spot-checking the entirety of the study area to identify the presence or absence of any features of archaeological potential. On both August 25 and September 1, 2022, the weather was sunny and warm. At no time were field, lighting, or weather conditions detrimental to the identification of features of archaeological potential. The photography from the property inspection is presented in Section 7.1 and confirms that the requirements for a Stage 1 property inspection were met, as per Section 1.2 and Section 7.7.2 Standard 1 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Figure 9 illustrates photo locations and the archaeological potential of the study area.

Based on the results of the property inspection, approximately 17.4% of the study area consists of modern disturbances from the existing paved roads, paved and gravel road shoulders, engineered foreslope and backslope for existing roads and drainage ditching within the municipal road ROWs. Photos 1 to 34 illustrate typical examples of existing disturbance identified in the ROWs. Other modern disturbances are noted throughout the study area, including residences, commercial buildings, and laneways, but were not photo documented as part of the property inspection.



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Based on Ontario Ministry of Natural Resources and Forestry (MNR) wetland mapping and on the results of the property inspection, approximately 5.0% of the study area is low and permanently wet. Photos 35 to 39 illustrate examples of low and permanently wet areas within the study area.

Approximately 3.8% of the study area has been previously assessed, and no further archaeological assessment is required. The remainder of the study area, approximately 73.8%, consists of manicured lawn, agricultural field, woodlot, and scrubland, or areas which were not specifically examined as part of the Stage 1 property inspection. Photos 40 to 45 illustrate typical examples of the areas noted above.



3 Analysis and Conclusions

3.1 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by the 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; soil texture and drainage; glacial geomorphology; elevated topography; and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site location in Ontario. Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential.

As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. The MCM categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks.
- Secondary water sources: intermittent streams and creeks, springs, marshes, and swamps.
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes.
- Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As stated in Section 1.3.1, numerous primary water sources run near, or through, the study area including Bonnechere River which crosses the study area at Eganville, Hurds Creek northwest of Eganville, Mink Lake east of Eganville, Cold Creek, Mink Creek, and Snake River. Bonnechere River was a significant historical waterway for transportation, logging, and later power generation. The portion of the study area containing the Bonnechere River retains potential for the identification of marine archaeological resources which can be further evaluated using the MCM's Criteria for Evaluating Marine Archaeological Potential Checklist. Ancient and/or relic tributaries of these or other primary water sources may have existed but are not identifiable today and are not indicated on historic mapping. Further examination of the study area's natural environment identified pockets of soil suitable for Indigenous and Euro-Canadian agriculture and areas of elevated topography. An examination of the *Ontario Archaeological Sites Database* has shown that there are six registered Indigenous archaeological sites, one Euro-Canadian



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archaeological site, and one indeterminate archaeological site within one kilometre of the study area (Government of Ontario 2022a).

Archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990a) or property that local histories or informants have identified with possible historical events, activities, or occupations. Historical mapping demonstrates that the study area follows the early municipal road structure of Renfrew County. One registered archaeological site, the Turner Cabin Site (BjGg-12) is located within the study area and to the best of Stantec's knowledge, still retains cultural heritage value and interest (see Section 3.2). One listed property, the Eganville Bridge, and one designated property, the Old Post Office, are located within the study area within Eganville. Much of the established road and settlement from the early 19th century is still visible today.

When the above listed criteria are applied, the study area retains potential for the identification of Indigenous and Euro-Canadian archaeological resources. However, as noted above, extensive and deep land alteration can eradicate archaeological potential. The Stage 1 property inspection confirmed that a portion of the study area, approximately 17.4%, has been subject to extensive land disturbance. The extensive land disturbance noted within the study area includes the municipal road ROWs of various streets within Eganville, Lett's Cemetery Road, Cold Creek Road, Bulger Road, McGaghran Road, Micksburg Road, McGuinty Road, Highway 60, and Cobden Road (County Road 8), which have been subject to modern disturbance such as the existing paved and gravel roads, paved and gravel shoulders, engineered foreslope and backslope for existing roads, ditching, gravel and paved driveways/laneways, and buried utilities and municipal infrastructure (e.g., sewers, pipelines, etc.). Additionally, the Stage 1 property inspection, aided by MNRF wetland mapping, confirmed that a portion of the study area, approximately 5.0%, is low and permanently wet. A portion of the study area, approximately 3.8% has been previously archaeologically assessed. Collectively, these portions of the study area, approximately 26.2%, retain low to no potential for archaeological resources.

The remaining portion of the study area, approximately 73.8%, comprises manicured lawn, agricultural field, woodlot, and scrubland, or areas which were not specifically examined as part of the Stage 1 property inspection. This portion of the study area retains potential for the identification of archaeological resources.

3.2 Registered Archaeological Sites

As discussed in Section 1.3.3, Past Recovery (2014) undertook Stage 1-2 archaeological assessment in advance of a proposed subdivision development in southeast Eganville. A portion of the Past Recovery (2014) study area overlaps with the current study area. During the Stage 1-2 assessment, Past Recovery (2014) identified the Turner Cabin Site (BjGg-12), represented by a scatter of 217 mid-19th century Euro-Canadian artifacts. Past Recovery (2014) determined that the Turner Cabin Site (BjGg-12) retained cultural heritage value and interest, and recommended Stage 3 archaeological assessment of the site. To the best of Stantec's knowledge, Stage 3 assessment of the site has not been completed.



4 Recommendations

The Stage 1 archaeological assessment of the study area for the Project, involving background research and a property inspection, determined that portions of the study area retain potential for the identification and documentation of archaeological resources. In accordance with Section 1.3.1 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is required for any portion of the Project's anticipated construction which impacts an area of archaeological potential (Figures 8 and 9).**

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 portions of the study area accessible for ploughing, the Stage 2 archaeological assessment will involve pedestrian survey 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 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 portions of the study area retaining archaeological potential that are inaccessible for ploughing, the Stage 2 archaeological assessment will involve 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 subsoil, and have 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 lands to be bedrock, 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 for the Project include engagement with interested Indigenous communities. Indigenous engagement practices conducted during the Stage 2 archaeological assessment will be completed in accordance with the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and the MCM's draft technical bulletin on *Engaging Aboriginal Communities in Archaeology*.

The study area crosses the Bonnechere River, a historically important waterway, at two points within the town of Eganville. This portion of the study area containing the Bonnechere River retains potential for the identification of marine archaeological resources. While no impacts to the Bonnechere River are anticipated, the final study area will be finalized as part of the Project's detailed design phase. Thus, **it is further recommended that potential for marine archaeological resources be evaluated using the MCM's *Criteria for Evaluating Marine Archaeological Potential Checklist*.**



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The Stage 1 archaeological assessment also determined that portions of the study area retain low to no archaeological potential due to extensive disturbance or permanently low and wet conditions. These portions of the study area retain low to no potential for the identification or recovery of archaeological resources. In addition, portions of the study area have been previously assessed and no archaeological resources were documented (ASI 2002a, 2002b, 2004; Past Recovery 2014). In accordance with Section 1.3.2 and Section 7.7.4 of the MCM's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), **Stage 2 archaeological assessment is not required for any portion of the Project's anticipated construction which impacts an area of low to no archaeological potential or which has been previously assessed (Figures 8 and 9).**

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 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), the following standard statements are a required component of archaeological reporting and are provided from the MCM's 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c O.18 (Government of Ontario 1990a). The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the study area of a development proposal have been addressed to the satisfaction of the MCM, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* (Government of Ontario 1990a) for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the *Ontario Public Register of Archaeological Reports* referred to in Section 65.1 of the *Ontario Heritage Act* (Government of Ontario 1990a)

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a) The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a)

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (Government of Ontario 2002), requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Government and Consumer Services is also immediately notified.

Archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and may not be altered, or have artifacts removed, except by a person holding an archaeological license.



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Stage 1 Archaeological Assessment: Eganville Community Expansion Project

7 Images

7.1 Photographs

Photo 1: View of disturbed municipal road ROW, facing north



Photo 2: View of disturbed municipal road ROW, facing northeast



Photo 3: View of disturbed municipal road ROW, facing north



Photo 4: View of disturbed municipal road ROW, facing southeast



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 5: View of disturbed municipal road ROW, facing southeast



Photo 6: View of disturbed municipal road ROW, facing southeast



Photo 7: View of disturbed municipal road ROW, facing northeast



Photo 8: View of disturbed municipal road ROW, facing southeast



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 9: View of disturbed municipal road ROW, facing west



Photo 10: View of disturbed municipal road ROW, facing north



Photo 11: View of disturbed municipal road ROW, facing southwest



Photo 12: View of disturbed municipal road ROW, facing north



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 13: View of disturbed municipal road ROW, facing north



Photo 14: View of disturbed municipal road ROW, facing northeast



Photo 15: View of disturbed municipal road ROW, facing north



Photo 16: View of disturbed municipal road ROW, facing southeast



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 17: View of disturbed municipal road ROW and residential area, facing north



Photo 18: View of disturbed municipal road ROW and manicured lawn, facing northwest



Photo 19: View of disturbed municipal road ROW, facing southwest



Photo 20: View of disturbed municipal road ROW, facing north



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 21: View of disturbed municipal road ROW, facing north



Photo 22: View of disturbed municipal road ROW, facing west



Photo 23: View of disturbed municipal road ROW and forest, facing southwest



Photo 24: View of disturbed municipal road ROW, facing northeast



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 25: View of disturbed municipal road ROW and agricultural field, facing southwest



Photo 26: View of disturbed municipal road ROW, facing east



Photo 27: View of disturbed municipal road ROW, facing northeast



Photo 28: View of disturbed municipal road ROW, facing southwest



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 29: View of disturbed municipal road ROW and agricultural field, facing northeast



Photo 30: View of disturbed municipal road ROW, facing southwest



Photo 31: View of disturbed municipal road ROW and scrubland, facing southwest



Photo 32: View of disturbed municipal road ROW, facing southwest



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 33: View of disturbed municipal road ROW, facing north



Photo 34: View of disturbed municipal road ROW, facing north



Photo 35: View of low and permanently wet area, facing northwest



Photo 36: View of Hurds Creek – low and permanently wet area, facing southeast



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 37: View of low and permanently wet area, facing northwest



Photo 38: View of low and permanently wet area, facing northeast



Photo 39: View of Mink Creek – low and permanently wet area, facing west



Photo 40: Example of manicured lawn, facing northwest



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

Photo 41: Example of agricultural field, facing east



Photo 42: Example of agricultural field, facing northwest



Photo 43: Example of scrubland, facing northeast



Photo 44: Example of forest, facing southeast



Stage 1 Archaeological Assessment: Eganville Community Expansion Project

**Photo 45: Example of bedrock – no
archaeological potential, facing
southeast**

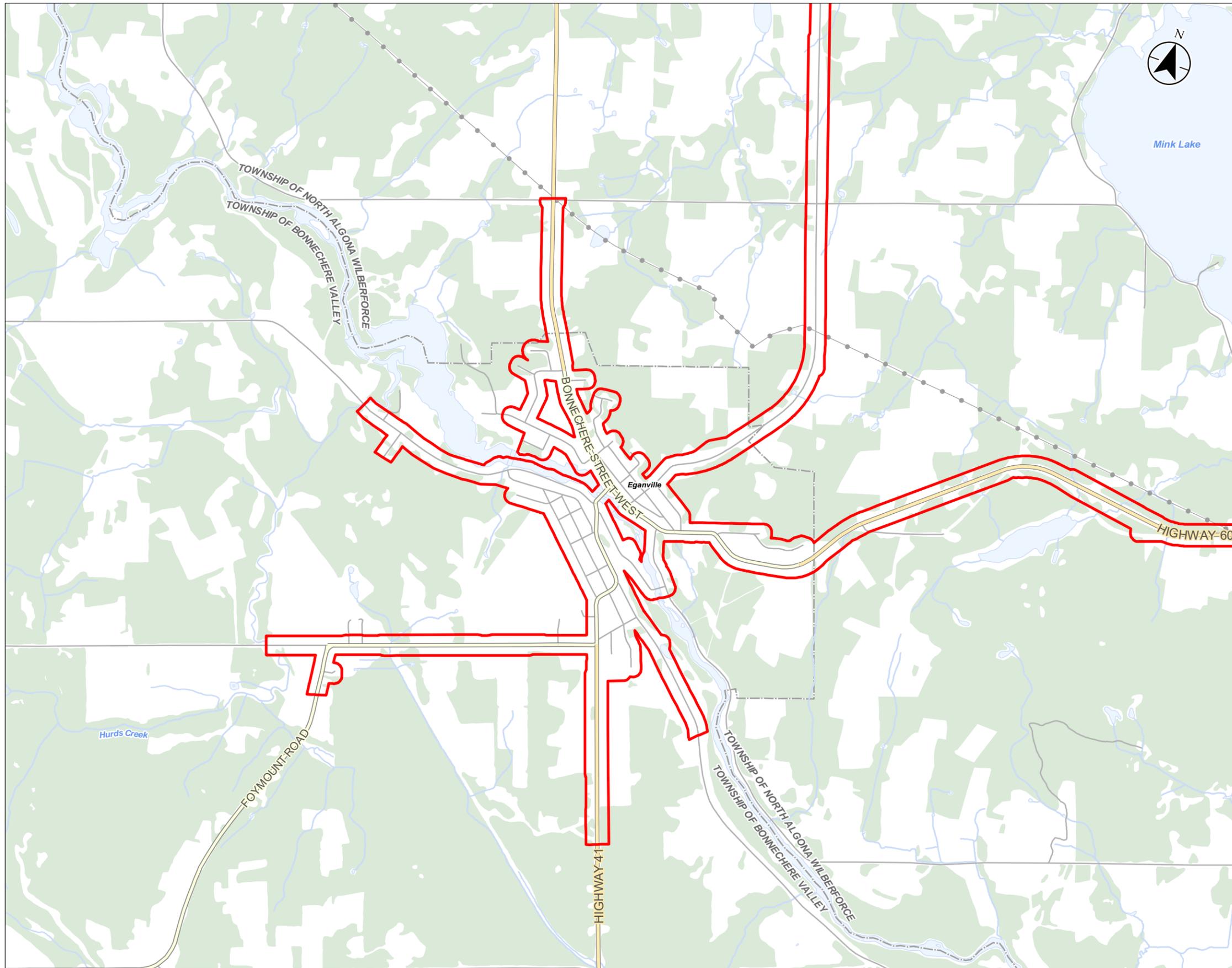


9 Maps

General maps of the study area follow on succeeding pages. Maps showing the location of the Turner Cabin site (BjGg-12) can be found in the Supplementary Documentation.



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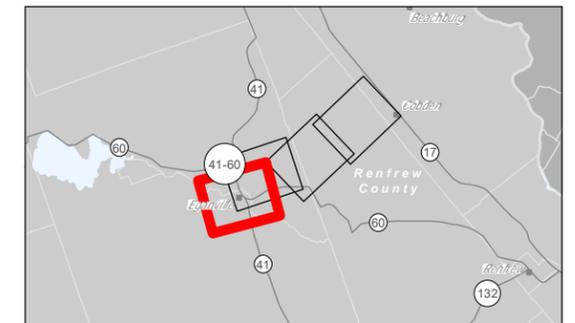


Legend

- Study Area
- Highway
- Major Road
- Minor Road
- Hydro Line
- Watercourse
- Municipal Boundary, Lower
- Waterbody
- Wooded Area



- Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.



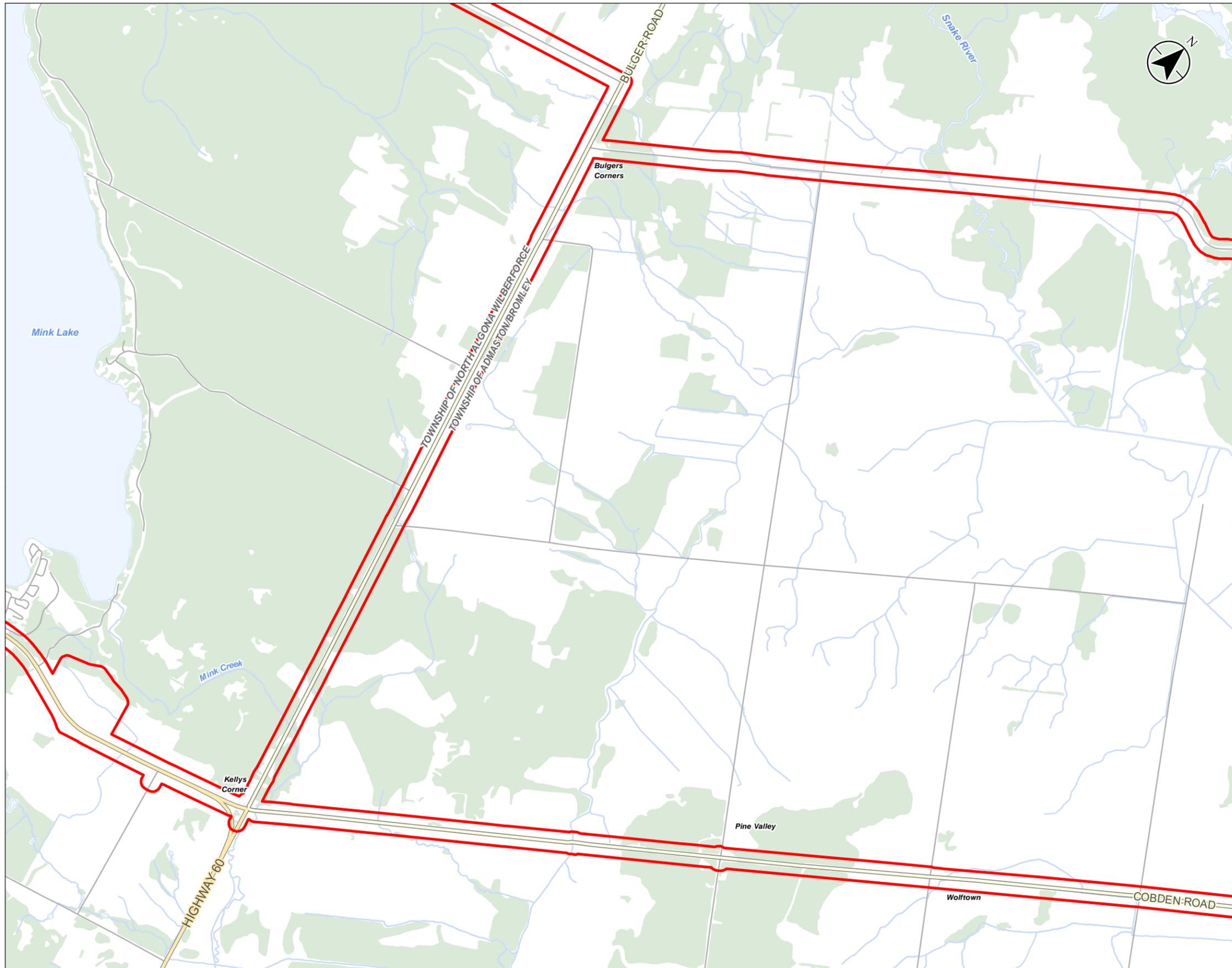
Project Location: County of Renfrew
 Prepared by BK on 2022-12-13
 Technical Review by SE on 2022-10-02

Client/Project: EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 1-1

Title: Location of the Project

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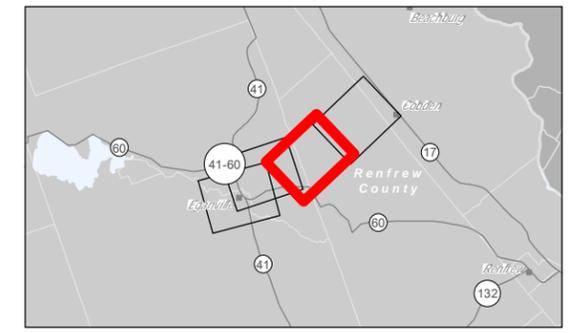


Legend

- Study Area
- Highway
- Major Road
- Minor Road
- Watercourse
- Municipal Boundary, Lower
- Waterbody
- Wooded Area



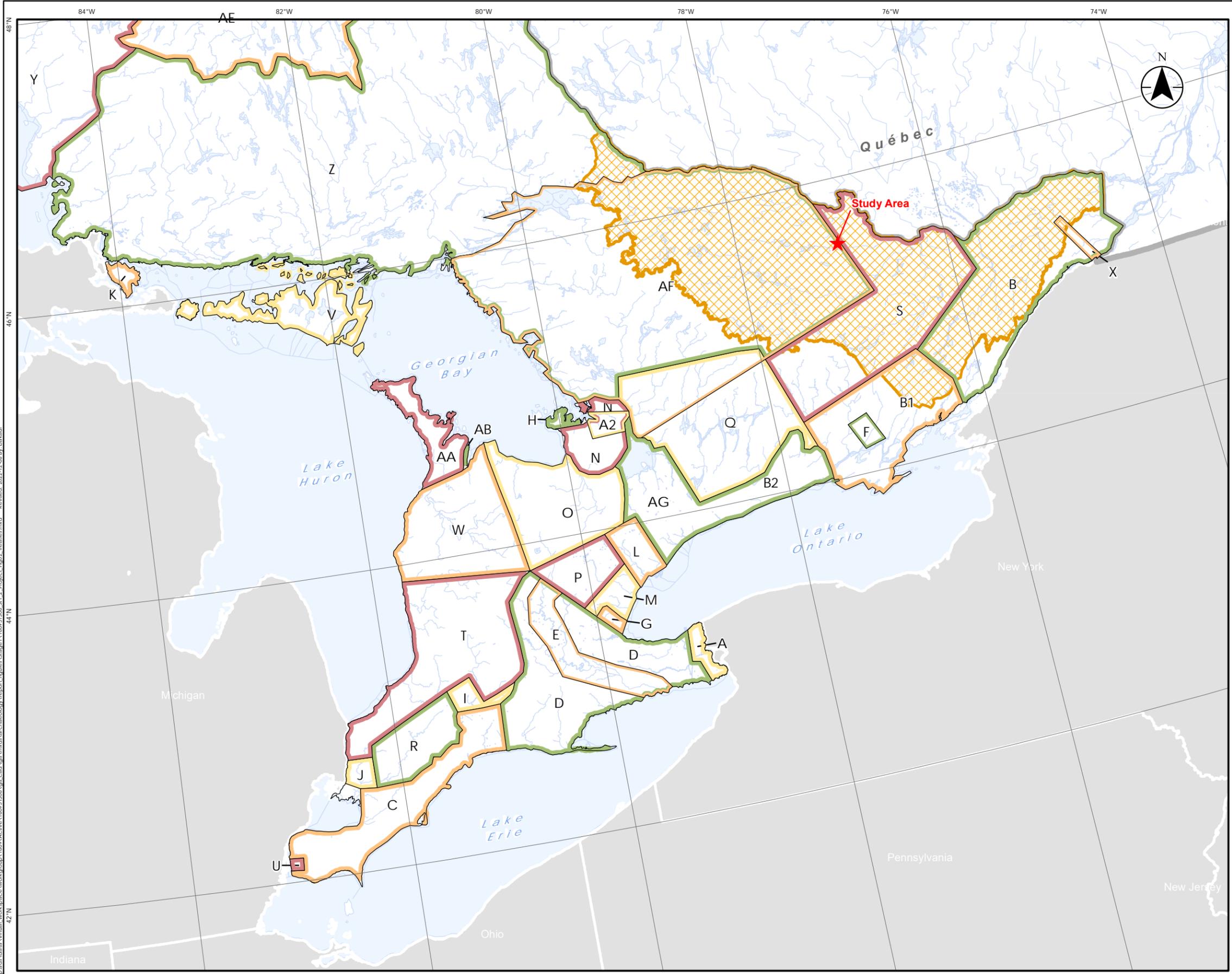
- Notes
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.



Project Location: County of Renfrew
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Client/Project: EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

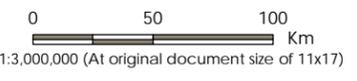
Figure No.: 1-3
 Title: Location of the Project



Legend

- ★ Study Area
- Algonquins of Ontario Settlement Area Boundary
- Waterbody

- A Treaty No. 381, May 9th, 1781 (Mississauga and Chippewa)
- AA Treaty No. 72, October 30th, 1854 (Chippewa)
- AB Treaty No. 82, February 9th, 1857 (Chippewa)
- AE Treaty No. 9, James Bay 1905, 1906 (Ojibway and Cree)
- AF Williams Treaty, October 31st and November 15th, 1923 (Chippewa and Mississauga)
- AG Williams Treaty, October 31st, 1923 (Chippewa)
- A2 John Collins' Purchase, 1785 (Chippewa)
- B Crawford's Purchase, October 9th, 1783 (Algonquin and Iroquois)
- B1 Crawford's Purchase, October 9th, 1783 (Mississauga)
- B2 Crawford's Purchase, 1783, 1787, 1788 (Mississauga)
- C Treaty No. 2, May 19th, 1790 (Odawa, Chippewa, Pottawatomi, and Huron)
- D Treaty No. 3, December 2nd, 1792 (Mississauga)
- E Haldimand Tract: from the Crown to the Mohawk, 1793
- F Tyendinaga: from the Crown to the Mohawk, 1793
- G Treaty No. 3 3/4: from the Crown to Joseph Brant, October 24th, 1795
- H Treaty No. 5, May 22nd, 1798 (Chippewa)
- I Treaty No. 6, September 7th, 1796 (Chippewa)
- J Treaty No. 7, September 7th, 1796 (Chippewa)
- K Treaty No. 11, June 30th, 1798 (Chippewa)
- L Treaty No. 13, August 1st, 1805 (Mississauga)
- M Treaty No. 13A, August 2nd, 1805 (Mississauga)
- N Treaty No. 16, November 18th, 1815 (Chippewa)
- O Treaty No. 18, October 17th, 1818 (Chippewa)
- P Treaty No. 19, October 28th 1818 (Chippewa)
- Q Treaty No. 20, November 5th, 1818 (Chippewa)
- R Treaty No. 21, March 9th, 1819 (Chippewa)
- S Treaty No. 27, May 31st, 1819 (Mississauga)
- T Treaty No. 27 1/2, April 25th, 1825 (Ojibwa and Chippewa)
- U Treaty No. 35, August 13th, 1833 (Wyandot or Huron)
- V Treaty No. 45, August 9th, 1836 (Chippewa and Odawa, "For All Indians To Reside Thereon")
- W Treaty No. 45 1/2, August 9th, 1836 (Saugeen)
- X Treaty No. 57, June 1st, 1847 (Iroquois of St. Regis)
- Y Treaty No. 60, Robinson, Superior, September 7th, 1850 (Ojibwa)
- Z Treaty No. 61, Robinson, Huron, September 9th, 1850 (Ojibwa)



- Notes**
1. Coordinate System: NAD 1983 Statistics Canada Lambert
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
 3. Treaty boundaries adapted from Morris 1943 (1964 reprint). For cartographic representation only.

Project Location 160951306 REVA
 County of Renfrew Prepared by BK on 2022-12-08
 Technical Review by BCC on 2022-08-15

Client/Project
 EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
 2

Title
 Treaties and Purchases (Adapted from
 Morris 1943)

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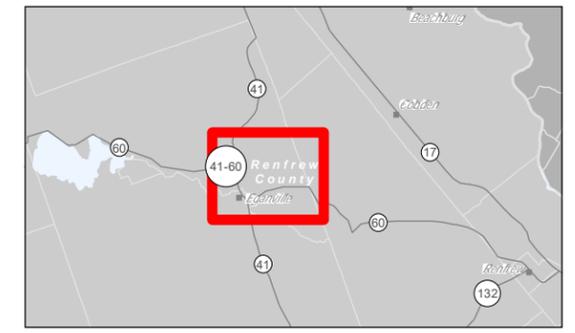
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Legend
[Red Outline] Archaeology Study Area (Approximate)

Figure Not to Scale

Notes
1. Source: Robertson, V. John. 1851. Plan of the Township of Wilberforce. Map B34. Map on file at the Crown Land Records Office, Ministry of Natural Resources and Forestry, Peterborough.

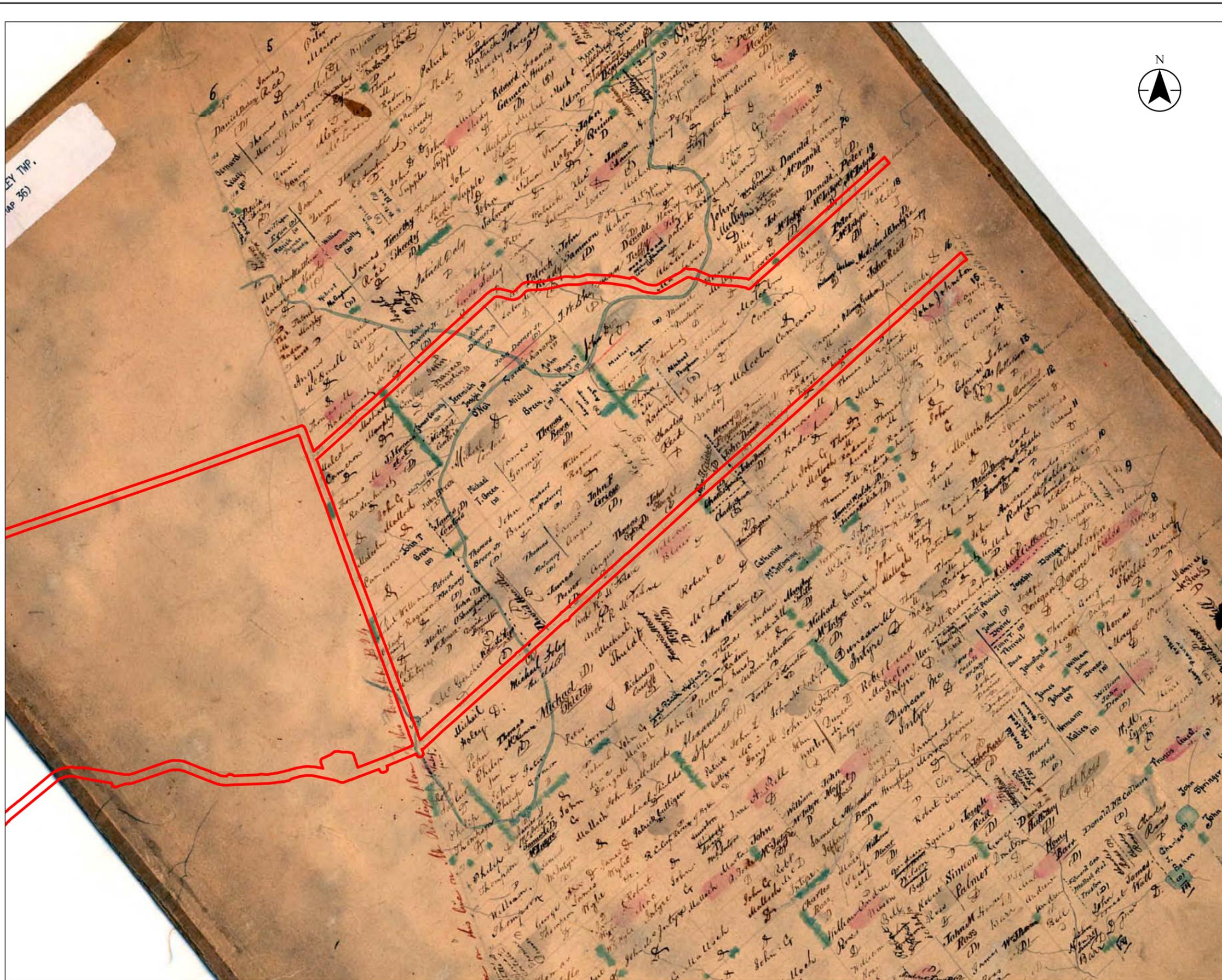


Project Location: 160951306 REVA
County of Renfrew Prepared by BK on 2022-12-13
Technical Review by SE on 2022-09-27

Client/Project
EGANVILLE COMMUNITY EXPANSION PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
4

Title
Portion of the 1851 Survey Plan of
Wilberforce Township

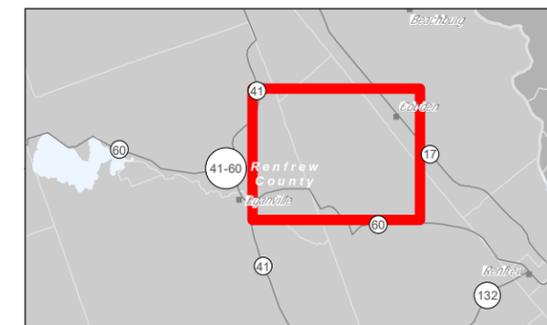


Legend

Archaeology Study Area (Approximate)

Figure Not to Scale

Notes
 1. Source: McNaughton, J.W. 1842. Plan of the Township of Bromley, Map 4. Map on file at the Crown Land Records Office, Ministry of Natural Resources and Forestry, Peterborough.



Project Location: 160951306 REVA
 County of Renfrew Prepared by BK on 2022-12-13
 Technical Review by SE on 2022-09-27

Client/Project
 EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
 5

Title
 Portion of the 1842 Survey Plan of Bromley Township

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Legend
 Archaeology Study Area (Approximate)

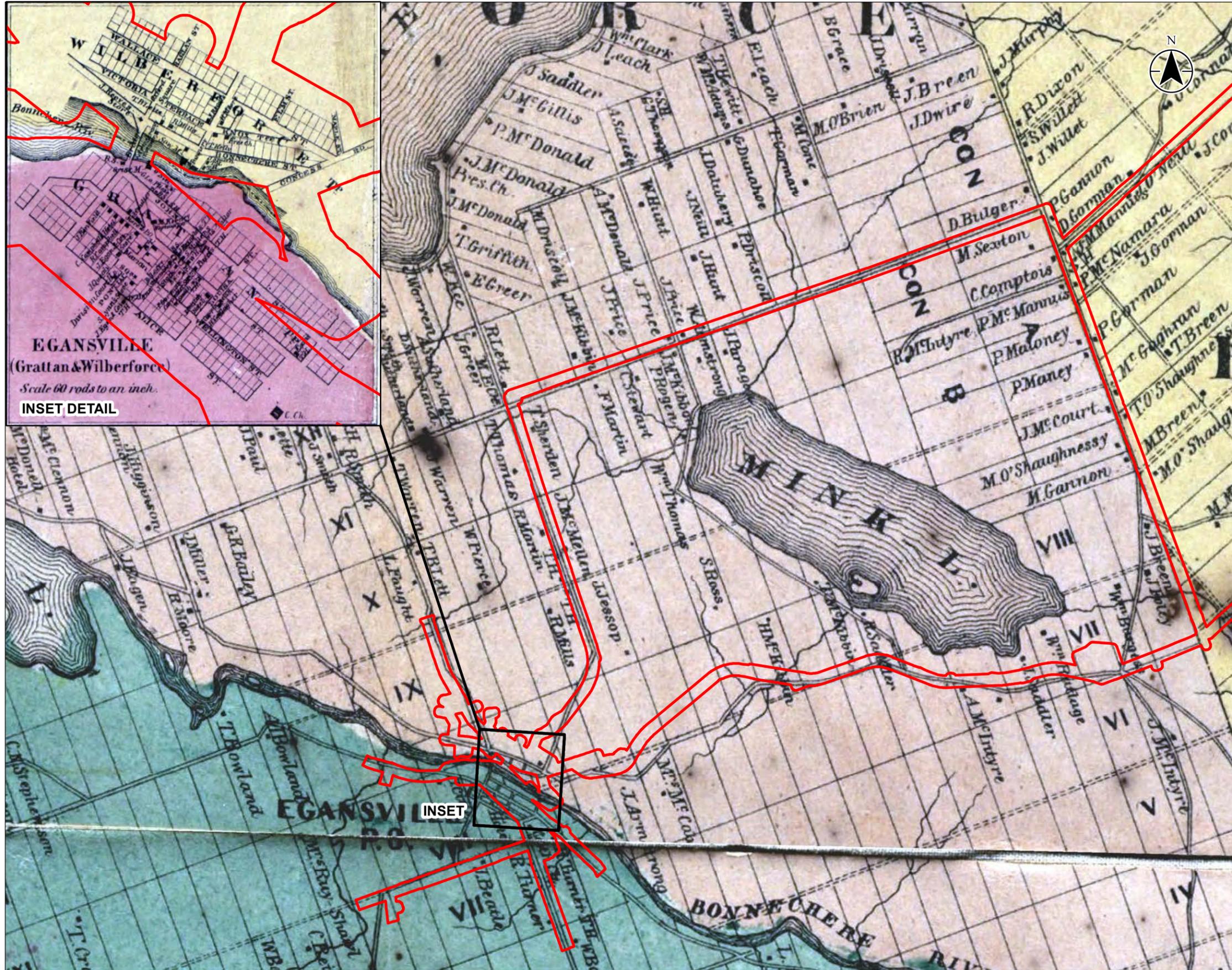
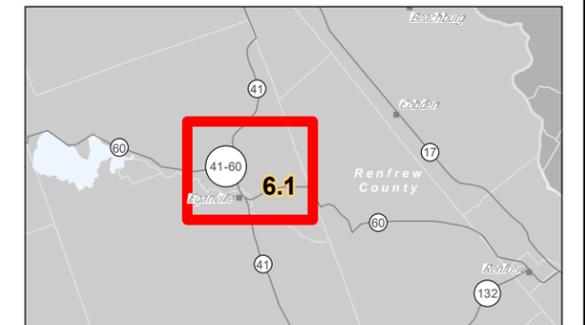


Figure Not to Scale

Notes
 1. Source: Walling, H.F. 1863. Map of the counties of Lanark and Renfrew, Canada. Boston Public Library, Norman B. Leventhal Map Centre.

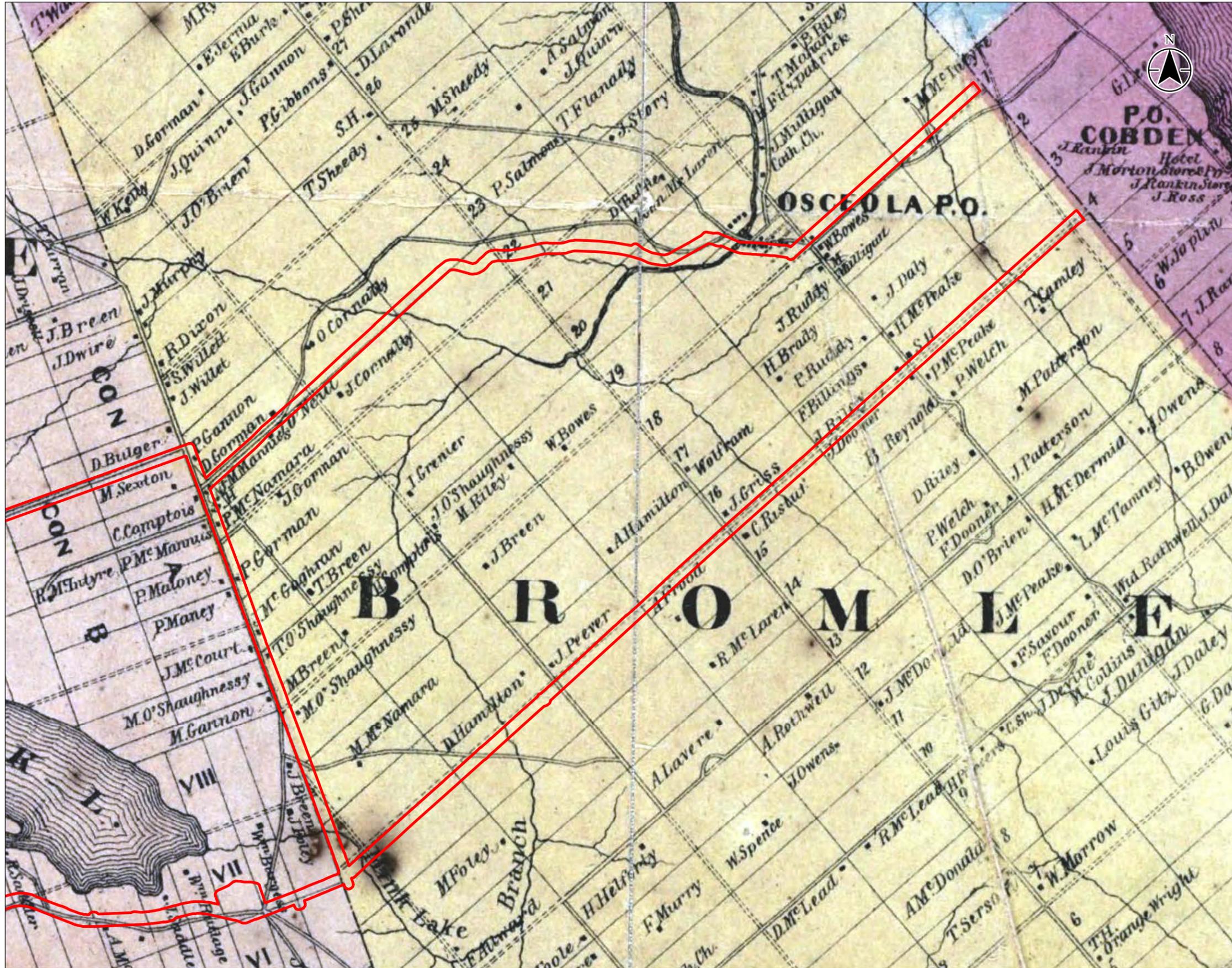


Project Location: County of Renfrew
 Prepared by BK on 2022-12-13
 Technical Review by SE on 2022-09-27

Client/Project: EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: **6.1**

Title: **Portion of the 1863 Walling's Map of Renfrew County**

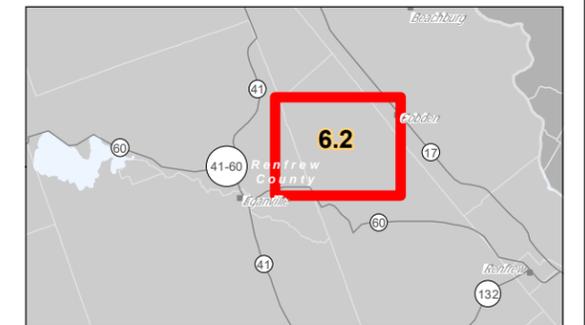


Legend
 Archaeology Study Area (Approximate)



Figure Not to Scale

Notes
 1. Source: Walling, H.F. 1863. Map of the counties of Lanark and Renfrew, Canada. Boston Public Library, Norman B. Leventhal Map Centre.



Project Location: County of Renfrew
 160951306 REVA
 Prepared by BK on 2022-10-11
 Technical Review by SE on 2022-09-27

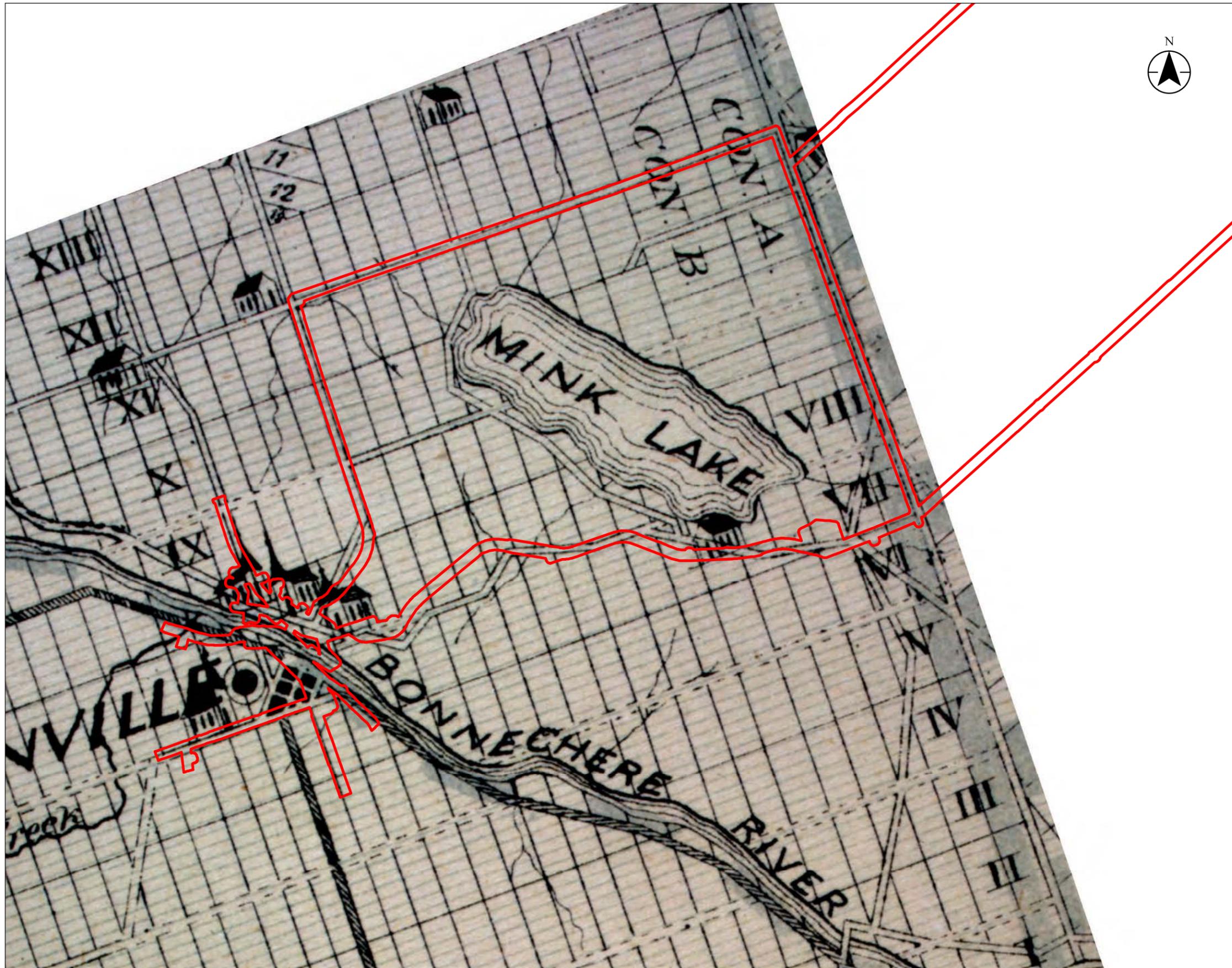
Client/Project
 EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
6.2

Title
Portion of the 1863 Walling's Map of Renfrew County

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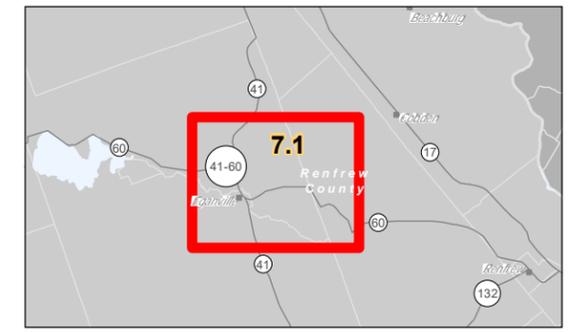
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Legend
[Red outline box] Archaeology Study Area (Approximate)

Figure Not to Scale

Notes
1. Source: Belden and Co. 1881. Renfrew Supplement in Illustrated Atlas of the Dominion of Canada. Toronto: H. Belden & Co.



Project Location: County of Renfrew
160951306 REVA
Prepared by BK on 2022-12-13
Technical Review by SE on 2022-09-27

Client/Project: EGANVILLE COMMUNITY EXPANSION PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 7.1
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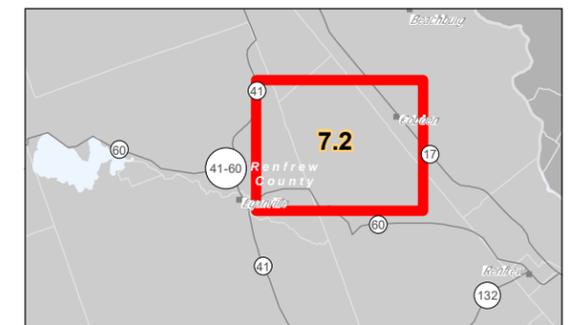
Legend

 Archaeology Study Area (Approximate)



Figure Not to Scale

Notes
 1. Source: Belden and Co. 1881. Renfrew Supplement in Illustrated Atlas of the Dominion of Canada. Toronto: H. Belden & Co.



Project Location: 160951306 REVA
 County of Renfrew Prepared by BK on 2022-12-13
 Technical Review by SE on 2022-09-27

Client/Project
 EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.
 7.2
 Title
 Portion of the 1881 Map of Renfrew County

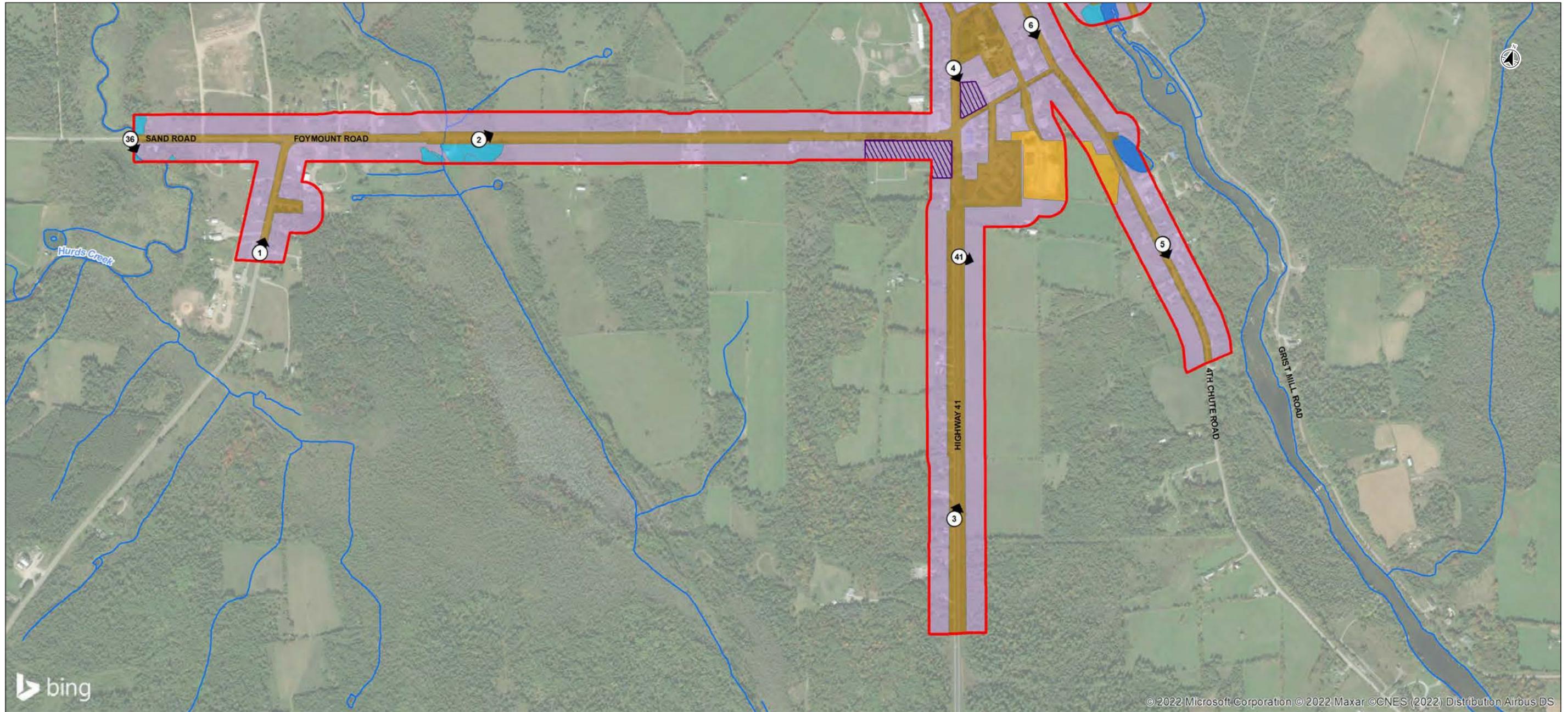
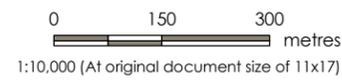


Figure 9-1

- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
 - Assessment Method
 - Archaeological Potential – Stage 2 Required

- Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Assessed (Past Recovery 2014) - No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required
- Waterbody, No Terrestrial Archaeological Potential, May Retain Marine Archaeological Potential – Marine Archaeological Potential Checklist Recommended



Project Location: County of Renfrew
 Prepared by BK on 2022-12-13
 Technical Review by SE on 2022-08-14

Client/Project: EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

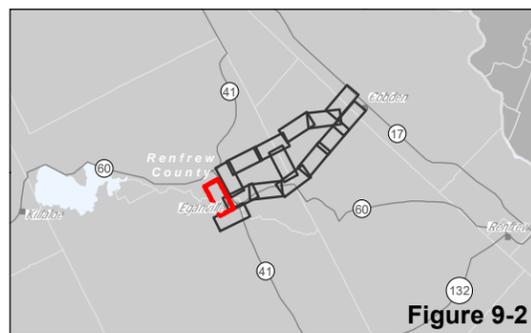
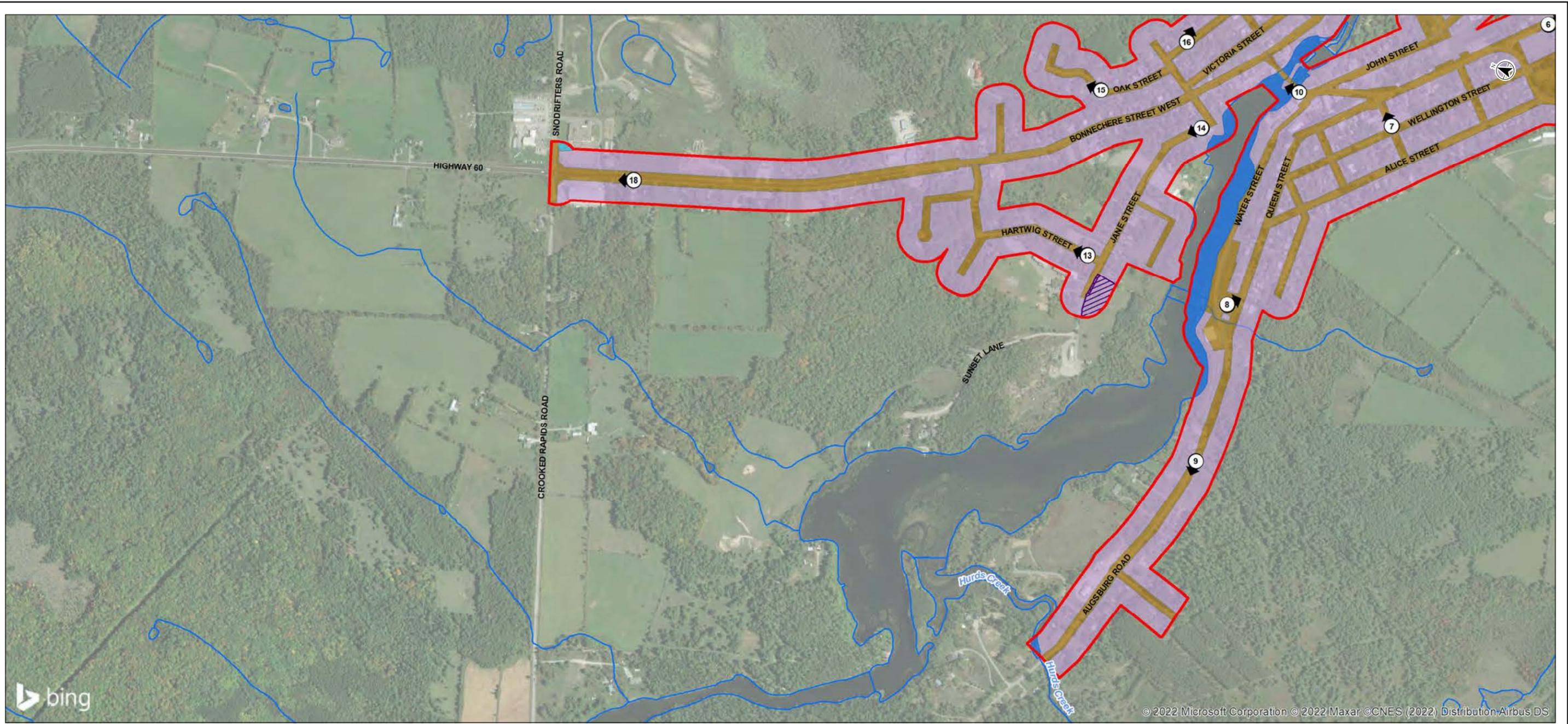
Figure No.: 9-1
 Title: Archaeological Potential: Mapbook

Notes

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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Cemetery
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required

- Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required
- Waterbody, No Terrestrial Archaeological Potential, May Retain Marine Archaeological Potential – Marine Archaeological Potential Checklist Recommended



Project Location: County of Renfrew
 160951306 REVA
 Prepared by BK on 2022-12-13
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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 9-2

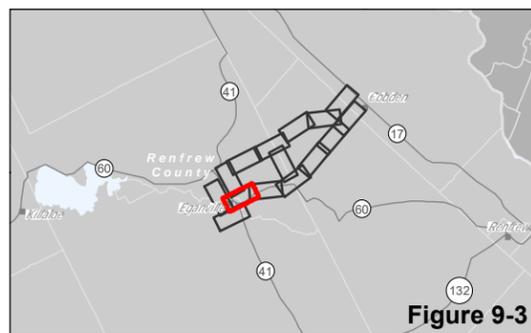
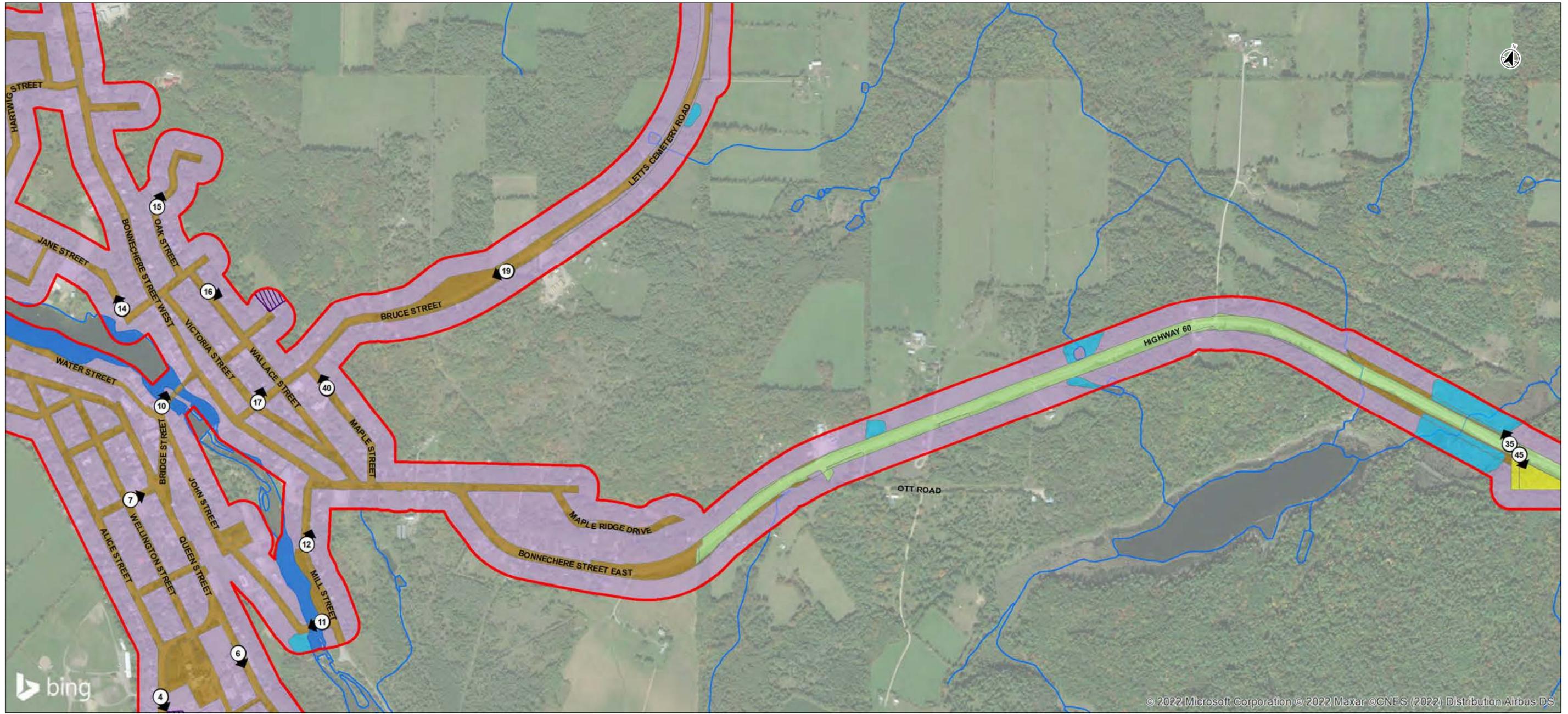
Title: Archaeological Potential: Mapbook

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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Cemetery

0 150 300 metres
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County of Renfrew Prepared by BK on 2022-12-13
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STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 9-3

Title: Archaeological Potential: Mapbook

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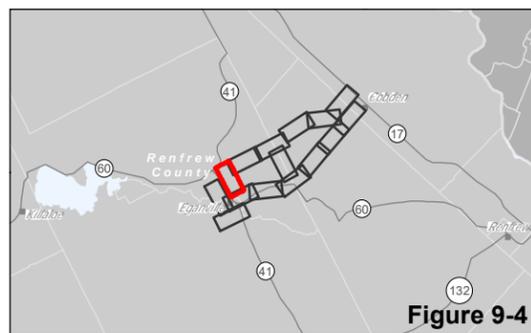
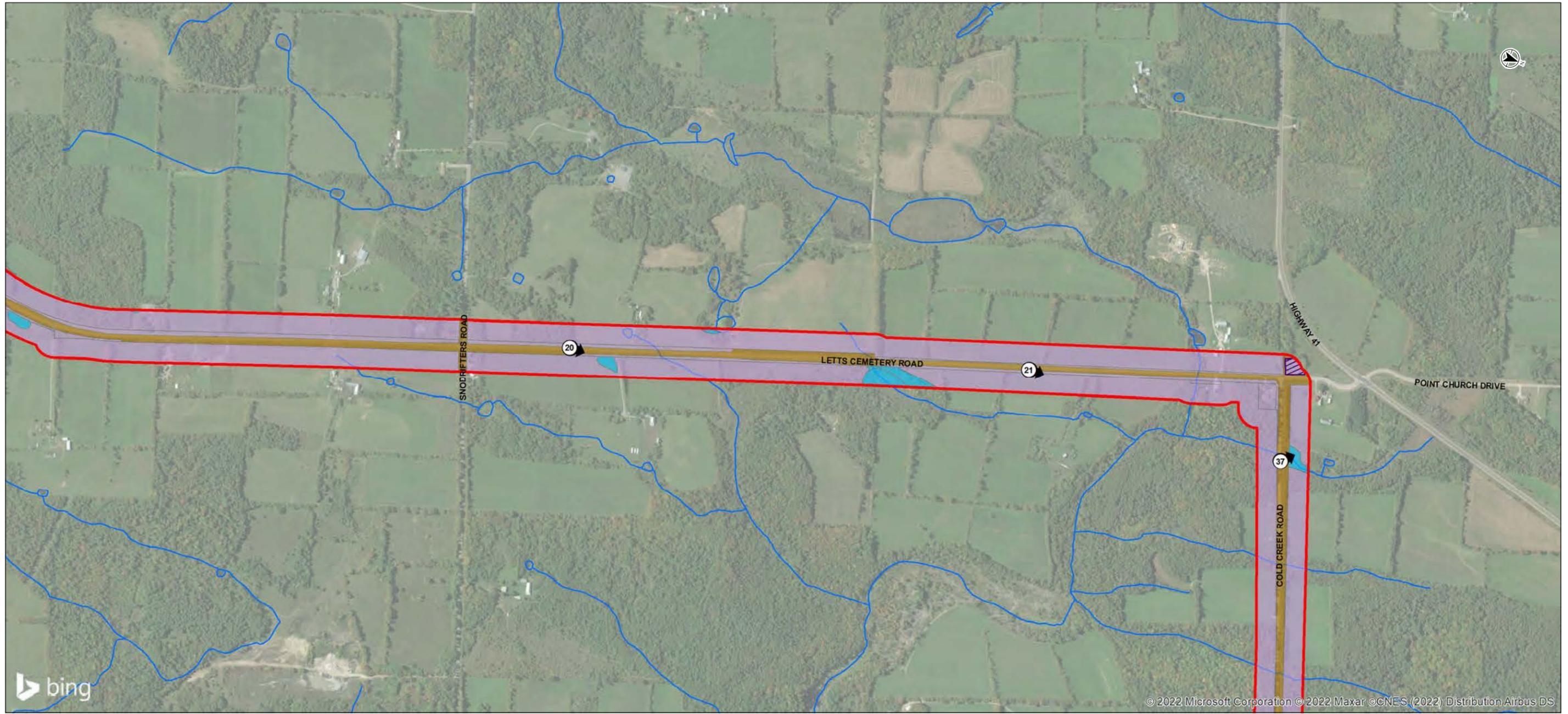
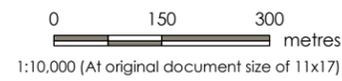


Figure 9-4

- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Cemetery
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required

- Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required



Project Location: County of Renfrew
 160951306 REVA
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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 9-4

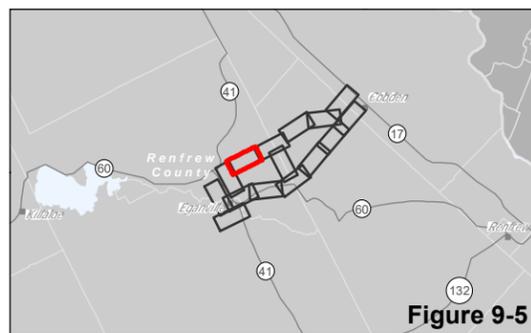
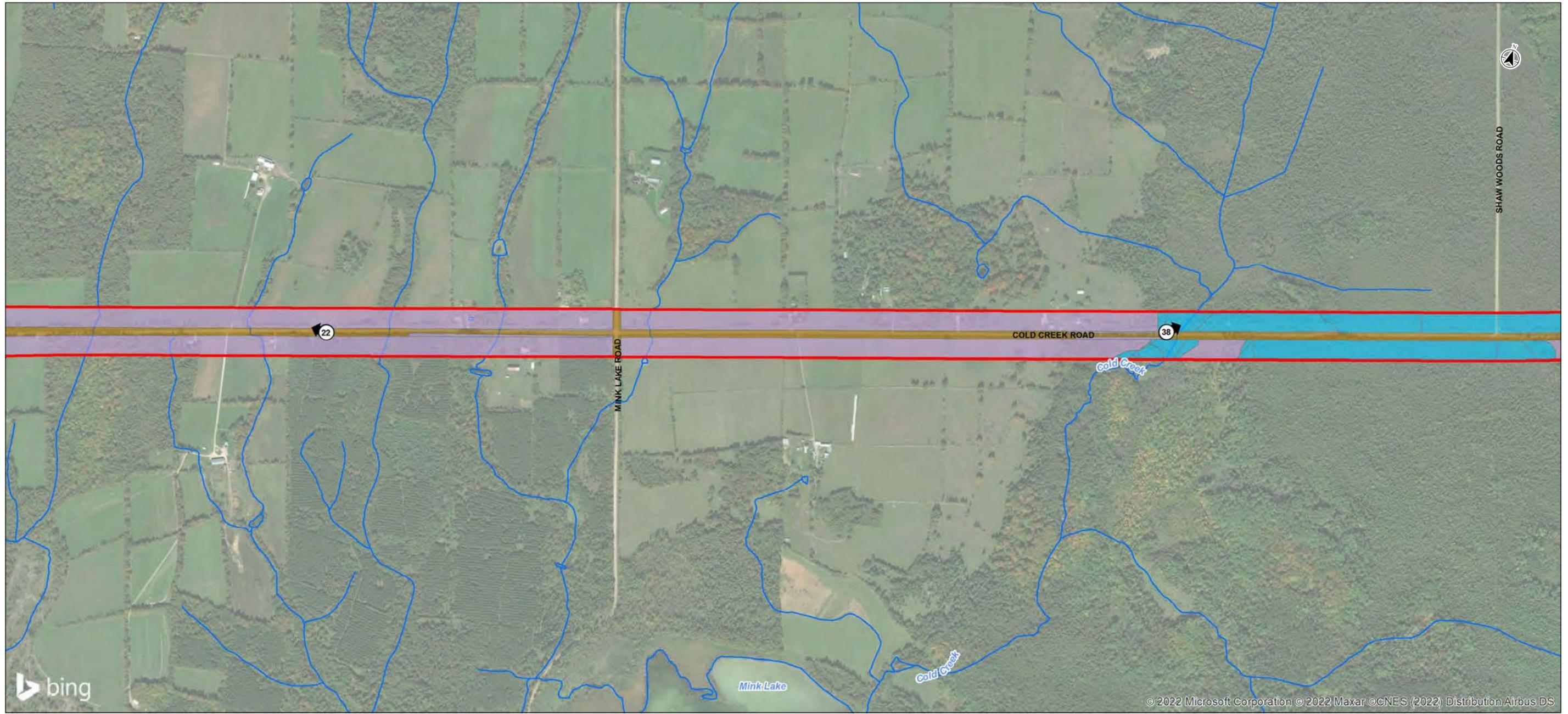
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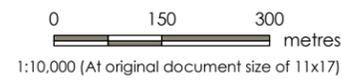
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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required



Project Location: 160951306 REVA
 County of Renfrew
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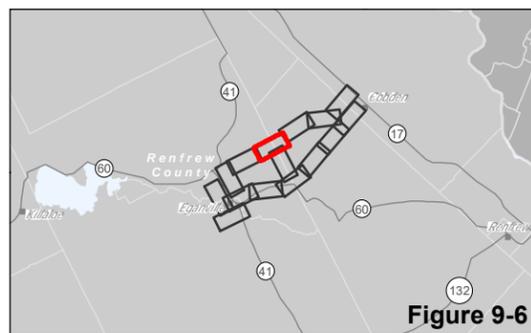
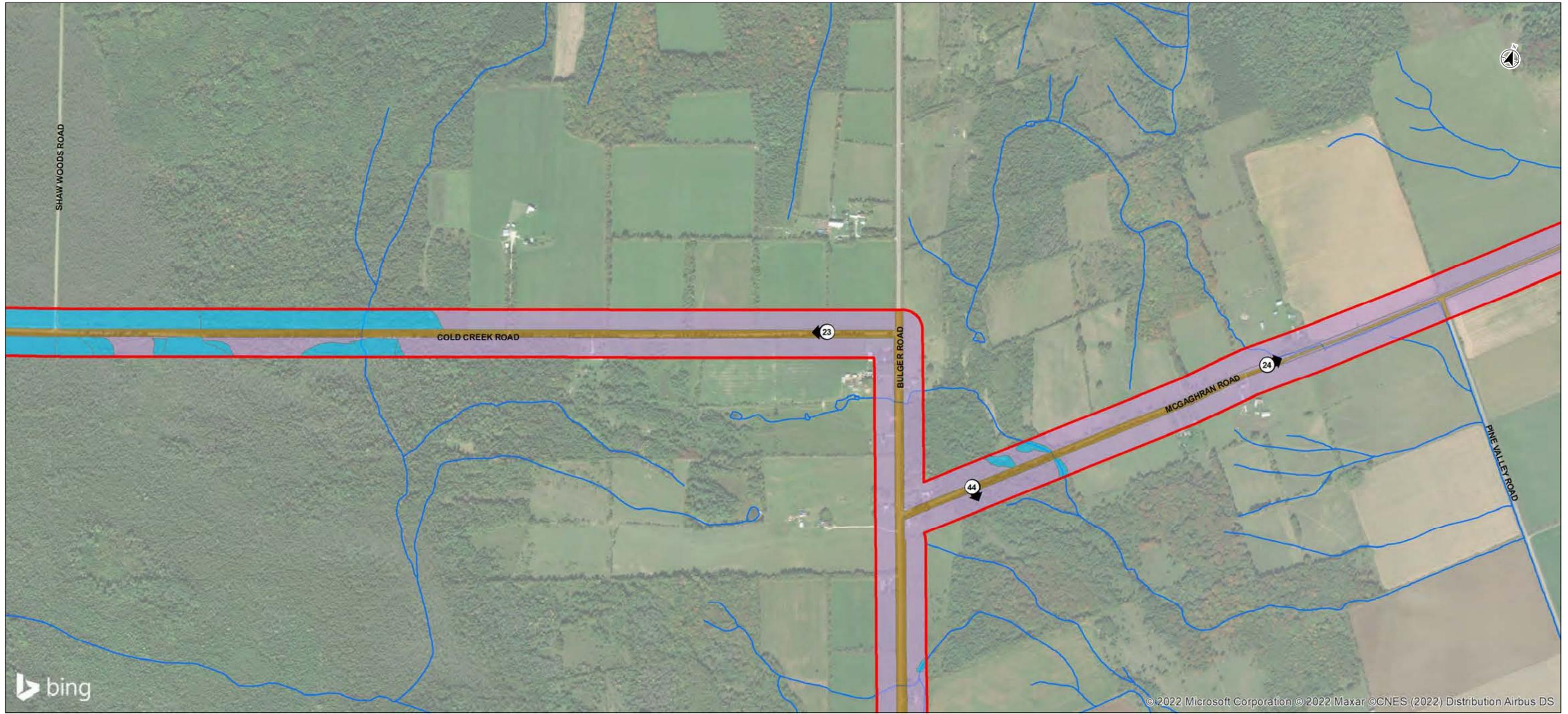
Figure No.: 9-5

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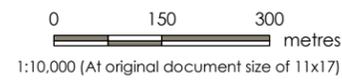
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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required



Project Location: County of Renfrew
 160951306 REVA
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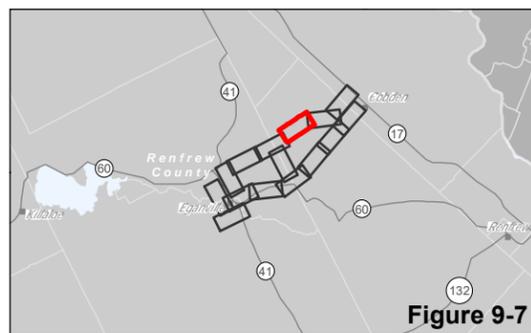
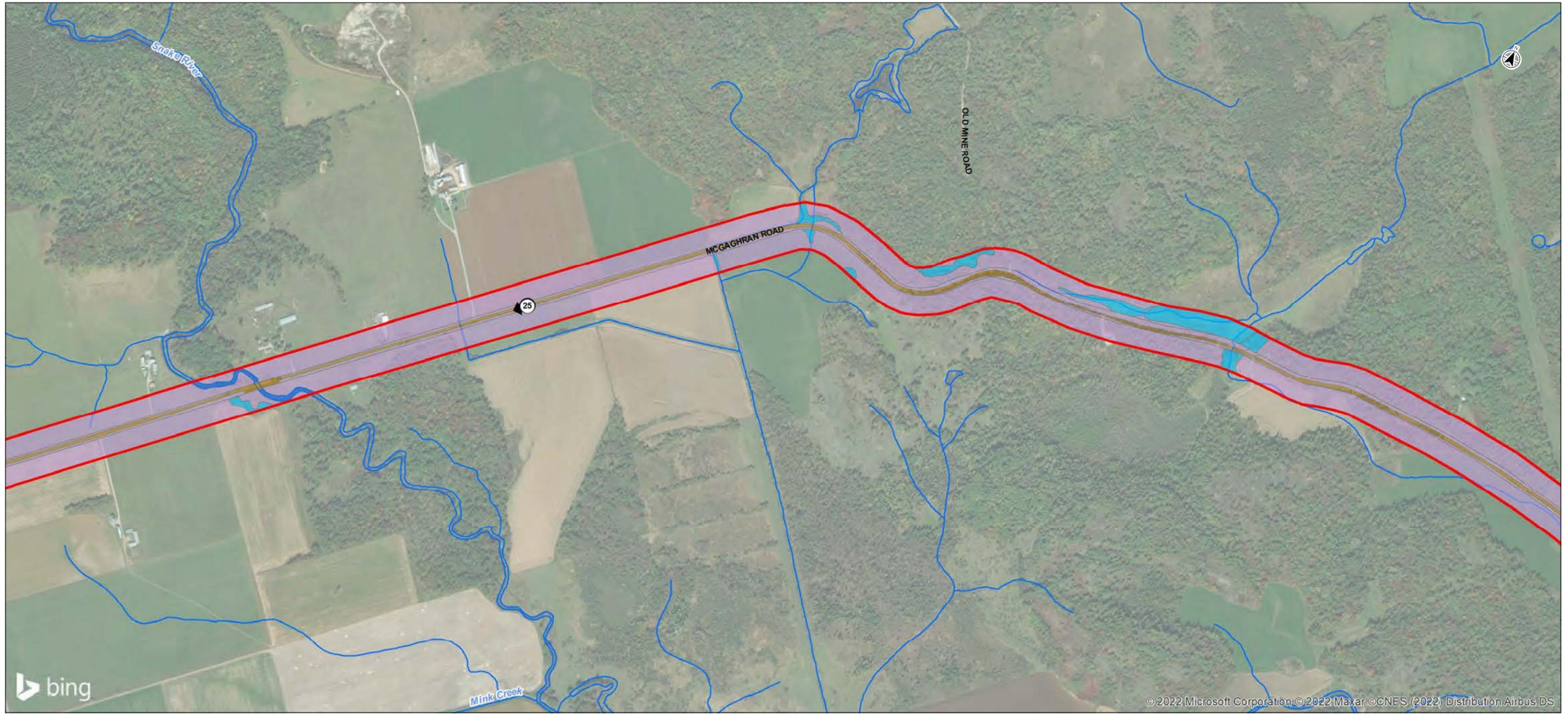
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Figure No.: 9-6
 Title: Archaeological Potential: Mapbook

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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential - Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential - No Further Archaeological Work Required

- Previously Disturbed, Low to No Archaeological Potential - No Further Archaeological Work Required
- Waterbody, No Terrestrial Archaeological Potential, May Retain Marine Archaeological Potential - Marine Archaeological Potential Checklist Recommended

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STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 9-7

Title: Archaeological Potential: Mapbook

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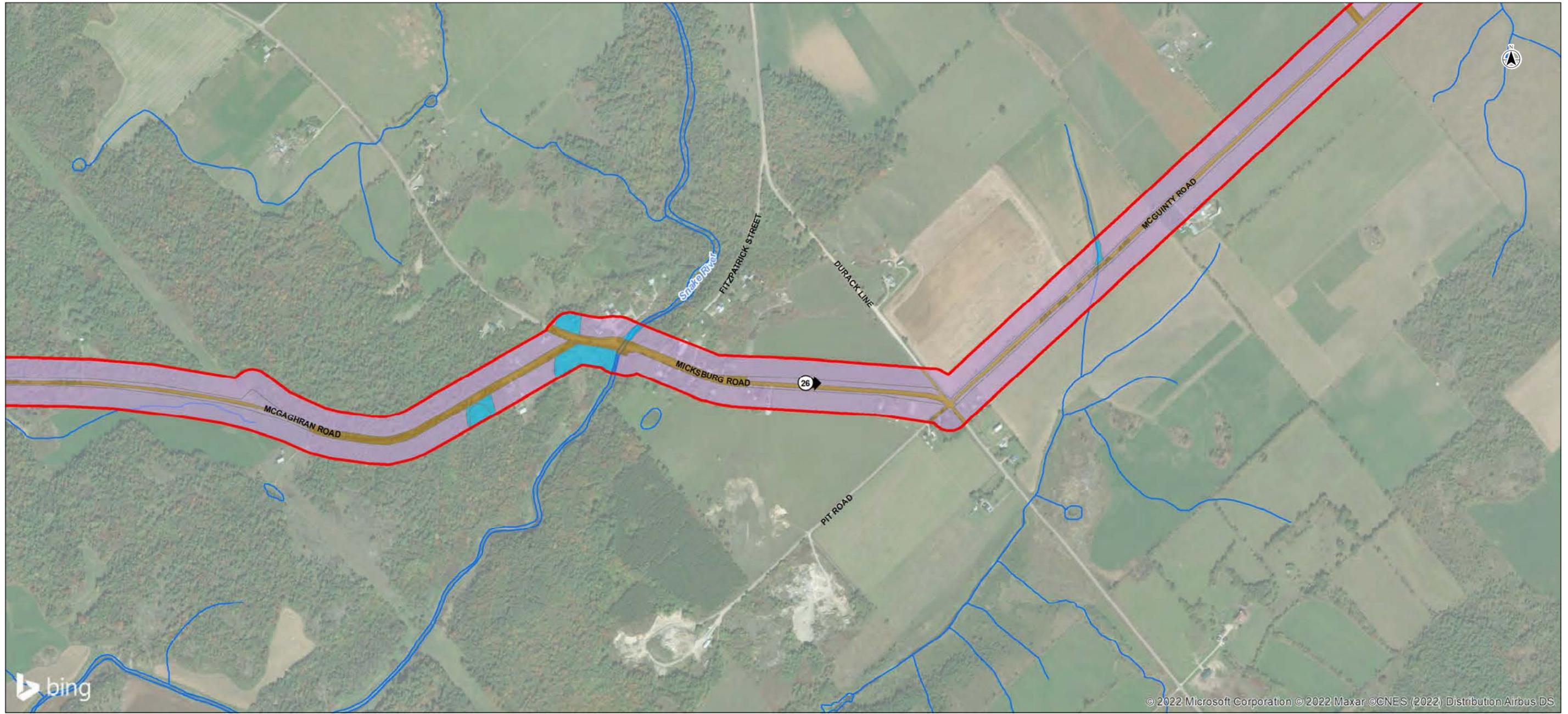


Figure 9-8

- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required
- Waterbody, No Terrestrial Archaeological Potential, May Retain Marine Archaeological Potential – Marine Archaeological Potential Checklist Recommended

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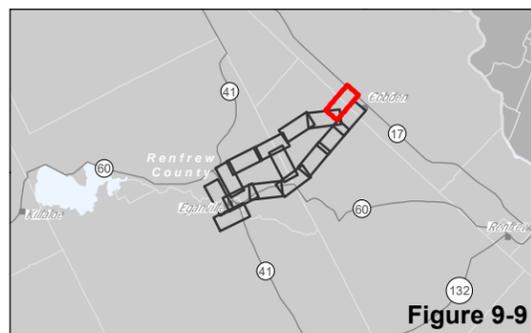
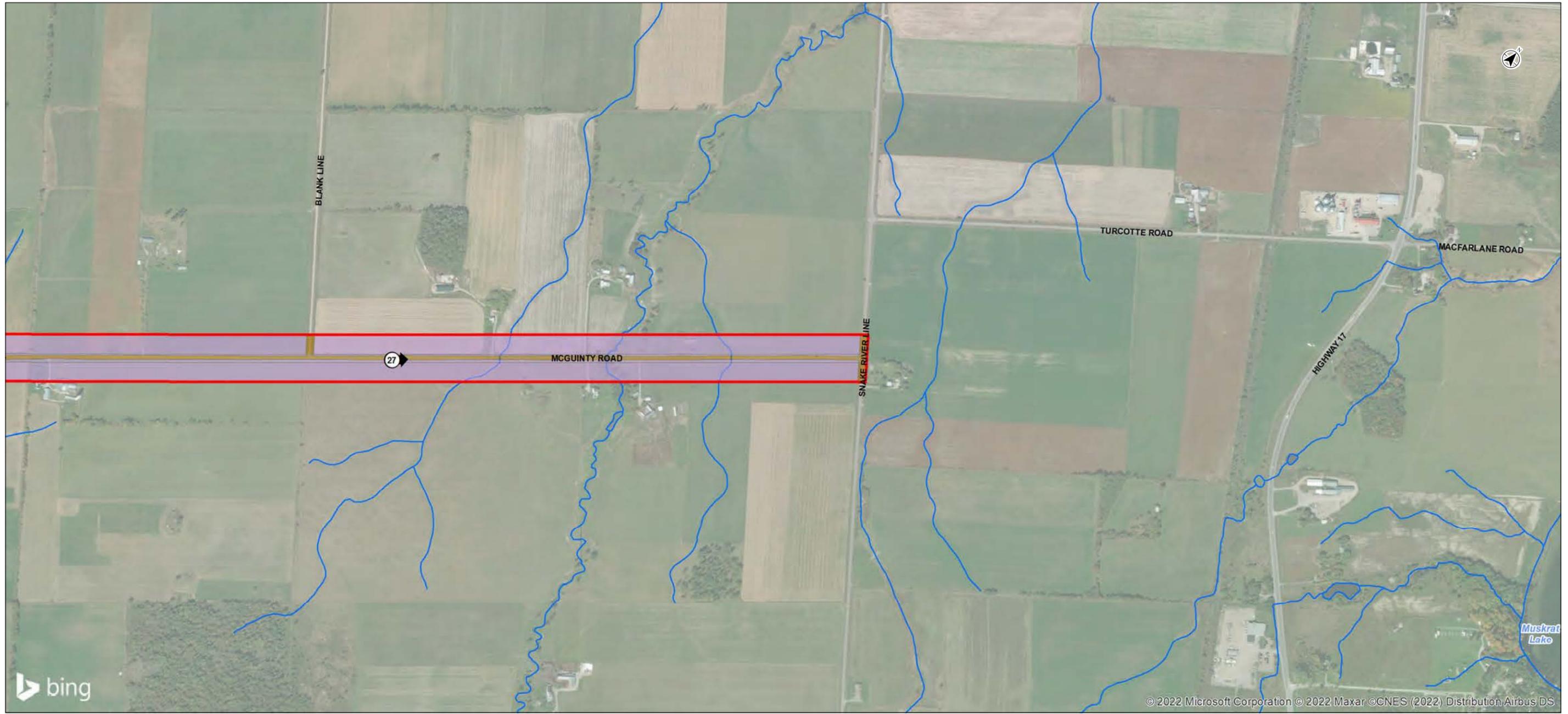
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Figure No.
9-8

Title
Archaeological Potential: Mapbook

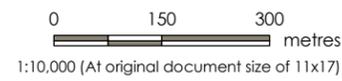
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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required

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Figure No.: 9-9

Title: Archaeological Potential: Mapbook

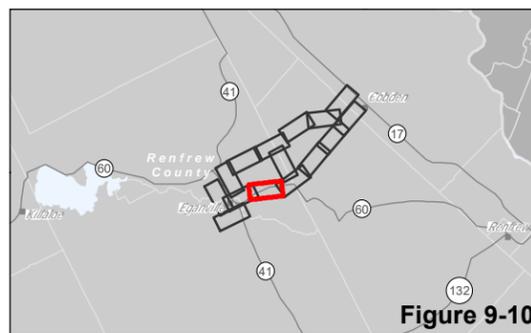
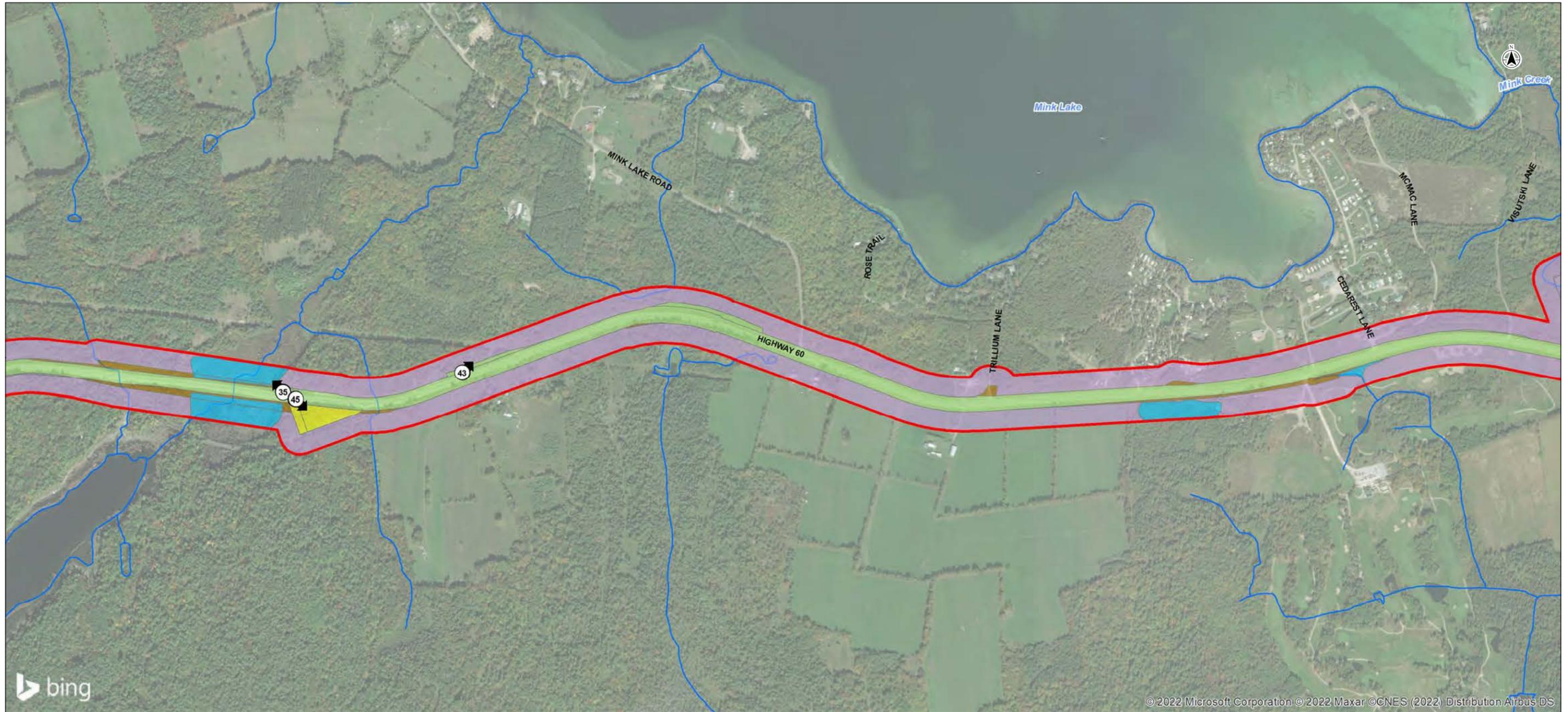
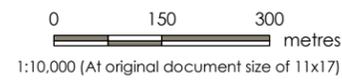


Figure 9-10

- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Bedrock, Low to No Archaeological Potential – No Further Archaeological Work Required

- Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required
- Previously Assessed (ASI 2004) - No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required



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 County of Renfrew
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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

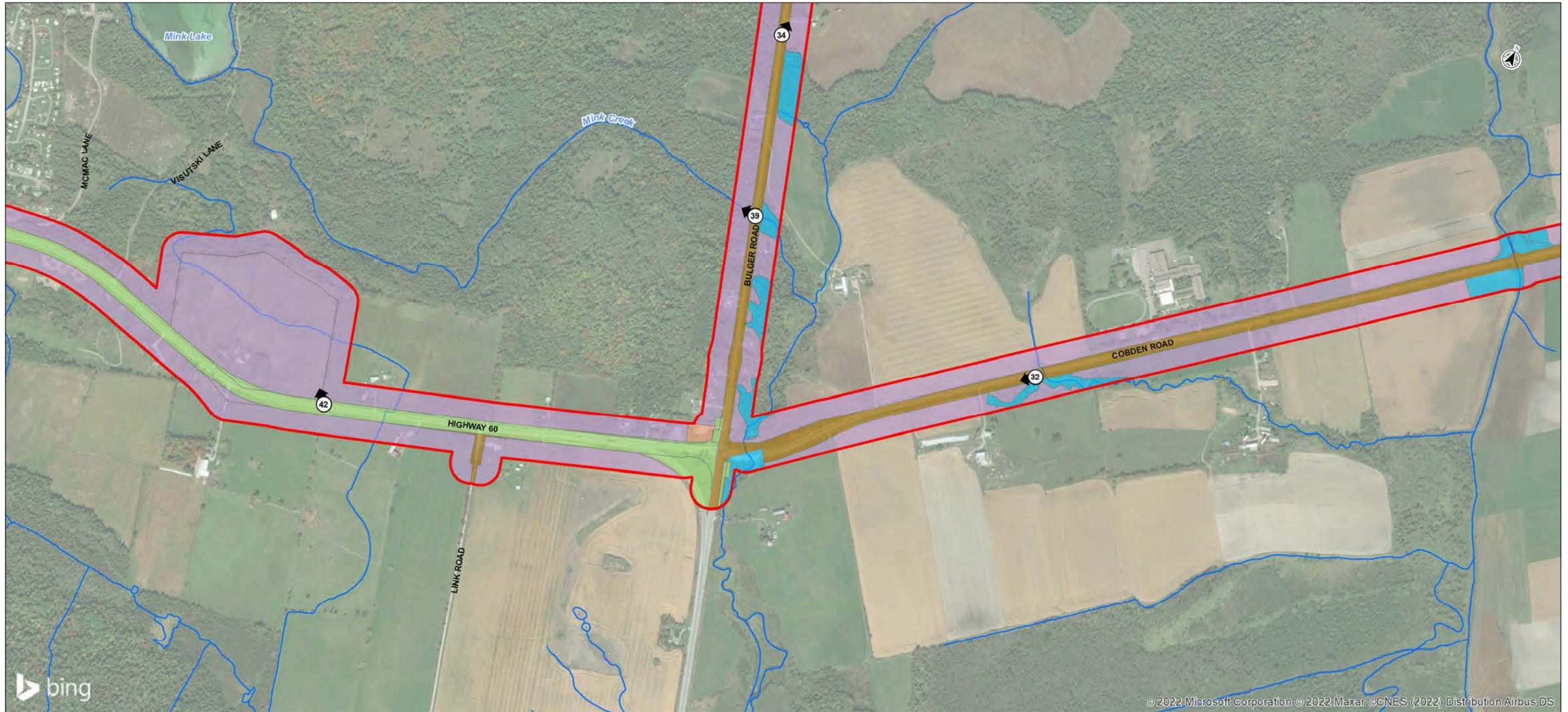
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Title: Archaeological Potential: Mapbook

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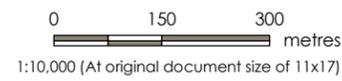
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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

- Previously Assessed (ASI 2002b) - No Further Archaeological Work Required
- Previously Assessed (ASI 2004) - No Further Archaeological Work Required
- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required
- Waterbody, No Terrestrial Archaeological Potential, May Retain Marine Archaeological Potential – Marine Archaeological Potential Checklist Recommended



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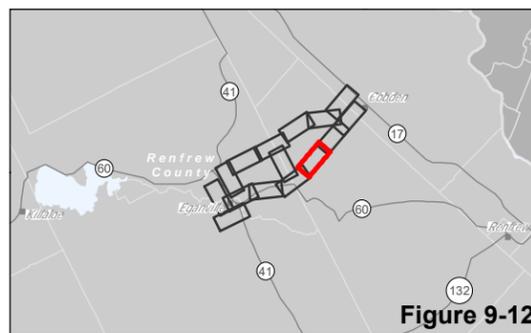
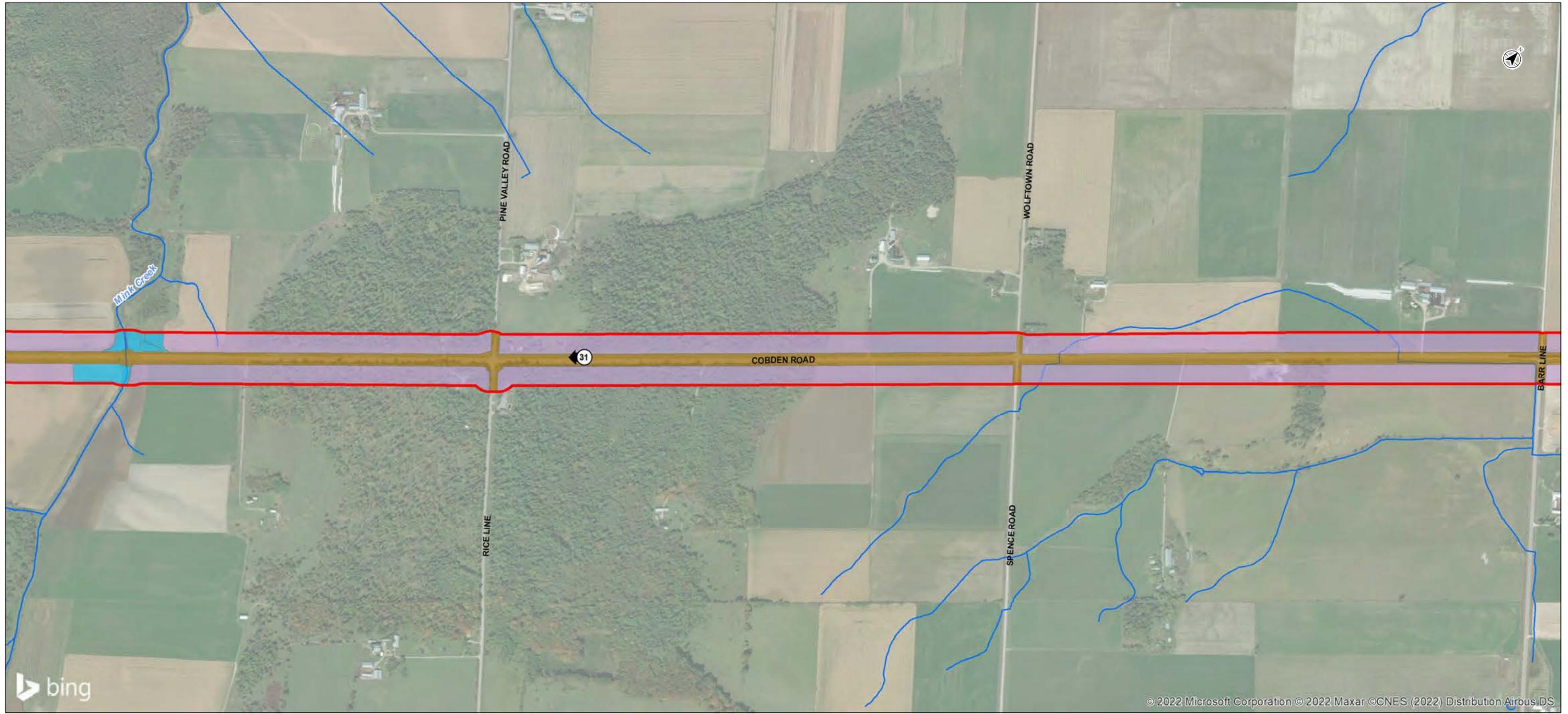
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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

- Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required
- Waterbody, No Terrestrial Archaeological Potential, May Retain Marine Archaeological Potential – Marine Archaeological Potential Checklist Recommended



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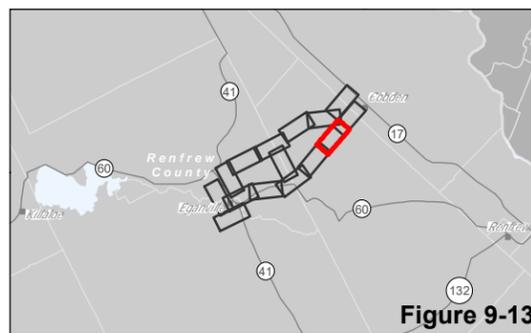
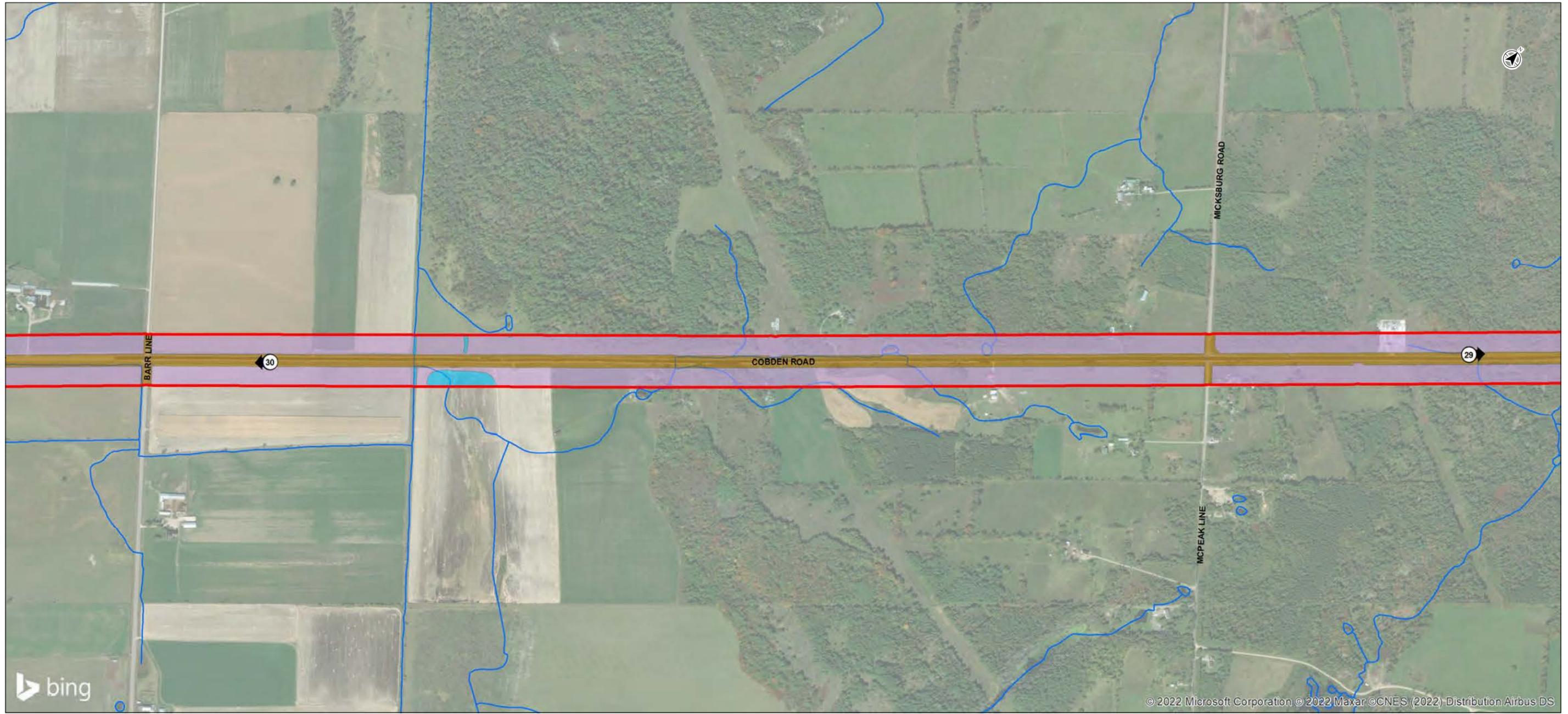
Title: Archaeological Potential: Mapbook

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- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required



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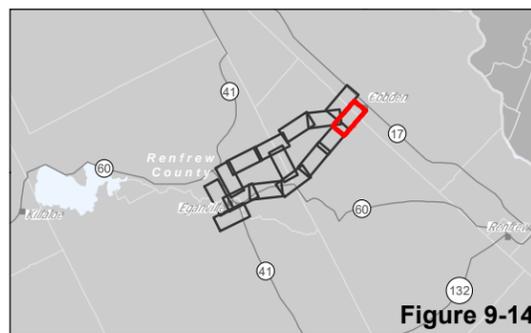
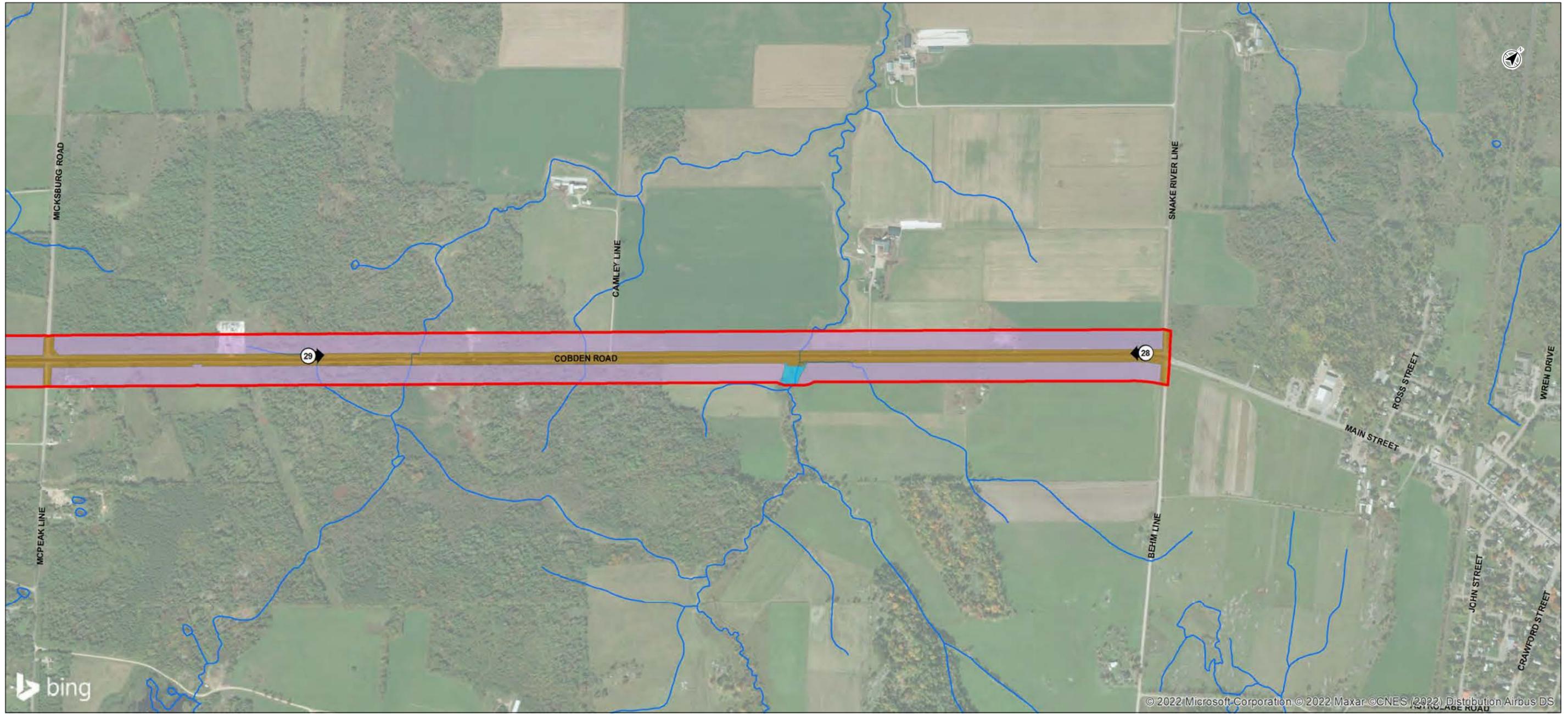


Figure 9-14

- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required

0 150 300 metres
1:10,000 (At original document size of 11x17)



Project Location: 160951306 REVA
County of Renfrew Prepared by BK on 2022-12-13
Technical Review by SE on 2022-08-14

Client/Project: EGANVILLE COMMUNITY EXPANSION PROJECT
STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No. 9-14

Title: Archaeological Potential: Mapbook

Notes

1. Coordinate System: NAD 1983 UTM Zone 18N
2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
3. Orthoimagery: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS.
4. Low and Permanently Wet Area boundaries based on Wetlands dataset from Land Information Ontario (LIO), 2022.

\\corp.adh\data\Virtual_Workspace\workgroup\160951306\Active\160951306\gis_cad\gis\mxd\archaeology\report\Figures\Stage1\160951306_S11_2_project_Fig09_MethodsResults.mxd Revised: 2022-12-13 By: bakour

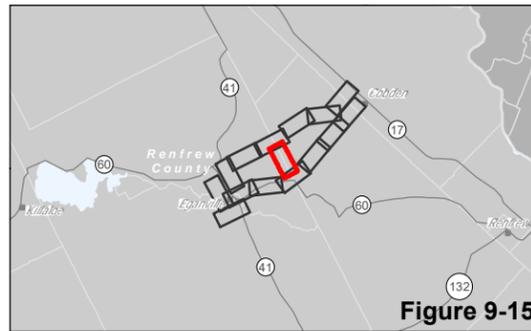
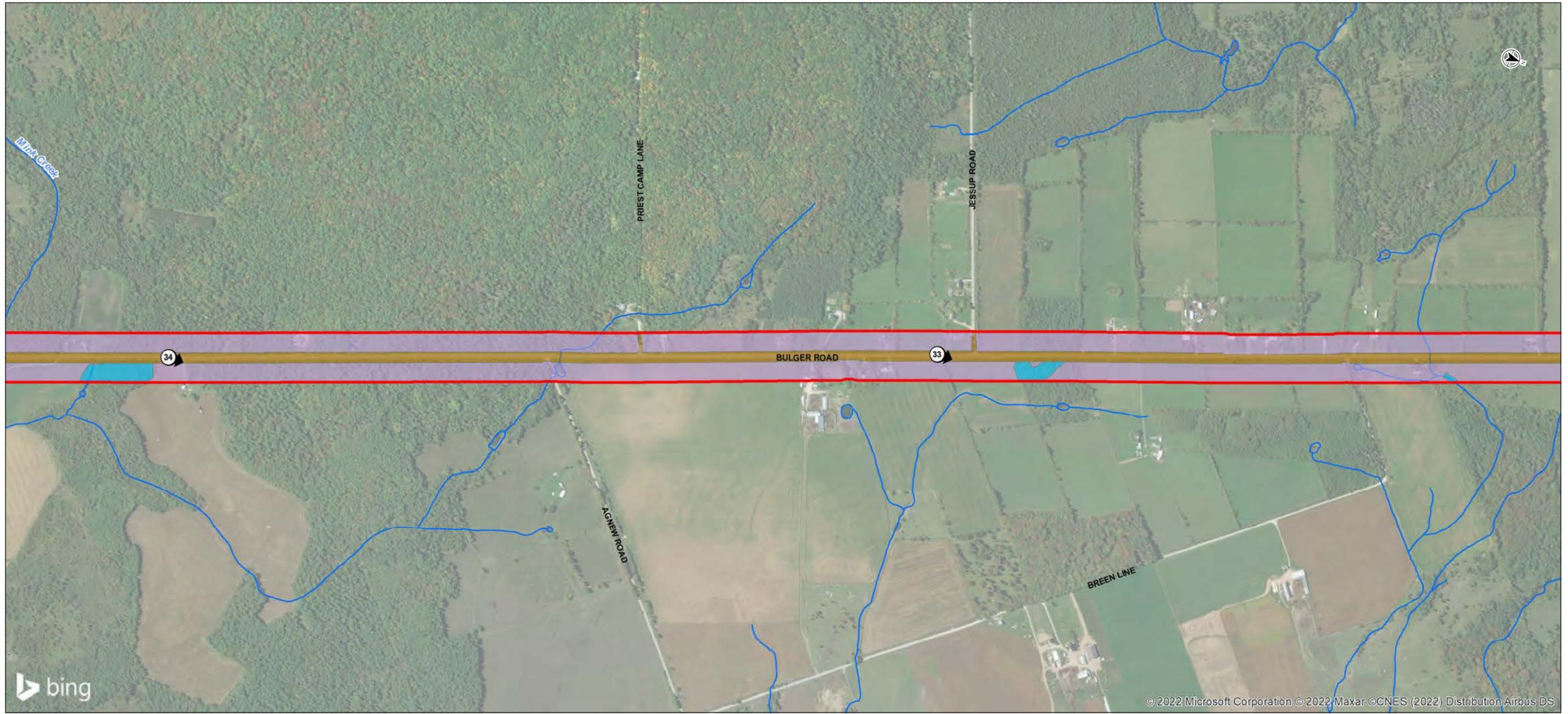
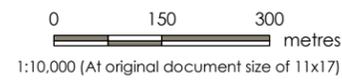


Figure 9-15

- Legend**
- Archaeology Study Area
 - Photo Location and Direction
 - Watercourse
 - Waterbody
- Assessment Method**
- Archaeological Potential – Stage 2 Required
 - Low and Permanently Wet Area, Low to No Archaeological Potential – No Further Archaeological Work Required

Previously Disturbed, Low to No Archaeological Potential – No Further Archaeological Work Required



Project Location: County of Renfrew
 Prepared by BK on 2022-12-13
 Technical Review by SE on 2022-08-14

Client/Project: EGANVILLE COMMUNITY EXPANSION PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Figure No.: 9-15

Title: Archaeological Potential: Mapbook

Notes

1. Coordinate System: NAD 1983 UTM Zone 18N
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\\corp.adh\data\Virtual_Workspace\workgroup\1609\Active\160951306\figs_cad\get\mxd\archaeology\report\Figures\Stage1\160951306_S11_2_project\Fig09_MethodResults.mxd Revised: 2022-12-13 By: bakour

10 Closure

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities, or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Quality Review  Digitally signed by Colin Varley
Date: 2023.02.21 10:47:14 -05'00'

(signature)

Colin Varley – Senior Archaeologist, Senior Associate

Independent Review  Dickson, Parker
2023.02.21 10:54:52 -05'00'

(signature)

Parker Dickson – Senior Archaeologist, Senior Associate



Appendix F Cultural Heritage Checklist



The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Eganville Community Expansion Project

Project or Property Location (upper and lower or single tier municipality)

Eganville, Township of Bonnechere Valley, County of Renfrew

Proponent Name

Enbridge

Proponent Contact Information

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. a National Historic Site (or part of)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. is in a Canadian Heritage River watershed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. contains buildings or structures that are 40 or more years old?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. has a special association with a community, person or historical event?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
 - [Ontario Heritage Trust](#)
 - local land registry office (for a title search)
-

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
 - municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
 - local land registry office (for a title search)
-

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
 - municipal heritage planning staff
 - municipal heritage committee
-

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
 - [Ontario Heritage Trust](#)
-

- v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

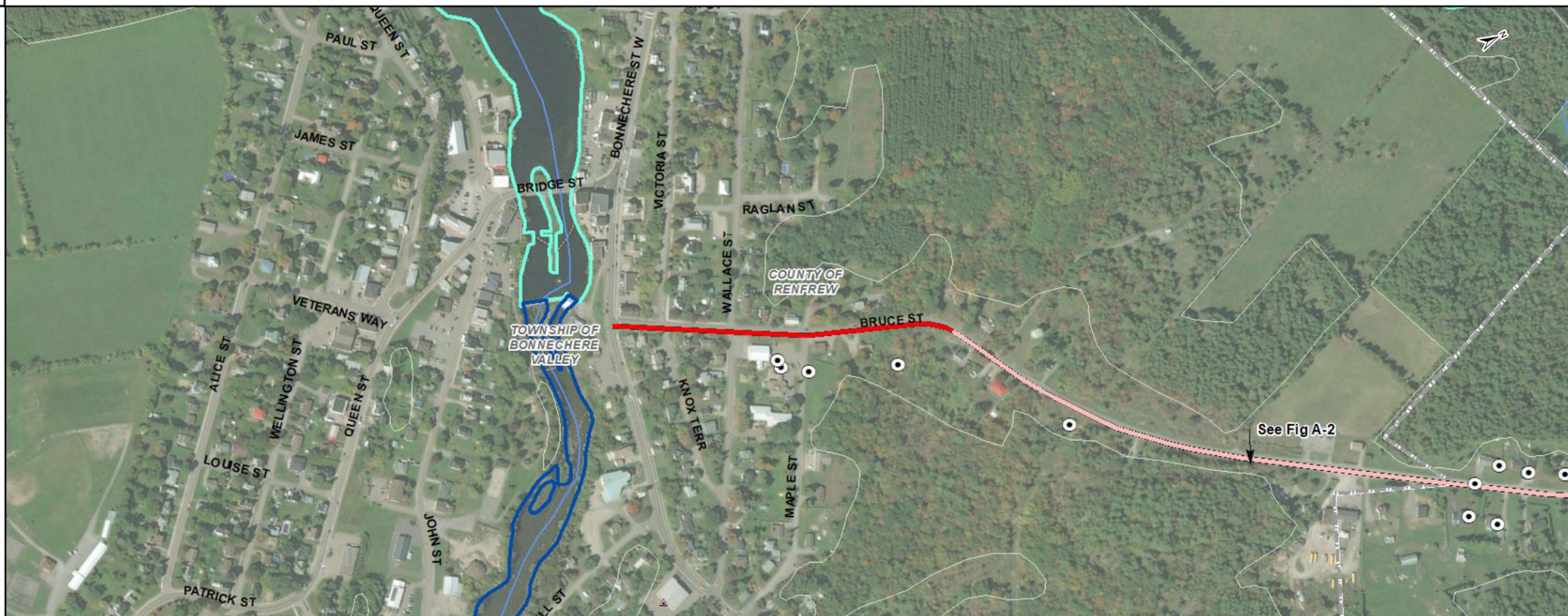
Appendix G Environmental Alignment Sheets



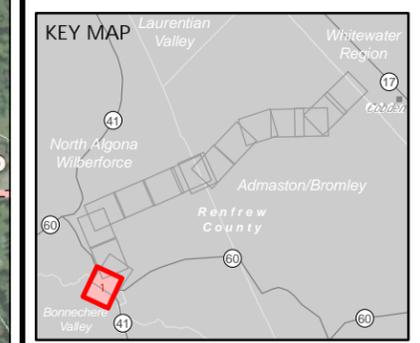
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI	
	WETLAND WATERCOURSE ANSI	
	VEGETATION	
	WATER WELL WITHIN 50 m	Wells Present
	LINEAR FEATURES	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE	
	SPECIES AT RISK (SAR) HABITAT	

Construction Mitigation Notes:
 Note 1: HDD construction method. Refer to Section 5.1.1 of the ER.
 Note 2: Crossing permit from Hydro One Networks Inc. (HONI) needed.
 Note 3: Aggregate quarry - Refer to Table 5.1 of the ER.
 Note 4: Natural gas pipeline - Refer to Section 4.5.4 and Table 5.1 of the ER.
 Note 5: No clearing activities during the migratory breeding bird restricted activity period (April 1 - August 31) without preconstruction nesting surveys. Refer to Section 4.4.2.4 of the ER.
 Note 6: Groundwater wells present - Refer to Section 4.3.3 and 7.1.2 of the ER.
 Note 7: Water well monitoring program recommended. Refer to Section 7.1.2 of the ER.
 Note 8: Linear facility - Refer to Table 5.1 of the ER.
 Note 9: Maintain emergency egress. Refer to Table 5.1 of the ER.
 Note 10: Warm water watercourse crossing - In-water work permitted from July 16 to March 14 (restricted from March 15 to July 15, inclusive).
 Note 11: Cool water watercourse crossing - the warm-water timing restriction applies to the cool-water habitat for this project.
 Note 12: Overall Benefit Permit under the Endangered Species Act, 2007 from the MNRF may be required if the species, or protected habitat, are impacted by project activities

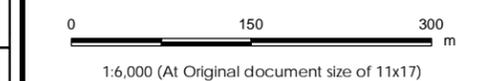
Acronyms List:
 ER: Environmental Report (Stantec 2022)
 MNRF: Ministry of Natural Resources and Forestry



- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - ▲ Hazardous Waste (MOECC)
 - Watercourse
 - ▭ Cold Water, Thermal Regime
 - ▭ Cool Water, Thermal Regime
 - ▭ Waterbody
 - ▭ Unevaluated Wetland (per OWES)
 - ▭ Wooded Area



- Notes
1. Coordinate System: NAD 1983 UTM Zone 17N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
 3. Orthoimagery: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS.
 4. MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2022.



Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)	
	PIPELINE CROSSING METHODS	
	VEGETATION RESTRICTIONS	
	PERMITTING REQUIREMENTS	
	MONITORING	Note 6 & 7
	SPECIES AT RISK (SAR) HABITAT	
	POTENTIALLY CONTAMINATED SITES	
SEED MIX		

Project Location: 160951306
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
ENBRIDGE GAS DISTRIBUTION INC.
EGANVILLE COMMUNITY EXPANSION

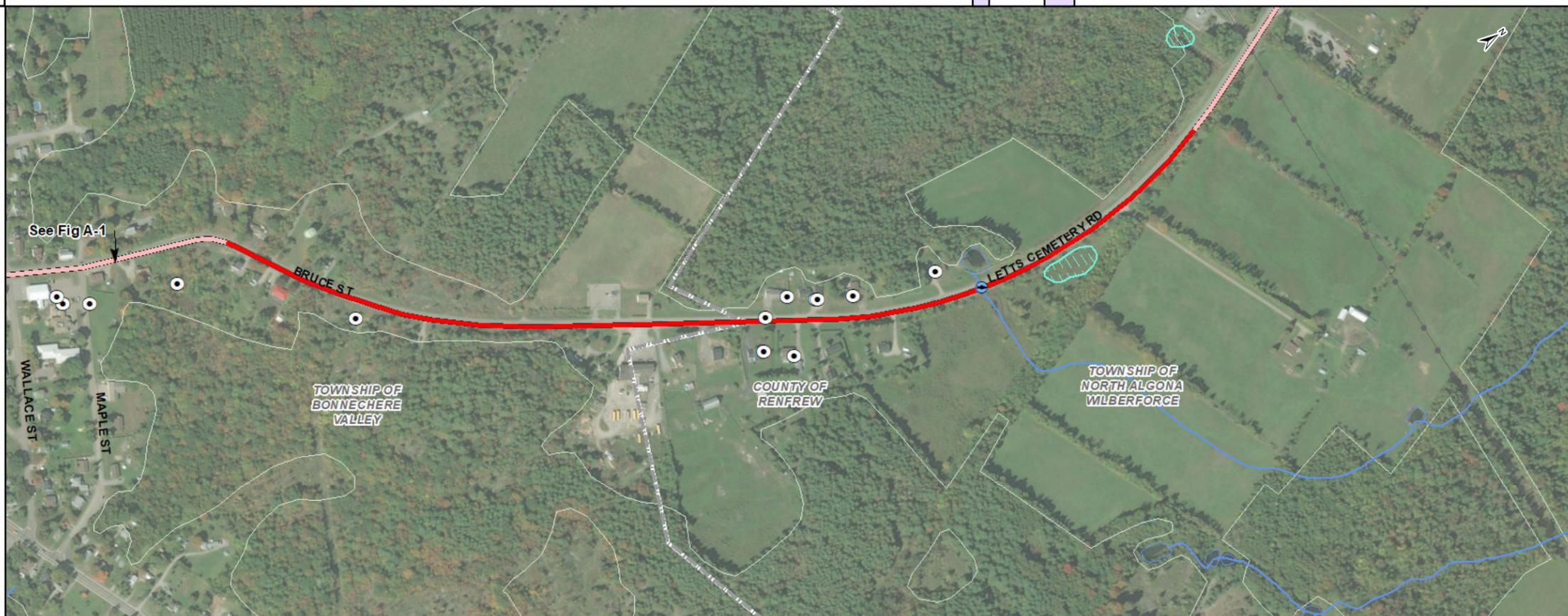
Figure No.
A-1

Title
**Environmental Alignment
 Sheets - Map 1**

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI					
	WETLAND WATERCOURSE ANSI			Watercourse	Wetland	
	VEGETATION			Wooded Area		
	WATER WELL WITHIN 50 m		Water Well		Wells Present	
	LINEAR FEATURES		Driveways & Roads		Driveways & Roads	
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE					
	SPECIES AT RISK (SAR) HABITAT				Pot SAR Habitat	Pot SAR Habitat

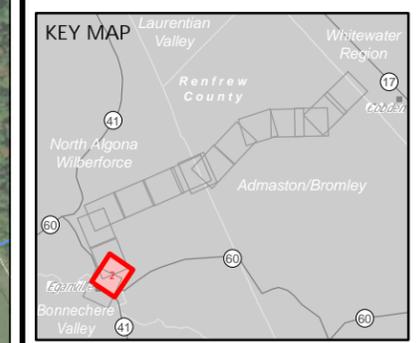
Construction Mitigation Notes:
 Note 1: HDD construction method. Refer to Section 5.1.1 of the ER.
 Note 2: Crossing permit from Hydro One Networks Inc. (HONI) needed.
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Acronyms List:
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Legend

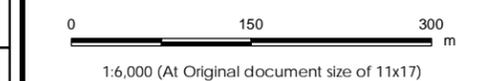
- Preliminary Preferred Route (Segment Evaluated)
- Preliminary Preferred Route (Segment not Evaluated on this page)
- Base / Environmental Features
- Water Well (MOECC)
- Watercourse Crossing
- Hydro Line
- Watercourse
- Waterbody
- Unevaluated Wetland (per OWES)
- Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8		Note 8	
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)					
	PIPELINE CROSSING METHODS				Note 1	Note 1
	VEGETATION RESTRICTIONS			Note 5		
	PERMITTING REQUIREMENTS					
	MONITORING		Note 6 & 7		Note 6 & 7	
	SPECIES AT RISK (SAR) HABITAT				Note 12	Note 12
	POTENTIALLY CONTAMINATED SITES					
SEED MIX						

Notes

1. Coordinate System: NAD 1983 UTM Zone 17N
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4. MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2022.



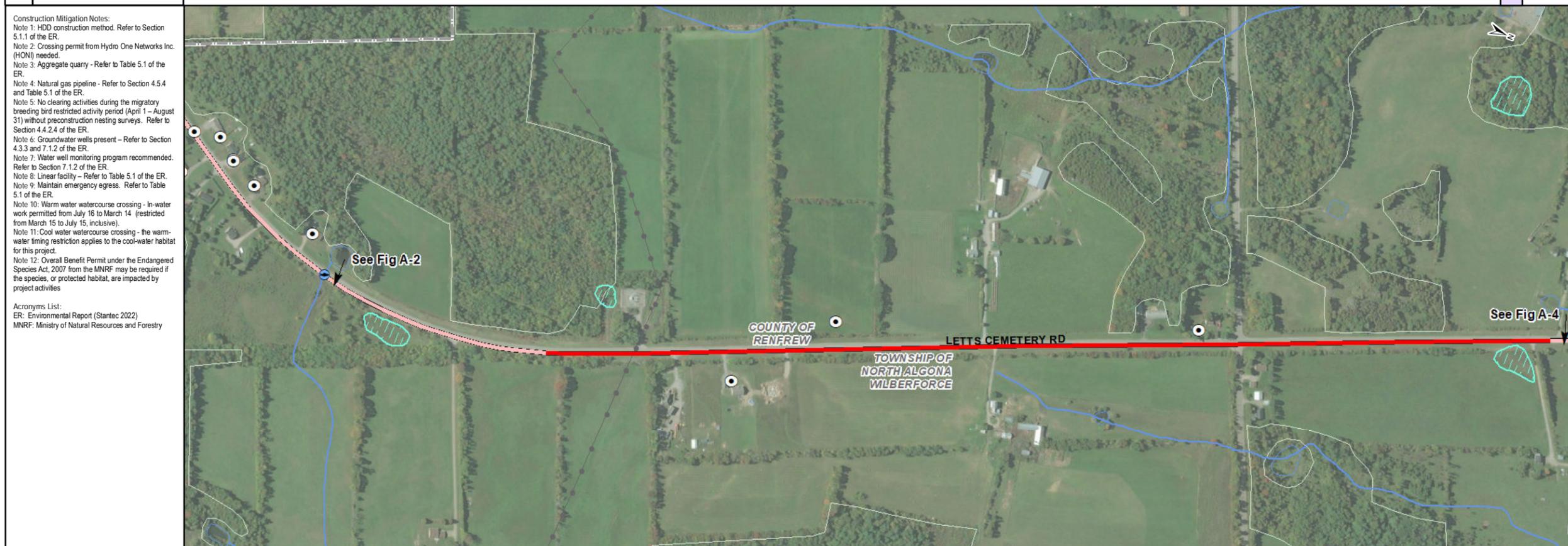
Project Location: 160951306
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-2
 Title
 Environmental Alignment
 Sheets - Map 2

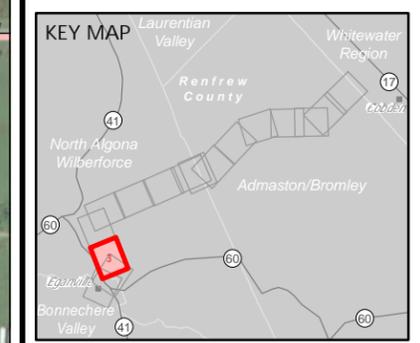
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI	
	WETLAND WATERCOURSE ANSI	Wetland
	VEGETATION	Wooded Area
	WATER WELL WITHIN 50 m	Water Well Water Well Water Well
	LINEAR FEATURES	Hydro Line Driveways & Roads Driveways & Roads Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE	
SPECIES AT RISK (SAR) HABITAT	Hot SAR Habitat	

- Legend**
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Hydro Line
 - Watercourse
 - Waterbody
 - Unevaluated Wetland (per OWES)
 - Wooded Area



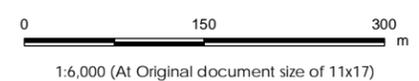
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Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 2 & 8 Note 8 Note 8 Note 8 Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)	
	PIPELINE CROSSING METHODS	Note 1
	VEGETATION RESTRICTIONS	Note 5
	PERMITTING REQUIREMENTS	
	MONITORING	Note 6 & 7 Note 6 & 7 Note 6 & 7
	SPECIES AT RISK (SAR) HABITAT	Note 12
	POTENTIALLY CONTAMINATED SITES	
SEED MIX		

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 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

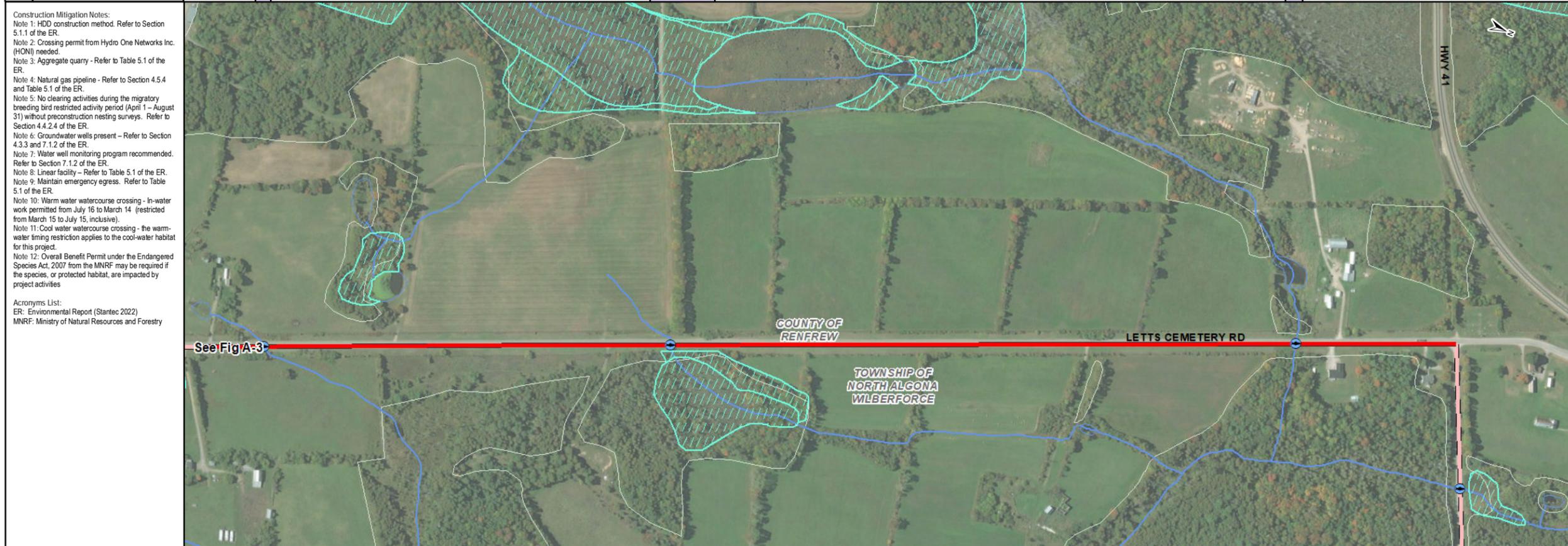
Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-3
 Title
 Environmental Alignment
 Sheets - Map 3

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 Revised: 2022-11-21 By: bakaur

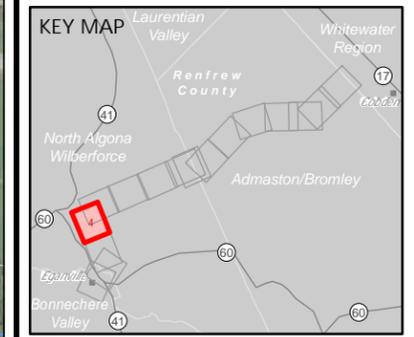
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI			
	WETLAND WATERCOURSE ANSI	Watercourse	Watercourse → Wetland	Watercourse
	VEGETATION			Wooded Area
	WATER WELL WITHIN 50 m			
	LINEAR FEATURES	Driveways & Roads	Driveways & Roads	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE			
	SPECIES AT RISK (SAR) HABITAT	Pot SAR Habitat	Pot SAR Habitat	Pot SAR Habitat

- Legend**
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Watercourse
 - Waterbody
 - Unevaluated Wetland (per OWES)
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Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 8	Note 8	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)			
	PIPELINE CROSSING METHODS	Note 1	Note 1	Note 1
	VEGETATION RESTRICTIONS			Note 5
	PERMITTING REQUIREMENTS			
	MONITORING			
	SPECIES AT RISK (SAR) HABITAT	Note 12	Note 12	Note 12
	POTENTIALLY CONTAMINATED SITES			
	SEED MIX			

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 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

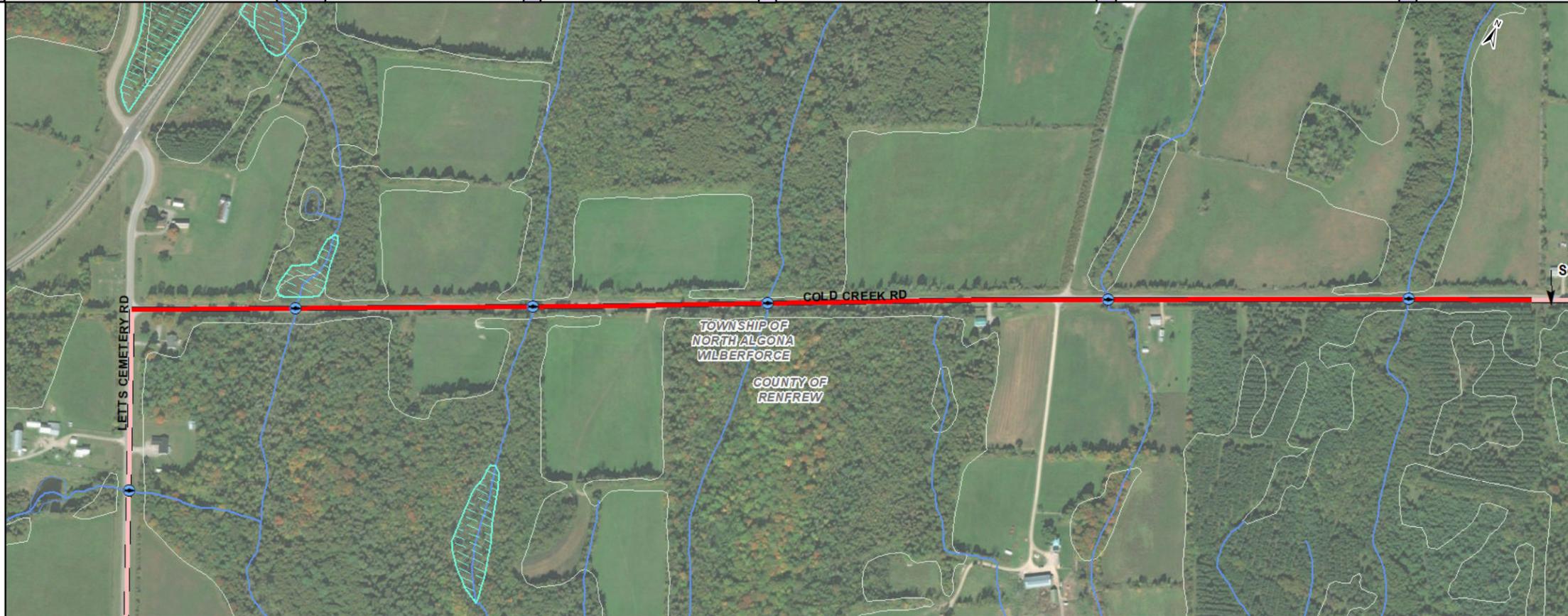
Figure No.
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 Title
 Environmental Alignment
 Sheets - Map 4

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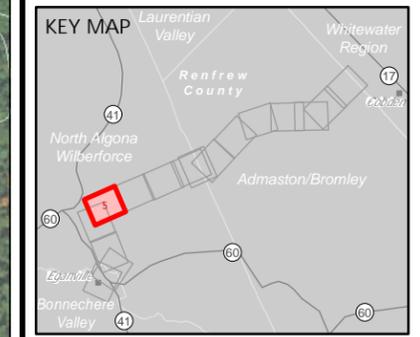
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI								
	WETLAND WATERCOURSE ANSI	Watercourse	Wetland	Watercourse	Watercourse	Watercourse	Watercourse	Watercourse	Watercourse
	VEGETATION		Wooded Area		Wooded Area		Wooded Area		Wooded Area
	WATER WELL WITHIN 50 m								
	LINEAR FEATURES		Driveways & Roads				Driveways & Roads		
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE								
	SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat		Pot SAR Habitat		Pot SAR Habitat		Pot SAR Habitat

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- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Watercourse
 - Waterbody
 - Unevaluated Wetland (per OWES)
 - Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8				Note 8		
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)								
	PIPELINE CROSSING METHODS		Note 1		Note 1		Note 1		Note 1
	VEGETATION RESTRICTIONS		Note 5		Note 5		Note 5		Note 5
	PERMITTING REQUIREMENTS								
	MONITORING								
	SPECIES AT RISK (SAR) HABITAT		Note 12		Note 12		Note 12		Note 12
	POTENTIALLY CONTAMINATED SITES								
	SEED MIX								

- Notes
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 County of Renfrew
 Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
**ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION**

Figure No.
A-5

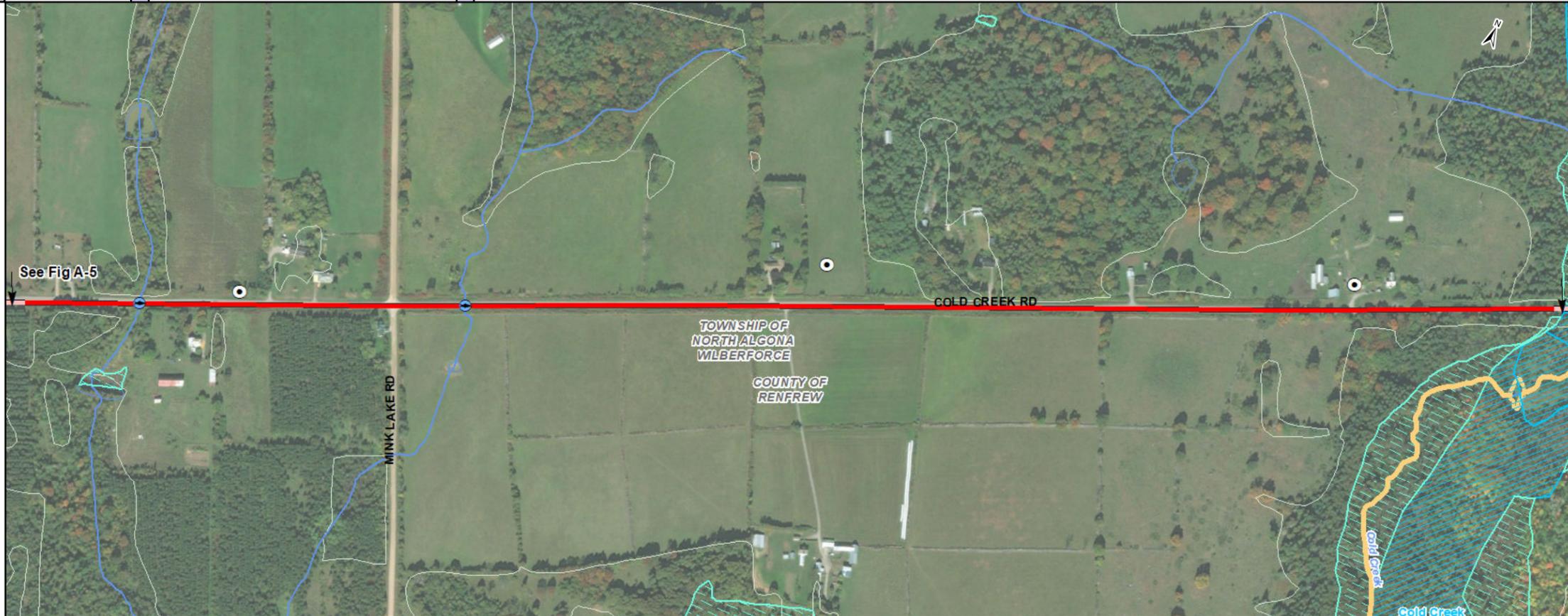
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**Environmental Alignment
 Sheets - Map 5**

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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI										
	WETLAND WATERCOURSE ANSI		Watercourse			Watercourse					
	VEGETATION		Wooded Area	Wooded Area			Wooded Area			Wooded Area	
	WATER WELL WITHIN 50 m			Water Well			Water Well			Water Well	
	LINEAR FEATURES		Driveways & Roads				Driveways & Roads		Driveways & Roads		Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE										
SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat		Pot SAR Habitat							

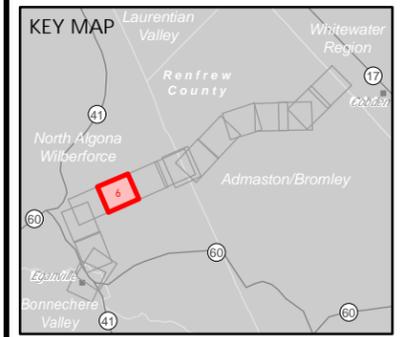
Construction Mitigation Notes:
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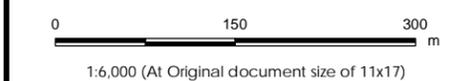


Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8				Note 8		Note 8		Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)										
	PIPELINE CROSSING METHODS		Note 1		Note 1						
	VEGETATION RESTRICTIONS		Note 5	Note 5			Note 5			Note 5	
	PERMITTING REQUIREMENTS										
	MONITORING			Note 6 & 7				Note 6 & 7			Note 6 & 7
	SPECIES AT RISK (SAR) HABITAT		Note 12		Note 12						
	POTENTIALLY CONTAMINATED SITES										
	SEED MIX										

- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Watercourse
 - Cold Water, Thermal Regime
 - Warm Water, Thermal Regime
 - Waterbody
 - Other/Locally Significant Wetland
 - Unevaluated Wetland (per OWES)
 - Wooded Area



- Notes
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Project Location: 160951306
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-6
 Title
 Environmental Alignment
 Sheets - Map 6

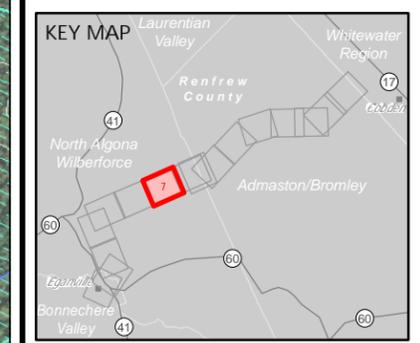
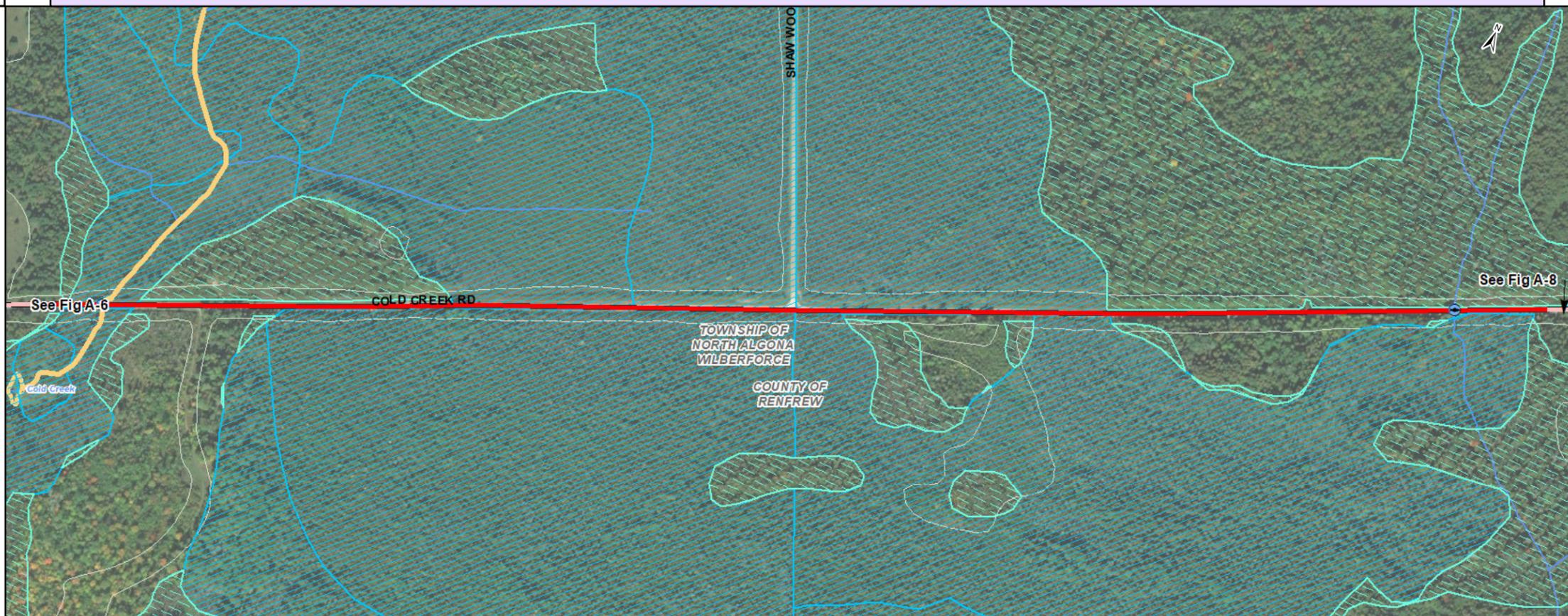
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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI	
	WETLAND WATERCOURSE ANSI	Watercourse Wetland Watercourse
	VEGETATION	Wooded Area
	WATER WELL WITHIN 50 m	
	LINEAR FEATURES	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE	
	SPECIES AT RISK (SAR) HABITAT	Pot SAR Habitat

- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Watercourse
 - Warm Water, Thermal Regime
 - Waterbody
 - Other/Locally Significant Wetland
 - Unevaluated Wetland (per OWES)
 - Wooded Area

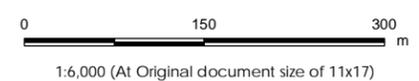
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Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)	Note 10
	PIPELINE CROSSING METHODS	Note 1 Note 1
	VEGETATION RESTRICTIONS	Note 5
	PERMITTING REQUIREMENTS	
	MONITORING	
	SPECIES AT RISK (SAR) HABITAT	Note 12
	POTENTIALLY CONTAMINATED SITES	
SEED MIX		

- Notes
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 County of Renfrew Prepared by BK on 2022-11-21
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Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-7

Title
 Environmental Alignment
 Sheets - Map 7

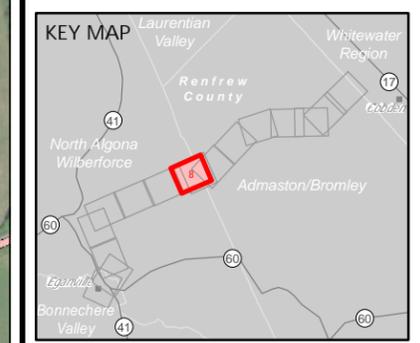
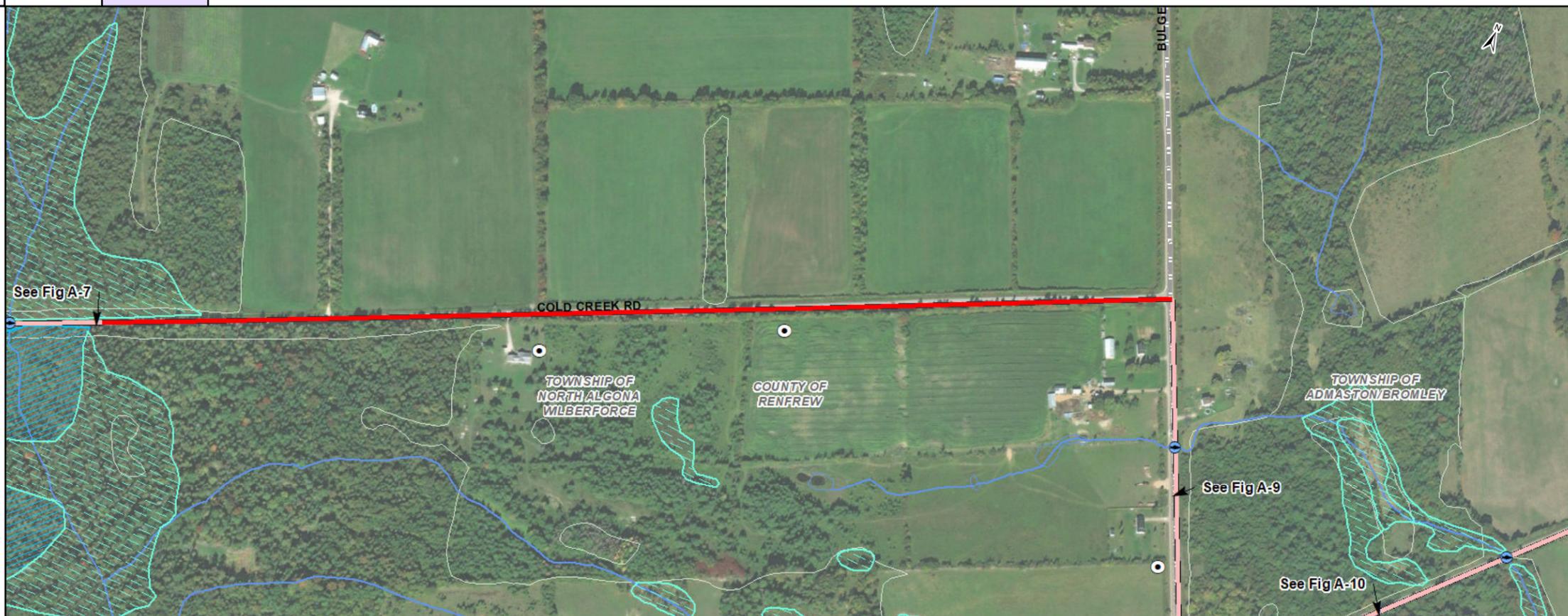
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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI					
	WETLAND WATERCOURSE ANSI		Wetland			
	VEGETATION		Wooded Area	Wooded Area	Wooded Area	
	WATER WELL WITHIN 50 m			Water Well	Water Well	
	LINEAR FEATURES		Driveways & Roads	Driveways & Roads	Driveways & Roads	
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE					
	SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat			

- Legend
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 - Water Well (MOECC)
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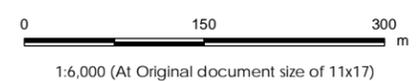
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Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8	Note 8	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)				
	PIPELINE CROSSING METHODS		Note 1		
	VEGETATION RESTRICTIONS		Note 5	Note 5	Note 5
	PERMITTING REQUIREMENTS				
	MONITORING			Note 6 & 7	Note 6 & 7
	SPECIES AT RISK (SAR) HABITAT		Note 12		
	POTENTIALLY CONTAMINATED SITES				
	SEED MIX				

- Notes
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Project Location: 160951306
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

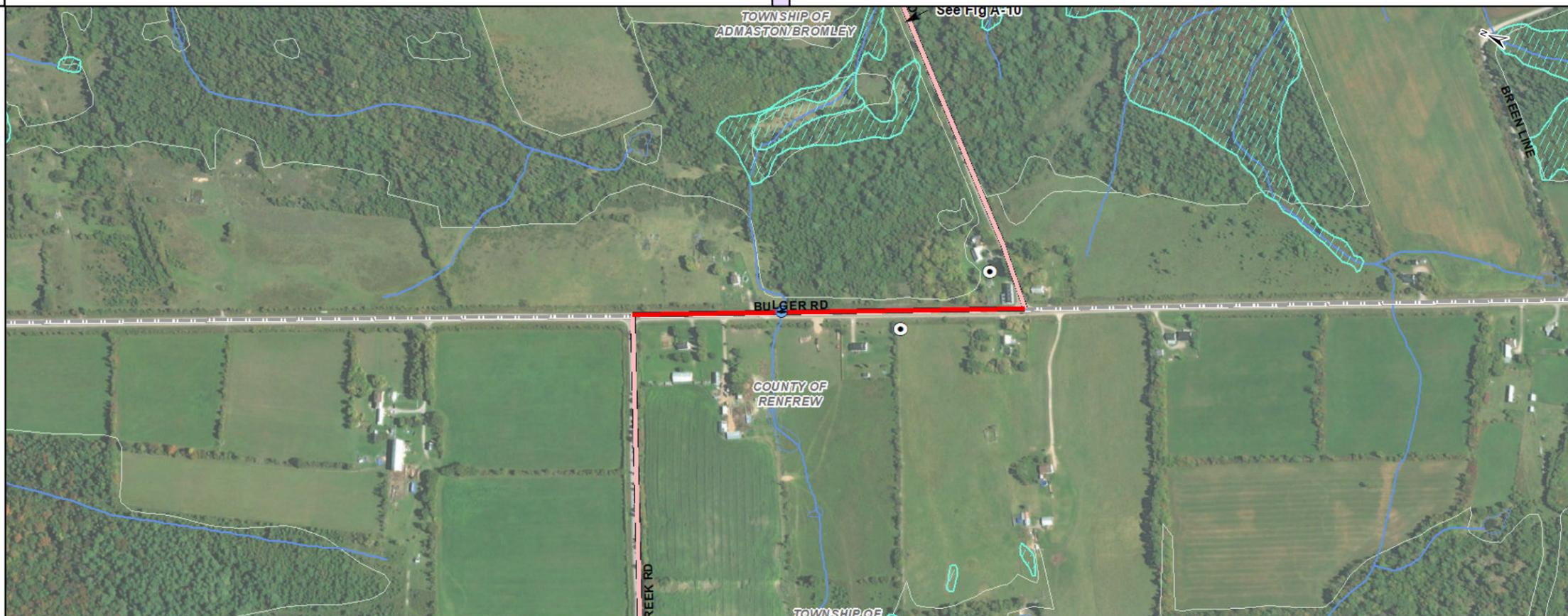
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 A-8
 Title
 Environmental Alignment
 Sheets - Map 8

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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI	
	WETLAND WATERCOURSE ANSI	Watercourse
	VEGETATION	Wooded Area
	WATER WELL WITHIN 50 m	Wells Present
	LINEAR FEATURES	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE	
	SPECIES AT RISK (SAR) HABITAT	Pot SAR Habitat

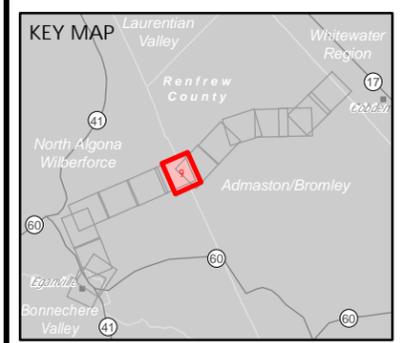
Construction Mitigation Notes:
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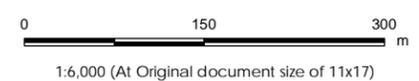
Legend

- Preliminary Preferred Route (Segment Evaluated)
- Preliminary Preferred Route (Segment not Evaluated on this page)
- Base / Environmental Features
- Water Well (MOECC)
- Watercourse Crossing
- Watercourse
- Waterbody
- Unevaluated Wetland (per OWES)
- Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS	
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)	
	PIPELINE CROSSING METHODS	Note 1
	VEGETATION RESTRICTIONS	Note 5
	PERMITTING REQUIREMENTS	
	MONITORING	Note 6 & 7
	SPECIES AT RISK (SAR) HABITAT	Note 12
	POTENTIALLY CONTAMINATED SITES	
	SEED MIX	

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 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-9
 Title
 Environmental Alignment
 Sheets - Map 9

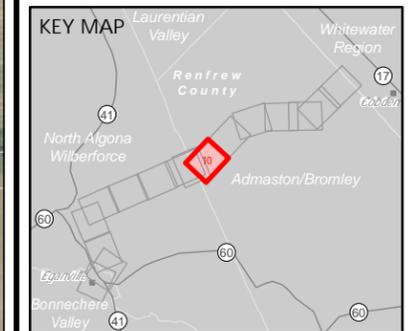
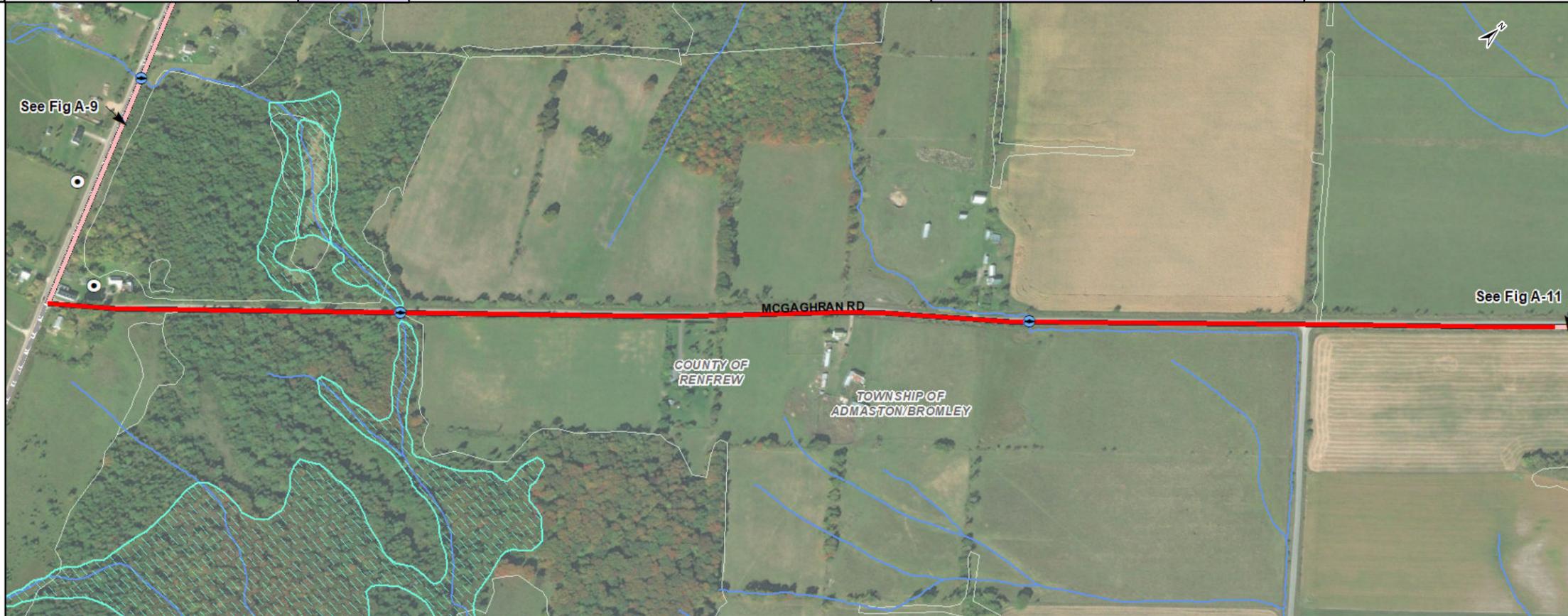
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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI				
	WETLAND WATERCOURSE ANSI		Wetland	Watercourse	Watercourse
	VEGETATION		Wooded Area		Wooded Area
	WATER WELL WITHIN 50 m	Water Well			
	LINEAR FEATURES	Driveways & Roads		Driveways & Roads	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE				
	SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat		Pot SAR Habitat

- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
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 - Waterbody
 - Unevaluated Wetland (per OWES)
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Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 8	Note 8	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)			
	PIPELINE CROSSING METHODS	Note 1	Note 1	
	VEGETATION RESTRICTIONS	Note 5		Note 5
	PERMITTING REQUIREMENTS			
	MONITORING	Note 6 & 7		
	SPECIES AT RISK (SAR) HABITAT	Note 12	Note 12	
	POTENTIALLY CONTAMINATED SITES			
	SEED MIX			

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Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

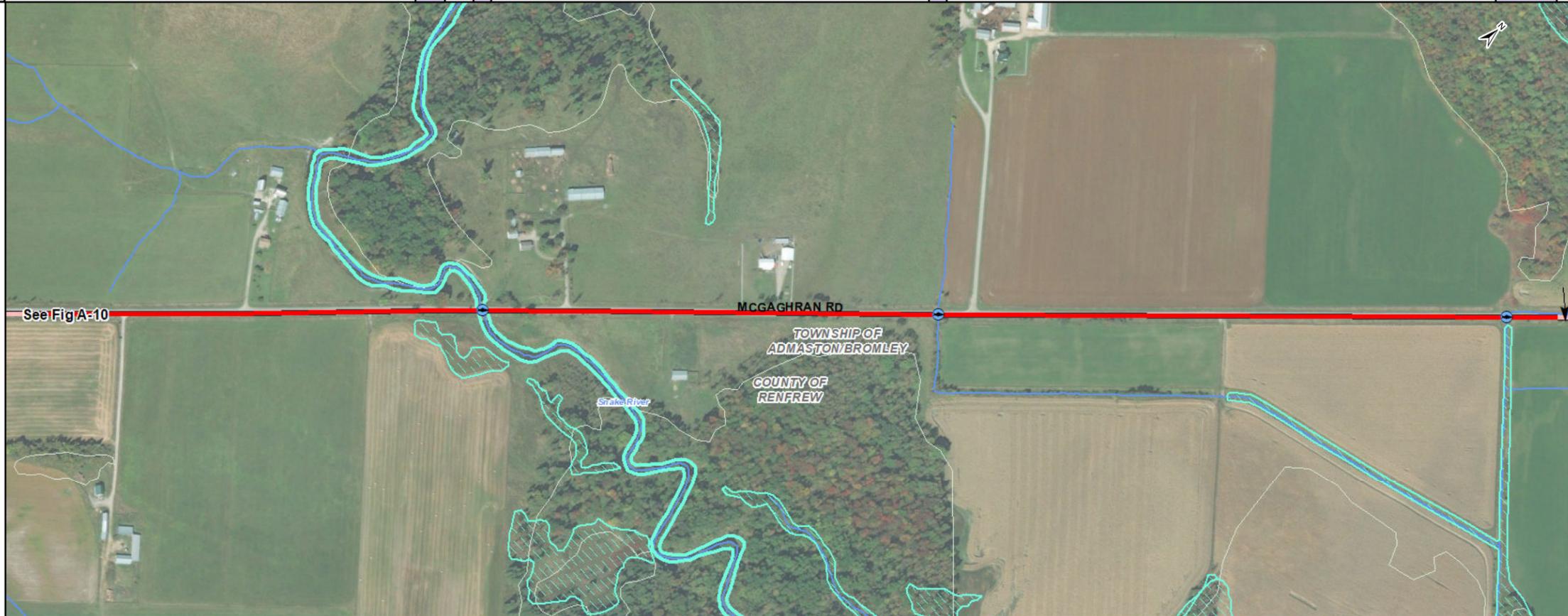
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 Title
 Environmental Alignment
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 Revised: 2022-11-21 By: bakaur

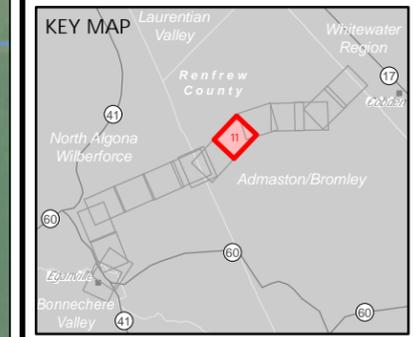
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI				
	WETLAND WATERCOURSE ANSI		Wetland	Waterbody	Watercourse
	VEGETATION				
	WATER WELL WITHIN 50 m				
	LINEAR FEATURES		Driveways & Roads		Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE				
	SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat	Pot SAR Habitat	Pot SAR Habitat

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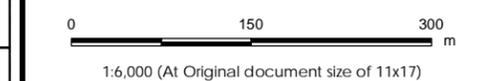


- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Watercourse
 - Aggregate Site (Active)
 - Cool Water, Thermal Regime
 - Waterbody
 - Unevaluated Wetland (per OWES)
 - Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8		Note 8	
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)			Note 11		
	PIPELINE CROSSING METHODS		Note 1		Note 1	Note 1
	VEGETATION RESTRICTIONS					
	PERMITTING REQUIREMENTS					
	MONITORING					
	SPECIES AT RISK (SAR) HABITAT		Note 12	Note 12	Note 12	Note Note 12 12
	POTENTIALLY CONTAMINATED SITES					
	SEED MIX					

- Notes
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 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
ENBRIDGE GAS DISTRIBUTION INC.
EGANVILLE COMMUNITY EXPANSION

Figure No.
A-11

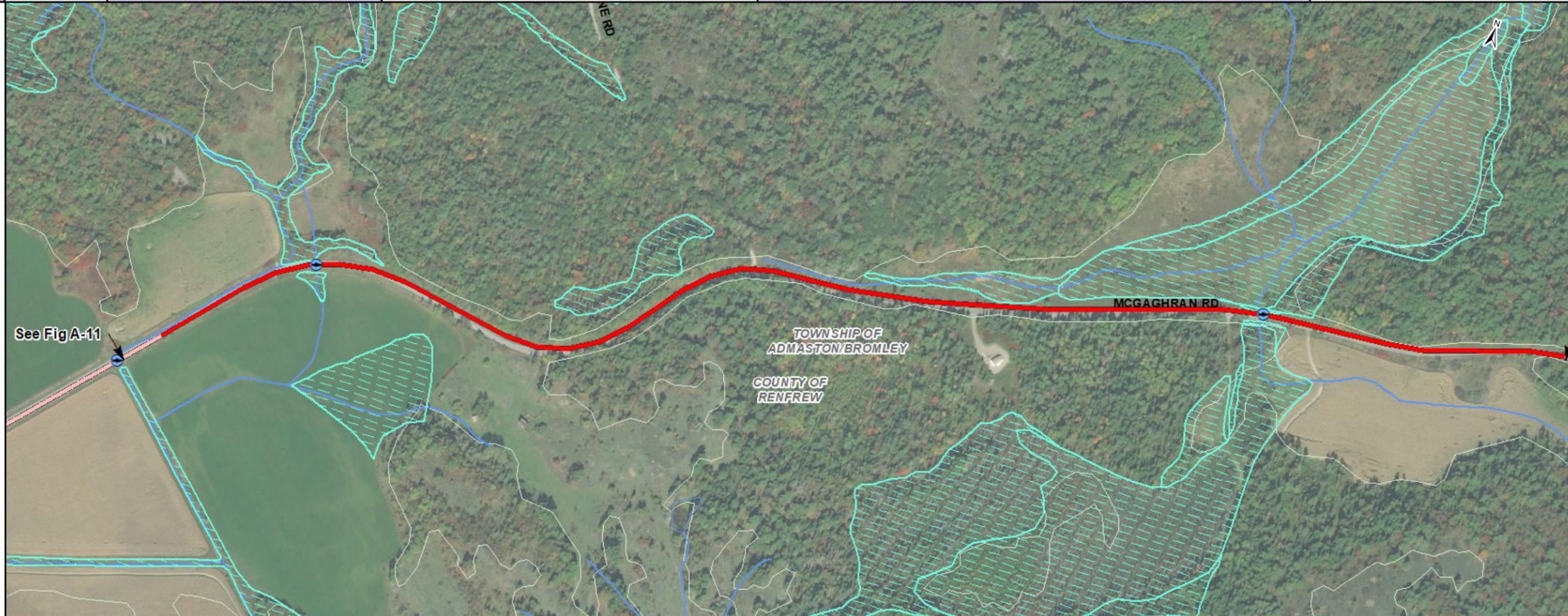
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 Revised: 2022-11-21 By: Bakaur

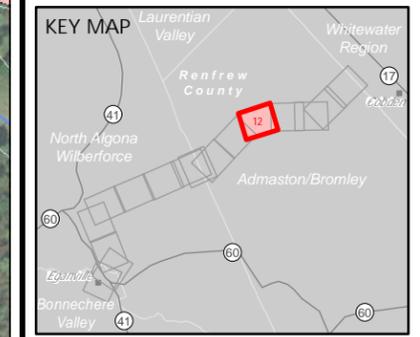
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI			
	WETLAND WATERCOURSE ANSI	Watercourse	Wetland	Wetland
	VEGETATION			Wooded Area
	WATER WELL WITHIN 50 m			
	LINEAR FEATURES		Driveways & Roads	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE			
	SPECIES AT RISK (SAR) HABITAT		Pot SAR Habitat	Pot SAR Habitat

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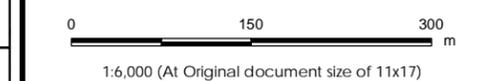


- Legend
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 - - - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Watercourse
 - Cool Water, Thermal Regime
 - Waterbody
 - Unevaluated Wetland (per OWES)
 - Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)			
	PIPELINE CROSSING METHODS	Note 1		Note 1
	VEGETATION RESTRICTIONS			Note 5
	PERMITTING REQUIREMENTS			
	MONITORING			
	SPECIES AT RISK (SAR) HABITAT	Note 12		Note 12
	POTENTIALLY CONTAMINATED SITES			
	SEED MIX			

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Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-12

Title
 Environmental Alignment
 Sheets - Map 12

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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI					Wetland			Wetland	Waterbody
	WETLAND WATERCOURSE ANSI					Wetland			Wetland	Waterbody
	VEGETATION	Wooded Area				Wooded Area			Wooded Area	
	WATER WELL WITHIN 50 m					Water Well				
	LINEAR FEATURES	Driveways & Roads		Natural Gas Line	Driveways & Roads			Driveways & Roads		
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE									
	SPECIES AT RISK (SAR) HABITAT					Pot SAR Habitat			Pot SAR Habitat	

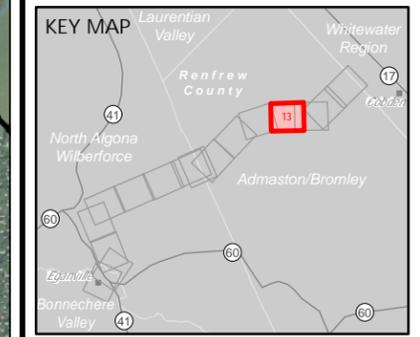
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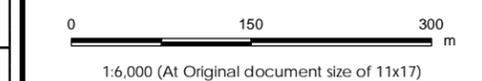
Legend

- Preliminary Preferred Route (Segment Evaluated)
- Preliminary Preferred Route (Segment not Evaluated on this page)
- Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Natural Gas Pipeline
 - Watercourse
 - Aggregate Site (Active)
 - Cool Water, Thermal Regime
 - Waterbody
 - Unevaluated Wetland (per OWES)
 - Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 8	Note 4 & 8	Note 8	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)				Note 11
	PIPELINE CROSSING METHODS			Note 1	Note 1
	VEGETATION RESTRICTIONS	Note 5	Note 5	Note 5	Note 5
	PERMITTING REQUIREMENTS				
	MONITORING			Note 6 & 7	Note 6 & 7
	SPECIES AT RISK (SAR) HABITAT			Note 12	Note 12
	POTENTIALLY CONTAMINATED SITES				
	SEED MIX				

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 EGANVILLE COMMUNITY EXPANSION

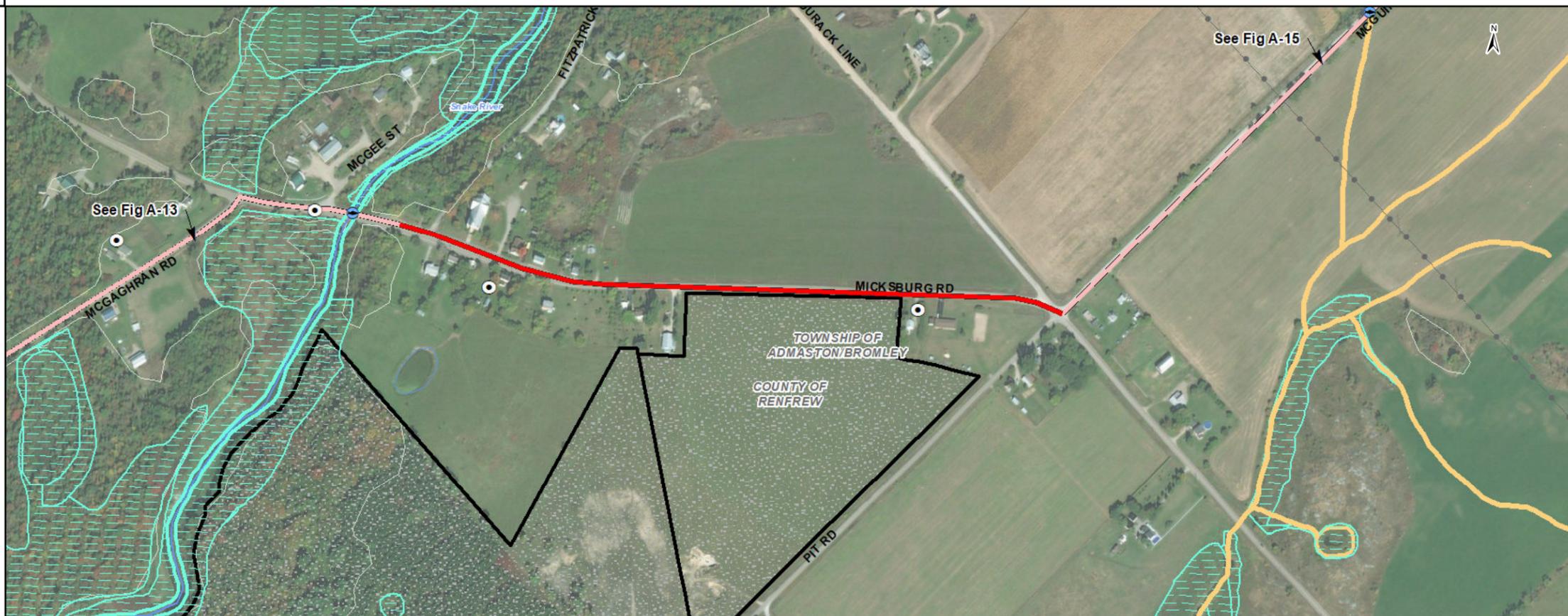
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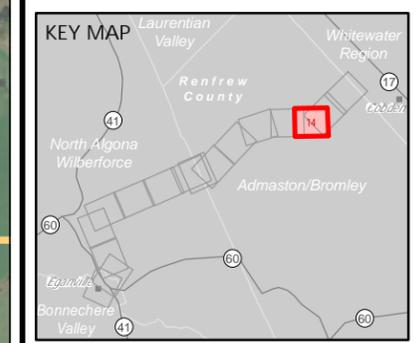
Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI			
	WETLAND WATERCOURSE ANSI			
	VEGETATION			
	WATER WELL WITHIN 50 m		Water Well	Water Well
	LINEAR FEATURES		Driveways & Roads	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE			Active Aggregate Site
	SPECIES AT RISK (SAR) HABITAT			

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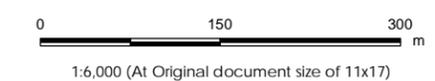


- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Landfills (MOECC)
 - Hydro Line
 - Natural Gas Pipeline
 - Watercourse
 - Aggregate Site (Active)
 - Cool Water, Thermal Regime
 - Warm Water, Thermal Regime
 - Waterbody
 - Unevaluated Wetland (per OWES)
 - Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8	Note 3	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)				
	PIPELINE CROSSING METHODS				
	VEGETATION RESTRICTIONS				
	PERMITTING REQUIREMENTS				
	MONITORING		Note 6 & 7		Note 6 & 7
	SPECIES AT RISK (SAR) HABITAT				
	POTENTIALLY CONTAMINATED SITES				
	SEED MIX				

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 Technical Review by SE on 2022-07-14

Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-14

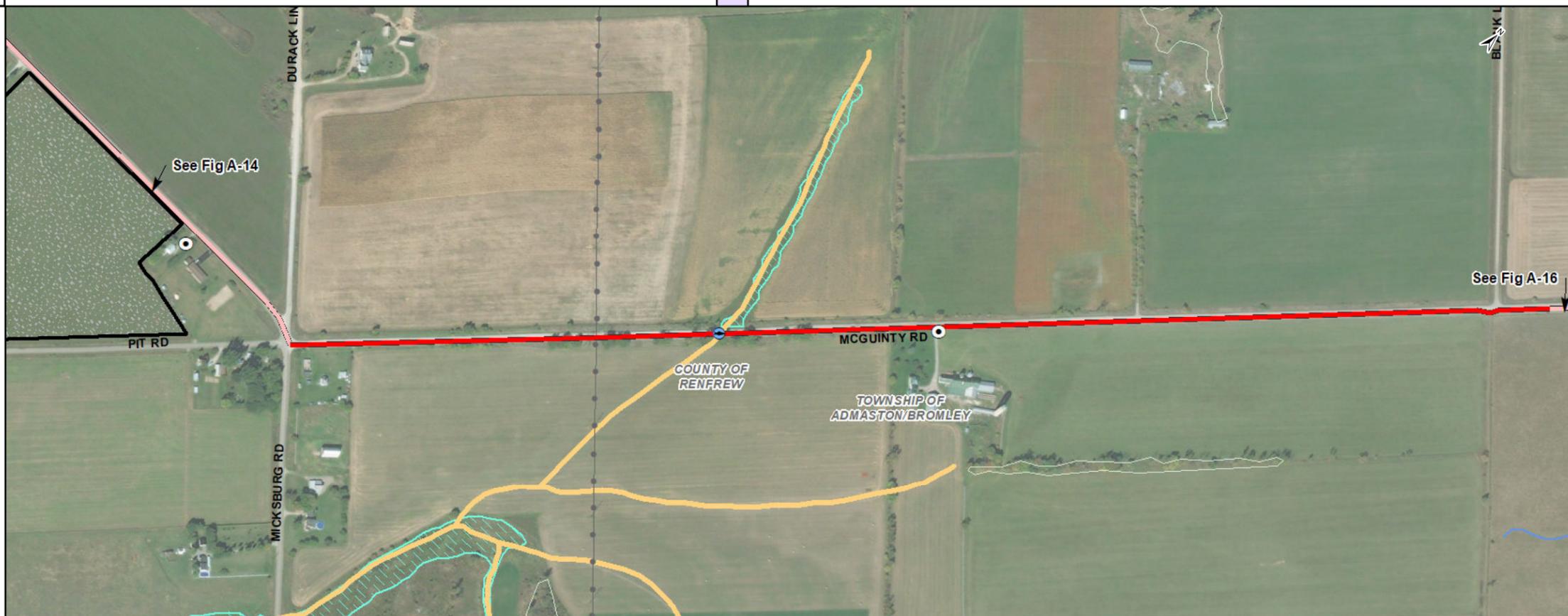
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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI	
	WETLAND WATERCOURSE ANSI	Watercourse → Wetland
	VEGETATION	
	WATER WELL WITHIN 50 m	Water Well
	LINEAR FEATURES	Driveways & Roads Hydro Line Driveways & Roads Driveways & Roads Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE	
	SPECIES AT RISK (SAR) HABITAT	Pot SAR Habitat

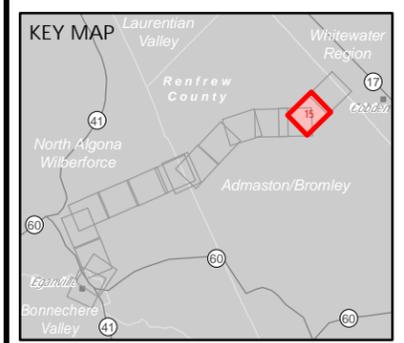
Construction Mitigation Notes:
 Note 1: HDD construction method. Refer to Section 5.1.1 of the ER.
 Note 2: Crossing permit from Hydro One Networks Inc. (HONI) needed.
 Note 3: Aggregate quarry - Refer to Table 5.1 of the ER.
 Note 4: Natural gas pipeline - Refer to Section 4.5.4 and Table 5.1 of the ER.
 Note 5: No clearing activities during the migratory breeding bird restricted activity period (April 1 - August 31) without preconstruction nesting surveys. Refer to Section 4.4.2.4 of the ER.
 Note 6: Groundwater wells present - Refer to Section 4.3.3 and 7.1.2 of the ER.
 Note 7: Water well monitoring program recommended. Refer to Section 7.1.2 of the ER.
 Note 8: Linear facility - Refer to Table 5.1 of the ER.
 Note 9: Maintain emergency egress. Refer to Table 5.1 of the ER.
 Note 10: Warm water watercourse crossing - In-water work permitted from July 16 to March 14 (restricted from March 15 to July 15, inclusive).
 Note 11: Cool water watercourse crossing - the warm-water timing restriction applies to the cool-water habitat for this project.
 Note 12: Overall Benefit Permit under the Endangered Species Act, 2007 from the MNRF may be required if the species, or protected habitat, are impacted by project activities

Acronyms List:
 ER: Environmental Report (Stantec 2022)
 MNRF: Ministry of Natural Resources and Forestry



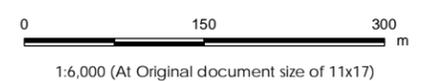
Legend

- Preliminary Preferred Route (Segment Evaluated)
- Preliminary Preferred Route (Segment not Evaluated on this page)
- Base / Environmental Features
- Water Well (MOECC)
- Watercourse Crossing
- Hydro Line
- Watercourse
- Aggregate Site (Active)
- Cool Water, Thermal Regime
- Warm Water, Thermal Regime
- Waterbody
- Unevaluated Wetland (per OWES)
- Wooded Area



Construction Mitigation	CONSTRUCTION REQUIREMENTS	Note 8	Note 2 & 8	Note 8	Note 8	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)			Note 10		
	PIPELINE CROSSING METHODS			Note 1		
	VEGETATION RESTRICTIONS					
	PERMITTING REQUIREMENTS					
	MONITORING			Note 6 & 7		
	SPECIES AT RISK (SAR) HABITAT			Note 12		
	POTENTIALLY CONTAMINATED SITES					
	SEED MIX					

- Notes
- Coordinate System: NAD 1983 UTM Zone 17N
 - Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2022.
 - Orthoimagery: © 2022 Microsoft Corporation © 2022 Maxar © CNES (2022) Distribution Airbus DS.
 - MOECC Water well locations are approximate and have been positioned based on published UTM coordinates © Queen's Printer for Ontario, 2022.



Project Location: 160951306
 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
 ENBRIDGE GAS DISTRIBUTION INC.
 EGANVILLE COMMUNITY EXPANSION

Figure No.
 A-15

Title
 Environmental Alignment
 Sheets - Map 15

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 Revised: 2022-11-21 By: bakaur

Resources	CONSERVATION AUTHORITY REGULATED AREA / ANSI			
	WETLAND WATERCOURSE ANSI	Watercourse	Watercourse	Watercourse
	VEGETATION			Water Well
	WATER WELL WITHIN 50 m			
	LINEAR FEATURES		Driveways & Roads	Driveways & Roads
	ENVIRONMENTALLY SENSITIVE AREA / ACTIVE AGGREGATE SITE			
	SPECIES AT RISK (SAR) HABITAT	Pot SAR Habitat	Pot SAR Habitat	Pot SAR Habitat

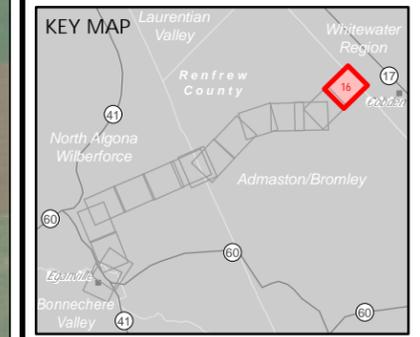
Construction Mitigation Notes:
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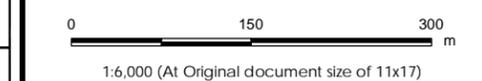


Construction Mitigation	CONSTRUCTION REQUIREMENTS		Note 8	Note 8
	FISHERIES TIMING RESTRICTIONS (CONSTRUCT BETWEEN)		Note 11	Note 11
	PIPELINE CROSSING METHODS	Note 1		
	VEGETATION RESTRICTIONS			
	PERMITTING REQUIREMENTS			
	MONITORING		Note 6 & 7	
	SPECIES AT RISK (SAR) HABITAT	Note 12	Note 12	Note 12
	POTENTIALLY CONTAMINATED SITES			
	SEED MIX			

- Legend
- Preliminary Preferred Route (Segment Evaluated)
 - - - Preliminary Preferred Route (Segment not Evaluated on this page)
 - Base / Environmental Features
 - Water Well (MOECC)
 - Watercourse Crossing
 - Watercourse
 - Cool Water, Thermal Regime
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 County of Renfrew Prepared by BK on 2022-11-21
 Technical Review by SE on 2022-07-14

Client/Project
ENBRIDGE GAS DISTRIBUTION INC.
EGANVILLE COMMUNITY EXPANSION

Figure No.
A-16

Title
**Environmental Alignment
 Sheets - Map 16**

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 Revised: 2022-11-21 By: Bakaur