MARATHON TRANSFORMER STATION EXPANSION

CLASS ENVIRONMENTAL ASSESSMENT

DRAFT ENVIRONMENTAL STUDY REPORT

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CLASS ENVIRONMENTAL ASSESSMENT

DRAFT ENVIRONMENTAL STUDY REPORT

March 2018

Report Number: 590-CLEA-18--1

Hydro One Networks Inc.
Environmental Services
483 Bay Street, North Tower, 12th Floor
Toronto, ON, M5G 2P5

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EXECUTIVE SUMMARY

Hydro One Networks Inc. (Hydro One) has prepared this draft Environmental Study Report (ESR) for the proposed expansion of the existing Marathon Transformer Station (TS), located in the Town of Marathon. The expansion of this TS is referred to as the Marathon Transformer Station Expansion project (herein referred to as "the proposed Project"). The proposed Project is required to support the proposed new East-West Tie transmission line. The proposed undertaking would involve the installation of a new relay building and new electrical equipment, as well as the reconfiguration of existing electrical components. To accommodate this work, the existing Marathon TS would have to be expanded by approximately five hectares (ha) onto adjacent Crown Land. Hydro One would seek to acquire this land from the Ministry of Natural Resources and Forestry (MNRF).

The proposed Project is subject to the Class Environmental Assessment for Minor Transmission Facilities (Class EA), (Hydro One, 2016), an approved planning process under the *Environmental Assessment Act* (EA Act). The proposed work will also be carried out according to the requirements set out in the Class EA for Resource Stewardship and Facility Development Projects (MNR Class EA), (MNR, 2002). This draft ESR has been prepared in compliance with the requirements of the EA Act and describes the Class EA process that has been undertaken for the proposed Project.

At the onset of the proposed Project, a study area was defined based on the technical specifications and system requirements for the proposed new East-West Tie line. The Class EA process for the proposed Project included an assessment of the environmental features within the study area. Resources were identified from literature reviews, reports (e.g., NextBridge Infrastructure's Stage 1 archaeological assessment) and technical memos commissioned by Hydro One, databases, mapping, consultation and/or field surveys.

Since early 2017, Hydro One has conducted comprehensive consultation regarding the proposed Project with municipal, provincial and federal government officials and agencies, First Nations and Métis communities, potentially affected and interest persons, and interest groups. This involved project notification as well as issues identification and resolution. The consultation process included the development of a project website, a Public Information

Centre (PIC) in the Town of Marathon to provide interested parties with an opportunity to learn more about the project and discuss any questions or concerns with the Hydro One project team, and meetings with key stakeholders.

Potential environmental effects resulting from the proposed Project have been identified and avoidance and/or mitigation measures have been proposed accordingly. No residual environmental effects were identified.

This draft ESR is being made available for public review and comment for 30 calendar days, from March 9, 2018 until 4:00 p.m. on April 9, 2018 at the following location:

Town of Marathon Municipal Office
4 Hemlo Drive
Marathon, ON
Tel: 807-229-1340

The draft ESR is also available on the project website at:

https://www.hydroone.com/Projects/MarathonTS

Comments or questions can be submitted to:

Yu San Ong
Environmental Planner
Hydro One Networks Inc.
483 Bay Street, North Tower, 12th Floor
Toronto, ON M5G 2P5

Community.Relations@HydroOne.com
1-877-345-6799

Comments received from municipal, provincial and federal government officials and agencies, First Nations and Métis communities, potentially affected and interest persons, and interest groups during this period will be addressed and documented in the final ESR as required by the Class EA process.

Hydro One will respond to and make best efforts to resolve issues raised by concerned parties during the public review period. If no concerns are expressed, Hydro One will finalize the ESR and file it with the Ministry of the Environment and Climate Change (MOECC). The proposed Project would then be considered acceptable and may proceed as outlined in the ESR.

The EA Act has provisions that allow interested parties to ask for a higher level of assessment for a Class EA project if they feel that outstanding issues have not been adequately addressed by Hydro One. This is referred to as a Part II Order request. Such requests must be addressed in writing to the Minister of the Environment and Climate Change, as well as the Director of the Environmental Assessment and Permissions Branch, and received no later than 4:00 p.m. on April 9, 2018 at the following addresses:

Minister of the Environment and Climate Change
77 Wellesley Street West
11th Floor, Ferguson Block
Toronto, ON M7A 2T5
Email: Minister.MOECC@ontario.ca

Director, Environmental Assessment and Permissions Branch
Ministry of the Environment and Climate Change
135 St. Clair West, 1st Floor
Toronto, ON M4V 1P5
Email: MOECCpermissions@ontario.ca

Please note that a duplicate copy of a Part II Order request must also be sent to Hydro One at the above noted address.

The proposed Project would be implemented in full compliance with the requirements of the Class EA process as outlined in this draft ESR, incorporating input obtained throughout the planning process including the consultation program. Hydro One would obtain the necessary environmental approvals and permits required for the proposed Project.

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TABLE OF CONTENTS

LIST OF APPENDICES

Appendix B: Environmental Features in the Study Area – Baseline Data

Appendix B1: Human Settlements – Town of Marathon Official Plan Maps

Appendix B2: Climate Normal Data

Appendix B3: Baseline Natural Heritage Surveys

LIST OF FIGURES

LIST OF TABLES

LIST OF ACRONYMS & ABBREVIATIONS

ABBO	Atlas of Breeding Birds of Ontario
AMO	Atlas of the Mammals of Ontario
ANSI	Area of Natural and Scientific Interest
BCI	Bat Conservation International, Inc.
CAO	Chief Administrative Officer
Class EA	Class Environmental Assessment for Minor Transmission Facilities, 2016
CN Rail	Canadian National Railway
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
COSSARO	Committee on the Status of Species at Risk in Ontario
CP Rail	Canadian Pacific Railway
EA	Environmental Assessment
EA Act	*Environmental Assessment Act*
EASR	Environmental Activity and Sector Registry
ECCC	Environment and Climate Change Canada
ELC	Ecological Land Classification
ESA, 2007	*Endangered Species Act, 2007*
ESC	Erosion and Sediment Control
ESR	Environmental Study Report
FIPPA	*Freedom of Information and Privacy Protection Act*
GPS	Global Positioning System
Hydro One	Hydro One Networks Inc.
IESO	Independent Electricity System Operator
LIO	Land Information Ontario
MBCA	*Migratory Birds Convention Act, 1994*
MMAH	Ministry of Municipal Affairs and Housing
MNDM	Ministry of Northern Development Mines
MNRF	Ministry of Natural Resources and Forestry

MNR Class EA	Class Environmental Assessment for Ministry of Natural Resources Resource Stewardship and Facility Development Projects, 2002
MOECC	Ministry of the Environment and Climate Change
MTCS	Ministry of Tourism, Culture and Sport
NAPS	National Air Pollution Surveillance
NFMC	Nawiinginokiima Forest Management Corporation
NHIC	Natural Heritage Information Centre
OHWM	Ordinary High Water Mark
OPP	Ontario Provincial Police
O. Reg.	Ontario Regulation
ORAA	Ontario Reptiles and Amphibian Atlas
OWES	Ontario Wetland Evaluation System
PIC	Public Information Centre
PPS	Provincial Policy Statement, 2014
Proposed Project	Marathon Transformer Station Expansion
PTTW	Permit to Take Water
PSW	Provincially Significant Wetlands
SAR	Species at Risk
SARA	*Species at Risk Act*
SWH	Significant Wildlife Habitat
SVC	Static VAR Compensator
TS	Transformer Station
VAR	Volt Ampere Reactive
WMO	World Meteorological Organization

1 Introduction

Hydro One Networks Inc. (Hydro One) is proposing to expand the existing Marathon Transformer Station (TS) to accommodate the proposed new East-West Tie transmission line. The project would involve the installation of a new relay building, new electrical equipment such as circuit breakers, disconnect switches, and shunt reactors, and the reconfiguration of existing electrical components. To accommodate the required work, the existing station would have to be expanded by approximately five hectares (ha) onto adjacent Crown Land. Hydro One would seek to acquire this land from the Ministry of Natural Resources and Forestry (MNRF). The undertaking is referred to as the proposed Marathon Transformer Station Expansion project (herein referred to as "the proposed Project"). The location of the proposed Project is shown in Figure 1-1.

A Class Environmental Assessment (EA) is being carried out to assess the potential environmental effects of the proposed Project. The proposed Project is subject to the Class EA for Minor Transmission Facilities (Hydro One, 2016), an approved planning process under the Ontario *Environmental Assessment Act* (EA Act). The Class EA was developed as a streamlined process to ensure that minor transmission projects that have a predictable range of effects are planned and carried out in an environmentally acceptable manner. The proposed Project is also subject to the requirements set out in the Class EA for Resource Stewardship and Facility Development Projects (MNR, 2002).

This draft ESR has been prepared in accordance with the requirements of the EA Act. The requirements of both Class EAs will be met through coordinated efforts between Hydro One and the MNRF. Further details regarding the coordination process can be found in section 1.4.2.

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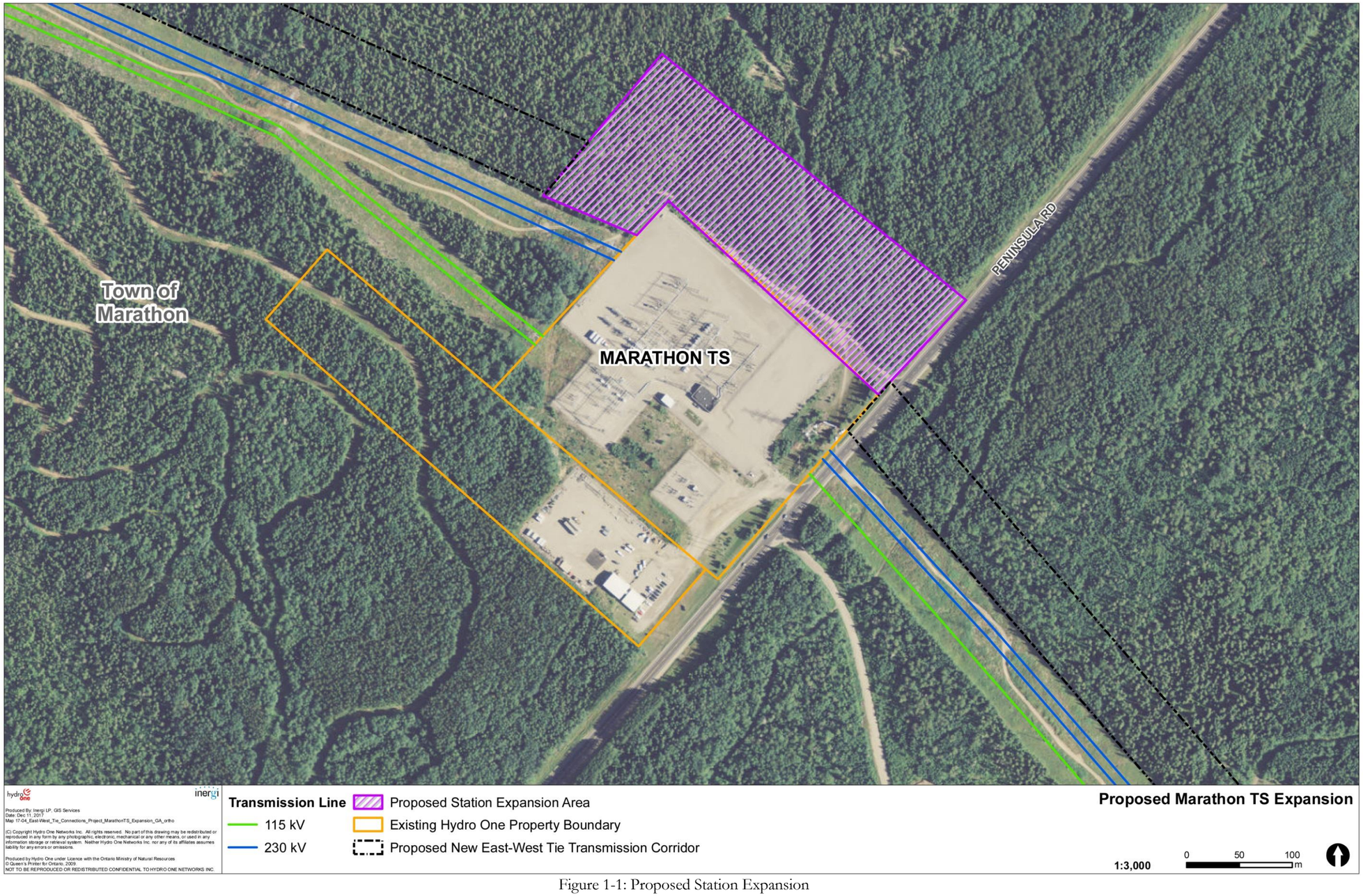

Figure 1-1: Proposed Station Expansion

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1.1 Need for the Undertaking

Hydro One is mandated to connect and accommodate the proposed new East-West Tie transmission line. Specifically, the existing Marathon TS needs to be expanded by approximately five ha in order to accommodate the necessary installation of new equipment to connect the proposed new transmission line to the electricity grid via Marathon TS.

The Independent Electricity System Operator (IESO) identified the need for the proposed new East-West Tie Expansion project, and the Minister of Energy included it as a priority project in the 2010 Long-Term Energy Plan. The need is described as follows:

"The purpose of this project is to provide a long-term, reliable electricity supply to Northwest Ontario to enable forecast demand growth and changes to the supply mix in the region.

The East-West Tie Expansion project consists of a new 230 kV transmission line roughly paralleling the existing East-West Tie Line between Wawa and Thunder Bay. The new line will increase the electricity transfer capability into Northwest Ontario from 175 MW to 650 MW, and will improve the flexibility and efficiency of the Northwest electricity system." (IESO, 2017).

1.2 Description of the Undertaking

The proposed Project would involve reconfiguration of 230 kilovolt (kV) buses and diameters, installation of new 230 kV circuit breakers and disconnect switches and connection of the circuits and installation of two new 230 kV shunt reactors. The existing 230 kV circuits inside Marathon TS would be re-terminated and the last structure of the new East-West Tie 230 kV circuits (outside of Marathon TS) would be connected to structures inside the station. A new relay building would also be installed. In the future, when required, the land to be acquired from the MNRF would provide the land provision to install a static volt ampere reactive (VAR) compensator (SVC), as well as to undertake station sustainment work. To accommodate the station expansion, the access trail to Shack Lake, a commonly used recreational trail among local residents, would be permanently relocated. The relocated access trail would be approximately 5 metres (m) in width, requiring approximately 10 m of

tree clearing to facilitate the relocation.The conceptual layout map for the TS and expansion area is shown in Figure 1-2.

Detailed design of the proposed Project would be completed following submission of the final ESR, as discussed in section 6.1. Upon the successful completion of the approval process, construction could begin as early as mid-2018 and be completed by December 2020.

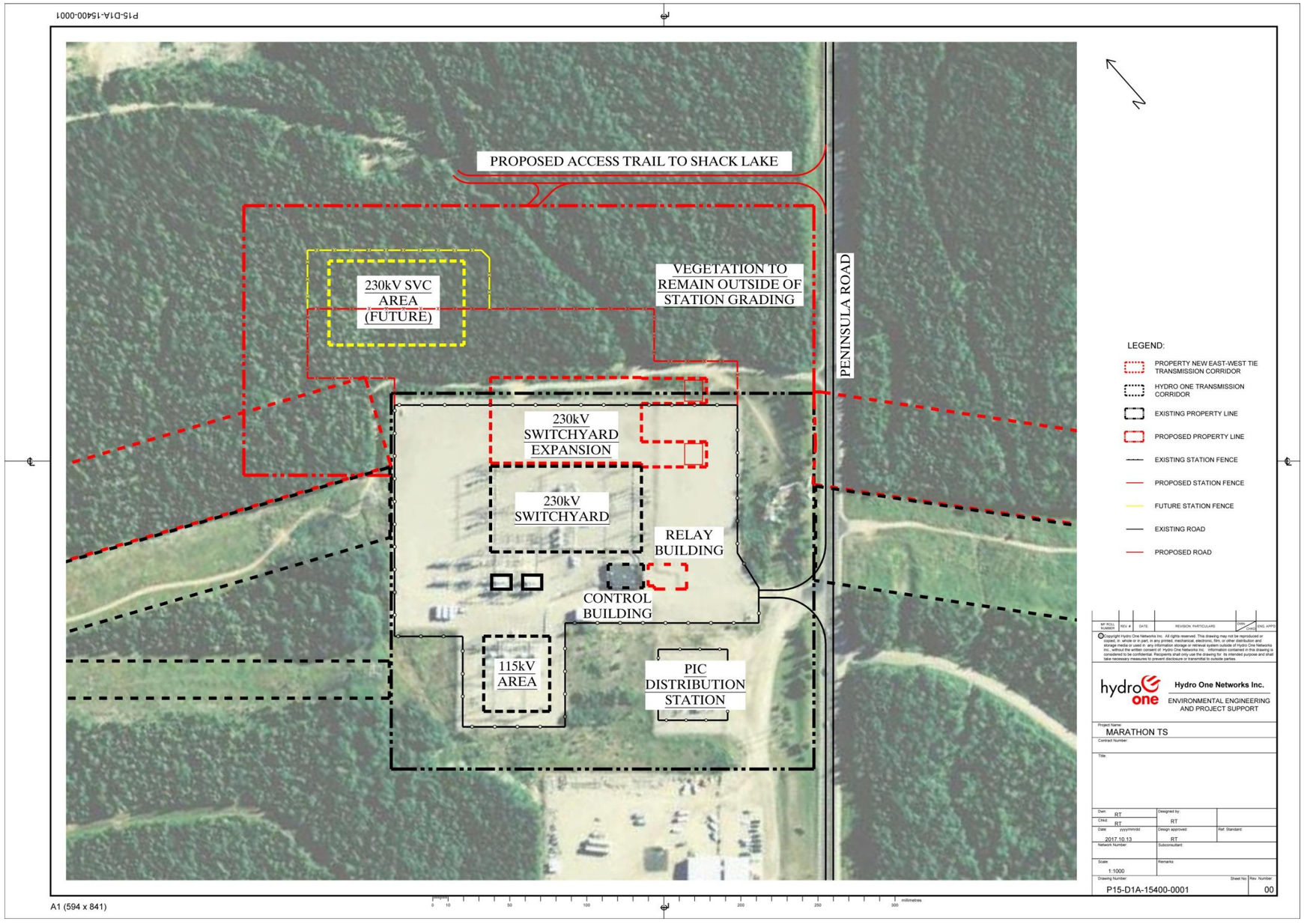

Figure 1-2: Conceptual Layout Map

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1.3 Alternatives to the Undertaking

The EA Act and the Class EA process require identification and evaluation of alternatives to the undertaking. Alternative methods of carrying out the undertaking are distinct from alternatives to the undertaking. Alternatives to the undertaking are functionally different approaches to address the need for the undertaking. These alternatives must be reasonable from a technical, economic and environmental perspective.

The following alternatives to the undertaking were considered in the development of the proposed Project:

- Alternative 1: Do Nothing
- Alternative 2: Expand the existing transformer station

Alternative 1: Do Nothing

The "Do Nothing" alternative would not meet the need for the undertaking and is therefore not a feasible alternative to be carried forward for further consideration in this draft ESR.

Alternative 2: Expand Existing Transformer Station

The second alternative considered the expansion of the existing Marathon TS. This alternative is consistent with the Ontario Provincial Policy Statement (PPS) (Ministry of Municipal Affairs and Housing [MMAH], 2014), which states that:

"Before consideration is given to developing new infrastructure and public service facilities:

- The use of existing infrastructure and public service facilities should be optimized; and,
- Opportunities for adaptive re-use should be considered, wherever feasible."

Alternative 2, to expand the existing transformer station, has been selected as the preferred alternative to the undertaking. This alternative and rationale for selecting the northern area for expansion is further discussed in section 5.

1.4 Approval Process and Regulatory Requirements

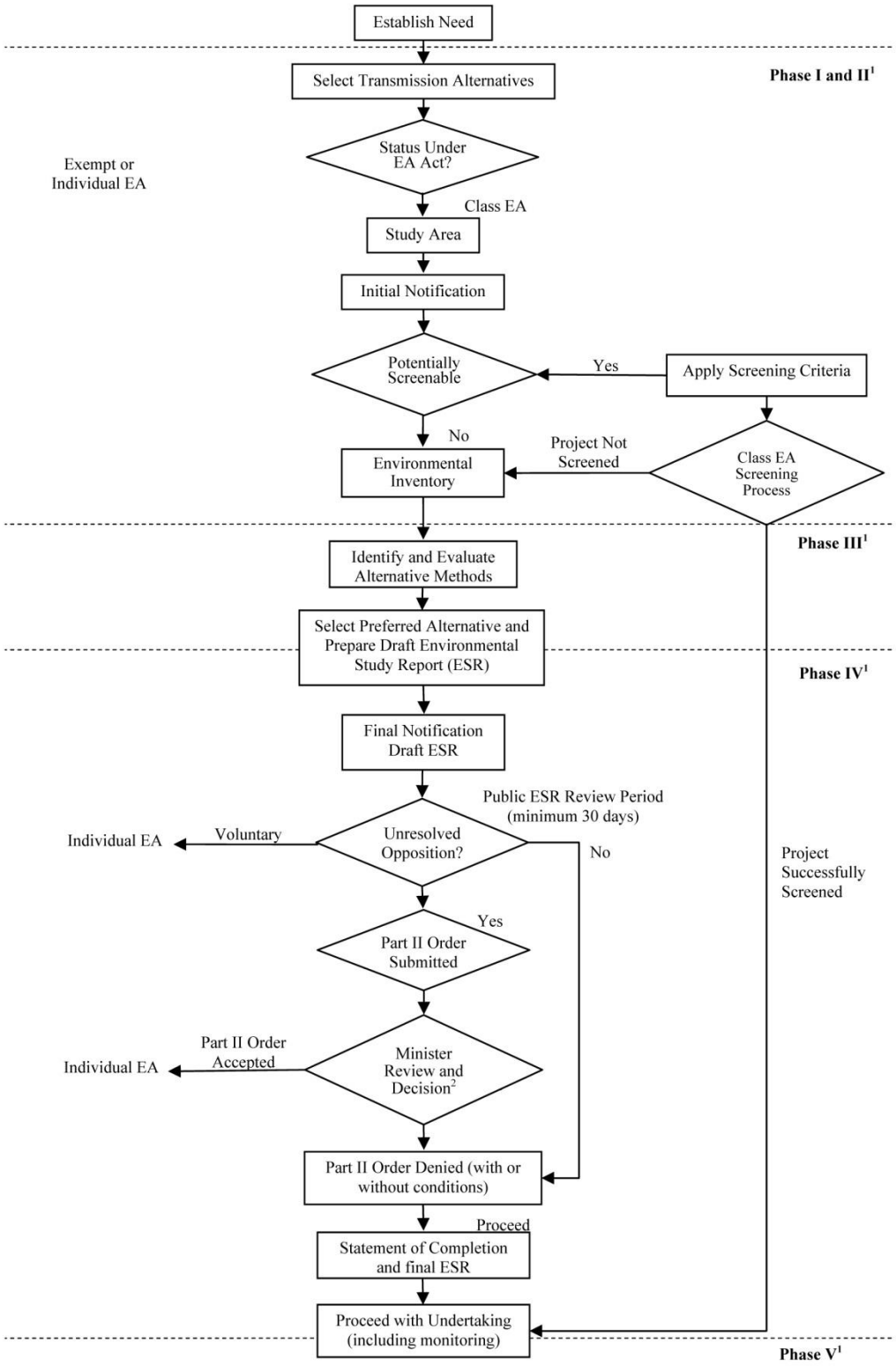
This section outlines the approval process as required under the Class EA process as well as other regulatory requirements.

1.4.1 *Class Environmental Assessment Process*

This draft ESR has been prepared in accordance with the Class EA (Hydro One, 2016), an approved planning process under the EA Act. The Class EA defines an environmental planning process which meets the requirements of the EA Act, including:

- Establish need (section 1.1);
- Identify and evaluate alternatives to the undertaking (section 1.3);
- Define study area (section 2);
- Issue initial notification (section 3.1);
- Conduct environmental inventory (section 4);
- Identify and evaluate alternative methods (section 5);
- Select preferred alternative method (section 5) and prepare draft ESR;
- Issue final notification and commence associated draft ESR Review Period (section 3.8);
- File Statement of Completion with the Ministry of the Environment and Climate Change (MOECC) and proceed with the undertaking (section 3.8); and,
- Conduct consultation throughout the process (section 3).

The Class EA process is illustrated on Figure 1-3.



[1] Phases of Generic Project Planning Process as described in the MOECC Code of Practice, s. 6.1.7 (MOECC, 2014)
[2] Refers to the Minister of the Environment

Figure 1-3: Class Environmental Assessment Process

The Class EA process is equivalent to the Environmental Screening Process described in sections A.5.1 and A.5.2 of the Guide to Environmental Assessment Requirements for Electricity Projects (MOECC, 2011). The Class EA applies to Category B transmission projects that are not associated with Category B generation projects.

Transmission facilities covered under the Class EA include:

a. The planning, design and construction of minor transmission lines and/or transformer stations (including telecommunication stations), and the subsequent operation, maintenance and retirement of these facilities.

   Minor transmission lines include all transmission line projects involving greater than 2 km of line, which:

   i. Are capable of operating at a nominal voltage equal to 115 kV.

   ii. Are capable of operating at a nominal voltage level higher than 115 kV and less than 500 kV, and which involve less than 50 km of line.

b. The planning, design and construction required to modify or upgrade a transmission line, and the subsequent operation, maintenance and retirement of the revised line where:

   i. The work requires replacement of poles or towers and/or changes in the RoW for existing transmission lines capable of operating at a nominal voltage of 115 kV or higher and no more than 500 kV.

   ii. The modified or upgraded existing lines would operate at a nominal voltage of equal to or greater than 115 kV, and equal or less than 500 kV (nominal voltage).

c. The planning, design and construction required to modify or expand a transformer station, and the subsequent operation, maintenance and retirement of the modified station where:

   i. Acquisition of additional property is required; and,

ii. The modified stations are capable of operating at a nominal voltage level of equal to or greater than 115 kV and equal to or less than 500 kV (where a station has more than one voltage level, the highest level is used in defining the station's nominal operating voltage.).

Upon completion of the draft ESR, Hydro One will issue a final notification to municipal, provincial and federal government officials and agencies, First Nations and Métis communities, potentially affected and interest persons, and interest groups. This draft ESR will be made available for public review and comment for a period of 30 calendar days, from March 9, 2018 until 4:00 p.m. on April 9, 2018. Hydro One will respond to and make best efforts to resolve issues raised by concerned parties during the review period. These issues will be documented and the resolutions summarized in the final ESR.

Should there be substantive issues or potential effects raised by a concerned party regarding the proposed Project that cannot be resolved by the proponent, the Class EA process allows that concerned parties request that the level of assessment for the project to be elevated to an Individual EA (referred to as a Part II Order request). See section 3.8 for more information on Part II Order requests.

Once the review period of the draft ESR is complete, comments received during the review period will be incorporated into the report and the ESR would be finalized. A copy of the final ESR would be placed on the Hydro One website, and sent to the Environmental Assessment and Permissions Branch and the appropriate Regional EA Coordinator at the MOECC for filing. The Statement of Completion would be submitted to the MOECC along with the final ESR. The proposed Project would then be considered acceptable and could proceed as outlined in the final ESR.

1.4.2 *Coordination with Other Class Environmental Assessments*

In addition to the Class EA for Minor Transmission Facilities, the proposed Project is also subject to the MNR Class EA, due to the disposition of Crown land. Through consultation with the MNRF, the proposed Project falls into Category 'B'; projects that may have low to medium potential for significant new negative environmental effects and/or public concern.

In accordance with the MNR Class EA, the project evaluation and consultation process for Category B Projects include the following:

- Scoping – the proposed project is assessed by the MNRF and the necessary project evaluation and consultation steps are identified;
- Public Notice – a notice is issued by Hydro One to notify persons and agencies with known or potential interest in the proposed project;
- Project Evaluation – the proposed project is evaluated by the MNRF staff and Hydro One, considering the input received from the public notice;
- Notice of Completion – a notice of completion is issued by notifying all persons and agencies that commented or asked to be notified of the decision on the project; and,
- Statement of Completion, Implement Project – once the proposed project meets all requirements, the Statement of Completion will be prepared by the MNRF manager and the project may proceed.

In order to meet the necessary requirements, Hydro One coordinated the respective processes with the MNRF during the Class EA process through several e-mail correspondences, meetings and discussions, ensuring effective and efficient consultation. For further details on correspondence with the MNRF, refer to section 3.4.3 and Appendix A-3.

1.4.3 *Other Permits, Licenses and Approvals*

In addition to meeting EA Act requirements, there are a number of necessary permits, licenses and approvals that may be required under municipal, federal and provincial legislations. These are presented in Table 1-1. Hydro One will contact the appropriate regulatory agencies to ensure that the proposed Project meets applicable requirements and that approvals are obtained as necessary prior to construction.

This project does not trigger a federal environmental assessment under the *Canadian Environmental Assessment Act, 2012*.

The proposed Project would discharge noise and processed stormwater to the surrounding environment. Hydro One is undertaking studies to ensure noise emissions would continue to be within provincial guidelines at surrounding receptors and the facility would be registered

under Ontario's Environmental and Sector Registry (EASR). Hydro One would also obtain an Environmental Compliance Approval (ECA) for operation of industrial sewage works (stormwater processing). The facility would discharge clean water, meeting Ontario Provincial Water Quality Objectives to the ground surface adjacent to the station. Neither noise emissions nor drainage discharge would be in quantities or qualities expected to cause an adverse effect. The expanded Marathon TS would operate in a very similar manner as the existing TS.

As stated in section 62.(1) of the *Planning Act* (R.S.O. 1990, c. P.13), "An undertaking of Hydro One Inc. that has been approved under the EA Act is not subject to this *Act*." Hydro One has been working with the Town of Marathon during the Class EA process and will continue to consult with the Town regarding the final layout and design of the station and property, and the effects of the construction on local traffic and community.

Table 1-1: Potentially Required Permits, Licenses and Approvals

PERMIT, LICENSE, OR APPROVAL	PRIMARY AGENCY	DESCRIPTION
Section 92 Approval	Ontario Energy Board (OEB)	Required for the proposed new East-West Tie transmission line and all associated work, including the proposed expansion of Marathon TS.
Drainage Environmental Compliance Approval	MOECC	Required for: - The addition of the two new shunt reactors; and, - The modification of site drainage.
Air and Noise Environmental Approval	MOECC	Required for the addition of the two shunt reactors.
Entrance Permit	Town of Marathon	Permit may be required for entrances off Peninsula Road.
Building Permit	Town of Marathon	Required for construction of a new relay building over 10 square metres (m^2).
Ministry of Natural Resources and Forestry Land Use Permit	MNRF	Required for: - Geotechnical and topographic surveys on Crown land; and, - Access trail to Shack Lake relocation on Crown land.
Forest Resource License	MNRF	Required for removal of timber on Crown Land.

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2 Study Area

A project study area is delineated to encompass the area of potential project effects. At the beginning of the study, the Hydro One project team collaborated to identify the technical specifications and system requirements for the proposed TS expansion, and the criteria and guidelines that were established to assist in identifying a study area.

The study area for the proposed Project was delineated to areas within 500 m from the existing TS. The study area encompasses the proposed expansion area located in the Town of Marathon, adjacent to the existing Marathon TS on the north side. Figure 2-1 shows the location of the study area for the proposed Project.

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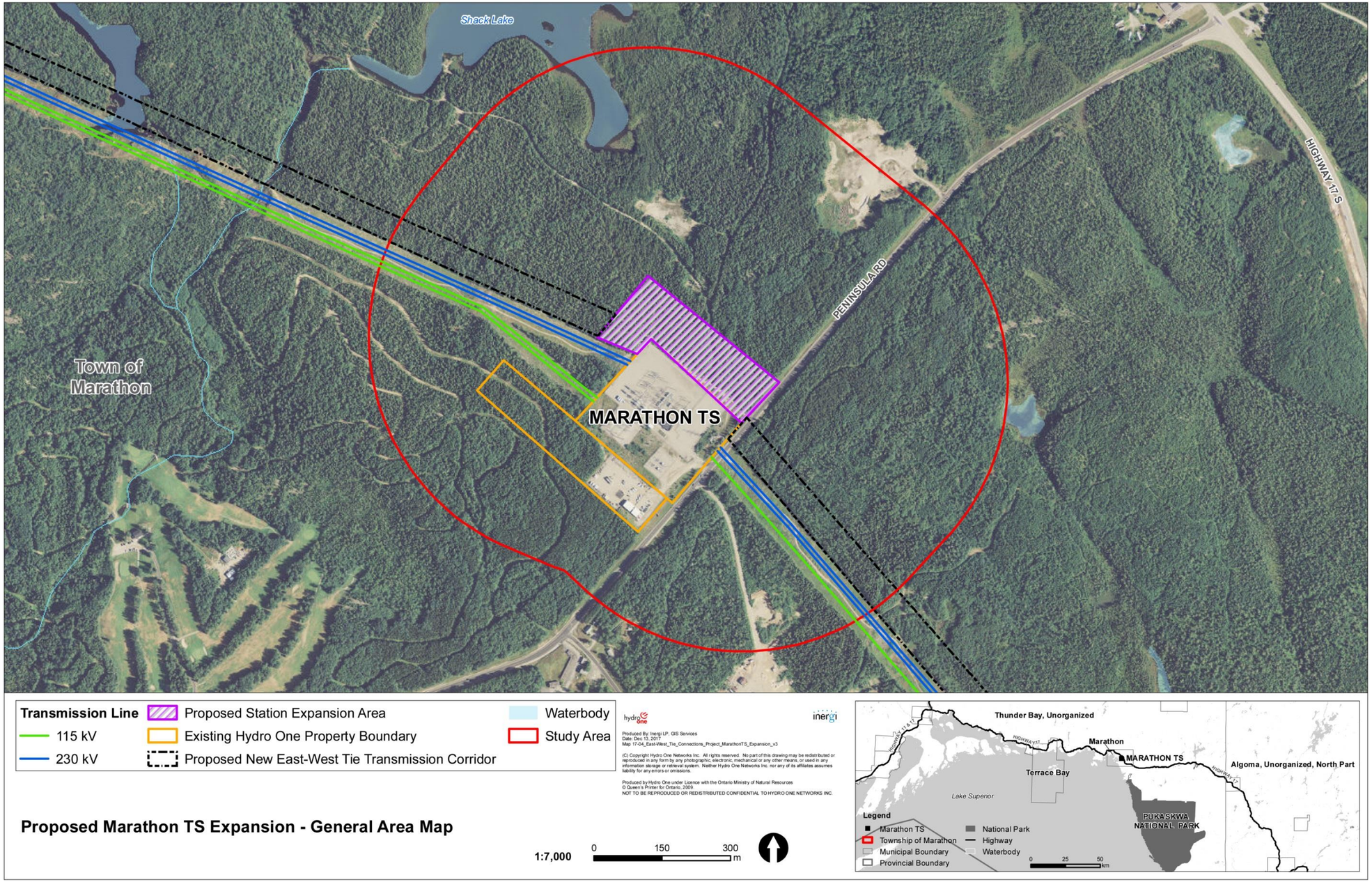

Figure 2-1: General Area Map

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3 Consultation

Consultation is an important component of the Class EA process, as it provides those who may be interested in, or potentially affected by the proposed Project with timely and adequate information and opportunities to participate in the planning process. Consultation also allows the proponent to gain information and knowledge related to social, cultural, economic and environmental considerations of direct relevance to the proposed Project, as well as the means to inform and explain the approach to and value of the proposed Project.

The key principles that guide Hydro One's approach to communication and consultation include the following:

- Early, ongoing and timely communications and consultation;
- Clear project information;
- An open, transparent, and flexible consultation process;
- Respectful dialogue with First Nations and Métis communities, community officials, and project stakeholders;
- No surprise approach for elected officials, to ensure they have copies of all public facing materials before they are distributed to their constituents;
- The provision of ongoing opportunities for interested parties to learn about and provide meaningful input on the proposed undertaking; and,
- Full and fair considerations and documentation by the proponent of all input received during the consultation process and incorporation of such input, where feasible, into project decision-making.

The consultation process incorporated methods to encourage two-way communication involving: First Nations and Métis communities as identified by the Crown; federal, provincial and municipal government officials and agencies; local residents and property owners; potentially affected and interested persons; and interest groups. The project contact list is provided in Appendix A-1.

Consultation methods were selected to promote a comprehensive, transparent and sufficient consultation approach. Consultation methods for this project included:

- Letters, flyers, and newspaper ads to announce and provide updates on the project;
- A Public Information Centre (PIC), which provided the opportunity for interested parties to learn more about the project and discuss any questions or concerns with the Hydro One project team, and complete comment forms;
- Discussions with local elected officials;
- Establishment of a project contact list, through which interested parties can receive project updates via e-mail and/or postal mail;
- A dedicated Community Relations representative; and,
- Establishment and maintenance of a project website (https://www.hydroone.com/Projects/MarathonTS), which allows for the sharing of project information and updates.

The results of the consultation program are summarized in the sections below. Input was considered by the project team and incorporated into the project planning where appropriate. Copies of consultation materials such as notices, notification letters, PIC display panels and correspondence are included in Appendix A. A copy of the project correspondence log is provided in Appendix A-3.

3.1 Initial Notification

Notifications were sent to First Nations and Métis communities as directed by the Crown, government officials and agencies, potentially affected and interested persons, community associations, and nearby residents.

The Notice of Commencement presented information regarding the need for the proposed Project and associated regulatory processes, and requested questions and comments to be provided to Hydro One. Each ministry, department and agency was asked to provide comments with respect to potential concerns relating to their respective policies, mandates and/or jurisdictions. A copy of the Notice of Commencement can be found in Appendix A-2.

Hydro One issued the Notice of Commencement to nineteen First Nations and Métis communities in March 2017. Refer to Appendix A-1 for the contact lists and section 3.2 for a summary of the e-mails with the communities. The notices were sent via e-mail to fourteen different government organizations and officials at the Town of Marathon in May 2017. The notices were also issued to property owners within 800 m of the proposed expansion site and interest groups by Canada Post in May 2017.

3.2 First Nations and Métis Communities

The consultation requirements of the Class EA process apply to First Nations and Métis communities. In adherence to the Crown's duty to consult and accommodate under section 35 of the *Constitution Act* (1982), Hydro One contacted the Ministry of Energy in the early project planning process on September 28, 2016 to confirm consultation requirements with regard to potentially interested First Nations and Métis communities, and provided a description of the characteristics and location of the proposed Project. On January 26, 2017, the Ministry of Energy, on behalf of the Crown, confirmed the duty to consult and advised that the following communities be included in the Project consultation process (see Appendix A-3 for the delegation letters from the Crown):

- Ojibways of Pic River First Nation;
- Pays Plat First Nation;
- Pic Mobert First Nation;
- Métis Nation of Ontario (MNO);
- MNO Greenstone Métis Council;
- MNO Superior North Shore Métis Council; and,
- MNO Thunder Bay Métis Council.

In addition, the following interest-based communities were identified to be included in the project consultation process:

- Animbiigoo Zaagi'igan Anishinaabek;
- Biinjitiwaabik Zaaging Anishinaabek;
- Bingwi Neyaashi Anishinaabek;

- Fort William First Nation;
- Ginoogaming First Nation;
- Long Lake No. 58 First Nation;
- Michipicoten First Nation;
- Missanabie Cree First Nation;
- Ojibways of Batchewana;
- Ojibways of Garden River;
- Red Rock Indian Band; and,
- Red Sky Métis Independent Nation.

The communities listed above were notified of the proposed Project and, throughout the consultation process, regularly informed of project updates and given opportunities to provide input. This was achieved by way of direct mailings of notifications, provision of information and updates about the proposed Project, and offers by the Hydro One project team to meet with staff from the community to present the proposed Project, and listen to the community's issues and/or concerns.

3.2.1 *Animbiigoo Zaagi'igan Anishinaabek*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Animbiigoo Zaagi'igan Anishinaabek on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Animbiigoo Zaagi'igan Anishinaabek could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. Chief Nelson acknowledged the notification letter, and stated that she had reviewed the Project proposal, and no issues or concerns were raised. She also asked Hydro One to consider any employment opportunities for community members (e-mail correspondence dated March 31, 2017).

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no further comments received after the PIC.

3.2.2 *Bingwi Neyaashi Anishinaabek*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Bingwi Neyaashi Anishinaabek on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Bingwi Neyaashi Anishinaabek could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.3 *Biinjitiwaabik Zaaging Anishinaabek*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Biinjitiwaabik Zaaging Anishinaabek on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Biinjitiwaabik Zaaging Anishinaabek could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.4 *Fort William First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Fort William First Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Fort William First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.5 *Ginoogaming First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Ginoogaming First Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Ginoogaming First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.6 *Long Lake No. 58 First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Long Lake No. 58 First Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in

order to ensure that Long Lake No. 58 First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.7 *Métis Nation of Ontario*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the Métis Nation of Ontario (James Wager, Manager) on March 15 and 16, 2017, respectively. This preliminary engagement activity took place early in the project planning process in order to ensure that the Métis Nation of Ontario could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer; however, Hydro One would be available to come and share the same information with their community. Hydro One made a follow-up call on March 23, 2017, to ensure that the notification had been received and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On April 13, 2017, an email was received by the coordinator of First Nations and Métis Relations of Hydro One from Bonnie Bartlett, who is an Energy Policy Analyst with MNO, requesting project information. Hydro One forwarded the initial notification letter that was sent to James Wager. Ms. Bartlett also requested to include her to the contact list for MNO in addition to Mr. Wager for future notifications.

On July 11 and 12, 2017, via e-mail to Mr. Wager (cc'd Ms. Bartlett) and registered mail respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no further comments received after the PIC.

3.2.8 *Michipicoten First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Michipicoten First Nation (Chief Joe Buckell) on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Michipicoten First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, and left a message to ensure that the notification had been received and to welcome any questions or concerns.

The initial notification letter was re-sent to the new Chief of the community (Chief Patricia Tangie) on May 31, 2017.

Chief Tangie followed up to this letter by requesting that Hydro One present the proposed Project to the community. On June 13, 2017, representatives from Hydro One attended the Water Tower Inn, Sault Ste. Marie, and gave a presentation to the community on the proposed Project.

On July 11 and 12, 2017, respectively via e-mail and registered mail, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no further comments received after the PIC.

3.2.9 *Missanabie Cree First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Missanabie Cree First Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Missanabie Cree First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.10 *MNO Greenstone Métis Council*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the MNO Greenstone Métis Council on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that the MNO Greenstone Métis Council could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer; however, Hydro One would be available to come and share the same information with their community. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.11 *MNO Superior North Shore Métis Council*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the MNO Superior North Shore Métis Council on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that the MNO Superior North Shore Métis Council could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer; however, Hydro One would be available to come and share the same information with their community. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.12 *MNO Thunder Bay Métis Council*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the MNO Thunder Bay Métis Council on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that the MNO Thunder Bay Métis Council could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer; however, Hydro One would be available to come and share the same information with their community. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.13 *Ojibways of Batchewana*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the Ojibways of Batchewana on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that the Ojibways of Batchewana could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.14 *Ojibways of Garden River*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the Ojibways of Garden River on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that the Ojibways of Garden River could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns.

On April 4, 2017, the Ojibways of Garden River issued a formal response letter requesting Capacity Funding to review the draft ESR when it becomes available. Hydro One responded on April 12, 2017, stating that they would consider a Capacity Funding and would offer a discussion in regards to this. The community sent a Proposed Capacity Funding proposal to Hydro One via e-mail on April 13, 2017. On May 3, 2017, Hydro One responded with a letter via e-mail. A phone conference was held on May 30, 2017 with the Environmental Planner and Manager of First Nations and Métis Relations at Hydro One and Nolan Cheyenne and Richard Perrault, from Economic Resource and Community Development at the Ojibways of Garden River to discuss and agree on the Proposed Capacity Funding. Hydro One sent a follow-up e-mail on June 1, 2017, to review action items from the conference call. Hydro One will continue to consult and provide project updates with the community throughout the Class EA process.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no further comments received after the PIC.

Hydro One sent an e-mail on September 6, 2017, to inform the community on the planned draft ESR submission date and provided PIC display panels, project website details, and offered a meeting for further discussion.

Hydro One sent a follow-up e-mail on February 27, 2018 to inform the community of the submission of the draft ESR and offered to arrange a meeting/conference call to discuss the proposed Project.

3.2.15 *Ojibways of Pic River First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the Ojibways of Pic River First Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that the Ojibways of Pic River First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer; however, Hydro One would be available to come and share the same information with their community. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.16 *Pays Plat First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Pays Plat First Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Pays Plat First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer; however, Hydro One would be available to come and share the same information with their community. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.17 *Pic Mobert First Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Pic Mobert First Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Pic Mobert First Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer; however, Hydro One would be available to come and share the same information with their community. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall.

An Environmental Technician representing Pic Mobert First Nation attended the PIC on July 25, 2017, and general questions were asked, such as project timeline, Class EA process, and public review period. There were no further comments received after the PIC.

3.2.18 *Red Rock Indian Band*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to Red Rock Indian Band on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that Red Rock Indian Band could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. Hydro One made a follow-up call on March 23, 2017, to ensure that the community received the notification and to welcome any questions or concerns. No questions or concerns were raised regarding the proposed Project.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no comments received after the PIC.

3.2.19 *Red Sky Métis Independent Nation*

Hydro One initiated consultation by sending a project notification letter via e-mail and registered mail to the Red Sky Métis Independent Nation on March 15 and 16, 2017, respectively. This preliminary engagement activity took place in the early project planning process in order to ensure that the Red Sky Métis Independent Nation could provide input at an important stage in project planning. The letter also indicated that they would receive an invitation to the PIC for the upcoming summer. A follow up phone call and e-mail on March 23 and 31, 2017, respectively, were made by the Environmental Planner of Hydro One to inquire if the community had any questions or concerns about the proposed Project.

On April 3, 2017, Dean Whellan, Community Consultant with Red Sky Métis Independent Nation e-mailed Hydro One, stating that no concerns were identified regarding the physical location of the proposed Project. The community would like to be notified if any artifacts or culturally significant items are recovered.

On July 11 and 12, 2017, via e-mail and registered mail, respectively, Hydro One provided an invitation, as well as information on the PIC that would be held in the Marathon Centre Mall. There were no further comments received after the PIC.

3.3 **Federal Government & Agencies**

As part of the consultation plan for the project, the following federal government representatives and agencies were contacted:

- Canadian Environmental Assessment Agency;
- Transport Canada (TC);
- NAV Canada;
- Aboriginal Affairs and Northern Development Canada;
- Environment Canada; and,
- Health Canada - Environmental Assessment Division.

Hydro One initiated consultation by sending Project notification letters on May 12, 2017. This preliminary engagement activity was hosted early in the project planning process in

order to ensure that the federal government and various agencies could provide input at an important stage in project planning. The project notification included an invitation to attend the PIC and the Notice of Commencement. The official invitation to attend the PIC was subsequently issued on July 14, 2017.

Additional details on correspondence with the following federal agencies are presented in the sections below:

- Transport Canada; and,
- NAV Canada.

A summary of the issues and concerns raised by the federal government and various agencies throughout the consultation process is provided in Section 3.7.

3.3.1 *Transport Canada*

Hydro One issued the Notice of Commencement to TC, Environmental Assessment Program Division on May 12, 2017.

TC responded on May 16, 2017, and provided the department contact for future communications. They requested that Hydro One self-assess their project to determine if the proposed Project will interact with a Federal property or waterway, and if the proposed Project will require approval under any Acts governed by TC. To support this determination, they provided website links to facilitate answering the questions. If Hydro One determines that the proposed Project is inapplicable, they directed Hydro One to discontinue communication. If Hydro One determines the proposed Project does impact TC, a new TC contact will be identified for all future correspondences. In addition, they provided a summary of the most common and relevant Acts that they govern.

On August 3, 2017, TC contacted Hydro One via e-mail and requested that they submit a Transport Canada Aeronautical Assessment Form for Obstruction Marking and Lighting. Hydro One submitted the form on August 25, 2017.

On September 6, 2017, TC e-mailed Hydro One in response to the form and requested that additional information be included regarding the proposed Project. Hydro One revised and re-sent the Aeronautical Assessment Form on September 7, 2017.

TC sent Hydro One the assessed and approved Aeronautical Assessment Form on November 24, 2017, as found in Appendix A-3. No further comments or questions were received.

3.3.2 *NAV Canada*

Hydro One issued the Notice of Commencement to NAV Canada, Land Use Division on May 12, 2017.

NAV Canada responded on May 23, 2017, and requested the coordinates, elevation and height of the transformer in order to complete a Land Use submission for the Project.

On July 28, 2017, NAV Canada contacted Hydro One via e-mail with an attached letter regarding the proposal, as found in Appendix A-3. The file number was provided and described that NAV Canada had evaluated the proposal and that there was no objection. The land use evaluation is valid for a period of 12 months.

Hydro One contacted NAV Canada on November 27, 2017, to confirm that a Land Use Evaluation form did not need to be submitted in regards to the proposed Project. NAV Canada responded on November 28, 2017, stating that no further action is required on Hydro One's part. No further comments or questions were received.

3.4 **Provincial Government & Agencies**

As part of the consultation plan for the project, the following provincial government representatives and agencies were contacted:

- Ministry of Energy;
- Ministry of Aboriginal Affairs;
- Ministry of Northern Development and Mines (MNDM);
- Ministry of the Environment and Climate Change (MOECC);

  - Environmental Assessment and Approvals Branch
  - Thunder Bay District Office
- Ministry of Natural Resources and Forestry (MNRF) – Nipigon District Office;
- Ministry of Tourism, Culture and Sport (MTCS) – Heritage Program Unit;
- Ministry of Housing (MH); and,
- Ministry of Municipal Affairs and Housing (MMAH) - Planning Innovation Section Provincial Planning Policy Branch.

Hydro One initiated consultation by sending project notification letters to provincial government agencies on May 12, 2017. This preliminary engagement activity was hosted early in the project planning process in order to ensure that the provincial government and various agencies could provide input at an important stage in project planning. The project notification included an invitation to attend the PIC and the Notice of Commencement. The official invitation to attend the PIC was subsequently issued on July 14, 2017.

Additional details on correspondence with the following provincial agencies can be seen in the sections below:

- Ministry of Energy;
- Ministry of Tourism, Culture and Sport – Heritage Program Unit;
- Ministry of Natural Resources and Forestry – Nipigon District Office;
- Ministry of Northern Development and Mines; and,
- Ministry of the Environment and Climate Change – Thunder Bay District Office.

A summary of the issues and concerns raised by the provincial government and various agencies throughout the consultation process is provided in section 3.7.

3.4.1 *Ministry of Energy*

As previously mentioned in section 3.2, on January 26, 2016, the Ministry of Energy confirmed the list of First Nations and Métis communities in proximity to the proposed Project area. The Ministry of Energy recommended that Hydro One notify these First Nations and Métis communities, provide project information and opportunities for input,

and maintain a record of interactions with the communities. Additionally, the Ministry of Energy requested that they be kept updated on the consultations.

3.4.2 *Ministry of Tourism, Culture and Sport – Heritage Program Unit*

Hydro One issued the Notice of Commencement to MTCS, Heritage Program Unit on May 12, 2017.

MTCS responded on May 19, 2017, and provided comments, requesting that Hydro One complete the MTCS Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscape checklist and that Hydro One screen the project with the MTCS Criteria for Evaluating Archaeological Potential.

On July 27, 2017, Hydro One sent the completed heritage checklist to MTCS and stated that based on NextBridge's Stage 1 Archaeological Report, it indicated that there is no archaeological potential on the Marathon TS expansion area. The completed heritage checklist can be found in Appendix A-3.

On August 23, 2017, MTCS responded, identifying that there were no further comments.

3.4.3 *Ministry of Natural Resources and Forestry – Nipigon District*

Hydro One issued the Notice of Commencement to the MNRF, Nipigon District on May 12, 2017.

MNRF responded on May 18, 2017, inquiring about the notification letter for the non-agency stakeholder mail out. Hydro One responded on May 18, 2017, and provided the MNRF with a project update, which included all mail out dates to First Nations and Métis communities, federal and provincial agencies, municipalities, property owners and interested groups. The correspondence also included the french and english version of the Notice of Commencement newspaper ad and the date it will be published.

Meetings via conference call were held with the MNRF on February 23, June 15 and August 24, 2017 to discuss the proposed Project and provide updates.

Throughout the project planning process, Hydro One has ensured coordination with the MNRF in order to meet the MNRF Class EA requirements, as detailed in section 1.4.2.

Main points of discussion between the MNRF and Hydro One have included the following:

- Coordination of Class EA notifications to MNRF stakeholders:
    - Hydro One kept the MNRF up-to-date on consultation activities with their stakeholders, including correspondence with First Nations and Métis communities;
    - Hydro One and MNRF coordinated consultation notifications for interest groups on MNRF's *Freedom of Information and Protection of Privacy Act* (FIPPA) List;
- Selection of the relocation area for Shack Lake access trail:
    - Hydro One presented the sketch of the relocated access which was provided by the Town of Marathon to the MNRF for comments and suggestions;
    - Hydro One submitted a preliminary conceptual design to the MNRF based on the sketch;
    - Work permit for access relocation was issued by the MNRF on September 29, 2017;
- Field Studies (Species at Risk (SAR), field survey, Woodland Caribou):
    - Hydro One described the field studies planned for the proposed Project in advance;
    - Hydro One forwarded the field survey results to the MNRF for review;
- Woodland Caribou mitigation strategies:
    - MNRF issued a Data Share Agreement for Woodland Caribou to Hydro One in order to compile a thorough mitigation plan for the baseline report;
- Crown Land acquisition:
    - Hydro One has ensured necessary consultation with the MNRF in order to access the expansion lands required for the proposed Project by acquiring a Land Use Permit and other necessary permits.

On January 9, 2018, MNRF recieved the pre-draft ESR for their review from Hydro One to ensure that the requirements of the MNR Class EA were satisfied. MNRF responded on January 25, 2018, and provided comments on the draft ESR. Comments included general updates/corrections as well as requests for further clarification and additional information on areas regarding Woodland Caribou. Hydro One revised the draft ESR to ensure that all comments were addressed.

Communication is ongoing with the MNRF to address other permit requirements, the details of the relocation of Shack Lake access, as well as the real estate transaction of the expansion area.

3.4.4 *Ministry of Northern Development and Mines*

Hydro One issued the Notice of Commencement to the MNDM, Technical Services Unit on May 12, 2017.

MNDM responded on June 7, 2017, identifying that there were no concerns or conflicts associated with MNDM projects. They also stated that no further correspondence is necessary, as they are being kept in the loop by CanACRE and NextBridge regarding the proposed new East-West Tie Transmission Project.

On June 22, 2017, MNDM – Mines and Minerals Division sent Hydro One a response letter to the Notice of Commencement. The letter stated that there were no concerns with respect to mining lands, geology or mineral resource potential, as well as no concerns from the Abandoned Mines Rehabilitation Program. MNDM also identified a mining claim within 1 km of the study area, which will not be affected by the proposed Project (see section 7.5 for more details). There were no further comments or questions received.

3.4.5 *Ministry of the Environment and Climate Change – Thunder Bay District*

Hydro One issued the Notice of Commencement to the MOECC – Thunder Bay District on May 12, 2017.

MOECC responded on May 15, 2017, and requested that Hydro One continue to provide MOECC with relevant project documents and public notices.

On May 18, 2017, an Environmental Planner from Hydro One provided the MOECC EA reviewer, Gillianne Marshall, with a project update; including the dates and which initial notification letters were sent to different stakeholder groups. A Notice of Commencement newspaper ad (french and english) was also attached to the email.

On June 27, 2017, a conference call was held to provide the new EA reviewer, Anneleis Eckert, with the project overview and updates. Main points of discussion included the following:

- Project Overview:
    - Hydro One gave a detailed project description to MOECC, including the proposed East-West Tie Transmission Project and the Class EA process for Marathon TS;
- Project Updates:
    - Hydro One informed the MOECC of the notifications that had been issued and the plans for the PIC on July 25, 2017, in the Town of Marathon.

On January 12, 2018, Hydro One e-mailed MOECC – Thunder Bay District to provide project updates and timelines. MOECC stated that the contact for the regional coordinator had changed. Hydro One updated the contact list and offered to hold a conference call to review the proposed Project. No comments were received.

Hydro One will continue to follow-up with the MOECC – Thunder Bay District regarding updates to the proposed Project.

3.5 **Municipal Government and Agencies**

As part of the consultation plan for the proposed Project, the Mayor, Works & Operation Manager and Chief Administrative Officer (CAO) from the Town of Marathon were contacted.

Pre-consultation with municipal elected officials of the Town of Marathon took place in the early planning process. On March 29, 2017, Hydro One held a conference call with representatives from the Town of Marathon to discuss the proposed Project. Hydro One

provided a slide deck with an overview of the proposed Project, including a general area map, to facilitate the discussion. Refer to Appendix A-3 for the slides presented to the Town of Marathon. The representatives from the Town of Marathon noted that the proposed expansion would cut off the access trail to Shack Lake, and Hydro One clarified that as part of the project, the access trail would be relocated to maintain lake access. Following the discussion, town officials provided a sketch of a potential new site for the relocation of the access trail for consideration. Hydro One then presented this sketch to the MNRF for feedback.

Hydro One initiated formal consultation with municipal government representatives via a Notice of Commencement issued on May 15, 2017.

These representatives were also sent invitations to the PIC via e-mail on July 14, 2017.

The Town's Mayor, Rick Dumas, invited the Hydro One project team to attend the Municipal Matters meeting on July 24, 2017. Hydro One staff attended to provide an overview of the proposed project and answer questions. During the presentation, staff also invited Marathon residents to attend the PIC the following day.

On August, 10, 2017, Hydro One held a conference call with the CAO of the Town of Marathon to follow up on a few items that were discussed during the Municipal Matters meeting, such as size of the existing Marathon TS, future employment opportunities at Hydro One's Marathon Service Center, and some work taking place at Hydro One's Marathon Distribution Station. Hydro One also provided the CAO an update on the PIC. An e-mail was sent to the Mayor of the Town of Marathon the same day to keep him informed.

Hydro One provided the CAO and Works & Operations Manager a project update on February 20, 2018. Hydro One indicated that the design plans were being developed for the Shack Lake access trail relocation, and inquired whether any staff or departments at the Town of Marathon would like to be circulated on the finalized design plans. Hydro One also provided an update on the EA process, indicating the proposed timeline for the draft ESR 30-day Public Review Period and the earliest date for tree removal and construction. The

CAO responded on the same day, February 20, 2018, confirming that the Town of Marathon would like to see the proposed relocated Shack Lake access trail plan..

Hydro One will continue to work with the Town of Marathon throughout the course of the proposed Project.

3.6 Potentially Affected and Interested Persons, Businesses and Interest Groups

Consultation opportunities were provided to potentially affected and interested persons, businesses and interest groups throughout the Class EA process. Property owners within an 800 m radius of the proposed Marathon TS were provided project notifications by means of Canada Post delivery and advertisements on the local radio station and in the newspaper.

In addition, Hydro One encouraged interested persons to sign up for the e-mail project contact list to be notified on project updates.

A table summarizing the key issues and concerns raised by potentially affected and interested persons, businesses, and interest groups throughout the consultation process is presented in Section 3.7. The table includes a summary of efforts to address concerns and mitigate potential effects, as well as commitments made.

3.6.1 *Utilities*

The following utility was included in the contact list due to the proximity of their existing infrastructure to the study area:

- Superior Propane

Superior Propane was notified by e-mail and Canada Post using publicly available contact details on June 12, 2017; however, the e-mail and letter were sent back, as the addresses did not exist. On June 29, 2017, an e-mail was sent to the general customer service e-mail address, however no response was received.

3.6.2 *Potentially Affected and Interested Persons*

Residential, commercial, and industrial property owners, and local residents who may be potentially affected by the proposed Project were contacted, as described in Section 3.1.

Following the PIC invitation, a property owner phoned Hydro One on July 19, 2017, requesting that their contact information be updated. Hydro One forwarded the request to MNRF to update, as the contact was under their FIPPA List.

In addition to the initial notification discussed in Section 3.1, Hydro One held the PIC on July 25, 2017 to welcome any questions, concerns and/or comments from potentially affected and interested persons.

3.6.3 *Community Groups*

As part of the consultation plan for the proposed Project, the following local community groups were contacted:

- Marathon Cross Country Ski and Snowshoe Club

The Marathon Cross Country Ski and Snowshoe Club was notified by e-mail using known contact information or publicly available contact details on May 17, 2017. On July 14, 2017, Hydro One sent the PIC invitation via e-mail and stated that the PIC display panels would be available on the Hydro One website shortly after the event. On August 31, 2017, Marathon Cross Country Ski and Snowshoe Club contacted Hydro One asking that they verify that the proposed expansion is on the opposite side of the station from local ski trails, and would not impact the trails. Hydro One responded on September 5, 2017, confirming that the expansion would not impact the current ski trails. No further comments were received.

- Superior Ridge Runners ATV Club

Superior Ridge Runners ATV Club was notified by e-mail using known contact information or publicly available contact details on May 17, 2017. On July 14, 2017, Hydro One sent the PIC invitation via e-mail and stated that the PIC display panels would be available on the Hydro One website shortly after the event. No response was received.

- Marathon Sno-Kickers Snowmobile Club

Marathon Sno-Kickers Snowmobile Club was notified by Canada Post mail using contact information provided by the Town of Marathon on May 17, 2017. On July 14, 2017, Hydro One sent the PIC invitation via e-mail and stated that the PIC display panels would be available on the Hydro One website shortly after the event. No response was received.

3.6.4 *Public Information Centre*

Hydro One issued invitations to the PIC in early July, 2017. The invitations publicly announced Hydro One's plan to host the PIC on July 25, 2017 to share information about the proposed Project and gather input. It included details of where and when the event was being held, and was issued in both English and French, as found in Appendix A-2.

Invitations were sent out via e-mail and Canada Post mail, to all municipal, provincial and federal government officials and agencies, First Nations and Métis communities, potentially affected and interest persons, and interest groups. In addition, the PIC invitation was published in the *Marathon Mercury* newspaper on July 18, 2017, in conjunction with a radio advertisement that ran three times a day for the week leading up to the PIC on the local station, *CFNO-FM*.

On July 25, 2017, Hydro One hosted a PIC for the proposed Project. The event was held from 4:00 pm to 8:00 pm at the Marathon Centre Mall, located at 2 Hemlo Drive in Marathon. The Marathon Centre Mall is located approximately 2.5 km southwest of the project study area.

The purpose of the PIC was to share information on the proposed Project, the Class EA process, the required relocation of the Shack Lake access trail, next steps in the planning and approvals process, and to gather input from the public. A set of 14 descriptive panels were displayed to allow attendees to obtain information about the proposed Project, and to facilitate one-on-one discussions with the Hydro One project team. The display panels are provided in Appendix A-4.

Ten individuals attended the PIC including local residents, a representative from the *Marathon Mercury* newspaper, recreational users of the Shack Lake access trail and a representative from Pic Mobert First Nation.

Project team representatives including the Hydro One Project Manager, Community Relations Officer and Environmental Planners were on hand to answer questions, hold discussions with participants, and to listen to participants' input. Comment forms were also available to provide attendees with the opportunity to record comments and/or concerns and to provide feedback. A copy of the comment form is provided in Appendix A-4.

In total, two completed comment forms were submitted. The information provided in the feedback indicated that the PIC was helpful in understanding the proposed station expansion, and that there was an adequate opportunity to express comments to Hydro One's project team. No further comments, questions, or concerns were indicated on the feedback form.

Section 3.7 provides a summary of the issues and concerns raised at the PIC and Hydro One's efforts to address concerns or mitigate potential effects.

Key themes identified from the written comments provided from the PIC include the following:

- Contact list:
    - An individual requested that Hydro One notify the Ontario Federation of Snowmobile Clubs (OFSC) to inform them of the trail re-routing. Hydro One added the OFSC to their contact list.
- Access trail to Shack Lake:
    - An individual requested "that a connecting trail be put in to accommodate the ATV's and skidoos as this connection will not be there - or close enough to go across." Hydro One has noted the concerns and is committed to working with local community members and recreational users. Hydro One will ensure that the new station expansion allows for continued safe access to the existing trail system in the area around the station.

3.7 **Summary of Key Issues**

Tables 3-1 to 3-5 provide a summary of the comments and issues raised from the interested parties throughout the consultation process. A complete summary of questions and comments Hydro One received during the Class EA process is provided in sections 3.2 to 3.6 and Appendix A-3.

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3.7.1 *First Nations and Métis Communities Comments and Interests*

Table 3-1: Summary of First Nations and Métis Communities Comments and Issues

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
Class EA Process		
Field Studies	Request to be notified if artifacts or culturally significant items are recovered.	Hydro One has committed to provide updates on any artifacts or culturally significant items that are recovered to the communities.
Employment Opportunities	Request to be informed of any employment opportunities.	Hydro One will keep communities informed of any future employment opportunities for the proposed Project.

3.7.2 *Federal Government and Agencies Comments and Issues*

Table 3-2: Summary of Federal Agencies Comments and Issues

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
Class EA Process		
Aeronautical Assessment	Transport Canada requested Hydro One to self-assess the project to verify whether the: -Project will interact with a federal property -Project will require approval and/or authorization under any Acts administered by Transport Canada	Hydro One provided the Aeronautical Assessment form. TC requested Hydro One to provide additional information, a revised form was submitted.
Land Use Submission	NAV Canada requested Hydro One to complete a land use submission for the project. NAV Canada also requested the coordinates, elevation and height of the transformer for their internal assessment. NAV Canada evaluated the proposed Project, and stated no concerns (Appendix B-3).	Hydro One acknowledged this by requesting that NAV Canada confirm that a Land Use submission was not necessary for the proposed Project. NAV Canada responded, stating no further action is required by Hydro One.

3.7.3 *Provincial Government and Agencies Comments and Issues*

Table 3-3: Summary of Provincial Agencies Comments and Issues

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
Class EA Process		
Consultation Tracking	The Ministry of Energy recommended Hydro One maintain a record of interactions with Aboriginal communities for the proposed Project.	Hydro One is maintaining a record of engagement with all relevant First Nations and Métis communities in relation to the proposed Project.
Project Information	MOECC requested that Hydro One provide any relevant project documentation.	Hydro one updated MOECC regarding dates and to whom the notification letters were sent. Regular updates were provided.
	MNRF requested a Project update from Hydro One.	Hydro one updated MNRF regarding dates and to whom the notification letters were sent. Hydro One also informed MNRF of the date of the newspaper publication. Regular updates were provided.
	MTCS requested further information regarding archaeological potential in the project area.	Hydro One confirmed that there is no archaeological potential in the project area, based on the results of the NextBridge Stage 1 Archaeological Assessment.
	MNDM requested no further updates on the Hydro One project since CanACRE and NextBridge will be keeping them informed on the proposed new East-West Tie project.	Hydro One acknowledged this.

3.7.4 *Municipal Government and Agencies Comments and Issues*

Table 3-4: Summary of Municipal Government and Agencies Comments and Issues

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
Class EA Process		
Access Relocation	The Town of Marathon inquired about the relocation	Hydro One informed the Town of Marathon that the access trail to Shack Lake

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
	of the Shack Lake access trail, and provided a sketch of a possible new access trail location.	would be relocated, and valued their opinion on route selection by forwarding the sketch to the MNRF. The land use permit for access trail relocation in the location suggested by officials from the Town on Marathon was issued by the MNRF on September 29, 2017.

3.7.5 *Public Comments and Issues*

Table 3-5: Summary of Public Comments and Issues

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
Class EA Process		
Environmental Assessment Process	A member of the public asked when the draft ESR would be made available for public review and how long the comment period will be.	It is anticipated that the draft ESR will be made available for a 30-day public review during the fall of 2017.
Public Information Centres (PICs)	A member of the public inquired whether a second PIC is planned for this project.	A second PIC is not currently planned for this project.
Consultation		
Communication with Interest Groups	A member of the public commented that Hydro One should notify the OFSC on the proposed Project.	Hydro One has added O.F.S.C – District 17 – Thunder Bay to the project contact list.
Technical Design		
Project Need	Members of the public inquired about the need and purpose of the project.	The existing Marathon TS must be expanded to connect the proposed new East-West Tie transmission line to the station.

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
General Project Questions	A member of the public inquired who would be responsible for operating the TS.	Hydro One will continue its responsibility for the operation of Marathon TS.
	A member of the public inquired how many transformer stations are proposed.	The proposed Project involves only the expansion of the existing Marathon TS; it does not involve building any new stations.
Shack Lake Access Trail	Questions as to where the new Shack Lake access trail will be constructed (inside or outside the fence line).	Hydro One plans to construct the new access trail outside of the future station fence.
	Concerns expressed regarding safety implications for recreational users, requesting "that a connecting trail be put in to accommodate the ATV's and skidoos as this connection will not be there – or close enough to go across."	Hydro one has noted the concerns and is committed to working with local community members and recreational users. Hydro One will ensure that the new station expansion allows for continued safe access to the existing trail system in the area around the station.
Proposed Expansion Location	A member of the public inquired how the proposed area for the expansion was chosen.	The proposed area for the expansion was chosen through assessment by Hydro One engineers, based on existing station infrastructure and the proposed new East-West Tie transmission corridor (section 5).
	A member of the public inquired as to if there are any wells located near or within the expansion area.	Refer to section 4.6.4 for information regarding well resources within the study area.
East-West Tie EA	A member of the public expressed concern for land use and ownership as they had a mining claim with NextBridge that did not get renewed with the East-West Tie Project. Concerned about economic implications for the East-West Tie project as it affects areas with mining potential.	The member of the public understood that this is a comment that should be addressed by NextBridge Infrastructure, who undertook the Class EA for the proposed new East-West Tie transmission line. No response required from Hydro One.
Natural Environment		
Natural Environment	A member of the public inquired about whether there are any wetlands in the area.	Wetlands are present outside of the immediate project area would not affected by the planned project works.

THEME	ISSUE/CONCERN	RESPONSE FROM HYDRO ONE
Construction		
Schedule and Timing	There were questions regarding when the new access trail to Shack Lake would be built.	The Shack Lake access trail would be in place prior to construction of the station expansion and access to the lake would be available throughout project construction.
Monitoring	A member of the public asked about whether there would be an environmental monitor during construction.	As part of the Class EA, Hydro One will ensure that an environmental monitor would be assigned during construction. It is anticipated that a Hydro One environmental field planner will fill this role (section 8).

3.8 Final Notification and Draft ESR Review Period

Hydro One is providing a 30-day review period, from March 9, 2018 to April 9, 2018, to allow sufficient time for review and comment on the draft ESR. Comments regarding the draft ESR are to be submitted to Hydro One no later than 4:00 p.m. on April 9, 2018 at the following address:

Yu San Ong
Environmental Planner
Hydro One Networks Inc.
483 Bay Street, North Tower, 12th Floor
Toronto, ON M5G 2P5

Community.Relations@HydroOne.com
1-877-345-6799

On March 5, 2018, the Notice of Completion of draft ESR was distributed to all interested parties including municipal, provincial and federal government officials and agencies, First Nations and Métis communities, potentially affected and interest persons, and interest groups presented in section 3.2 to section 3.6 (see contact lists in Appendix A-1). The notification indicated that the draft ESR was complete, and that the public review and comment period would run between March 9, 2018 and April 9,. A notification was also placed in the local newspaper and on the project website (see Appendix A-2 for notification letter and newspaper ad).

A copy of the draft ESR has been made available for review in hardcopy at the following location:

Town of Marathon Municipal Office
4 Hemlo Drive
Marathon, ON
Tel: (807)-229-1340

The draft ESR is also available on the project website:
https://www.hydroone.com/Projects/MarathonTS/

Issues and concerns received by Hydro One during the draft ESR review period will be recognized, considered, addressed and documented. The final ESR will be prepared for the proposed Project in accordance with the Class EA process. Upon completion of the Class EA process, the final ESR will be filed with the MOECC. Copies of the report will also be forwarded to organizations or individuals upon request.

The EA Act has provisions that allow for interested parties to ask for a higher level of assessment for a Class EA project if they feel that outstanding issues have not been adequately addressed by Hydro One. This is referred to as a Part II Order request. Such requests must be addressed in writing to the Minister of the Environment and Climate Change, as well as the Director of the Environmental Assessment and Permissions Branch of the MOECC, and received no later than 4:00 p.m. on April 9, 2018 at the following addresses:

Minister of the Environment and Climate Change
77 Wellesley Street West
11th Floor, Ferguson Block
Toronto, ON M7A 2T5
Email: Minister.MOECC@ontario.ca

Director, Environmental Assessment and Permissions Branch
Ministry of the Environment and Climate Change
135 St. Clair West, 1st Floor
Toronto, ON M4V 1P5
Email: MOECCpermissions@ontario.ca

A duplicate copy of a Part II Order request must also be sent to Hydro One at the address noted above.

4 Environmental Inventory

As described in the Class Environmental Assessment (EA) process, information from within the Project study area was collected for the following:

- Agricultural resources;
- Forestry resources;
- Cultural heritage resources (i.e., built heritage resources, cultural heritage landscapes and archeological resources);
- Human settlements;
- Mineral resources;
- Natural environment resources (e.g., air, land, water, wildlife);
- Recreational resources; and,
- Visual and aesthetic resources.

The following sections summarize the environmental and socio-economic baseline conditions of the Project study area. The study area is illustrated in Figure 4-1 and includes a 500 m buffer around the Marathon TS project site. Parcels of land under private ownership are excluded from the study area as permission to enter for access was not received prior to the completion of field surveys. Where applicable, particularly for the socio-economic environment, secondary information is presented beyond the Project study area to provide related context.

Information presented below was obtained through review of peer-reviewed literature, reports commissioned by Hydro One, specialized consultants and other interest groups, online resource databases and mapping, consultation with stakeholders and agencies, and through the completion of targeted natural heritage field surveys. Primary sources of information included:

- Correspondence with the MNRF (Nipigon District);
- MOECC;
- Environment and Climate Change Canada's Species at Risk Public Registry database (ECCC, 2017);

- The MNRF Species at Risk in Ontario List (MNRF, 2017);
- MNRF's Natural Heritage Information Centre (NHIC);
- The Ontario Reptiles and Amphibian Atlas (ORAA) (Ontario Nature, 2012);
- The Atlas of the Mammals of Ontario (AMO) (Dobbyn, 1994);
- Bat species profiles and range maps for the province of Ontario provided by Bat Conservation International, Inc. (BCI, 2013);
- The Second Atlas (2001-2005) of Breeding Birds of Ontario (ABBO) (Cadman et al. 2007); and,
- Topographic data extracted from Land Information Ontario (LIO).

Field surveys within the study area were undertaken by Amec Foster Wheeler Environment & Infrastructure, a Division of Amec Foster Wheeler Americas Limited (Amec Foster Wheeler) between July 7 and 9, 2017. Results of the field surveys and value/significance interpretations of natural heritage features are presented in summary below and in greater detail in the Baseline Natural Heritage Report (Amec Foster Wheeler, 2017) (Appendix B-3).

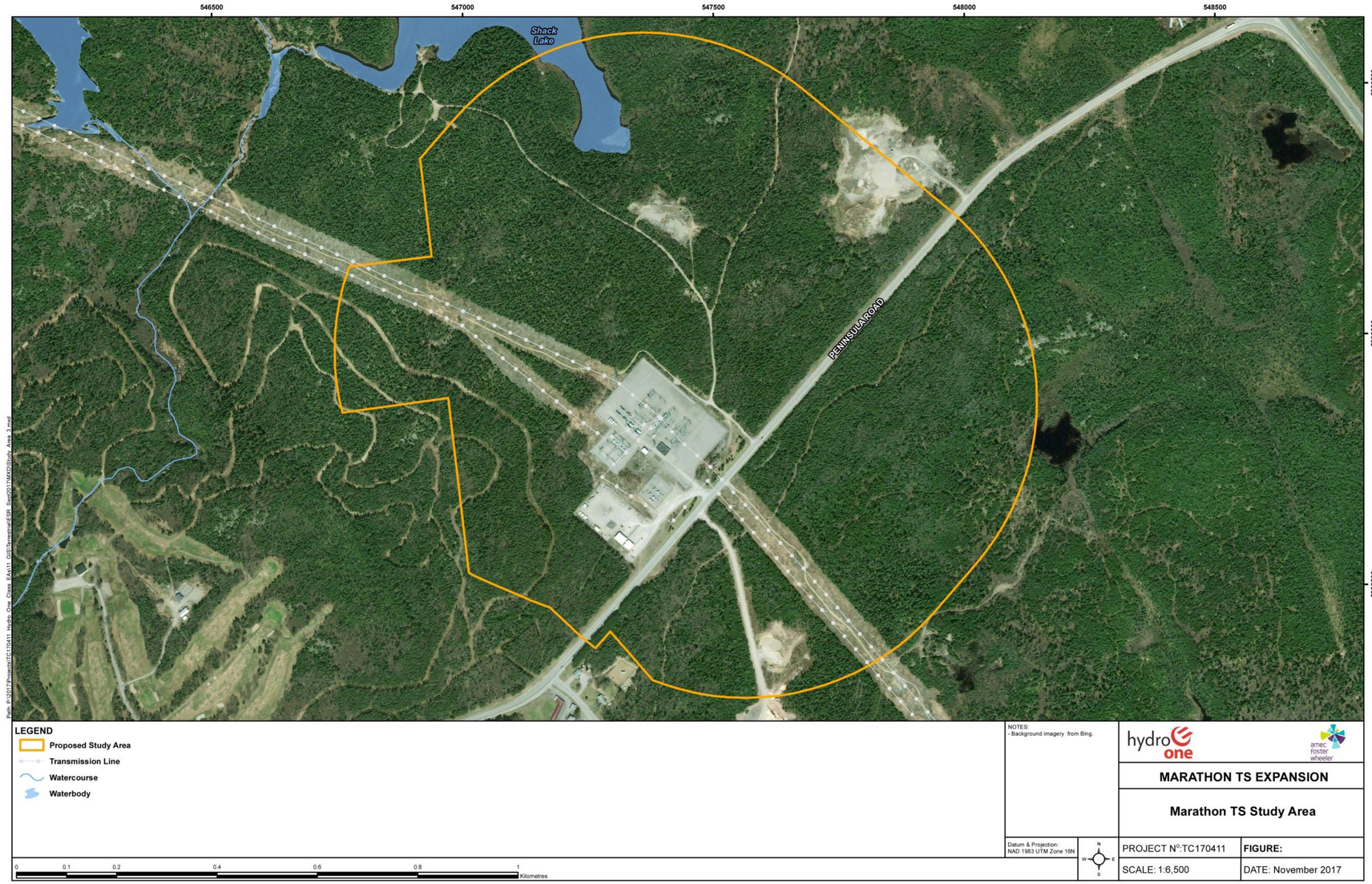

Figure 4-1: Marathon TS Study Area

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4.1 Agricultural Resources

The Canadian Land Inventory agriculture mapping does not occur for most of northern Ontario and is not available for the boundaries of the study area (Agriculture and Agri-Food Canada, 2013). Baseline vegetation surveys completed during the field surveys and through a review of satellite imagery indicate that landscapes within the study area are forested with no existing agriculture uses. Agricultural resources are not present within the study area and are not considered any further.

4.2 Forestry Resources

Forestry resources on Crown Land within the regional area are managed by the Nawiinginokiima Forest Management Corporation (NFMC). Within the study area forestry resources fall within the Big Pic Forest Management Unit - 067; one of three management units managed by NFMC. The other forest management units includes the Pic River Forest and the White River Forest.

The NFMC was established to operate within a defined management area that includes the communities of the Ojibways of the Pic River First Nation, Pic Mobert First Nation, Hornepayne Aboriginal community, Marathon, Hornepayne, Manitouwadge and White River (NFMC, 2012). NFMC is the first local forest management corporation in Ontario. It was established through the passage of Regulation 111/12 under the *Ontario Forest Modernization Act* (OFMA), 2011 on May 29, 2012, and represents a significant milestone towards modernizing forest tenure in Ontario (NFMC, 2012).

At the project onset, Hydro One staff have undertaken consultation with NFMC in order to secure an agreement to undertake the removal of trees as part of the proposed Project and relocation of the Shack Lake access trail.

4.3 Cultural Heritage Resources

Provincial heritage properties include three (3) types of cultural heritage resources: built heritage resources, cultural heritage landscapes and archaeological sites (MTCS, 2010). Hydro One completed and submitted the checklist for Evaluating Potential for Built

Heritage Resources and Cultural Heritage Landscapes as per request from the MTCS (Appendix A-3). MTCS responded to the checklist, stating that they had no further comments. Based on the checklist and preliminary scoping, no cultural heritage features are present in the Project study area.

In addition, no potential for archaeological resources are present according to NextBridge's Stage 1 Archaeological Report (EWT EA Appendix 15-I: Stage 1 Archaeological Reports Part 3), which outlines that a Stage 2 archaeological assessment is not required for the proposed Project area. Cultural heritage and archaeological resources are not considered any further.

4.4 **Human Settlements**

The study area is located within the Town of Marathon, approximately 3 kilometres (km) northeast of the central townsite (Figure 4-2). The Town of Marathon has a population of 3,138 people (Statistics Canada, 2017), with a land base of 265 square kilometres (km^2) (Official Plan, 2016).

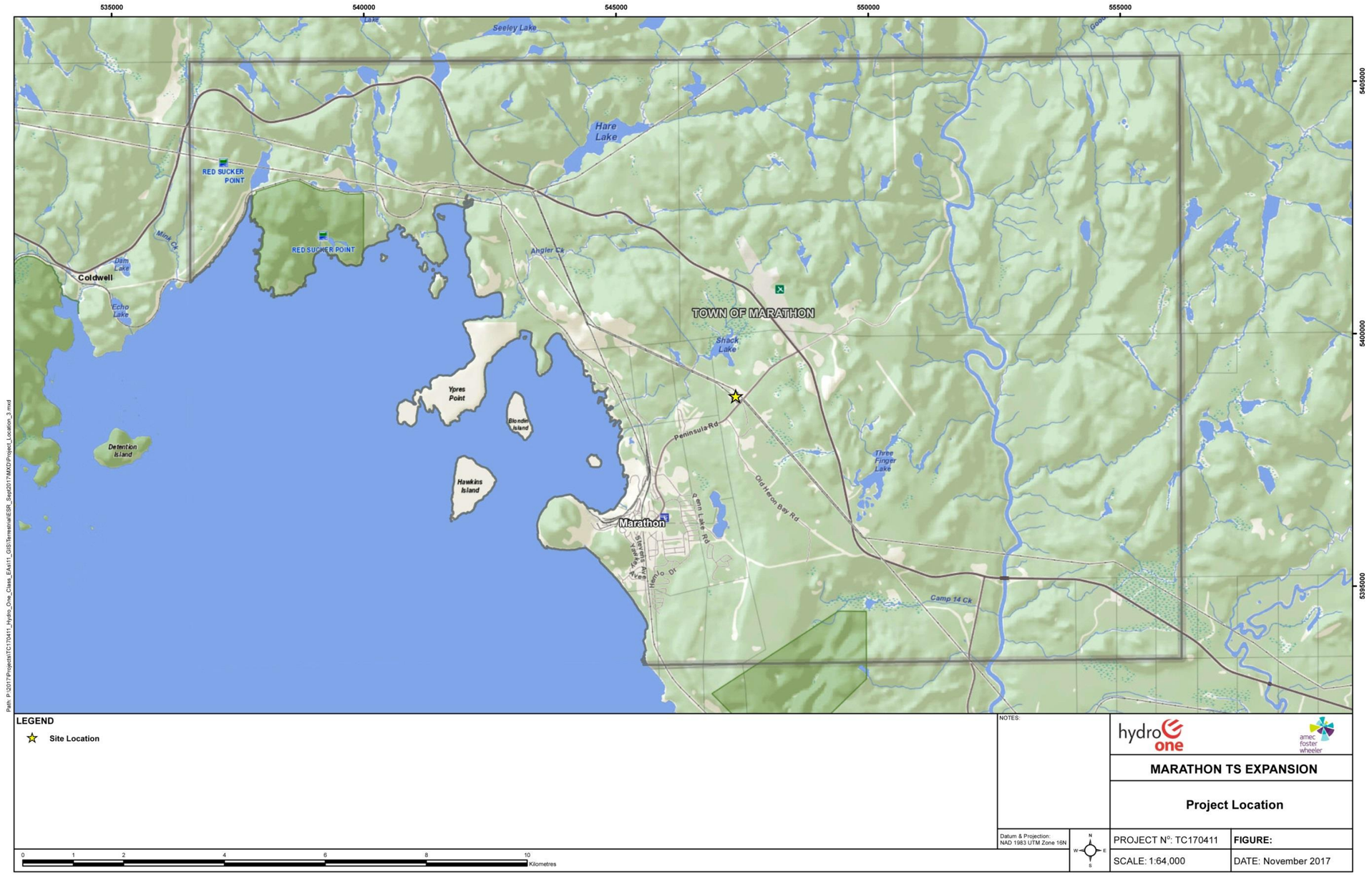

Figure 4-2: Project Location

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4.4.1 *Land Use Planning*

With respect to existing land use designations, land use in the study area is guided by the Provincial Policy Statement (PPS, 2014) and the Town of Marathon's Official Plan (2016). The PPS (2014) provides the Government of Ontario's policy direction on land use planning to promote strong communities, a strong economy, and a clean and healthy environment including the efficient management of land and infrastructure, the protection of resources, and appropriate employment and residential development. The Town of Marathon's Official Plan (2016) and other planning documents are required to comply with the PPS to ensure consistency.

Based on the Town of Marathon's online mapping system, the study area includes industrial land uses and open spaces. Identified industrial land use includes the existing Marathon TS. Most of the study area is not currently zoned under the Town of Marathon's Official Plan. General land use mapping of the study area is provided in Appendix B-1.

Within the study area and apart from the Marathon TS, no direct residential, institutional, commercial or industrial land uses were identified. Portions of the study area include lands designated for aggregates resource extraction (discussed further in section 4.5). Outside of the study area and southwest along Peninsula Road, Old Heron Bay Road was identified and designated as an "Urban Service Area" within the Town's Official Plan. Old Heron Bay Road provides access to institutional, commercial and industrial land uses outside of the study area.

4.4.2 *Transportation*

The Marathon TS is accessible via the Trans-Canada Highway/Highway 17, which is a major provincial highway. Peninsula Road stems off Highway 17 and leads southwesterly towards the townsite of Town of Marathon and Lake Superior. Peninsula Road is the primary artery to the townsite from Highway 17. Highway 17 provides a connection to Thunder Bay to the west (300 km) and Sault Ste. Marie to the east (400 km).

Regional transportation services include Greyhound, which operates a terminal within the Town of Marathon townsite. Greyhound buses utilize Peninsula Road to access the terminal

from Highway 17. The Town of Marathon does not provide a local transportation service. In addition, there are no railways within the study area.

The proposed project is approximately 2 km southwest of the Marathon Municipal Airport, and as such, NAV Canada and Transport Canada were contacted as described in section 3.3.

4.4.3 *First Nations Lands and Territory*

The study area is not located within any First Nations Reserve Lands (Aboriginal Affairs and Northern Development Canada, 2012). The nearest reserve is Pic River 50, located approximately 13 km southeast from the existing Marathon TS. As part of the consultation process, First Nations and Métis communities and interest groups were contacted as part of the EA process. Further details pertaining to First Nations and Métis consultation is provided in section 3.2.

4.5 **Mineral Resources**

No mineral resource areas were identified within the study area (Atlas of Canada, 2017). Two (2) aggregate resource areas (pits) were however identified within the study area (MNRF, 2017). Portions of a pit owned and operated by the Town of Marathon are present at the northeast boundary of the study area. Within the southeast boundary of the study area, Aecon Construction and Materials Limited owns and operates an aggregate pit. Maximum annual tonnage for the pits is 50,000 tonnes and 25,000 tonnes respectively. Both pits are 12 ha in size.

In a response letter to the Notice of Commencement, MNDM indicated to Hydro One that although there are no known mineral occurrences on the proposed Hydro One expansion site, there is one within 1 km of it. MDI42D09NW00018 is known as the Shack Lake Spectrolite discretionary occurrence (early exploration project, PR-13-10295R). An active mining claim (#4241515) covers the occurrence. MNDM also noted that the claim appears to be located close to the northwest boundary of the expansion area. The claim will not be affected by the proposed Project.

4.6 **Natural Environment Resources**

This factor considers areas of environmental sensitivity including air, land, water and wildlife resources and features within the study area. The assessment is based on the requirements outlined in the PPS (2014) and following the Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement (MNR, 2010).

Baseline information regarding the following physical and biological features in the study area is discussed and includes the following:

- Physical environment;
- Atmospheric environment;
- Surface and groundwater resources;
- Designated or special natural areas; and,
- Natural heritage features.

4.6.1 *Physical Environment*

Bedrock geology within the study area is characterized as the carbonatite-alkalic suite (Figure 4-3). This geological formation is generally described as igneous rock with mineralogic composition consisting of greater than 50 % carbonate minerals (Duncan and Willett, 1990). Carbonatites have been known to provide economic value as they can host rare earth elements (Guilbert and Park, 1986).

Surficial geology within the study area is characterized as undifferentiated igneous and metamorphic bedrock. Bedrock is exposed at the surface or is covered by a discontinuous, thin layer of drift (Figure 4-4).

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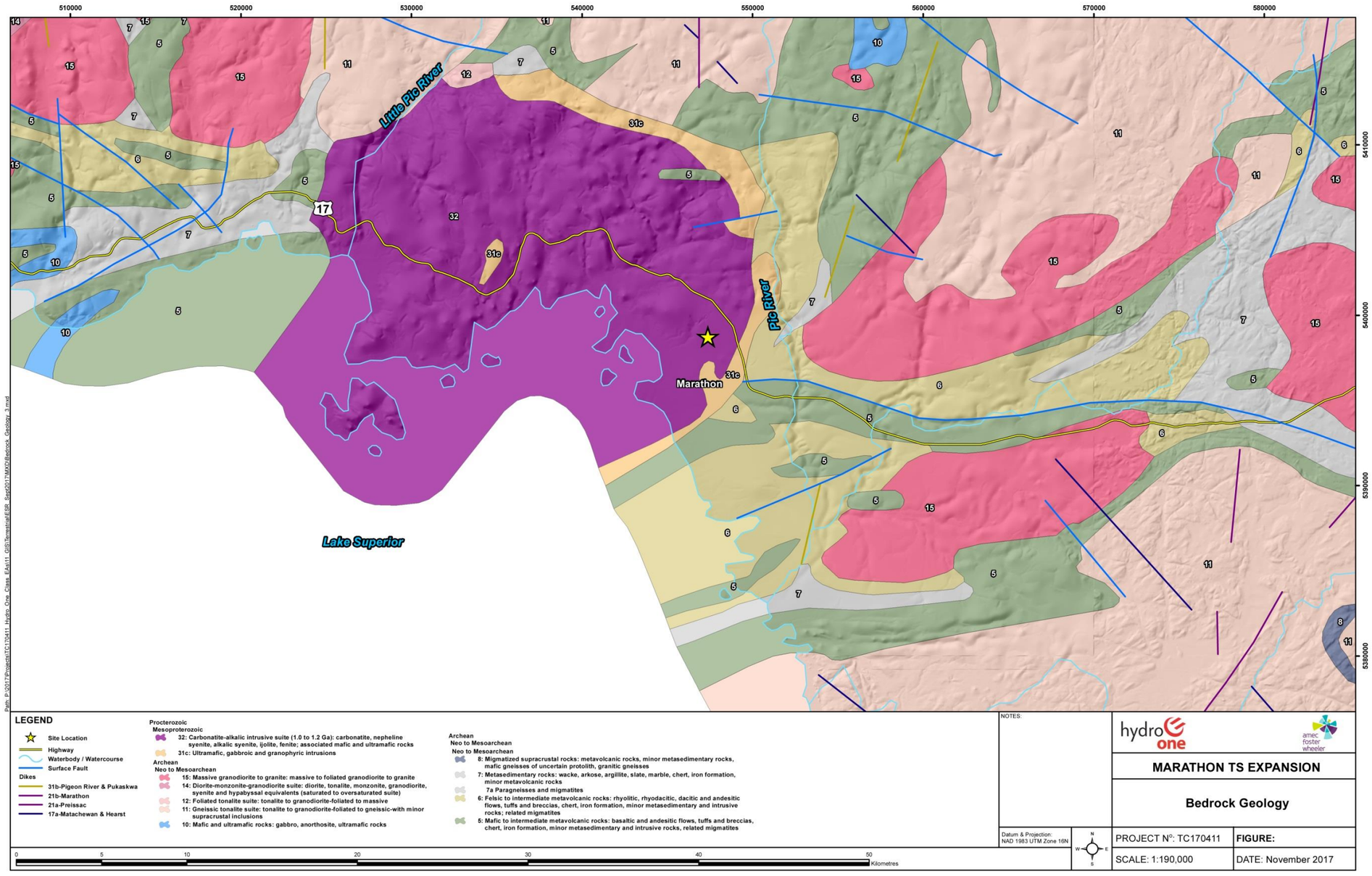

Figure 4-3: Bedrock Geology

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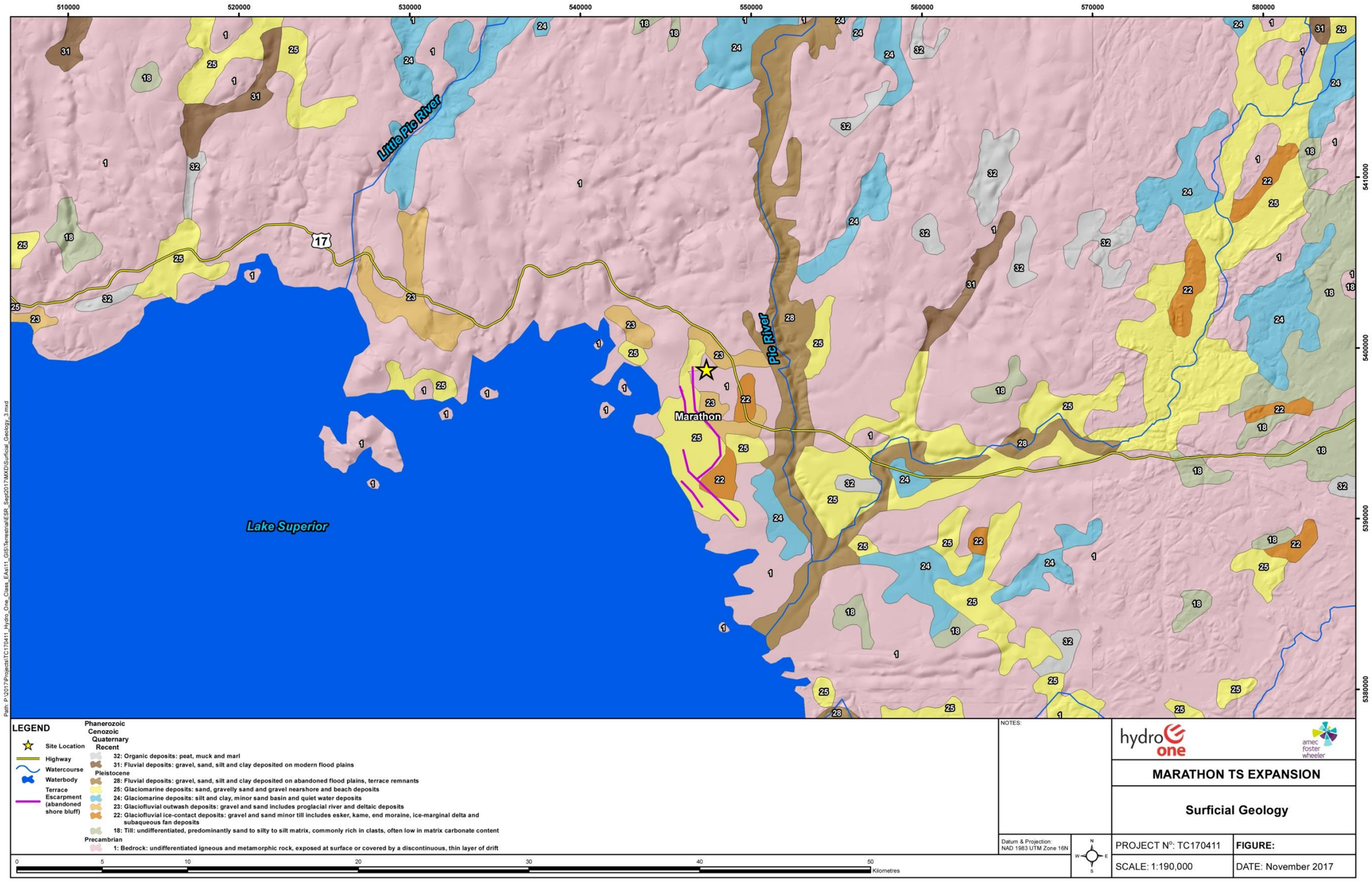

Figure 4-4: Surficial Geology

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4.6.2 *Atmospheric Environment*

Climate

The climate of the Town of Marathon is highly influenced by Lake Superior. Inferred from the Wawa Meteorological Station (World Meteorological Organization [WMO] Station Identifier [ID] NA, Climate ID: 6059D09), which experiences similar climatic influences, summer seasons are typically cool and partly cloudy, whereas the winter season is windy with significant snow accumulation. The temperature throughout the year ranges between 15.3 degrees Celsius (ºC) and -14 ºC. The Town of Marathon typically receives a significant amount of rainfall during spring, summer and fall and a significant amount of snow during the winter months.

The closest meteorological station to the study area is the Wawa Meteorological Station. The station is approximately 186 km southeast of the study area and has climate normal data available. Climate Normals and Averages are used to summarize or describe the average climatic conditions of a particular location. At the completion of each decade, ECCC updates its Climate Normals for as many locations and as many climatic characteristics as possible. The most recent Climate Normal data available is from 1981-2010. Data presented in this baseline climate section is based on the 1981-2010 Climate Normal data.

The mean annual temperature at the Wawa Meteorological Station is 2.1 °C. Climate Normal monthly precipitation varies between 2.3 millimetres (mm) in January and 121.8 mm in September. Total annual precipitation is approximately 969.7 mm, with 707.8 mm falling as rain and 319.4 centimetres (cm) falling as snow (see Appendix B-2) (Government of Canada, 2017).

Based on the Climate Normal data for 1981-2010 at the Wawa Meteorological Station, the average length of the frost-free period is 105 days. Frozen ground conditions usually occur between mid-September to early June (see Appendix B-2). Climate Normal data displays winds to be primarily from a southwesterly direction, with average annual wind speeds of 9.5 kilometres per hour (km/h) (see Appendix B-2).

Air Quality

In Ontario, regional air quality is monitored through a network of air quality monitoring stations operated by the MOECC and ECCC National Air Pollution Surveillance (NAPS) program. The closest station to the Town of Marathon is in Thunder Bay; therefore, air quality information is unavailable for the study area and cannot be accurately reported in this document.

Noise and Vibration

A desktop review of publicly available data was completed to identify noise-sensitive receptors within the study area as defined by the MOECC (MOECC – Noise Pollution Control (NPC)-300, 2013). No known noise-sensitive receptors exist within the study area.

Vibration can be a by-product of construction activities. Some activities during the construction phase of the proposed Project with the ability to result in vibration include demolition, soil compaction, excavation of foundations, and heavy equipment use. No heritage structures and/or vibration-sensitive facilities have been identified within the study area.

4.6.3 *Surface Water Resources*

Identified surface water resources within the study area include Shack Lake. A portion of Shack Lake is present within the north boundary of the study area. A detailed assessment of Shack Lake was not undertaken as part of this study as preliminary scoping activities and agency consultation did not identify any potential adverse effects to this aquatic resource feature. No secondary source information was available for review for inclusion in this report. Additional details related to the Shack Lake fishery are presented in section 4.6.6.

4.6.4 *Groundwater Resources*

In order to provide a preliminary hydrogeological characterization of the existing site conditions as well as a preliminary assessment of the conditions that may be encountered at the site during the completion of the planned expansion, water well records located within a 1 km radius of the site, as well as two geotechnical investigations completed at the site were reviewed.

Within a 1 km radius of the site, a total of 19 water well records were located in the Ministry of the Environment and Climate Change (MOECC)'s water well record database. Of these records, 13 had recorded groundwater levels as shown in Figure 4-5. The remaining six records listed dry wells, including four records located at the site.

The groundwater elevations obtained from the water well records were used to generate a groundwater flow map (also shown in Figure 4-5). The interpreted groundwater flow map indicates groundwater flow from the northeast towards the west-southwest, towards Lake Superior, which is expected to be the regional groundwater discharge zone. There may be some local groundwater flow towards Shack Lake as the groundwater table typically mimics the local topography, but there is insufficient local data available to confirm this.

Two geotechnical reports completed at the study site were reviewed. The Hydro-Electric Commission report (1968) included the drilling of six boreholes and found sand and gravel overburden deposits to depths of between 6.1 m and 8.2 m at all of the boreholes, with the upper 2.4 m and 3.0 m consisting of loose sand and gravel. None of the boreholes encountered groundwater and drilling water was found to drain away quickly.

The Hemmera (2017) report involved the drilling of 16 boreholes to depths ranging between 2.6 m and 15.7 metres below ground surface (mbgs). Subsurface conditions encountered in these boreholes was similar to those reported in the 1968 report, consisting of variable thicknesses of primarily sand with varying amounts of gravel and some silt layers. Monitoring wells were installed in three (3) boreholes with groundwater levels recorded in two (2) of the monitoring wells between 6.0 mbgs and 8.4 mbgs. The remaining monitoring well was dry. Hemmera noted that the groundwater levels measured may not represent stabilized conditions as the measurements were taken shortly following the completion of drilling. As such, the stabilized groundwater table was inferred to range between 3.5 mbgs and more than 15 mbgs at the site.

The water well records and the geotechnical investigations completed at the site suggest that the groundwater table may be encountered in localized areas on the site. Areas of sand and gravel, particularly at the bedrock contact, may produce groundwater. For example, one water well (#6100895) located on the site had a recommended pumping rate of 11,520 Litres

per day, but this well was installed at the overburden-bedrock interface starting at a depth of approximately 40 m, while other water wells installed at the site were found to be dry, even at similar depths.

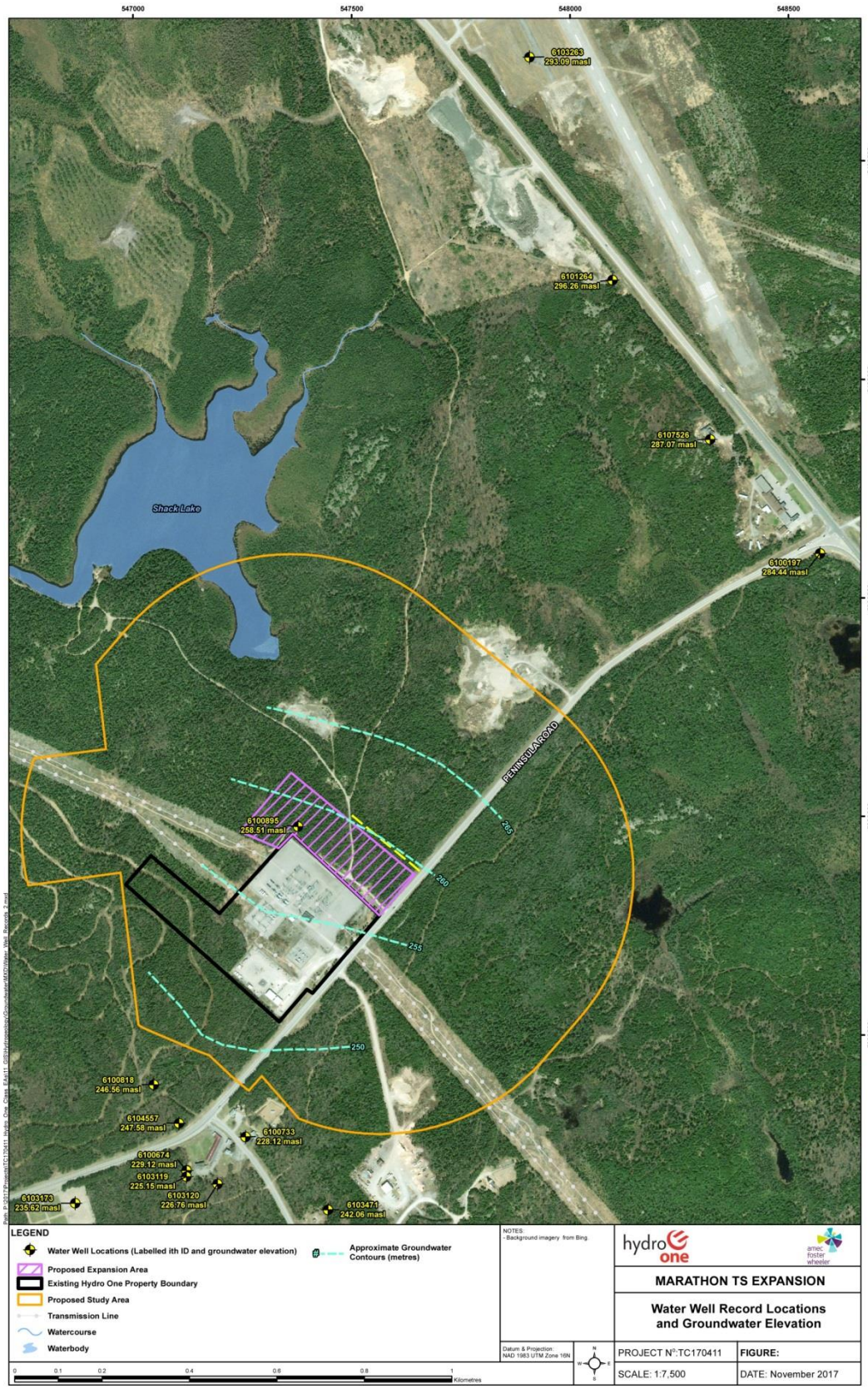

Figure 4-5: Water Well Record Locations and Groundwater Elevation

4.6.5 *Designated or Special Natural Areas*

Designated or special natural areas are identified by federal or provincial agencies and municipalities through legislation, policies, or approved management plans. These areas typically have special or unique values that result in conservation land initiatives. Such areas may have a variety of ecological, recreational, aesthetic and functional features that are highly valued.

There are no designated or special natural areas within the study area and therefore are not considered further.

4.6.6 *Natural Heritage Features*

As defined in the PPS (2014), natural heritage features and areas include "significant wetlands, significant coastal wetlands, fish habitat, significant woodlands south and east of the Canadian Shield, significant valleylands south and east of the Canadian Shield, significant habitat of endangered species and threatened species, significant wildlife habitat, and significant areas of natural and scientific interest", which are important for their environmental and social values as a legacy of the natural landscapes of an area. Furthermore, section 2.1.8 of the PPS (2014) states that development and site alteration shall not be permitted on lands adjacent to natural heritage features "unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions."

Crown Lands were identified within the study area (Land Use Designation #G2690), of which includes the direct footprint of the proposed Marathon TS expansion area and relocated Shack Lake access trail (Figure 4-6). Crown Lands within the study area are under the authority of the MNRF. Land use planning of Crown Land is conducted under the *Public Lands Act*. Crown Land is defined to protect natural and cultural features, maintain biodiversity and provide opportunities for compatible recreation.

Figure 4-6: Proposed Transformer Station Expansion Area & Relocated Shake Lake Access Trail

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Wetlands

The study area is located within Ecoregion 3E and the Boreal Shield Ecozone. Natural forest areas were generally defined to be homogenous within the study area. Transmission line corridors were heavily altered and maintained for the removal of large riparian trees and woody understory brush. There was also evidence of cultural influences within the study area suggesting historic reforestation efforts.

The PPS (2014) also requires that municipalities and others responsible for land use planning protect provincially significant wetlands (PSWs). A wetland is determined to be a PSW based on an evaluation by the MNRF using the Ontario Wetland Evaluation System (OWES) (MNRF, 2014). The Land Information Ontario (LIO) database (MNRF, 2016h) was accessed to determine the presence of PSWs or unevaluated wetlands in the natural heritage study area. No PSWs were identified in or adjacent to the study area.

Fish Habitat

Fish habitat is present in the portion of Shack Lake that is within the study area. A recreational sport fishery for Shack Lake exists for Brook Trout (*Salvelinus fontinalis*), Lake Trout (*Salvelinus namaycush*), Yellow Perch (*Perca flavescens*), Walleye (*Sander vitreus*), Smallmouth Bass (*Micropterus dolomieu*), Rainbow Trout (*Oncorhynchus mykiss*) and Largemouth Bass (*Micropterus salmoides*). No further information pertaining to fish habitat or the aquatic ecosystem of Shack Lake was available for inclusion in this report. It is assumed that Shack Lake provides habitat for a number of fish species at all trophic levels, including bait/forage fish, as it sustains a locally known recreational sport fishery. As previously noted, detailed documentation of fish habitat within the study areas was not undertaken for this Class EA as preliminary scoping did not identify any adverse effect to this aquatic resource feature.

Woodlands

Woodlands are treed areas, woodlots and forested areas that provide various environmental and economic benefits to landowners and the general public (PPS, 2014). During the field surveys conducted, plant communities were broadly characterized and key natural features were noted. A number of woodland areas were identified in the study area during these surveys and through desktop Ecological Land Classification (ELC) mapping.

Significant woodlands are woodlands that are ecologically, functionally and/or economically important based on one or more features, such as species composition, stand age, contribution to the broader landscape, site quality, or past management history (MNR, 2010). The designation of significant woodlands is deferred to local planning authorities. General guidelines for determining significance of a woodland area are also included in the Natural Heritage Reference Manual for Policy 2.3 of the PPS (MNR, 2010) if the local planning authorities have not provided criteria for significance. No significant woodlands were identified in the study area.

Valleylands

Valleylands are natural areas that occur in a valley or other landform depression in which water flows or stands for part of the year (PPS, 2014). Significant valleylands are valleylands that are "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). Valleylands were not identified in the study area.

Areas of Natural and Scientific Interest

Areas of Natural and Scientific Interest (ANSI) are contiguous lands and waters officially designated by the province that have geological or ecological features of significant representative provincially, regionally, or locally. These features are important and valued for natural heritage protection, appreciation, scientific study or education. Through a review of secondary source information, no ANSI's were identified in the Project study area.

Species at Risk

Under the provincial *Endangered Species Act* (ESA, 2007) and the federal *Species at Risk Act* (SARA), SAR and their habitats are protected. No protected avian, herpetological or plant SAR were detected or are known to occur within the study area. The potential occurrence of Woodland Caribou (*Rangifer tarandus*) within the study area was identified by the MNRF as part of the initial consultation process (pers. comm. K. McNaughton, MNRF District Planner) and is discussed below.

A total of 95 plant species were identified during the field survey program (Appendix B-3). No rare, sensitive or SAR were identified during the field surveys. Four distinct vegetation communities were classified within the study area (Figure 4-7). Communities were largely comprised of species typical of the southern boreal forest, with White Spruce (*Picea glauca*), Black Spruce (*Picea mariana*), Balsam Fir (*Abies balsamea*), Jack Pine (*Pinus banksiana*) and White Birch (*Betula papyrifera*) identified as dominant species. Further details pertaining to each community are provided in Appendix B-3.

No specific or targeted surveys to confirm Woodland Caribou presence/absence within the study area were undertaken as the proposed Project occurs within the Lake Superior coastal range for the species (MNRF, 2014) and distribution, occurrence, as well as seasonal habitat use is known.

Woodland Caribou and their habitat are regulated under Section 9 and 10 of the ESA, 2007 and consultation and/or approvals through MNRF must be sought for Projects adversely effecting habitat. At the broad landscape scale, Woodland Caribou require large, undisturbed areas of mature conifer upland forest and lowlands dominated by Jack Pine or Black Spruce (Brown et al. 2003; Ferguson and Elkie, 2004). These areas allow Woodland Caribou to effectively separate themselves from higher densities of Moose (*Alces alces)* and predators, such as Grey Wolf (*Canis lupus*). At more local scales, Woodland Caribou seasonally select specific habitat features and areas that support successful reproduction and calf rearing, provide summer and/or winter forage or facilitate movement between discrete areas of use. These sub-range habitat features and high-use areas often exhibit repeated intensive use by Woodland Caribou, such as nursery and calving areas, winter use areas and travel corridors over multiple years (MNRF, 2014; Hazell and Taylor, 2011). Confirmed wintering and nursery areas for Woodland Caribou occur outside of the study area starting approximately 3 km west of the Marathon TS and extending along the Lake Superior coast in areas within and adjacent to Neys Provincial Park, Red Suckerpoint Provincial Nature Reserve and Prairie River Mouth Nature Reserve (Figure 4-8).

Nursery Areas are selected by adult female Woodland Caribou immediately prior to parturition and thereafter to raise their calves during the spring, summer and early fall. These features are typically comprised of lakes and wetland complexes dominated by fens and

bogs, particularly those interspersed with upland islands and peninsulas (Carr et al., 2011). MNRF has delineated nursery areas based on animal observations from May 1 to September 15 to include calving and post calving behavior (LIO, 2013). The calving season occurs from May 1 to July 15, with the peak estimated to occur around June 1 with a defined window of May 7 – July 15 in northwest Ontario (MNRF, 2013). Post-calving season occurs from July 15 to November 14 (Ferguson and Elkie, 2004a, MNRF 2013). Calves are particularly vulnerable to mortality during the first 50 days following birth, predominantly by predation (Pinard et al., 2012).

Wintering Areas are typically associated with soil and forest cover conditions that provide abundant ground lichen for winter forage and tend to have lower average snow depths that may facilitate easier movement (Stardom, 1975). MNRF has used Caribou locations from December 1 to March 31 to inform the delineation of Winter Use Area boundaries (LIO, 2013). Caribou aggregate in higher concentrations (6 to 50 per group) during the winter to take advantage of these features, which may allow individuals to minimize energy expenditure, forage more efficiently or minimize individual risk of predation (Stardom, 1975). The location and amount of area individual caribou use during the winter varies widely across Ontario, and individual fidelity to specific Winter Use Areas is generally less than for Nursery Areas (Cumming et al. 1996; Ferguson and Elkie, 2004; Hazell and Taylor, 2011).

Potential indirect adverse effects and associated mitigation strategies for Woodland Caribou are discussed in Section 7.

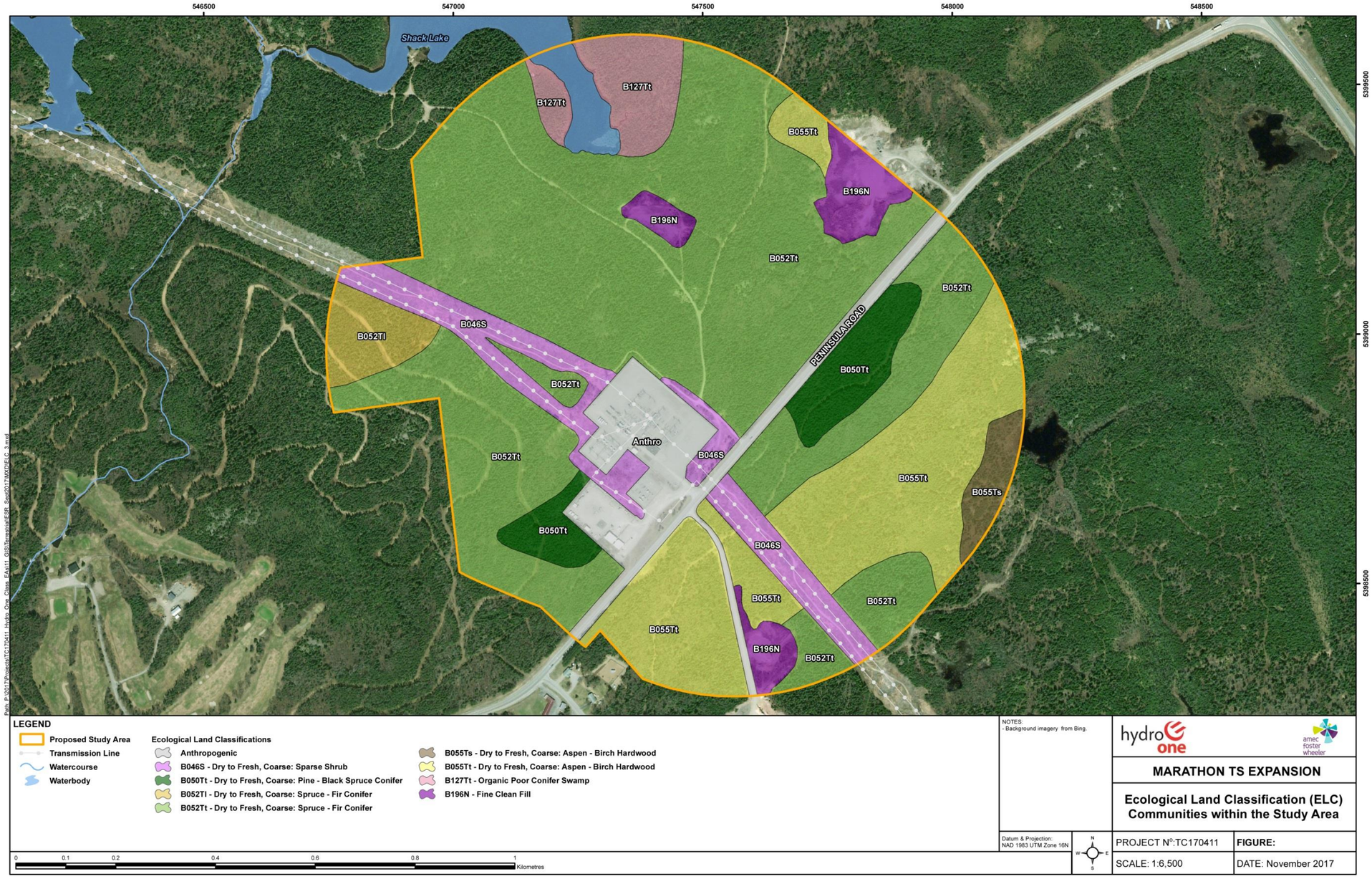

Figure 4-7: Ecological Land Classification Communities within the Study Area

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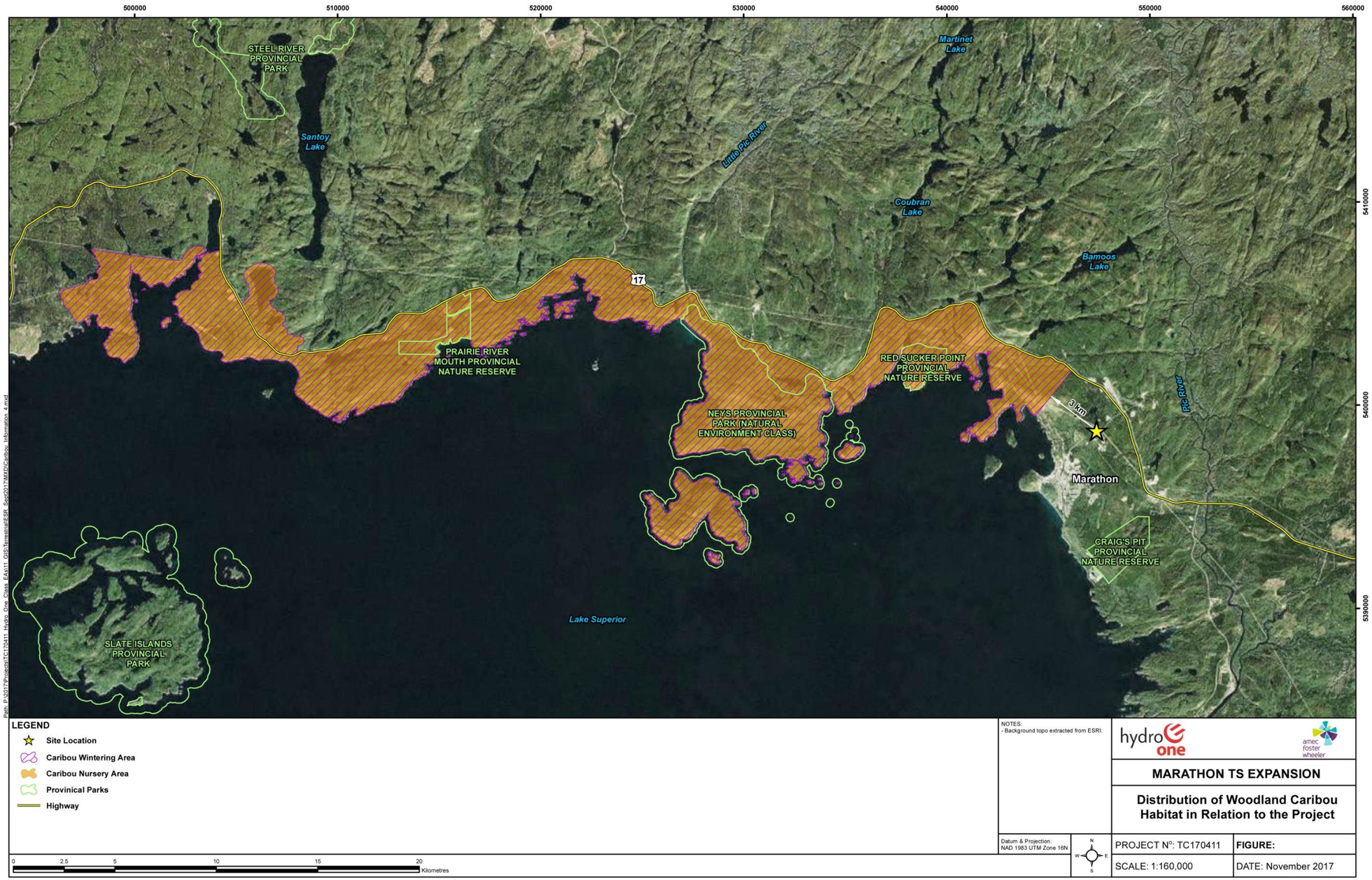

Figure 4-8: Distribution of Woodland Caribou Habitat in Relation to the proposed Project

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Wildlife and Significant Habitat

Surveys for wildlife included breeding bird surveys, amphibian call surveys, incidental observations of mammals and reptiles and Significant Wildlife Habitat (SWH) classification and mapping (Figure 4-9).

There were no records or observations of mammals within the study area during the completion of the field surveys. However, Black Bear (*Ursus americanus*), Moose, Grey Wolf, Porcupine (*Erethizon dorsatum*), White-tailed Deer (*Odocoileus virginianus*), Red Fox (*Vulpes vulpes*), Racoon (*Procyon lotor*), American Marten (*Martes americana*), Fisher (*Martes pennant*) and various small mammal species, such as mice, voles and shrews have moderate probabilities of occurrence or portions of their distribution areas that overlap with the study area.

No anuran (frog and toad) or reptile species were documented during the targeted evening surveys. However, incidental observations of American Toad (*Anaxyrus americanus*), Wood Frog (*Lithobates sylvaticus*), Mink Frog (*Lithobates septentrionalis*) and Green Frog (*Rana clamitans*) were recorded during diurnal vegetation and habitat surveys. Amphibians were not detected in areas identified as potential breeding habitats and incidentally recorded species are considered to be migrants.

Of the 89 avian species identified through secondary source information (OBBA, 2017), 37 species were identified during field surveys. Commonly recorded species were typical of boreal forests including White-throated Sparrow (*Zonotrichia albicollis*), Winter Wren (*Troglodytes hiemalis*), Red-eyed Vireo (*Vireo olivaceus*), Nashville Warbler (*Oreothlypis ruficapilla*), Black-throated Green Warbler (*Setophaga virens*), Pine Siskin (*Spinus pinus*) and White-winged Crossbill (*Loxia leucoptera*).

Potential areas of SWH were identified on-site utilizing the MNRF Significant Wildlife Habitat Technical Guide and cross referenced with delineated ELC ecosites. Table 4-1 identifies potential SWH and provides a rationalization for its presence/absence within the study area as well as relative significance.

Table 4-1: Significant Wildlife Habitat within the Study Area

Wildlife Habitat	Species	ELC Ecosite	Relative Significance
Moose Late Winter Cover	Moose	B050 & B052	Potential presence within the study area as canopy cover exceeded 60%. There was however no evidence of tracks or scat.
Bat Maternity Colonies	Big Brown Bat & Silver-haired Bat	B055	Mature forested stands within the study were identified however there is low potential for habitat as decay is minimal and limited tree cavities and snags and no caves or buildings were identified.
Colonially Nesting Bird Breeding Habitat (Tree/Shrubs)	Great Blue Heron Bonaparte's Gull Double-crested Cormorant	B046, B050, B052 & B055	No evidence of these species or their nests within the study area.
Woodland Raptor Nesting Habitat	Red-tailed Hawk, Great Horned Owl, Broad-winged Hawk, Sharp-shinned Hawk, Merlin, Coopers Hawk, Northern Goshawk, Great Gray Owl, Long-eared Owl, Common Raven, Saw-whet Owl, Boreal Owl, Barred Owl and Northern Hawk Owl	B046, B050, B052 and B055	Potential presence within the study area. No specific tree cavities or stick nests were identified.

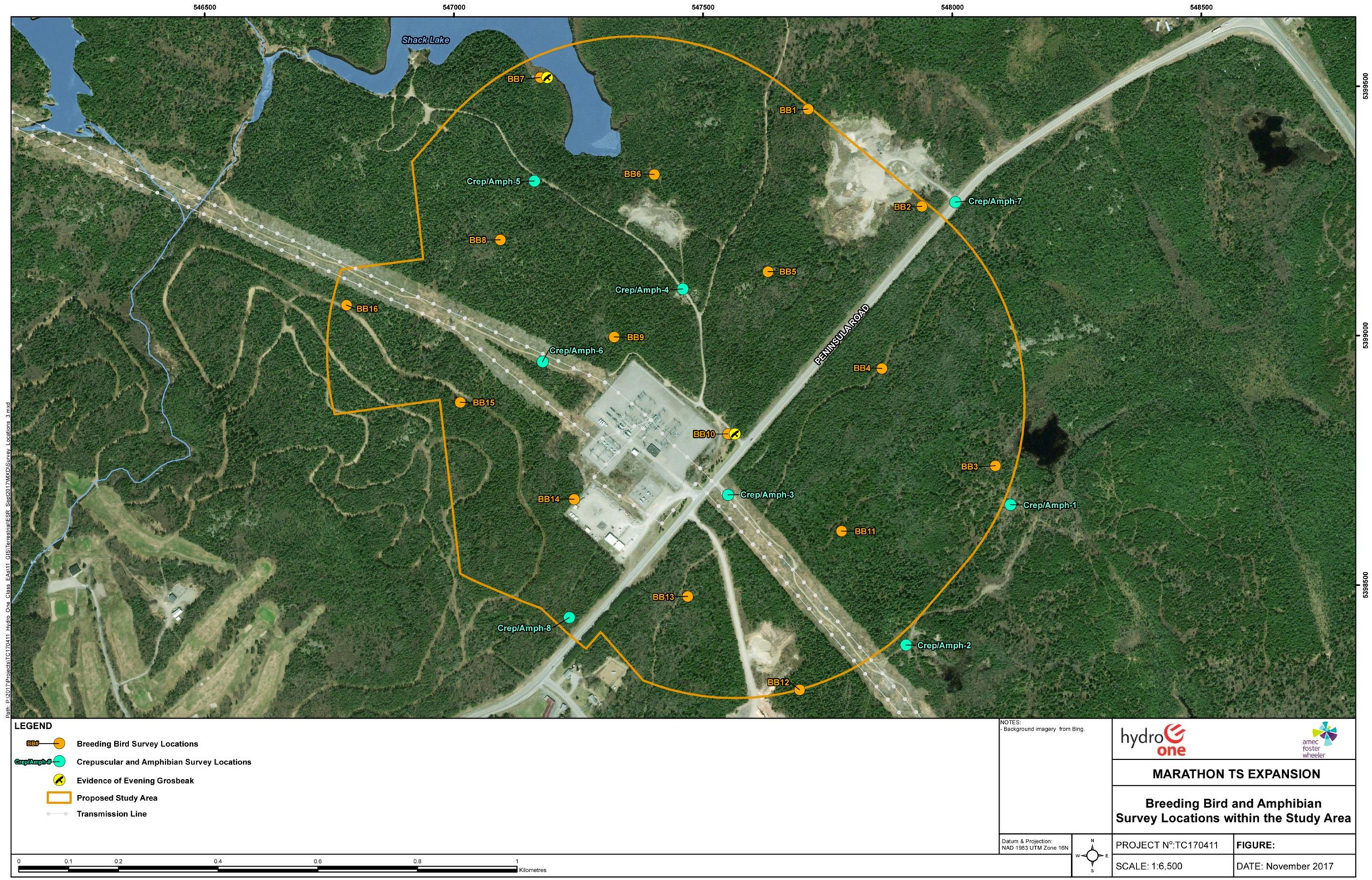

Figure 4-9: Breeding Bird and Amphibian Survey Locations within the Study Area

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4.7 Recreational Resources

The primary land use within the study area is for recreational purposes, with Crown Land encompassing a significant portion of the study area. An existing recreational trail immediately north of the existing Marathon TS was identified at the onset of the study. This recreational trail is locally known as the Shack Lake access trail and provides access off Peninsula Road westerly to Shack Lake. Portions of Shack Lake exist within the study area; however, primary recreational areas off the Shack Lake access trail (i.e., boat launch, etc.) were outside of the study area.

Based on information gathered during the study and through public and agency consultation, it is understood that the Shack Lake access trail is used by local residences for a multitude of recreational purposes including walking, running, snowshoeing, all-terrain vehicle (ATV) use, snowmobiling, etc. Through interpretations of satellite aerial imagery, a secondary network of recreational trails was also identified within the study area. Recreational trails were noted on the south side of the Marathon TS, west of Peninsula Road. Information pertaining to specific uses of these recreational trails was not determined through the course of the study. It is assumed that similar uses as described for the Shack Lake access trail apply to this recreational trail system.

4.8 Visual and Aesthetic Resources

This factor considers the physical appearances of the landscape and its susceptibility to change as a result of the proposed Project.

A visual assessment was completed using the following sources of data: topographical maps, aerial photography, and field interpretation.

The existing landscape at Marathon TS is rural with mature northern Ontario forest surrounding the existing station. The station fronts on Peninsula Road, a main access into the Town of Marathon from the Trans-Canada Highway. The existing station extends into the site at approximately 280 m. The proposed expansion to the north and north-east would require the removal of trees. The vegetation removal would be minimized and limited to areas required for the new 230 kV switchyard expansion and the future 230 kV SVC.

Approximately 50 m of vegetation from Peninsula Road and into the site would remain untouched, providing a natural screening of the new expansion from the road. The future 230 kV SVC area would be located on an elevation that is lower than that of the current station and Peninsula Road, which would assist in covering the views of the station in that area.

5 Alternative Methods

This section describes the reasonable alternative methods for carrying out the proposed Project. Alternative methods refer to different means of carrying out the same task to achieve the purpose of the undertaking (e.g., different routes or sites). Potential alternative methods are identified based on presence of environmental features, technical and cost factors, and input received during the consultation process, and follow the recommendations of the Provincial Policy Statement (PPS, 2014). Following the identification of alternative methods for the undertaking, evaluation criteria are established, and evaluation and selection of the preferred alternative occurs.

A site selection process was completed in order to select the most appropriate area for the expansion of Marathon TS; this included four alternatives (Figure 5-1):

1. Expanding on the north side of the current TS, along Peninsula Road;
2. Expanding toward the side of the existing TS across from Peninsula Road would be costly and would follow a non-standardized design;
3. Expanding on the adjacent Hydro One property on the south side of the TS would require land acquisition and would similarly be costly and follow a non-standardized design; and,
4. Expanding on the side that is adjacent to Crown land, to the west of the TS, contains existing lines which would need to be reconfigured in order to accommodate an expansion. In addition to this, it would also be costly and follow a non-standardized design to expand the TS in this area.

The preferred station expansion area is on the north side along Peninsula Road (alternative 1) according to Hydro One's conceptual engineering design. In order to minimize construction and operational costs, a suitable location was selected based on the following criteria:

- Sufficient space to accommodate new electrical equipment;
- Close proximity to the existing transmission line and TS;
- Consistent design with the planned new East-West Tie transmission line; and,

- Space availability.

The proposed expansion area is in close proximity to the existing line and station and is consistent with the planned new East-West Tie line, where it will connect and tie-in to the TS. The sufficient site coverage of this proposed area for the new electrical equipment can also minimize the land acquisition costs. This alternative will accomplish the proposed Project at the lowest cost, while minimizing environmental and socio-economic effects as it fully utilizes Hydro One's existing assets and mitigates reliability risks.

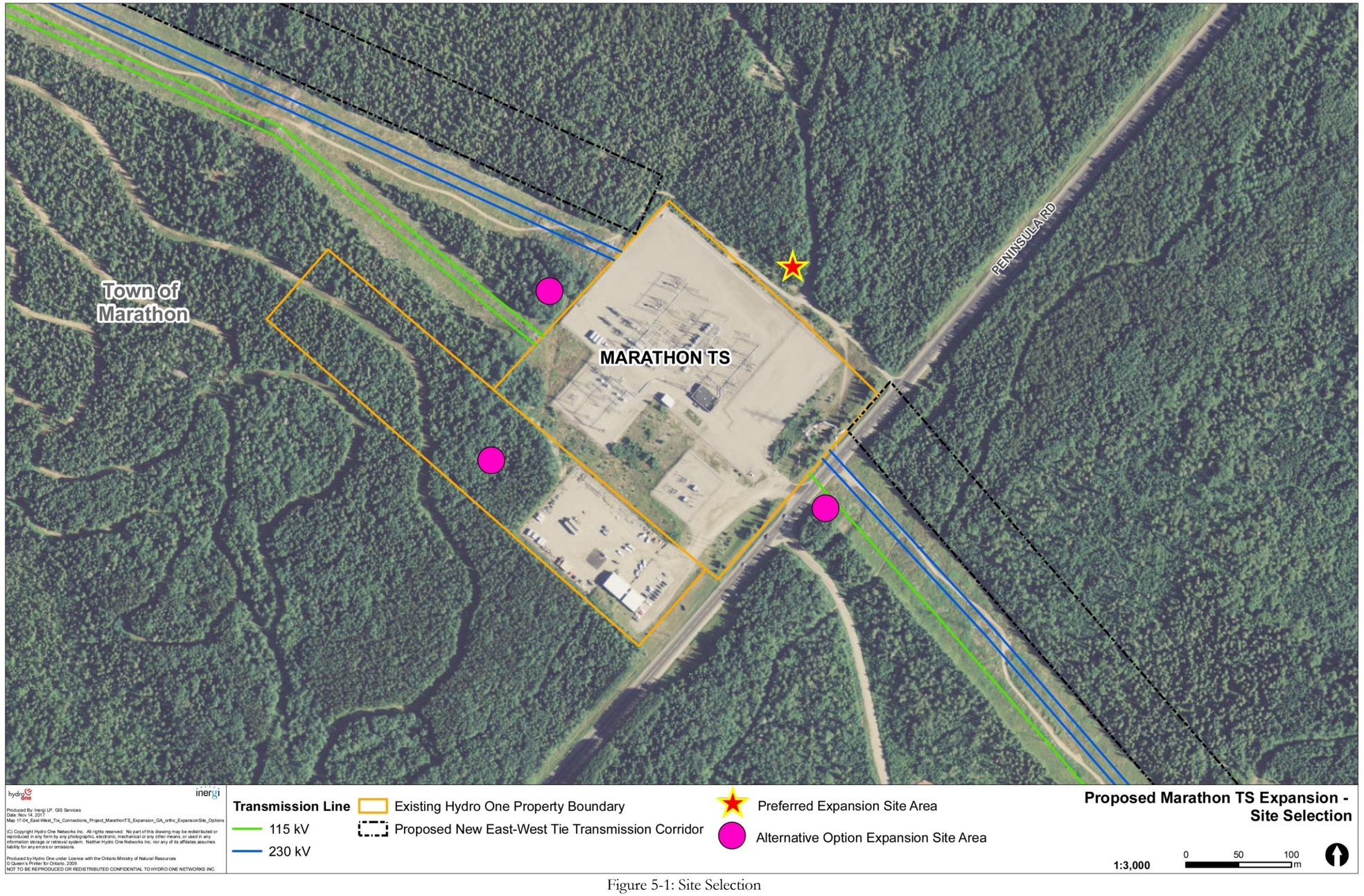

Figure 5-1: Site Selection

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6 Project Description

The proposed Project is similar to many other projects completed by Hydro One. The proposed Project would expand the footprint of the existing TS by approximately five additional ha of the existing TS, and consists of the following major components:

- Reconfiguration of 230 kV buses and diameters;
- Installation of new 230 kV circuit breakers and disconnect switches and connection of the circuits;
- Installation of two new 230 kV shunt reactors;
- Re-termination of the existing 230 kV circuits inside Marathon TS;
- Establish connection between the last structure of the new East-West Tie line's 230 kV circuits outside Marathon TS, and structures inside the station;
- Installation of a new relay building to house electronic devices critical for safety, reliability and security of the power system; and,
- Future work - installation of a static VAR compensator (SVC) when the transfer capability is required at a future date.

Relocation of an existing access trail to Shack Lake would be required in order to accommodate the proposed station expansion. The new access trail would be created first, prior to any station construction, to ensure continued access throughout construction.

6.1 Design Phase

Following completion of the Class EA process, detailed engineering and design for the proposed Project would be completed. The final design plans would be based on necessary surveys and consultation, including the geotechnical survey and slope stability assessment. Concurrent with finalization of the design, required permits, licences and approvals, as listed in section 1.4.3, would be obtained. Hydro One would also finalize restoration plans in consultation with the appropriate stakeholders and local community as necessary.

An Environmental Specification document would be prepared following the completion of the Class EA process that would provide specific directions to construction personnel, summarizing legislated requirements and environmental commitments set out in the final

ESR. This would include all required monitoring, as specified in the monitoring plan (section 8).

6.2 Construction Phase

Construction and maintenance activities would be guided by generic and project-specific documents; these are to be adhered to by all construction personnel including sub-contractors. In addition, the project-specific Environmental Specification, outlining specific requirements for the proposed Project, would be followed during the construction phase. Hydro One would adhere to Appendix E of the Class EA for typical mitigation measures for the most common potential effects of environmental assessment projects. Specific project related mitigation measures would also be taken in order to undergo approvals and construction.

Construction would involve the following activities:

Relocation of Shack Lake Access Trail

The relocation of the access trail would involve:

- Site preparation including clearing and grading; and,
- Delivery and laydown of gravel for trail.

Station Expansion

The expansion of the existing Marathon TS would involve:

- Site preparation including clearing and grading;
- Modification of station fencing and security systems around the expanded area;
- Delivery and installation of switching equipment;
- Delivery and installation of equipment for protection, control and telecommunications;
- Expansion of station underground services and drainage facilities;
- Installation of station foundations and steel support structure;
- Expansion of ground grid and lightning protection masts;
- Installation of a relay building for housing install protection, control and telecommunication equipment;

- Construction of station roads; and
- Clean up and site restoration.

Line Work

The required line work within the expanded area would involve:

- Installation of foundation at the new structure locations;
- Construction and installation of line entrance/exit structures;
- Stringing new transmission conductors (wires) on the structures inside the station to the last structure of new East-West Tie line's 230 kV circuits outside Marathon TS; and,
- Clean up and site restoration.

Future Station Work – Static VAR Compensator

Future construction to accommodate for the SVC within the expanded area would involve:

- Site preparation including clearing and grading;
- Fence line extension to include the future SVC area; and,
- Installation of the SVC equipment.

Throughout the construction period, an Environmental Specialist would be available to address unforeseen environmental effects and mitigation requirements. The Environmental Specialist would monitor activities to ensure conformance with the requirements set out in Hydro One's construction standards and guidelines as well as the Environmental Specification that will be prepared for the project.

Upon completion of construction, clean up and restoration (e.g., seeding) of areas disturbed by construction would occur, as required. As well, operation and maintenance staff would be provided with a briefing and "as constructed" documentation covering ongoing commitments, including monitoring and notification requirements, if applicable.

Should any archaeological finds be uncovered during construction, work would stop immediately pending assessment by the project archaeologist and further consultation with the MTCS, as well as the appropriate First Nations and Métis communities.

6.3 Maintenance and Operation Phase

The expanded station would continue to be operated remotely from Hydro One's grid control centre. An operator would make periodic inspections and would be dispatched to the station in case of emergency. Whenever preventative or emergency maintenance is required, a crew would be dispatched to the site. The station would be fully equipped with spill containment and oil/water separation facilities. In the event of equipment failure, oily water would not escape from the site. An Emergency Response Plan would govern spill response. Spill cleanup and response equipment would be located on site.

Throughout the operating life of the station, preventative and emergency maintenance would be carried out to ensure that equipment operates according to design parameters and to ensure compliance with Hydro One standards of safety, reliability, citizenship and cost. Snow would be cleared to allow site access.

6.4 Project Schedule

The anticipated schedule for proposed Project activities is provided below in Table 6-1. This schedule shows key steps remaining in the Class EA process and subsequent anticipated timing of the start of construction and commissioning of the proposed expanded station.

Table 6-1: Project Schedule

ACTIVITY	PERIOD
Release of draft ESR for 30-day public review and comment period	Q1 2018
Comment integration and response	Q2 2018
Filing of final ESR with the MOECC	Q2 2018
Construction start	Q2 2018
Planned in-service date	December 2020

7 Potential Environmental Effects and Mitigation Measures

This section describes the potential environmental effects and mitigation measures associated with both the short-term (construction) and long-term (operation) activities of the proposed Project. The assessment of potential environmental effects for the proposed Project considered the baseline information on the environmental features that was collected for the study area as presented in section 4.

The potential environmental effects resulting from the construction and operation of the proposed Project are similar to other projects undertaken by Hydro One and are well understood. Hydro One has a strong track record of environmental compliance and stewardship and is committed to the completion of comprehensive environmental and social analysis and mitigation of potential effects.

The following sections describe potential environmental effects for both the construction and operational phases of the proposed Project. The selection of mitigation measures are based on the following seven (7) guiding principles:

- Avoidance of sensitive areas, where practical;
- Avoidance of watercourse crossings, where feasible, by use of an existing nearby crossing, access to structures from either side of the watercourse, or use of off-corridor access;
- Appropriate timing of construction activities, where feasible, to avoid sensitive time periods, such as fish spawning and egg incubation periods, or migratory bird nesting periods;
- Proactive communication with area residents and businesses on proposed Project timelines and construction areas;
- Proactive communication with First Nations and Métis communities, government agencies, stakeholders and interest groups regarding the proposed Project;
- Implementation of conventional, proven mitigation measures during construction consistent with the criteria set out in Appendix E of the Class EA, and in accordance with applicable legislative requirements; and,

- Development of environmental enhancement or compensation measures to offset the unavoidable effects of construction and operation where such effects exist and where practical.

The proposed expansion of the Marathon TS will result in the loss of approximately five ha of forest type habitat. The forest is currently managed for timber harvesting by NFMC. Habitat loss includes both the direct footprint of the proposed Marathon TS and the footprint of the relocated Shack Lake access trail. The value and sensitivity of effected areas has been assessed locally and regionally to be low due to the implementation of the proposed mitigation measures and no significant adverse or residual effects are expected to result following construction.

7.1 Agricultural Resources

As indicated in section 4.1, there is no potential for the proposed Project to affect agricultural resources; therefore, no potential effects have been identified for the proposed Project.

7.2 Forestry Resources

To mitigate adverse effects on adjacent forestry resources during the removal of trees within the footprint of the proposed Marathon TS and relocation of the Shack Lake access trail, Hydro One will ensure any agreed upon commitment(s) made with NFMC and MNRF are met. These conditions should ensure that the value of any adjacent resource is not affected during the construction phase of the proposed Project or during the operational phase of the Marathon TS.

7.3 Cultural Heritage Resources

There is minimal potential for the proposed Project to affect any built heritage resources, cultural heritage landscapes or archaeological resources during construction as none of these resources were identified at the project onset or during the completion of field investigations. However, if archaeological material is encountered during construction, all activities with the potential to affect these materials would cease immediately and a licensed archaeologist would be engaged. Notification of such findings must also be communicated

to the MTCS. In the event that human remains are encountered, Hydro One would immediately stop work in the area and notify local police, the coroner's office, MTCS and the Registrar of Cemeteries.

7.4 Human Settlements

If not appropriately controlled, construction sites pose potential safety hazards to local land users and residents due to the operation of heavy construction equipment. This is of concern given regular use of the Shack Lake access trail by local residents. Prior to any construction on the TS expansion, the Shack Lake access trail would be relocated in order to maintain access.

Hydro One would mitigate safety issues by implementing safety measures in accordance with its Public Safety Policy during construction. To minimize the effects of construction on public safety, Hydro One would undertake a wide range of safety measures, adding signage, fencing and locks to construction laydown areas, installing additional lighting in construction laydown and equipment storage areas, carefully selecting construction laydown areas and access roads, developing the construction schedule in consultation with the Town of Marathon planning staff (including avoidance of major events where feasible), providing the final construction schedule to emergency and protective services (Ontario Provincial Police (OPP)) and Town of Marathon Emergency Services (fire and ambulance), informing adjacent residents, landowners and commercial establishment operators of proposed Project activities prior to construction, and if required, provide alternative driveway and/or pedestrian entrances for businesses and municipal facilities where traditional access routes are blocked by construction activities.

During the construction of the proposed Project, nearby individuals may experience some temporary localized nuisance effects. Nuisance effects are subjective, and the magnitude of the effect would vary depending on the individual and their location in relation to construction activities. Noticeable nuisance effects relating to air quality, noise, vibration, and mud could occur intermittently during the construction phase of the project.

Air Quality

Construction activities have the potential to create temporary, localized effects on air quality in the immediate vicinity of the proposed Project. Emissions from construction are primarily comprised of fugitive dust and combustion products from the movement and operation of construction equipment, machinery and vehicles. These emissions, in turn, may create a nuisance or disturbance effect for local residents and land users during the construction phase.

Mitigation measures to reduce potential nuisance effects of dust and air emissions include maintenance of equipment used on site to minimize exhaust, adherence to Hydro One's Fleet Environmental Program, which includes anti-idling requirements and Global Positioning System (GPS) installation in vehicles to optimize routing, and use of effective dust suppression techniques, such as on-site watering and road sweeping, as necessary.

Noise and Vibration

Proposed Project activities have the potential to affect ambient noise levels during the construction, which may create a nuisance or disturbance effect for residents and land users. However, it is important to note that noise effects would generally not be constant across the study area for the entirety of the construction phase; rather, noise would be introduced and diminish depending on where construction is actively occurring, thereby reducing the duration of nuisance effects to local residents, business operators and land users. Mitigation measures to reduce potential nuisance effects resulting from noise include ensuring that noise abatement equipment on machinery is in good working order and maintaining equipment such that construction and maintenance activities conform to typical noise parameters. Hydro One would consider noise when deciding which equipment and construction work methods and schedule to use.

Construction activities would conform to the Town of Marathon's Noise Control By-Law (By-Law 1190), to the extent feasible. If exemptions to the noise by-law are necessary, the requirements of applicable approvals processes would be met.

Proposed Project activities have the potential to affect ambient vibration levels during the construction phase, causing nuisance and disturbance effects to local residents and land users in the vicinity of the proposed Project.

Mitigation measures to reduce potential nuisance effects resulting from vibration include the consideration of vibration when selecting equipment, construction work methods and work schedules for the proposed Project as well as taking reasonable measures to control vibration related to project construction near sensitive areas.

Mud

Construction activities may result in the accumulation of mud in construction areas. Mats would be installed, as required, near site exits onto Peninsula Road to loosen and shake off mud. Mud related to construction activities would be removed from access roads, and vehicles and equipment would be washed and maintained at work areas as necessary. Formal cleanup and site restoration through restoration planting and seeding would further minimize this effect as construction progresses and is completed.

7.4.1 Land Use Planning

The proposed Project's land use designation compatibility with the Town of Marathon's Official Plan confirms that there are no conflicts with the proposed Project. The acquisition of Crown Land required for the Marathon TS expansion will be subject to a rezoning requirement to meet the industrial zoning of the existing Marathon TS. Pending rezoning approval, no potential effects on land use planning have been identified.

7.4.2 Transportation

The study area is located within a rural landscape, with Peninsula Road acting as a major service corridor connecting the Town of Marathon with the Trans-Canada Highway (Highway 17). There is some potential for disruption to vehicular traffic in the study area during the construction phase; however, it is expected to be minimal and temporary in nature.

To minimize disruptions and/or delays to local road traffic and emergency public safety services, construction areas and access points would be carefully designed to avoid and

minimize adverse effects. If required, Hydro One would develop a Traffic Management Plan in consultation with the Town of Marathon. Advanced notice would be provided to the Town, adjacent landowners, commercial establishment operators, railway operators (i.e., CN Rail and CP Rail), regional transit operators (i.e. Greyhound) and emergency response services outlining the location of entry/exit points for construction sites as well as the schedule for construction work in those areas. Road signage would also be created and installed to reflect this information.

7.4.3 First Nations Lands and Territory

As indicated in section 4.4.3, there are no First Nations Reserve Lands located in the study area. However, the proposed Project is located within the traditional territory of First Nations and Métis communities; therefore, some traditional lands have the potential to be disturbed by construction and maintenance and operation activities of the proposed Project.

Hydro One is committed to developing and maintaining relationships of mutual respect between Hydro One and First Nations and Métis communities. Hydro One recognizes that First Nations and Métis communities and their lands are unique in Canada, with distinct legal, historical and cultural significance. Hydro One is committed to continue to engage with the First Nations and Métis communities to provide regular project updates, and actively identify and avoid geographically defined areas which support current or past traditional use for the harvesting of wildlife or fish, the harvesting of traditional plants, or use as sites of spiritual or cultural significance. Hydro One will seek to identify community concerns and build appropriate actions into proposed Project plans to address expressed concerns, as described in section 3.2.

7.5 Mineral Resources

As discussed in section 4.5, aggregate resource operations within the study area would not be effected by the proposed Project, therefore, mitigation is not required.

7.6 Natural Environment Resources

Based on desktop data and field surveys, there are limited natural environment resources in the proposed Project study area. With avoidance and/or appropriate mitigation, there are no anticipated residual effects on natural environment resources.

7.6.1 Physical Environment

Geology and Physiography

The proposed Project is not predicted to affect surficial or bedrock geology. With backfill and site restoration following construction, physiography in the vicinity of the proposed Project is not predicted to be affected. Therefore, no net effects on the physical environment have been identified for the proposed Project.

Spills

During construction there is the possibility of spills from the unintentional release of oils and fuels from construction vehicles and other equipment. A number of mitigation measures are proposed to reduce the risk of spills and to minimize the effect in the unlikely event that a spill occurs. These measures include:

- Operating properly functioning and well-maintained vehicles and equipment;
- Developing and making available an Emergency Response Plan to govern spill and other emergency response in the unlikely event of occurrence;
- Locating spill cleanup and response equipment on-site and in Hydro One vehicles;
- Training personnel on spill management;
- Should they occur, cleaning up spills as soon as possible and remediating a site after a spill;
- Installing alarms on equipment for early spill detection, where feasible; and,
- Undertaking refuelling, lubricating or servicing of construction vehicles and equipment in a designated location near spill cleanup equipment, at least 100 m away from water bodies and surface water drainage features.

During any phase of the project, in the event of an accidental spill of any material such as waste oil, fuel, lubricants or other pollutants, spills will be reported, managed and cleaned up in accordance with pertinent legislation and Hydro One procedures. All spills are to be reported to the MOECC Spills Action Centre (SAC).

Waste Generation

During the construction of the proposed Project, Hydro One would follow stringent provincial policy and legislation to ensure the safety and protection of both ground and surface water resources, complying with the *Clean Water Act, 2006,* the Provincial Policy Statement (PPS) (2014), and the Town of Marathon Official Plan (2016). Hydro One would continue to consult with provincial ministries and the Town of Marathon on proposed Project design, construction and operation to address concerns related to water services and infrastructure.

Construction waste would be generated by the proposed Project, and would need to be disposed of in regional landfills and recycling facilities. Waste generated during construction would be tested, handled, stored, transported and disposed of at licensed recycling and waste disposal facilities, as applicable, in accordance with applicable legislation (i.e. Ontario Provincial Standard Specification [OPSS] 180). Waste produced would be minimized, and segregated and recycled where possible.

7.6.2 Atmospheric Environment

Climate

It is important to note that the proposed Project is not a power generation project and its operation would not emit greenhouse gases. However, as mentioned in the Air Quality section above (section 7.4), there would be fossil fuel emissions from the vehicles and equipment used to construct and maintain this TS expansion. Hydro One adheres to initiatives such as anti-idling requirements and Global Positioning System (GPS) installation in vehicles to optimize routing to reduce fossil fuel emissions. The emissions directly related to the construction and maintenance of this project would be minimal.

Hydro One recognizes that a changing climate is likely to result in an increase of unusual weather patterns and severe weather events, which could potentially damage or adversely affect infrastructure and other public facilities. Hydro One is confident that the facilities being planned for this project have been engineered to adequately withstand the effects of climate change throughout the duration of their planned lifespan.

Air Quality

Construction has the potential to temporarily affect local air quality in the immediate vicinity of the proposed Project. Emissions from construction are primarily comprised of fugitive dust and combustion products from the movement and operation of construction equipment and vehicles. Potential effects associated with construction are anticipated to be minimal due to their short and intermittent duration. As a result, construction emissions are unlikely to have a long-term effect on local air quality.

Additionally, potential adverse effects to air quality from construction activities can be mitigated through proper servicing and maintenance of construction equipment and the implementation of best management practices. Proper maintenance of construction vehicles and equipment can assist in reducing combustion emissions and should reduce effects on air quality. The proposed Project would adhere to Hydro One's Fleet Services Environmental Program, which includes anti-idling requirements and GPS installation in vehicles to optimize routing. Similarly, the implementation of best management practices, such as on-site watering and road sweeping, can reduce the generation of fugitive dust. Therefore, it is likely that the net effects of construction activities on local air quality would be negligible and no additional mitigation is required.

With the exception of periodic maintenance activities, such as inspection from vehicles, no additional emissions are expected as a result of the operation of the proposed Project. Emissions from maintenance activities during operation would be variable depending on activities, expected to be short in duration, and would occur periodically over the life of the proposed Project. These maintenance activities are not expected to result in long-term changes to local air quality. Therefore, net air quality effects associated with maintenance and operation activities are likely to be lower in magnitude than the effects during the construction phase and would be negligible. No additional mitigation is required.

Noise and Vibration

Construction activities may be a potential source of short-term, intermittent local environmental noise.

All work is expected to be completed using common construction methods. The noise associated with the construction would most likely be a result of the activities listed in section 6.2. All of these activities would require the use of various pieces of heavy equipment, such as bulldozers, front-end loaders, pickup trucks, backhoes, bobcats, dump trucks, compactors, concrete trucks and/or cranes. The movement of delivery and worker vehicles would also add to the noise levels during the construction period.

Noise from construction activities is regulated at the municipal level through by-laws, which typically limit construction activities during certain days of the week and periods of the day. During construction, Hydro One would comply with Town of Marathon's Noise Control By-Law (By-Law 1190). However, there may be instances where noise by-law exemptions are sought (e.g., after-hours or weekend work). If exemptions are necessary, the requirements of applicable approvals processes would be met.

Noise sources and noise levels from maintenance activities after construction would be variable, are expected to be limited to a short duration, and would occur periodically over the life of the TS. With the exception of periodic maintenance activities, no additional noise sources are expected as a result of the TS expansion during the maintenance and operation. Any noise produced will adhere to the air and noise ECA. Therefore, no additional mitigation is required for noise during the maintenance and operation of the TS.

The proposed Project has the potential to affect ambient vibration levels during the construction phase.

Any construction vibration would be temporary in nature, occur only during specific activities, and limited to the immediate vicinity of the construction work area. The range in the increased vibration levels associated with construction activities would depend primarily on the number and type of sources and their proximity to the point of reception.

Mitigation measures to reduce potential nuisance effects resulting from vibration include: the consideration of vibration when selecting equipment and construction work methods, and determining work schedules for the proposed Project. Hydro One would take reasonable measures to control vibration related to construction near residential areas.

7.6.3 Surface Water Resources

Proposed project activities during the construction phase that have the potential to influence surface water quantity conditions in nearby aquatic ecosystems are:

- Site preparation, including vegetation removals, topsoil (organic) layer stripping, excavation and site grading;
- Discharge of construction water from dewatering activities to ground surface; and,
- Earthworks associated with construction following felling of trees and vegetation clearing.

Site Preparation

Site preparation, including activities such as removal of vegetation and construction of temporary access roads will be required to commence initial construction works.

Surface runoff following rain events from the temporary laydown and work areas is expected to be minimal and will remain localized. If site conditions change such that erosion or more permanent drainage features begin to develop during construction, Hydro One would construct temporary ditches for surface flow conveyance. Temporary ditches would be low gradient to minimize erosion and protected as required with the application of rock (rip-rap) protection and standard Erosion and Sediment Control (ESC) measures. These measures can include sediment traps, rock check dams and/or straw bale check dams.

During construction, it is expected that changes to stream flow and water levels in adjacent aquatic ecosystems (i.e. watercourses, wetlands, etc.) will not occur as these hydraulic features were not identified within the study area.

At the end of construction, the project area would be seeded and temporary laydown areas would be restored to their original condition (i.e. grade) to the extent feasible. Therefore, as a

result of site preparation activities, there would be negligible residual effects on surface water quantity.

Earthworks

Earthworks would be required during construction following felling of trees and vegetation clearing. Earthworks would include topsoil stripping, site grading and excavation.

To avoid or minimize the potential adverse effects of earthworks activities on surface water quality, the following mitigation measures would be implemented where feasible:

- Stage work to minimize the extent of exposed and disturbed areas at any given time;
- Stockpile soil and aggregates in designated areas above the Ordinary High Water Mark (OHWM) of watercourses and away from surface drainage features (i.e. ditches);
- Carry out work in consultation with the Town of Marathon and MNRF and incorporate their feedback into design and construction;
- Develop and execute site-specific ESC plans, as required;
- Minimize equipment operation adjacent to all environmental and natural heritage features; and
- Retain vegetation buffers along the perimeter of all environmental and natural heritage features.

With the implementation of the mitigation measures described above, and the short duration of the construction works, earthworks activities are not anticipated to have long-term residual effects on surface water quality conditions in nearby aquatic ecosystems.

Discharge of Construction Water from Dewatering Activities

The removal and discharge of construction water would likely be required as a result of dewatering activities in open trenches constructed for foundations or for underground utilities and servicing. Construction water would consist of local stormwater runoff and groundwater intercepted during the excavation process. Construction water from dewatering activities would be discharged to a filter bag and, in turn, to the ground surface (i.e., a vegetated area). Under most runoff conditions, this discharge water is expected to largely

infiltrate without any hydraulic connection to a permanent watercourse. The point of discharge for any dewatering operation would be monitored continuously to ensure any adverse effects are suitably minimized. To minimize the potential adverse effects of dewatering activities on surface water quantity conditions, the following mitigation measures will be implemented:

- Discharge construction water in compliance with the required permits and/or approvals from the MOECC (if required); and,
- Develop and execute appropriate construction dewatering plans prior to construction, as required.

Construction dewatering operations between 50,000 - 400,000 Litres per day (L/day) can be registered with the MOECC under the Environmental Activity and Sector Registry (EASR). If dewatering activities are in excess of 400,000 L/day a Permit to Take Water (PTTW) under the *Ontario Water Resources Act* (1990) would be required.

With the implementation of the mitigation measures described above, the short duration and localization of the dewatering activities, dewatering activities are not anticipated to have long-term residual effects on surface water quantity or groundwater resources in receiving watercourses.

7.6.4 Groundwater Resources

Construction of expanding the TS would not affect any groundwater resources, and the operation phase would continue to operate in the same manner as it currently is in regards to groundwater management.

Future SVC work has the potential to affect groundwater resources, as a spill containment system will be installed in order to incorporate the necessary additions. The necessary effects and mitigation will be considered in the future when further details become available.

7.6.5 Designated or Special Natural Areas

As indicated in section 4.6.5, there are no designated or special natural areas within the study area, therefore, no effects or mitigation is detailed.

7.6.6 Natural Heritage Features

The nature of the construction disturbances associated with the proposed Project are both temporary and permanent in nature. Permanent adverse effects include the removal of approximately five ha of forest and associated wildlife habitat to accommodate the proposed TS expansion. Temporary adverse effects include those from work operations that physically, visually or sonically disrupt wildlife during active construction. The forest community to be removed is not unique in terms of species composition, species diversity and value or significance of wildlife habitat compared to the surrounding landscape.

Construction activities for the proposed Project would be restricted to the designated work area. Protective barriers, such as fencing would be erected to protect adjacent features from construction related effects. Silt fencing and/or other sediment and erosion control measures would be installed as required to prevent the migration of sediment-laden water from the leaving the construction site. Trees will be felled to minimize any damage to off corridor vegetation and fencing will be installed where there are any concerns regarding off corridor access or encroachment. In addition, vegetation removal limits would be clearly demarcated on drawings and plans before any work can proceed. These detailed construction plans would be shared with the NFMC, MNRF and the Town of Marathon. Site access would utilize pathways/roadways within the existing Marathon TS, the Shack Lake access trail and/or direct access from Peninsula Road. Utilization of existing access infrastructure where possible during construction would limit disturbances to natural heritage features outside of the proposed Project footprint.

Other mitigation measures to be implemented to reduce adverse effects resulting from the construction of the proposed Project include:

- Restricting access and minimizing travel/work areas to maximize retention of compatible vegetation;
- Implementing sediment and erosion controls per applicable provincial and federal standards and guidelines;
- Using geotextile and gravel for temporary access, where feasible, to reduce compaction;

- Restoring compacted areas by methods such as rototilling or chisel-ploughing to relieve the compaction of the site. All disturbed sites would be leveled and grass seeded for restoration;
- Retention of compatible vegetation in constraint areas (e.g., road and watercourse crossings, wetlands, valley lands, significant wildlife habitat and other environmentally sensitive areas); and,
- Installing barriers, such as silt fences to facilitate heightened protection of adjacent natural heritage features.

The primary laydown area for the proposed Project during construction would be located within the exiting Marathon TS and within the proposed expansion area. Laydown areas would not affect natural vegetation communities or sensitive natural heritage features outside of the proposed Project footprint.

Many of the wildlife species that occur in the study area are likely habituated to human activities and are mobile. Any sensitive resident animals can relocate temporarily to avoid noise and disturbance associated with construction activities. As construction disturbance would be limited in size, local and temporary in nature, minimal displacement of wildlife is anticipated. Any wildlife encountered during construction would be left alone and allowed to disperse from the site. In some instances, Hydro One may retain the services of a biologist or trapper to capture and/or relocate individuals that do not disperse naturally. Hydro One would secure and obtain all necessary permits and approvals to complete undertake trapping or capture of wildlife during construction. If any SAR are observed, work activities would cease immediately to avoid inadvertent harassment (which is prohibited under Section 9 of the provincial ESA, 2007 of the individual and not start again until the animal leaves the site on their own accord.

Removal of vegetation has the potential to disturb nesting migratory birds. The *Migratory Birds Convention Act, 1994* (MBCA) prohibits the disturbance, destruction or removal of nests, eggs or nest shelters of migratory bird species. To avoid contravention of the MBCA, vegetation removal should be avoided during the breeding bird season for the Marathon region (C4) which is April 20 to August 31 (Environment and Climate Change Canada, 2017). If vegetation removal must occur during the breeding season, non-intrusive nest

surveys would be undertaken. Any active nests would be protected by a buffer, where construction activity would be restricted and would not be disturbed until the young have fledged. The size of the buffer zone would be species-specific and accordingly could range from 10 m for small migratory bird species up to 500 m for large raptors.

There would be a 50 m wide buffer of trees left along the highway where only the trees that pose a falling hazard to an electrical line or station fence would be removed. All vegetation on the proposed station site would be removed including the stumps. The merchantable wood would be taken to the AV Terraced Bay mill for processing and the un-merchantable material (limbs and brush) would be disposed of on-site through chipping or burning. Consultation with the MNRF would occur if any burning is to occur during the fire season of April 1 to October 31. The stumps would be disposed of appropriately, at landfills or other legal locations. No stumps would be buried. In order to allow the installation of the necessary grounding grid for this station, used to dissipate electrical current into the earth, all organic material must also be removed from this station site. This material would be stockpiled and can be blended into the site upon the restoration phase of the project. If any material is to leave the site, it would be tested for contamination prior to its departure.

Wetlands

In general, removal of woody vegetation would be minimized during construction to the most extent feasible and construction activities for the proposed Project would be restricted to the designated work area. Site disturbance would be minimized through utilization of existing access infrastructure, where feasible.

There are no sensitive vegetation communities or wetlands within the proposed Project area and direct or indirect adverse effects to such features are not expected.

Fish Habitat

Fish habitat would not be affected by the proposed Project; therefore, no mitigation has been detailed.

Woodlands

Significant woodlands have not been identified in the study area; therefore, no effects on woodlands as a result of the proposed Project are anticipated.

Valleylands

There are no valleylands present in the study area; therefore, no effects on valleylands as a result of the proposed Project are anticipated.

Areas of Natural and Scientific Interest

There are no ANSI's present in the study area; therefore, no effects on ANSIs as a result of the proposed Project are anticipated.

Species at Risk

Provincial and federal SAR designations are initially determined by the Committee on the Status of Species at Risk in Ontario (COSSARO) and Committee on the Status of Endangered Wildlife in Canada (COSEWIC), and if approved by the provincial and/or federal minister are added to the provincial ESA, 2007 or federal SARA.

Both the ESA, 2007 and SARA prohibit the killing or harming of species identified as 'endangered' or 'threatened' in the various schedules to the Acts and provide protection to critical or regulated habitat for these species. Subsection 9(1) of the ESA, 2007 prohibits the killing, harming or harassing of species identified as 'endangered' or 'threatened' in the various schedules to the Act. Subsection 10(1) (a) of the ESA, 2007 protects the habitat. General habitat protection is afforded to all threatened and endangered species and species-specific habitat protection is only afforded to those species for which a habitat regulation has been finalized and a permitting process where alterations to protected species or their habitats may be considered.

The potential occurrence of Woodland Caribou within the study area was identified by the MNRF as part of the initial consultation process (pers. comm. K. McNaughton, MNRF District Planner). Woodland Caribou are a threatened species in Ontario and individuals, populations and habitat receive protection under the ESA, 2007. The proposed Project

occurs within the Lake Superior coastal range for the species and distribution, occurrence as well as seasonal habitat use has been quantified by MNRF (MNRF, 2014a and b).

Development can have negative adverse effects on Woodland Caribou and their habitat by increasing disturbance, amount of habitat loss and fragmentation within the range. Caribou can exhibit avoidance of high use areas due to sensory disturbance from construction activities. Most studies have revealed that avoidance responses by Caribou are relative to the size of the disturbance and studies have focused on quantifying responses to large Projects or cumulative disturbance. Regional studies have revealed that Caribou reduce their use of areas within 1 to 15 km of large developments such as mines (Nellmann *et al.* 2001, Mahoney & Schaefer 2002, Cameron *et al.* 2005, Johnson *et al.* 2005, Weir *et al.* 2007, Vistnes & Nellmann 2008, Polfus *et al.* 2011, Boulanger *et al.* 2012). Caribou have varying disturbance threshold responses to linear disturbances, ranging from $\leq$250 m from seismic lines and trails (James & Stewart-Smith 2000, Dyer *et al.* 2001, Hebblewhite *et al.* 2010) to $\geq$500 m for well-traveled roads and highways (Environment Canada, 2012, Haskell *et al.* 2006, Hebblewhite *et al.* 2010, Cameron *et al.* 2005). Studies of caribou and hydro-electric projects suggest diminished habitat use within 3 km following construction (Mahoney & Schaefer, 2002) and up to 5 km if the power line is associated with roads (Nellemann *et al.* 2003, Vistnes & Nellemann, 2008).

As the Project footprint is small, the level of avoidance by Caribou is anticipated to be local in scale and largely occurring during construction as a result of sensory disturbance from noise. However, Woodland Caribou are affected by cumulative disturbance (Environment Canada, 2012) and the Marathon TS Project will incrementally add to levels of cumulative disturbance in the area through the footprint but also through the increased capacity for future transmission lines to be constructed.

The landscape around the Town of Marathon is comprised of historical as more recent disturbance and is fragmented from multiple anthropogenic developments associated with the town's infrastructure. Recent incidental observations in MNRF LIO database suggest that Caribou may occasionally try to move around Marathon and existing infrastructure may create barriers to this movement; however, their exact movement paths or routes can not be confirmed or quantified without detailed satellite telemetry data. This proposed Project,

although small in size would directly contribute to a small increase in cumulative disturbance on the landscape. Increases in cumulative disturbance can act to reduce landscape connectivity for caribou reducing permeability for movement. The proposed Project would also indirectly increase cumulative disturbance by increasing capavity to facilitate a new East-West Tie transmission line.

Potential impacts can be minimized through implementation of Best Management Practices Best Management for Renewable Energy, Energy Infrastructure and Energy Transmission Activities for Woodland Caribou in Ontario (MNRF, 2014) would be used during all phases of an activity and/or development, while working in the area of continuous and discontinuous distribution, to reduce and/or mitigate direct and indirect adverse effects to Caribou and Caribou habitat (MNRF, 2013, MNRF, 2014). Sub-range habitat features, such as seasonal ranges, high use areas such as nursery areas, winter use areas, and travel corridors are particularly sensitive to disturbance. MNRF data reveals nursery and wintering areas distributed along the Lake Superior Coastline starting 3 km west of the Project area boundary (see Figure 4-8). Hydro One would employ the MNRF Best Management Practices for Woodland Caribou (MNRF, 2014) to help to minimize habitat any sensory disturbance and facilitate rehabilitation of the site where feasible including:

- Avoiding adverse effects to known or potential High Use Areas such as Nursery Areas, Winter Use Areas and Travel Corridors;
- Minimizing the cumulative disturbance of the activities by maximizing the use of existing infrastructure (e.g. trails, roads, etc.) for person and equipment travel when conducting operations;
- Avoiding or minimizing sensory disturbance (e.g. noise, dust and light) within 10 km of known or potential high use areas during sensitive periods (these windows also cover the sensitive calving and wintering periods for any local moose that occur in proximity of the proposed Project Area):
    - Between May 1 to September 15 near Nursery Areas; and,
    - Between December 1 to March 31 near Wintering Areas.
- Minimize noise by ensuring that all exhaust systems have mufflers installed properly and that all machinery is operating as per specifications including avoid idling;

- Minimize the size of area to be affected as well as activities that disturb the ground surface;
- Do not feed, follow or harass any Woodland Caribou or any other wildlife species that may inadvertently enter the construction site;
- All on site construction workers would have awareness and education training on any SAR or other wildlife species they are likely to encounter while on site, including Woodland Caribou. Training should include awareness of the ESA, 2007 and how to avoid and/or prevent interactions with local wildlife; and,
- Should a Woodland Caribou suddenly occur in or near the active construction site, project work would cease immediately until the animal has left the area on its own accord. Should a SAR individual (including Woodland Caribou) be observed on site, the MNRF's SAR Biologist would also be contacted immediately for further direction and guidance.

In areas where disturbance is unavoidable, rehabilitation of habitat would occur and include the following steps, where feasible:

- Preserving the organic mat or topsoil;
- Store removed vegetation so that it can be later used as a seed source, moisture retention aid and shade for new growth during reclamation;
- Avoid seeding of non-native or invasive grass and legume-based mixes which will create competition for native target species and alternate food sources for predators of Woodland Caribou, such as Grey Wolf and Black Bear, and provide opportunities for alternate prey such as Moose to proliferate; and,
- Rehabilitate and restore habitat that was disturbed at the activity site.

During the operation phase, any increase in traffic associated with the TS expansion may lead to an increase risk of road mortality and may deter Woodland Caribou from using high use or calving sites due to increases in sensory disturbance (i.e., noise). Given current operational procedure of the existing TS, sensory disturbances are not anticipated to increase following operation of the expansion. Sensory disturbances to Woodland Caribou would not be monitored or evaluated during the operation phase. If an increase in access or human

activity is anticipated as a result of the Shack Lake access trail, additional mitigation would be considered;

- Place signs along roads and corridors (e.g., to increase awareness of Woodland Caribou, to post speed limits, to prevent public use, and to discourage recreational use, etc.);
- Identify reduced speed limits and/or seasonal travel restrictions (between May 1 to November 14 near nursery areas; during April and November near travel corridors; and between December 1 to March 31 near winter use areas);
- Use gates or other physical barriers to reduce additional traffic on any access roads where feasible; and,
- Allow for breaks along access (e.g., slash or rock, snow berms) to reduce sight lines for predators.

Access roads can provide favourable areas for the growth of deciduous shrubs and trees, resulting in increased availability of browse for Moose and Deer resulting in higher densities of Wolf and Black Bear and associated predation rates on Woodland Caribou. To reduce this potential adverse effect, appropriate vegetation control measures to prevent growth of deciduous shrubs and trees along the access route would be considered to keep browsing species from proliferating.

Wildlife and Significant Habitat

Potential SWH was identified on site (MNRF Significant Wildlife Habitat Technical Guide, 2002) and ELC classification preformed (Appendix B). Vegetation community structure surveys measuring canopy cover, species composition and age, presence of snags and/or cavity nesting trees and other coarse woody debris revealed a low potential for late winter cover for moose and bat maternity colonies and moderate potential for nesting habitat for raptors (Appendix B). However, additional evidence to support use by these specific wildlife groups was not observed (Appendix B). Therefore, the proposed Project is not anticipated to have significant adverse effects on SWH for local wildlife.

Other measures that would be undertaken to reduce adverse effects on wildlife habitat (including SWH) resulting from the proposed Project include:

- The retention of snags and cavity trees, where feasible;
- The promotion of wildlife habitat through vegetation control and minimization of footprint effects;
- The retention of natural vegetation, where possible;
- Respecting timing windows during sensitive periods for breeding birds and other wildlife such as Woodland Caribou and Moose, where feasible; and,
- The use of native plant species where seeding or planting is completed.

7.7 Recreational Resources

To maintain access during construction of the Marathon TS, the relocation of the Shack Lake access trail would be undertaken prior to initiating any construction work. The construction of the relocated Shack Lake access trail would be undertaken in compliance with the mitigation measures as outlined above to ensure environmental and natural heritage features are suitably protected. Construction of the relocated Shack Lake access trail prior to any TS construction would permit continued and uninterrupted access to recreational areas by land users and local residents during the construction of the Marathon TS. The timing of such works would be communicated to the Town, local residents and local land users prior to initiating any work. The cross section of the relocated Shack Lake access trail would be similar to the existing trail in that it would not restrict current vehicle access or diminish current uses. Temporary signage may be required once the relocated Shack Lake access trail is operational to ensure its use and access is not affected.

7.8 Visual and Aesthetic Resources

Currently, the existing TS can only be seen from Peninsula Road. The forest surrounding the station obscures views of the station from other properties and receptors. With the new switchyard, SVC and expansion, the views of the site and property would change very little, due to the preservation of the existing trees along Peninsula Road to the new SVC station. Views into Hydro One's property would remain similar to current views.

The equipment and structures inside the SVC station and switchyard would be similar to the current TS yard in size and height. Although there would be more equipment and structures, the views would contain items that already exist and, therefore, would not change the

characters of views. Views above the station fence and tree line would remain similar to current views and will not affect the character and viewsheds.

7.9 Summary of Potential Environmental Effects, Mitigation Measures, and Residual Effects

Table 7-1 provides a summary of potential effects, the associated mitigation, and the residual effects identified for the proposed Project, during the construction and operation and maintenance phase.

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Table 7-1: Summary of Potential Effects, Mitigation Measures and Residual Effects

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
EFFECTS TO FORESTRY RESOURCES			
Forestry Resources	Decrease in value and/or access to other the forestry management unit; NFMC.	• Ensure all agreement commitments made with NFMC are adhered to during construction and operation.	No residual effects are predicted.
EFFECTS TO CULTURAL HERITAGE RESOURCES			
Archaeological and Cultural Heritage Resources	Based on the MTCS Criteria for Evaluating Archaeological Potential and Criteria for Evaluating Built Heritage Resources and Cultural Landscapes checklists, no effects are predicted during the construction, maintenance, or operation phases of the proposed Project.	• If archaeological material is encountered during the course of the project, Hydro One would immediately cease all activities with the potential to affect the archaeological material and engage a licensed archaeologist, as well as the MTCS, and the First Nations and Métis communities that were consulted with for the proposed Project. • In the event that human remains are encountered, Hydro One would immediately stop work in the area and notify the police, the coroner's office, MTCS and the Registrar of Cemeteries.	No residual effects are predicted.
EFFECTS TO HUMAN SETTLEMENTS			
Public Safety	Construction sites pose potential safety hazards to local land users and residents due to the operation of heavy equipment during the construction phase.	• Construction areas to be fenced and locked where necessary with appropriate signage. • The construction schedule to be discussed with the Town of Marathon planning staff and provided to the local emergency services. • Nearby residents to be informed prior to construction.	No residual effects are predicted.
Emergency Services	Road traffic may increase near the proposed Project due to equipment and materials	• Provide advance notice of the construction schedule, construction activities and site access plans to the OPP	These effects will be temporary and limited

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
	delivery and worker vehicular traffic during the construction phase. Increased traffic may lead to decreased response times.	and emergency response services. • Communicate any changes to the OPP and emergency response services during the course of construction.	to the construction phase.
Air Quality	Emissions may be generated from vehicles during the construction, including dust and equipment and vehicle exhaust.	• Maintain equipment and machinery used on site to minimize exhaust. • Adhere to Hydro One's Fleet Environmental Program which includes anti-idling requirements and GPS installation in vehicles to optimize routing. • Use effective dust suppression techniques, such as on-site watering and road sweeping, as necessary.	Negligible residual effects are predicted. Effects on air quality will be temporary and limited to specific operations during the construction phase.
Noise	Noise may be generated during the construction phase.	• Ensure noise abatement equipment on machinery is in good working order. • Maintain equipment such that construction and maintenance activities conform to typical noise parameters. • Consider noise when deciding on equipment and construction work methods and schedule. • Take reasonable measures to control construction-related noise near residential areas. • Construction activities will conform to the Town of Marathon's noise by-law to the extent feasible. Residents, land users and businesses will be informed if activities need to be extended to facilitate their completion. If exemptions to the noise by-law are necessary, the requirements of applicable approvals processes will be met.	Negligible residual effects are predicted. Effects on noise will be temporary and limited to the construction phase.

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
Vibration	Vibration may be generated during the construction phase.	• Consider vibration when selecting equipment, construction work methods and determining work schedules. • Take reasonable measures to control construction-related vibration near sensitive areas.	Negligible residual effects are predicted These effects will be temporary and limited to the construction phase.
Mud	Mud may accumulate due to activities during the construction phase.	• Remove mud from access roads. • Install mud mats near site exits to loosen and shake off mud, as required. • Wash and maintain vehicles and equipment at work areas, as necessary. • Carry out formal clean-up and site restoration (e.g., restoration planting and seeding) as construction progresses.	Negligible residual effects are predicted These effects will be temporary and limited to the construction phase.
TRANSPORTATION			
Traffic Disruption	Road traffic may increase near the proposed Project due to equipment and materials delivery and worker vehicular traffic during the construction phase.	• Construction activities would be scheduled where possible to avoid significant inconvenience. • Develop approved traffic control plan with the Town of Marathon, as necessary. • Erect road signage and provide notification/pre-construction information to area residents on timelines and construction routes. • Where appropriate, assign traffic control officers to assist construction truck entry and exit.	These effects will be temporary and limited to the construction phase. No residual effects are predicted.

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
NATURAL ENVIRONMENT RESOURCES			
PHYSICAL ENVIRONMENT			
Spills	Spills can lead to the direct contamination impacts on wildlife and habitat through acute and chronic effects.	• Refuelling of all vehicles and equipment to be undertaken in a designated location. • Spill clean-up equipment to be nearby and in Hydro One vehicles. • Spills would be cleaned up as soon as possible and the site remediated after a spill. • Any fuels, chemicals and lubricants are stored on level ground in properly contained storage areas.	No residual adverse effects are predicted.
Waste Generation	Solid and/or liquid waste may be generated during the construction phase.	• Minimize waste produced and segregate and recycle waste where possible. • Test, handle, store, transport and dispose of recyclables and waste at licensed recycling and waste disposal facilities, as applicable, in accordance with applicable legislation.	No residual effects are predicted.
EFFECTS TO SURFACE WATER RESOURCES			
Surface Water Features	Surface water features may be impacted through increased sedimentation resulting from site preparation works, grading and excavation operations.	• Discharge construction water in compliance with the required permits and/or approvals, if required. • Develop and execute appropriate construction dewatering plans prior to construction, as required. • Carry out activities in the winter season or dry periods when ground conditions are stable and runoff events are infrequent, where feasible. • Stage work to minimize the extent of exposed and	No residual effects are predicted.

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
		disturbed areas at any given time. • Stockpile soil and aggregates in designated areas above the OHWM of watercourses and away from surface drainage features (i.e. ditches). • Carry out work in consultation with the Town of Marathon and MNRF and incorporate their feedback into design and construction. • Develop and execute site-specific ESC plans, as required. • Minimize equipment operation adjacent to all environmental and natural heritage features, where feasible. • Retain vegetation buffers along the perimeter of all environmental and natural heritage features, where feasible.	
EFFECTS TO NATURAL HERITAGE FEATURES			
Vegetation Communities and Wetlands	Destruction, loss and alteration of habitat.	• Removal of woody vegetation will be minimized during construction to the extent feasible. • Construction activities restricted to the designated work area. • Site disturbance will be minimized through utilization of existing access infrastructure.	No residual effects are predicted.
Wildlife and Wildlife Habitat	Loss of significance, value and function of the feature and harm, harassment or mortality of individual species.	• Retain snags and cavity trees, where feasible. • Promote wildlife habitat through vegetation control and minimization of footprint impacts. • Retain natural vegetation, where possible. • Restrict construction work activities within specified	Significant permanent loss of wildlife habitat will not result.

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
		timing for breeding birds and other wildlife such as Woodland Caribou and Moose, where feasible. • Utilize native plant species where seeding or planting is completed.	
Species at Risk – Woodland Caribou	No Category 1 Woodland Caribou habitat would be directly impacted by the proposed Project, however loss of habitat within the footprint may reduce landscape connectivity and permeability for local Caribou movement around Marathon. Due to the small Project footprint and location directly adjacent to existing infrastructure, any realized and direct cumulative impacts are expected to be minimal. Temporary indirect habitat loss during the construction phase may occur as caribou will avoid areas associated with sensory disturbance (noise etc.); this impact is anticipated to be temporary and limited to the construction phase.	• Avoid impacts to known or potential High Use Areas such as Nursery Areas, Winter Use Areas and Travel Corridors. • Minimize cumulative disturbances by utilizing existing infrastructure and restoring disturbed areas as soon as possible • Avoid or minimize sensory disturbance within 10 km of known or potential high use areas during sensitive periods, where feasible (These windows also cover the sensitive calving and wintering periods for any local moose that occur in proximity of the Project Area): o Between May 1 to September 15 near Nursery Areas; and, o Between December 1 to March 31 near Wintering Areas. • Minimize noise by ensuring that all exhaust systems have mufflers installed properly and that all machinery is operating as per specifications including avoid idling. • Do not feed, follow or harass any Woodland Caribou or any other wildlife species that may inadvertently enter the construction site. • All on site construction workers should have awareness and education training on any SAR or other wildlife	No residual effects are predicted.

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
		species they are likely to encounter while on site, including Woodland Caribou. Training should include awareness of the ESA, 2007 and how to avoid and/or prevent interactions with local wildlife. • Should a Woodland Caribou suddenly occur in or near the active construction site, Project work must cease immediately until the animal has left the area on its own accord. Should a SAR individual (including Woodland Caribou) be observed on site the MNRF's SAR Biologist should also be contacted immediately for further direction and guidance. • In areas where disturbance was unavoidable rehabilitation of habitat should occur and include the following steps where feasible: o Preserving the organic mat or topsoil; o Store removed vegetation so that it can be later used as a seed source, moisture retention aid and shade for new growth during reclamation; o Avoid seeding of non-native or invasive grass and legume based mixes; and, o Rehabilitate and restore habitat that was disturbed at the activity site.	
RECREATIONAL RESOURCES			
Recreational Resources – Shack Lake Access Trail	Impeding access to recreational areas by local residents and land users.	• Communicate timing and the location of the Shack Lake access trail to the Town, local residents and local land users prior to initiating work. • Construct the relocated Shack Lake access trail prior to	No residual adverse effects are predicted.

ENVIRONMENTAL CONCERN	POTENTIAL EFFECTS	MITIGATION MEASURES	RESIDUAL EFFECT
		construction. • Ensure access to the relocated Shack Lake access trail is not restricted during construction. • Provide appropriate temporary signage, as required.	

8 Effects Monitoring

The purpose of effects monitoring is to confirm the extent of the proposed Project's environmental effects by comparing the actual effects with the predicted effects, to verify the effectiveness of mitigation measures, and to determine whether additional measures are warranted. Monitoring also confirms that the commitments, conditions of approval, where applicable, and compliance with other environmental legislation are met. An Environmental Specialist would be assigned to the project for the duration of construction to monitor construction activities and provide guidance on needed field changes.

As noted in previous sections, a project-specific Environmental Specification would be prepared following the completion of the Class EA process. The Environmental Specification would:

- Summarize legislative requirements;
- Summarize environmental commitments set out in the final ESR, and terms and conditions of approval, if any; and,
- Provide specific directions to construction personnel.

At the end of construction, an as-constructed plan would be prepared to guide ongoing operation and maintenance activities. The plan would document "as constructed" conditions as well as ongoing monitoring requirements, if required.

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9 Conclusion

Hydro One has completed a Class EA for Minor Transmission Facilities in accordance with the EA Act for the expansion of Marathon TS in the Town of Marathon. The proposed Project is required to accommodate the proposed new East-West Tie transmission line.

The proposed undertaking is described in section 6 including the design, construction, maintenance and operation, as well as the project schedule.

Potential short- and long-term environmental effects were identified for the proposed Project and corresponding mitigation measures were developed to address these effects. Based on the project design and implementation of the proposed mitigation measures, no significant adverse residual effects are expected.

Hydro One has conducted extensive consultations to inform stakeholders about the proposed Project, as well as to identify and resolve potential concerns. Municipal, provincial and federal government officials and agencies, First Nations and Métis communities, potentially affected and interest persons, and interest groups were consulted by way of meetings and/or written or telephone communications, and a Public Information Centre.

This draft ESR is being made available for public review and comment 30 calendar days, from March 9, 2018 until 4:00 p.m. on April 9, 2018. Hydro One will respond to and make best efforts to resolve issues raised by concerned parties during the review period. Comments received during this period will be addressed and documented in the final ESR.

Upon completion of the ESR, the proposed Project would be implemented in full compliance with the requirements of the Class EA process as outlined in this ESR, incorporating input obtained throughout the planning process including the consultation program. Hydro One will obtain the necessary environmental approvals and permits required for the proposed Project.

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