Historic and Heritage Resources Study

Proposed Bay d'Espoir to Western Avalon Transmission Line (TL 267)

FINAL REPORT

Prepared for:

Newfoundland and Labrador Hydro
A Nalcor Energy Company
Hydro Place, 500 Columbus Drive
PO Box 12400
St. John's, Newfoundland and Labrador
A1B 4K7 Canada

Prepared by:

Gerald Penney Associates Limited
40 Quidi Vidi Road, Suite 104
St. John's, Newfoundland and Labrador
A1A 1C1 Canada

In association with:

Amec Foster Wheeler Environment & Infrastructure
A Division of Amec Foster Wheeler Americas Limited
133 Crosbie Road, PO Box 13216
St. John's, Newfoundland and Labrador
A1B 4A5 Canada

July 2015

IMPORTANT NOTICE

This report was prepared exclusively for Newfoundland and Labrador Hydro by Gerald Penney Associates Limited and Amec Foster Wheeler Environment & Infrastructure, a Division of Amec Foster Wheeler Americas Limited (Amec Foster Wheeler). The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in the above noted companies' services and based on: i) information available at the time of preparation, ii) data supplied by outside sources and iii) the assumptions, conditions and qualifications set forth in this report. This report is intended to be used by Newfoundland and Labrador Hydro only, subject to the terms and conditions of its contract with Amec Foster Wheeler. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

EXECUTIVE SUMMARY

Newfoundland and Labrador Hydro (Hydro) is proposing to develop a transmission line (TL 267) across southeastern Newfoundland, from Bay d'Espoir to the Western Avalon Peninsula (the Project). This report was prepared by Gerald Penney Associates Limited (GPA) and comprises an Historic and Heritage Resources Study in support of the Project's Environmental Assessment (EA) Registration and future Project planning and design.

The proposed TL 267 will be approximately 188 km in length and will extend east from the existing Bay d'Espoir Terminal Station to the Western Avalon Terminal Station near Chapel Arm, paralleling existing transmission lines through this region. Of the total length of the proposed transmission line, an approximately 44 km segment on the Isthmus of Avalon has been previously assessed for historic resources and archaeological potential (Stantec 2010). The main focus of this study has therefore been the proposed 144 km segment of right of way (ROW) for the Project that will be located between the Bay d'Espoir Terminal Station and the point at which the proposed TL 267 meets the existing TL 203 near Come by Chance. The overall Study Area for this analysis is a one kilometre wide area extending 500 m on either side of the centreline of the proposed transmission line ROW.

The level of past archaeological research and investigation within, and adjacent to, the Study Area varies greatly from west to east. For the majority of the ROW, there are no known sites within 10 km of its centreline. At the western end, two sites (ClAw-01 and 02) are located 8-12 km from the centreline, at Conne River. East of Conne River, there are no known sites within 25 km of the centre line for 100 km, until the ROW traverses the Pipers Hole / Swift Current area, where there is a concentration of sites. The closest of these sites to the ROW is ClAn-11, which is about one km southwest of the Study Area. East of Pipers Hole, there is a historic-era site on Black River, two historic sites in North Harbour (ClAm-01 and ClAm-02), which are respectively 150 m and one km south of the proposed ROW. At Southern Head, between North Harbour and Come by Chance, two late-19th to early-20th century ethnographic sites are recorded (01M/16 Ethno 1 and 01M/16 Ethno 2). In summary, there is one known site within the one km wide Study Area (ClAm-01), and one which is within or very close to the Study Area (ClAm-02), but there are no known archeological sites within the proposed Project area (ROW) itself.

This report also presents background information on the natural and human history of the Study Area and surrounding region which is also used for the analysis. It then describes the approach and methodology used for the Archaeological Potential Mapping which forms the core part of this study. The Study Team has developed and utilized a system of objective geographic criteria for large-area desk-based assessments, which have been adapted for the current study. This system includes 10 broad categories of High historic resources potential (Criteria 1-10) and 10 categories of Medium historic resources potential (11-20). Based on the Study Team's review and analysis of the Study Area against these criteria, a total of 35 areas and locations were identified as being Areas of Interest (AOIs) which have High (8 locations) or Medium (27 locations) historic resources potential (see Appendix B, C and D). All inland areas that did not meet one or more of the identified criteria are considered to have Low historic resources potential.

The fact that there are only 37 locales (AOIs) with identified (High or Medium) potential to contain historic resources in the overall Study Area is reflective of the primarily inland nature of the Project, which approaches within five km of the coastline for only the first 10 km of the ROW east from Bay d'Espoir and for the approximately 25 km segment from Pipers Hole to Come by Chance. The current knowledge of the pre-contact peoples of Newfoundland and Labrador is derived primarily from archaeological sites located at, or near, the coast. Early historic archaeology is likewise primarily coastal, where European use and seasonal occupation of headland fishing stations in Fortune and Placentia Bays occurred early in the post-contact period. Year-round settlement by fishing families of European origin or descent began in the 18th century, with increasing seasonal use of the proximal interior[1] as population increased and settlement spread throughout the 19th century.

Of the nine High potential areas identified, AOI-6 (Conne River) is identified on the basis of the historic usage and cultural importance of this waterway amongst the Mi'kmaq. It is also presently a scheduled salmon river. About three km east of Conne River, the Study Area crosses a traditional route from Conne River (Old Country Path, AOI-7), to Sipaqmekek (sometimes rendered as Ce-bob-me-keg) and into the East Country and Middle Ridge caribou hunting areas. Train Hill (AOI-11) is also a known location of some cultural importance to the Mi'kmaq, and AOI-13 (Bay du Nord River), located near the outflow of another scheduled salmon river from Lake Medonnegonix, is proximate to known historic caribou hunting areas, transportation routes and portages.[2] Most other identified High potential locations are all situated near the eastern end of the Study Area, where the proposed transmission line crosses the Pipers Hole (AOI-30), North Harbour (AOI-33 and AOI-34) and Come by Chance (AOI-35) Rivers. Stantec (2010) identified one High potential area on the Isthmus of Avalon, on the shore of Big Gull Pond.

[1] GPA defines the proximal interior as that lying within 16 km (10 miles) of the coast.
[2] Medonnegonix is the orthography employed by Canada's National Topographic Service for this body of water. It is a historically-employed toponym derived from "the end of the portage" in the Mi'kmaq language, an expression now usually represented by the word *Metoqonikanik* in the Smith-Francis orthography. The Smith-Francis orthography was developed in 1980 and is the orthography supported by the Míkmaw Grand Council. *Míkmaq* (note acute over "i") is the plural, non-possessive form in the Smith-Francis orthography. *Míkmaw* is singular, and also the adjectival form to describe a singular noun. Míkmaw is also closer to representing phonetically, in English, the way the word Míkmaq is properly pronounced, which is "Meeg-em-ach" according to the Province of Nova Scotia. GPA has adopted the Nova Scotia convention of using the plural, non-possessive form "Mi'kmaq" in English (note the use of an apostrophe instead of an acute over the "i" to represent the long vowel). GPA consults native speakers and academics to ensure that correct grammar and form are used for quotations, or phrases written in the Mi'kmaq language. Orthographies, toponyms and original spellings used in historical documents are not changed.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 INTRODUCTION

Newfoundland Labrador Hydro (Hydro) owns and operates an extensive electrical generation and transmission system on the Island of Newfoundland, which includes a 613 megawatt (MW) hydroelectric generation station at Bay d'Espoir (BDE) in the south-central portion of the Island, as well as several transmission lines that extend between it and other electrical infrastructure and load centres across the Island. This includes two existing transmission lines that run from that facility to Sunnyside (TL 202 and TL 206) which were constructed in the late 1960s, as well as a 230 kV transmission system between Sunnyside and Chapel Arm.

The proposed development project that is the subject of this study includes the construction and operation of a new 230 kilovolt (kV) transmission line that will be approximately 188 km long and connect the existing BDE and Western Avalon (WAV) Terminal Stations (hereinafter also referred to as the "Project" or "TL 267"). The proposed TL 267 will parallel existing transmission line infrastructure (TL 202 and TL 206) from BDE to Come by Chance (CbC) and further parallels TL 203 from CbC to the WAV substation in Chapel Arm (Figure 1). Along with the proposed development of TL 267 between BDE and WAV, upgrades to existing infrastructure at the BDE and WAV terminal stations will also be completed. The existing transmission lines (TL 202, 203 and 206) were cleared and constructed within the boundaries of the easement granted to Hydro by Government at the time of their development, as will the proposed TL 267.

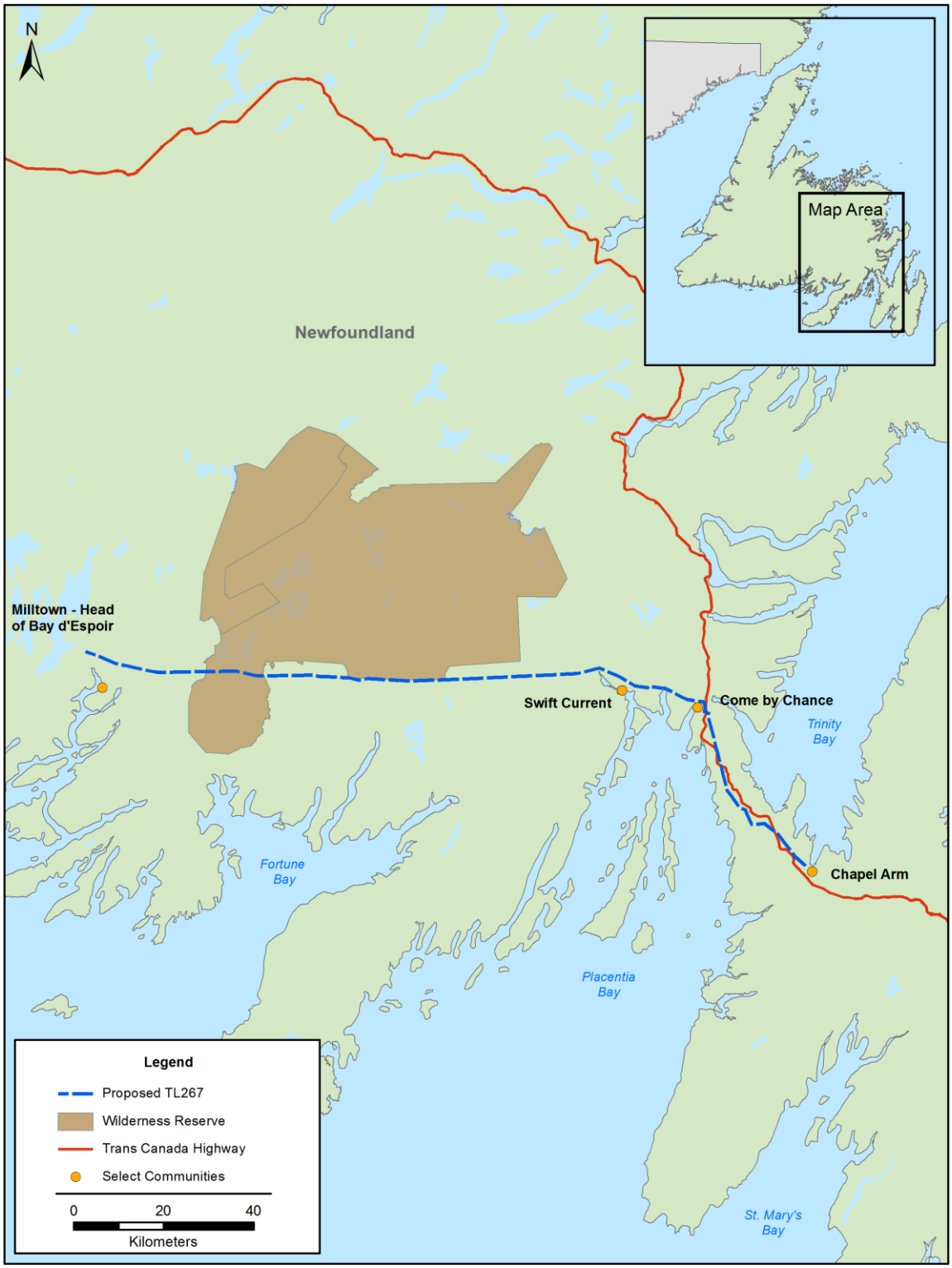
Given that this new transmission line and associated infrastructure will entirely follow along existing transmission lines and other infrastructure in the region, the Project is expected to have few if any environmental issues associated with it. Hydro is, however, committed to ensuring that Project construction and operations are conducted in an environmentally acceptable manner, in full compliance with associated environmental regulations and permits, as well as the company's own environmental policies, plans and standards. The Proponent has therefore planned and completed an environmental study program in relation to the proposed Project, in order to obtain and compile information on key aspects of the existing biophysical and socioeconomic environments within and near the Project area. The information provided through this study program is intended to support the Project's Environmental Assessment (EA) registration and review, and will be used in on-going Project planning and design, as well as in its eventual permitting and construction / mitigation planning.

This *Historic and Heritage Resources Study* comprises one component of that environmental study program.

1.1 Study Purpose, Objectives and Approach

Historic resources include sites and objects of historic and archaeological, cultural, spiritual and paleontological importance, which are protected under the NL *Historic Resources Act* (1985) administered by the Provincial Archaeology Office (PAO) of the Newfoundland and Labrador Department of Business, Tourism, Culture and Rural Development. The proposed Project will involve the clearing of vegetation and other ground disturbance, which may disturb or destroy such resources if they are present within the eventual Project "footprint".

Figure 1 - The Proposed Bay d'Espoir To Western Avalon Transmission Line (TL 267)



The purpose of the study is to identify and describe any known historic resources within or near the proposed Project area, as well as any areas with the potential to contain such resources. In doing so, it has included the following (inter-related) components:

1) *Background Research*, to identify and map known historic resources in the region, and to understand and describe its general human history. This included the review and analysis of information on the natural environment, and available information on past human habitation and associated activities (Chapters 2-4 and Appendix A); and

2) *Archaeological Potential Mapping*, to identify any areas of archaeological potential, for consideration in Project planning and design, and/or for possible further study, as required (Chapter 5 and Appendices B - D).

In terms of the latter component, and as referenced previously, the Study Team has developed and utilized a system of objective geographic criteria for large-area desk-based assessments, which have been adapted for the current study. This system includes 10 broad categories of High historic resources potential (Criteria 1-10) and 10 categories of Medium historic resources potential (11-20). These criteria and their application to the Study Area to identify and evaluate particular Areas of Interest (AOIs), and the outcomes of the associated archeological potential mapping, is provided in the Chapters and Appendices that follow.

1.2 Study Areas and Identified AOIs

In completing the analysis described above, the study has focussed upon identifying, reviewing and presenting information and analysis at a number of geographic scales, including:

Overview Assessment Area: For the overall review of existing information and background research regarding human history and occupation, the study includes consideration of large regional study area that comprises large parts of south-eastern Newfoundland. The background research components of this study consider known pre-contact and historic usage of all of southeastern Newfoundland, interior of Bay d'Espoir, Fortune Bay and Placentia Bay.

Study Area: The Study Area extends 500 m on either side of the centre line of the ROW for the proposed TL 267 (see below). This larger, surrounding area is considered in order to provide relevant, regional context for the analysis, as well as address the potential for Project-related ground disturbance outside the 40 m wide transmission line routing itself.

Project Area / Transmission Line ROW: A specific routing has been selected for the transmission line, which will involve a cleared ROW approximately 40 m in width.

Of the total length of the proposed transmission line, an approximately 44 km segment on the Isthmus of Avalon has been previously assessed for historic resources and archaeological potential (Stantec 2010). The main focus of this study has therefore been the proposed 144 km segment of ROW for the Project that will be located between the Bay d'Espoir Terminal Station and the point at which the proposed TL 267 meets the existing TL 203 near Come by Chance.

Table 1 provides a summary overview of the various AOIs that have been identified within the Study Area and their identified archaeological potential, for reference.

Table 1 – Summary of Identified Areas of Interest and their Archaeological Potential

AOI	Name / Location	Potential
1	Bay d'Espoir Terminal Station	Medium
2	Forebay Access Rd	Medium
3	Southeast Brook	Medium
4	Road East of SE Brook	Medium
5	Farm Access Road	Medium
6	Conne River	High
7	Old Country Path	High
8	Little River	Medium
9	Spruce Pond	Medium
10	Bear Droke Trail	Medium
11	Train Hill	High
12	Western Pond LO	Medium
13	Bay du Nord River	High
14	Medonnegonix	Medium
15	Pond east of Medonnegonx	Medium
16	Koscaecodde Esker	Medium
17	Hungry Grove Pond cabin	Medium
18	Hungry Grove Pond East	Medium
19	Long Harbour Trail	Medium
20	Blue Pond Hill	Medium
21	Kane Brook	Medium
22	Beaver Brook	Medium
23	Long Hr River W	Medium
24	Long Hr River E	Medium
25	Pin Hill Brook / Esker	Medium
26	Dunnes Brook	Medium
27	Sandy Harbour River	Medium
28	Wigwam Brook W	Medium
29	Wigwam Brook E	Medium
30	Pipers Hole River	High
31	Pipers Hole Lookout	Medium
32	Black River	Medium
33	North Harbour Bottom	High
34	North Harbour River	High
35	Come by Chance River	High
NTL 0523	Big Gull Pond (Stantec 2010)	Medium
NTL 0524	Eastern shore of Big Gull Pond (Stantec 2010)	High

2.0 HUMAN HISTORY AND PREVIOUS ARCHAEOLOGY

The following provides a review and summary of existing and available information on the human history of the region. This is provided as background and context for the study and the associated assessment of archaeological potential in and around the Study Area. A number of supporting figures are presented in Appendix A.

2.1 Overview of Pre-Contact Cultures of Newfoundland

The first recorded cultural group on the Island of Newfoundland were the Maritime Archaic Indians (MAI). The earliest evidence comes from the Gould site at Port au Choix, where one component had been dated to c. 5430 Before Present (c. 6240 BP calibrated).[3] The next oldest site on the Northern Peninsula is Big Droke 1 at Bird Cove, dated 4530+/-60 BP. Port au Choix is also the location of the well-known MAI cemetery site excavated in the 1960s after having been accidentally discovered during mechanical excavations for a building foundation.

No early MAI material has been conclusively identified in Newfoundland, although later MAI sites are located throughout the province. Uneven site distribution has been attributed to Relative Sea Level (RSL) differences between the MAI habitation era and present (see next section). Multiple-component[4] sites recorded in the Overview Assessment Area have found the earliest MAI either below the high water mark, or eroding into the sea. L'Anse a Flamme (CjAx-01, near Gaultois) is an example of the former.

It has been suggested that the Maritime Archaic populated the Island for about 2,000 years, as sites have not been dated after c. 3200 BP. The cultural "disappearances" of the MAI and later peoples have sometimes been interpreted as evidence of extinctions due to meager food sources, particularly of those groups whose subsistence patterns included the interior and terrestrial animals (Tuck and Pastore 1985). While a natural down cycle in caribou populations, for example, would likely have led to starvation by individuals, more recent thinking is that groups under such stress probably moved off the Island (Schwarz 1994; Renouf 1999). That various cultural groups on the Island likely still had connections with kin in Labrador is evidenced by trade and movement of lithic materials back and forth between these regions. Paleo-environmental data suggest that the MAI "extinction" was a period of warming, affecting sea ice and thus seal migration and populations.

It is currently posited that the end of the Maritime Archaic presence was the beginning of a 300-year period during which there was no human presence in Newfoundland. In Labrador, the MAI were succeeded temporally by Intermediate Indians, but here only a couple of possible Intermediate sites have been identified, all on the Northern Peninsula (Beaton 2004).

[3] "Appendix", p.304, in Renouf (ed.) 2011. All other dates given are uncalibrated unless otherwise stated.

[4] Archaeological sites which include artifacts from more than one culture are referred to as multi-component. In Newfoundland the mouths of salmon rivers, for instance, have often be re-used by multiple pre-contact cultures, as well as in the historic era. In layman's terms: "a good spot is a good spot."

While the MAI were an Indian people who migrated to Labrador from the south, the earliest Eskimo people are referred to as Groswater Palaeoeskimos. Groswater repopulated the Island c. 2990 BP, about 200 years after they first appear in the archaeological record of Labrador, having migrated from the north. The period of warming which coincides with the end of the MAI era was succeeded by a period of overall cooling, which probably had both "push" and "pull" factors for Paleoeskimos pursuing marine mammals. It is also posited that they had quite high mobility, as suggested by small site size, although many of the most-favoured sites were re-used many times in the 1000-year Groswater period. Their marine-based economy focused on seals, supplemented by fish and seabirds (Wells 2005). A few Groswater sites have also been found in the interior, suggesting seasonal pursuit of caribou as an important supplement at certain times of the year, similar to that of the Inuit of the historic era (Holly and Erwin 2009:70-71). Their sites have not been found later than c. 1800 BP, another period of slight warming. Again, it is assumed that sea ice was affected, which in turn affected seal migrations and populations (Bell and Renouf 2011:36).

During the last centuries of Groswater occupation, two additional groups moved onto the Island: known to archaeologists as Dorset Paleoeskimos and Recent Indians. The Dorset who moved here are those classified as "middle" Dorset in Labrador (no "early" or "late" Dorset sites have been identified). They first arrived c. 2000 BP, and became the most populous, widely distributed pre-contact group. The Dorset may be thought of as Newfoundland's most "successful" pre-contact people, having an even greater marine-oriented subsistence than Groswater, focusing on seals, supplemented by birds and fish. Most Dorset sites are located along the coast in highly-exposed headland areas, including several sites on the islands of Placentia Bay (see Figure 2, Known Archaeological Sites in the Overview Assessment Area).

In Newfoundland there is evidence of regional distinctions (e.g., differing end blades styles) and over time discrete Dorset populations developed in specific regions, such as adjacent bays, or opposite sides of an isthmus. This development suggests an evolution to a more settled seasonal round within a specific region (LeBlanc 2010). Again there is evidence of forays inland in pursuit of caribou.

The Dorset culture began to wane 1200-1100 BP, coinciding with a rise in temperature, which would have affected sea-ice, and in turn, seal populations. Evidence of a greater variety of food resources is found in later Dorset faunal collections (Renouf and Bell 2009; Bell and Renouf 2011:37). Dorset disappearance from the archaeological record about 1100 BP, may reflect a retreat to Labrador (LeBlanc 2010:3). The similarities in "late" dates at Dorset sites across the Island, however, suggest a large-scale population collapse or extinction (Renouf and Bell 2009:269).

Meanwhile, a second wave of Amerindians, referred to as Recent Indians, who can be thought of as "ancestral Beothuk", arrived c. 2100 BP. The first Recent Indian group, classified as the Cow Head complex (c. 2110-930 BP), moved onto the Island a short time before the Dorset Paleoeskimo, and were followed shortly thereafter by the Beaches complex (c. 2000-910 BP). Despite a relative lack of sites (especially the Cow Head complex), these early groups are presumed to have had a mixed subsistence, involving both coastal and interior resource exploitation.

Reliance on seals, seabirds and seabird eggs are thought to have resulted in significant seasonal use of the outer coast. Inner coastal areas would have been source areas for shellfish, capelin and salmon (at the mouths of rivers). Access to caribou further dictated regular seasonal presence in the interior.

A mixed subsistence seasonal round, with accustomed corridors of access between headlands and the interior, are aspects of aboriginal cultures of the historic era (Beothuk and Mi'kmaq). Thus historic evidence is a fruitful area of study when developing hypotheses relating to pre-contact patterns of movement and settlement.

Broadly contemporary dates for the Cow Head and Beaches complexes, coupled with differing lithic styles, have led to a conclusion that they are probably not part of a cultural continuum, but contemporaneous regional variations. It is presently thought that the Cow Head complex on the Northern Peninsula dissipated c. 930 BP. Meanwhile, the Beaches complex persisted primarily in central Newfoundland and developed into the Little Passage complex (c. 1100-360 BP). Thus the group known anthropologically as Recent Indians (Little Passage complex) are those encountered by Europeans c. AD 1500, and known for most of the historic era as "Red Indians" or Beothuk.[5]

2.2 Relative Sea Level History

Most of the proposed TL 267 right of way (ROW) lies many kilometres inland, and so the potential influence of relative sea level (RSL) change is limited. Of the 144 km of the ROW that comprises the 2015 Study Area, approximately 110 km are located more than five km from the coast. The majority of the route also lies at elevations which would not be affected by even the most extreme RSL history – only six of the 35 identified AOIs (see later sections of this report) are less than 20 metres above sea level (m asl). The principal exception is the section from Pipers Hole to Come by Chance, at the bottom of Placentia Bay[6]. Placentia Bay is postulated to have a Type "B" RSL curve, whereby there was an initial sea-level fall after de-glaciation followed by a rise to present (Renouf and Bell 2006:7). From an archaeological perspective, this results in rising sea levels, and the inundation, erosion and/or submergence of sites. This geomorphological event has its greatest impact on the oldest sites (i.e., Maritime Archaic Indian).

Type "B" RSL curves are the general rule for much of the Island[7]. Maritime Archaic sites have been recorded eroding from the shoreline in Trinity Bay (Gilbert 1996), and erosion at the Beaches Beothuk / Little Passage site in Bonavista Bay is an ongoing concern. It is postulated that RSL in the Town of Placentia has risen by as much as 60-90 cm in the past 300 years (Catto et al 1997:32-33), evidenced by flooding and inundation at its archaeological sites.

Similar results can be expected for the Pipers Hole, North Harbour, and Come by Chance areas at the bottom of Placentia Bay. Some of the sites recorded in these areas are the result of cultural material found eroding from banks and shorelines (McLean 2013). While this is partially the result of normal storm and tidal action, it is also indicative of rising RSL. Areas with expanses of shallow water or tidal flats are certainly potential locations for pre-contact finds. Specific locations in the Study Area where

[5] Encounter with Europeans and the ready adoption of metals affected the material culture of the Little Passage people. The presence of such materials distinguishes Little Passage/Recent Indian from Beothuk anthropologically. However, the archaeological evidence is clear that a great many Recent Indian sites continued to have significant use in the historic era.
[6] AOIs 1, 30, 32, 33, 34 and 35 – for approximate elevation of each AOI, see Appendix A.
[7] The main exception is the Northern Peninsula, which has a Type "A" RSL curve, whereby the oldest sites are often found at higher elevations, and thus further inland.

RSL may have had greatest impact are the bottom of North Harbour (AOI-33), and the sandy flats at the mouth of North Harbour River (AOI-34).

2.3 Past Archaeological Assessments and Their Findings

The level of past archaeological research and investigation within, and adjacent to, the proposed transmission line varies considerably from west to east. For the majority of the ROW, there are no known sites within 10 km of its centreline. At the western end, two sites (ClAw-01 and 02) are located 8-12 km from the centreline, at Conne River. East of Conne River, there are no sites whatsoever within 25 km of the centre line for 100 km, until the ROW traverses the Pipers Hole / Swift Current area, where there is a concentration of sites (see Figure 2).

For much of the TL 267 route, consideration of sites within the larger surrounding area is required in order to assess and evaluate archaeological (pre-contact) potential. There are several pre-contact sites in the Bay d'Espoir and Hermitage Bay areas, and near Gaultois in particular. The most significant of these is the Recent Indian site at L'Anse a Flamme (CjAx-01), which is about 40 km SSW of the TL 267 Study Area. L'Anse a Flamme is what archaeologists refer to as a "type site," where the Little Passage complex was first identified (Penney 1984). L'Anse a Flamme is also a multi-component site[8] and other sites in the Hermitage Bay area also have evidence of Maritime Archaic and Recent Indian occupations, although the greatest number of artifacts recovered on the southeast coast are Palaeoeskimo (Penney 1984:54-56).

The Harbour Breton area, east of Hermitage Bay, has another cluster of sites, where pre-contact and historic components have been identified. This cluster is probably in part reflective of Harbour Breton's headland location, but is also likely a result of the level of surveying effort, as it is accessible by road. Further east, the bottom of Fortune Bay is one of few parts of the coast of Newfoundland to have remained "beyond the road." A scant handful of sites have been recorded, spot-finds of a range of pre-contact and historic era components, including a possible European burial. Although such sites are not of direct consequence to the Study Area[9], they do indicate some usage of Fortune Bay by each pre-contact group. Further, the topography of Fortune Bay is well suited to identifying marine corridors of access between the headlands and the interior. In particular, Long Harbour, the Belleoram / Bay du Nord area (Belle Bay), and the Bay du Nord River, have been identified as priority areas for future archaeological investigation (GPA 2011b: 3, 30-32, 37-38).

In 2008 GPA was engaged by the Provincial Archaeology Office to conduct an overview assessment of western Placentia Bay (GPA 2008). At that time the Pipers Hole River / Swift Current area was identified as a priority area. In 2013 archaeologist Laurie McLean conducted the recommended survey, recording 12 sites (ClAn-01 to ClAn-12, see McLean 2013), including possible MAI and Recent Indian sites, as well as Beothuk and Mi'kmaq. The closest of these to the ROW is ClAn-11, which is about one km southwest of the Study Area, and 1.5 km south of AOI-30. Other Pipers Hole sites are between 1.5 and 3 km from the Study Area, most being on the southwest side of Pipers Hole (which is to say, on the opposite side of the inlet from the community of Swift Current and the

[8] In this case MAI, Dorset and Little Passage. MAI materials at L'Anse a Flamme were found almost exclusively below the high water mark.
[9] For instance, CjAr-01 (Long Harbour) is 30 km south of the Study Area.

proposed TL 267). East of Pipers Hole, there is a historic-era site on Black River, two historic sites in North Harbour (ClAm-01 and ClAm-02), which are respectively 150 m and one km south of the proposed ROW. At Southern Head, between North Harbour and Come by Chance, two late 19th to early 20th century ethnographic sites are recorded (01M/16 Ethno 1 and 01M/16 Ethno 2).

The Isthmus of Avalon has long been considered to be an area of significant pre-contact site advantage, with its opportunities for transit between Placentia and Trinity Bays. This is particularly so along the Come by Chance / Sunnyside corridor, where the isthmus is at its narrowest and where there is historic documentary evidence of transit by both Beothuk and Europeans. Three sites have been recorded in Come by Chance Harbour, one pre-contact, another European, and another multicomponent (ClAl-02, CkAl-01, CkAm-06), all of which are 1-4 km away from the Study Area. Other sites have been identified at Arnolds Cove near the Whiffin Head Transshipment Terminal, mostly late-historic gardens, and there are several pre-contact sites at Bordeaux on a narrow peninsula between Come by Chance Harbour and Arnolds Cove.

On the opposite side of the isthmus, Sunnyside, Trinity Bay has two sites, including a 17th century winterhouse with a Beothuk component (ClAl-05), and a large multi-component site at Frenchmans Island (ClAl-01) with evidence of all the pre-contact cultures as well as European material. Inland from Sunnyside (approximately 300 m north of the road into the community, 700 m north of the terminal station), are the remains of a mid-19th century telegraph station (ClAl-04). Further out the bay at Bull Arm, and further again at Stock Cove, other sites have been identified and investigated which are considered to have added significantly to the knowledge base related to each of the pre-contact cultures of Newfoundland. At Stock Cove a large Dorset Palaeoeskimo site, identified in the 1980s, also has a later Recent Indian component. The Recent Indian component is speculated to be a base camp for forays into the interior, and thus a significant habitation site. A concentration of pre-contact sites between Pipers Hole and Stock Cove highlights the potential for historic resources along the eastern 25 km of the proposed ROW. Additionally, surveys and excavations throughout Trinity and Placentia bays have shed light on the larger cultural history of the Isthmus. Excavation and testing has identified several sites on the islands and coast of Placentia Bay, most having pre-contact components, with Palaeoeskimo sites being most prominent. Dorset sites in Trinity Bay have produced similar style end blades to specimens recovered in Placentia Bay and along the south coast, suggesting travel to and fro. An additional draw would have been the salmon runs on the Pipers Hole, Black, North Harbour, and Come by Chance Rivers.

As indicated previously, this study evaluates and maps archaeological potential along the TL 267 ROW as far east as where the proposed TL 267 meets TL 203, near Come by Chance. The remaining 44 km of the TL 267 ROW, between Come by Chance and the Western Avalon Terminal Station near Chapel Arm, was the focus of a historic resource assessment in 2008 (Stantec 2010:51-54). That study identified three[10] High potential locales within one km of the proposed transmission line (TL 267) including: Northern Bight (near Sunnyside), portions of Big Gull Pond and the Southern and Western Coves of Chapel Arm. One Medium potential locale was identified also at Big Gull Pond. Further field testing was conducted at Chapel Arm, Jacks Pond, and near Sunnyside (the Bay Bulls Telegraph Station, ClAl-04). Generally, the Avalon Peninsula portions received their lowest level of testing of the

[10] Based on the criteria developed and used in that study.

entire transmission line route that was the subject of that previous study, and which extended from the Strait of Belle Isle to Soldiers Pond, "reflecting the scarcity of suitable testing locations" (Stantec 2010: 75).

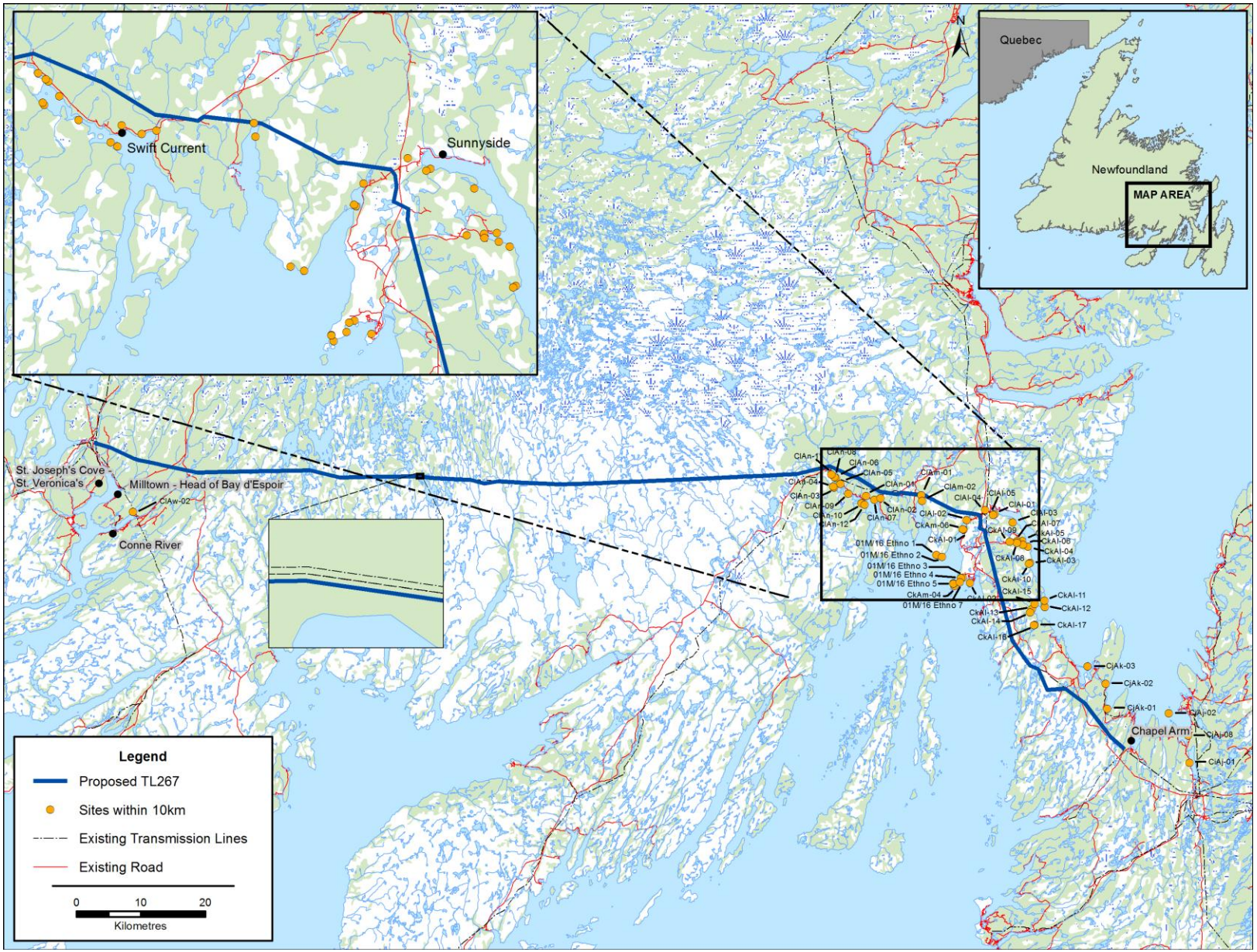
Table 2 below provides a listing and description of all known and identified archeological sites that are located within 10 km of the proposed Project Area (ROW). These known sites are shown in Figure 2.

Table 2 – Known Archaeological Sites Located within 10 km of the Project (TL 267)

Borden #	Name	Culture	Apx Distance From ROW Centerline (km)
Bay d'Espoir to Come by Chance			
ClAm-01	North Harbour 1	European; Euro-American	0.15
ClAl-04	Bay Bulls Arm Telegraph Station	Euro-American	0.9
ClAn-11	Piper's Hole Northwest	Precontact	1.0
ClAm-02	North Harbour 2	European; Euro-American	1.0
CkAm-06	Come-By-Chance Beach West	European; Precontact	1.2
ClAl-02	Come-By-Chance River West	European	1.2
ClAn-02	Black River Pulp Mill	European	1.3
ClAl-01	Frenchman's Island	Maritime Archaic; Palaeoeskimo (Early); Palaeoeskimo (Late); Recent Indian; Beothuk; European	1.3
ClAn-03	Pipers Hole 1	Precontact: Beothuk; Euro-American	1.5
ClAn-07	Pipers Hole East	Precontact; Euro-American	1.5
ClAn-04	Pipers Hole 2	Precontact	1.7
ClAn-01	Swift Current General	Maritime Archaic	1.7
ClAn-05	Pipers Hole 3	Precontact; Euro-American	2.1
ClAn-06	Pipers Hole North	Precontact	2.2
ClAn-08	Pipers Hole West	Precontact	2.2
ClAn-09	Barington Residence	Mi'kmaq	2.8
ClAn-10	Hutchings	Euro-American	3.1
CkAl-01	Come-By-Chance	Undetermined	3.2
ClAn-12	Grip's Nest	Precontact; Euro-American	4.1
CkAl-10	Stock Cove West	Maritime Archaic; Palaeoeskimo (Late); Recent Indian; Beothuk; European	5.2
CkAl-03	Stock Cove	Maritime Archaic; Palaeoeskimo (Early); Palaeoeskimo (Late); Recent Indian; Beothuk; European	5.3
01M/16 Ethno 2	Doughboy Cove 1	Euro-American	6.4
01M/16 Ethno 1	Southern Head 1	Euro-American	7.2
ClAw-02	Reuben Point	European	8.0

Borden #	Name	Culture	Apx Distance From ROW Centerline (km)
Come by Chance to Western Avalon			
ClAl-05	Sunnyside 1	Beothuk; European	2.1
CjAk-01	Collier Bay 1	Maritime Archaic	2.2
CkAl-09	Crossing Pond	Palaeoeskimo (Late)	3.4
CkAl-14	Maurice's Hole 1	Precontact; Euro-American	3.6
CkAl-17	Rantem 2	Precontact	3.7
CkAl-16	Rantem 1	Euro-American	3.9
CkAl-02	Arnold's Cove	Undetermined	4.1
CkAl-13	George's Cove 1	Precontact	4.3
CjAk-02	Thornlea 1	Recent Indian; European	4.4
CkAl-07	Great Mosquito Cove	European	4.5
CkAl-08	Crout Site	Palaeoeskimo (Late); Recent Indian	4.6
ClAl-03	Little Mosquito Cove 1	Precontact	4.7
CkAl-15	Northeast Arm 1	Precontact	4.7
CjAk-03	Bellevue Beach 1	European	4.8
01M/16 Ethno 3	Grassy Point Garden 1	Euro-American	5.1
CkAl-05	Peddle's Cove 1	European	5.3
CkAl-06	Bob Peddle's Cove	European	5.3
01M/16 Ethno 4	Grassy Point Garden 2	Euro-American	5.3
01M/16 Ethno 7	Grassy Point Garden 5	Euro-American	5.7
CkAl-04	Sampson's Head Cove	Maritime Archaic; Palaeoeskimo (Early); Palaeoeskimo (Late); Recent Indian; Recent Indian; Beothuk	5.9
CkAl-12	Fox Cove 1	Precontact	6.2
CkAl-11	Chislett's Cove 1	Palaeoeskimo	6.3
01M/16 Ethno 5	Grassy Point Garden 3	Euro-American	6.5
CkAm-04	Bordeaux East	Palaeoeskimo (Late)	6.6
01M/16 Ethno 6	Grassy Point Garden 4	Euro-American	6.7
CjAj-02	Dildo Island	Maritime Archaic; Palaeoeskimo (Early); Palaeoeskimo (Late); Recent Indian; Beothuk; European	8.9
CjAj-08	Dildo Whale Bone	Euro-American	10.0
CiAj-01	Russell's Point	Recent Indian; Beothuk	10.0
Source: Data provided by the NL Provincial Archaeology Office (June 2015)			

Figure 2 - Known Archaeological Sites



3.0 NATURAL FEATURES

The following provides a high level review and summary of available information on the past and current biophysical environment of the Overview Assessment Area. This information is again provided as background and context for the study and associated assessment of archaeological potential in and around the Study Area.

As noted previously, all areas within the Study Area that have been identified as having some level (High or Medium) of archaeological potential are referred as Areas of Interest (or AOIs) and are numbered consecutively from west to east. The preceding information and that which follows has been used in the identification of these various AOIs within the Study Area, which are also referred to throughout the following sections as relevant and shown in detail in the accompanying Appendices.

3.1 The Natural Environment

In one systematic classification of Newfoundland's ecoregions, the majority of the present Overview Assessment Area is included in the Maritimes Barrens region – in the west in the Central Barrens subregion and in the east in the Southeastern Barrens sub region. Damman (1983) provides a general description of the Maritime Barrens region as consisting of:

> *…extensive barren areas consisting mainly of dwarf shrub heaths, bogs and shallow fens. Forests are most common in valleys, but they can be found occasionally on hill tops and slopes… fires*[11] *appear to have played a major role in the development of this landscape [there has been] poor regeneration after these fires, the marginal climactic conditions for tree growth (*Damman 1983:185*).*

Sportsman J.G. Millais (1907) offers a more lyrical description of this landscape, which he traversed in the fall of 1906 in company with a group of Mi'kmaq trappers and hunters:

> *The whole character of the country from Fortune Bay to Mount Sylvester is different from that of any other part of the island which I have seen… The landscape is open, with rolling hills stretching away to the distant horizon. Here and there are little rocky eminences, locally designated as "knaps," from which miles of country may be spied. Marshes are few and small, and the whole country is covered with reindeer moss, with a few blueberry patches. Sometimes one sees a sprinkling of scattered larches from seven to ten feet high, whilst tiny spruce forests, of some dwarf variety which never exceeds three and a half feet in height, cover many of the summits of the ridges. At a distance these little spruce woods look like grass or moss, and they are of such small stature that a passage between them looks easy; but if you are so unfortunate as to find your way into their midst, nothing remains but retreat, or a short cut to the nearest hard ground, for the deceptive bush is a mass of interlaced boughs of great strength, which makes progression extremely arduous, and at times impossible. No*

[11] While there have doubtless been numerous forest fires in southeastern Newfoundland, it should be noted that historic accounts, going back to that of William Taverner in 1713 and William E. Cormack in 1822, describe a landscape which is generally barren and featureless.

> *Indian walks through "tufts," as these dwarf forests are called*[12] *unless he is forced to do so, and the employment of Steve [Bernard], who knows every deer and rabbit path in Shoe Hill and Kesoquit, was the means of avoiding much arduous labour (*Millais 1907:278*).*

Archaeological assessments and potential mapping of Newfoundland barrens offer some particular challenges. Individual bogs and marshes have generally low potential for historic resources, being used only for traverse. The Mi'kmaq, for instance, speak of the wetlands and barren areas traversed between drokes and ponds as "opens" (i.e., Big Knaps Open west of Sipaqmekek Pond; Green Land Open near Conne River – see Jeddore 2015). The barrens have few identifiable transit camp sites. Landform analysis can provisionally identify some features with historic resources potential (lookouts and eskers, for instance), but identification of cairns and erratic boulders used as way markers requires ground-level field investigation (Appendix A).

There are two forested pockets of country in the present Study Area, subregions of Damman's (1983) Central Newfoundland region at either end of the Study Area, both located quite close to the coast. The Twillick Steady sub region is an isolated pocket of the Central Newfoundland Forest sub region, including AOIs 3-7. A very similar landscape to that of the Head of Bay d'Espoir is found at the northwestern extremity of Placentia Bay in the valley of Pipers Hole (AOIs 30 and 31).

In considering the coast proximate to the Study Area in its western half, the north side of Fortune Bay is bold to the shore and deeply indented by long fiords, the most prominent of which is Long Harbour, at 30 km long and rarely as wide as a kilometre (Appendix A). Considered an insurmountable obstacle for road-building in the 1960s, Long Harbour dictated that the north side of the Bay would remain "beyond the road." Taking as a guiding principal that "a good spot is a good spot," GPA also looks carefully at each known former settlement and winterhouse, not only as indicative of historic-era site potential but also as a possible indicator of pre-contact potential. However, the historic evidence is clear that settlers of European descent rarely, if ever, penetrated the Fortune Bay interior as far as the Study Area, except along the original telegraph line which was built in 1856. While it is possible that the old telegraph line may be close to the Study Area in the vicinity of Little River (AOI-8 and AOI-9), the closest known approach of the old line to the area in at the Bay du Nord River. There, the 19th century telegraph line crossed the river approximately 1.5 km south of AOI-13.[13]

In considering pre-contact site advantage as a determinant of archaeological potential, GPA has adopted a model of "corridors of access" between inland food resources (caribou and small mammals), tidewater resources (salmon and shellfish) and headland resources (marine mammals, fish and seabirds). Generally, potential sites can be posited to lie along these corridors at the mouths of salmon rivers, landing beaches close to headlands and either "stepping stones" of islands or constriction of waterways which facilitate crossing in shallow-draft watercraft.

[12] More usually, "tucks," probably shortened from tuckamore.

[13] Other areas where historic cartography is clear as to the location of the 19th century telegraph line include Hungry Grove Pond (where the line was south of the pond, approximately 6.2 km south of AOI-18) and at the crossing of Long Harbour River (approximately 12.5 km south of AOI-23).

3.2 Identified Areas of Interest based on Natural Features

The following 11 rivers, considered "major" or culturally important waterways, were identified as possible corridors of access between marine and interior resources. Listed from west to east they are as follows:

AOI-3 and 4	Southeast Brook
AOI-6	Conne River
AOI-8	Little River
AOI-13	Bay du Nord River
AOI-21 and 25	Long Harbour River and tributaries
AOI-26	Dunnes Brook
AOIs-27 and 29	Sandy Harbour River and tributaries
AOI-30	Pipers Hole River
AOI-32	Black River
AOI-34	North Harbour River
AOI-35	Come by Chance River

Five large or culturally important lakes (most of which are labelled "ponds" in Newfoundland) were also identified and assessed as part of this Study. Stantec (2010) indentified and assessed one lake on the Isthmus of Avalon. From west to east these include:

AOI-9	Spruce Pond (on the Little River system)
AOI-14	East Arm of Medonnegonix (Bay du Nord River system)
AOI-15	Unnamed pond, east of Medonnegonix (Bay du Nord River)
AOI-17 and 18	Hungry Grove Pond (Bay du Nord River system)
AOI-20	Blue Hill Pond (Long Harbour River system)
NTL 0523/24	Big Gull Pond (Stantec 2010)

Five roads, or overland routes, were also assessed as having likely ethnographic potential:

AOI-2	Forebay Access Road
AOI-4	Road east of Southeast Brook
AOI-7	Old Country Path
AOI-10	Bear Droke Trail
AOI-19	Long Harbour Trail

Two eskers, both beside minor streams, were also identified and assessed:

AOI-16	Koscaecodde esker (Bay du Nord river system)
AOI-25	Pin Hill Brook esker (Long Harbour river system)

Three lookouts, or vantage points, were also investigated:

AOI-11	Train Hill
AOI-12	Western Pond Lookout

AOI-31 Pipers Hole Lookout [14]

Only one AOI was identified as being of High potential because of its proximity to the coast. North Harbour Bottom (AOI-33) is rated High as a known archaeological site and proximity to a salmon river.

[14] A 200 m buffer around this lookout places the buffer barely within 500 m of the TL 267 centreline

4.0 HISTORIC PATTERNS OF SETTLEMENT

The following provides a review and summary of existing and available information on historic patterns of settlement in the Overview Assessment Area, as background and context for the study.

4.1 Beothuk

Ingeborg Marshall (1996: 278) has summarized the island-wide distribution of the Beothuk:

> *The evidence leaves no doubt that Beothuk and their prehistoric forebears, the Little Passage Indians, had at one time or another exploited resources in every major bay of the island and had hunted inland from these bays, particularly in the watershed of the Exploits River. Eighteenth- and nineteenth-century accounts give a fairly convincing picture of the Beothuk's wide distribution and subsequent exclusion from many parts of their traditional land and coast. Already by the end of the seventeenth century the Beothuk had been pressured away from the south coast, from Placentia, St. Mary's and Conception bays. A few decades later, the Beothuk from Trinity Bay had been replaced by English settlers*.[15]

In the post-contact era there are very few accounts of aboriginal inhabitants in Placentia Bay. While there were rumours among the inhabitants of the English Shore that French fishers traded with the Indians, the only surviving first-hand account of an encounter occurred at the harbour of "Pesmarck," on its western side, in 1594. The "Savages" (presumed Beothuk) cut the moorings of boats belonging to the Grace of Bristol, which hurriedly departed from the harbour "fearing a shrewder turne." Marshall suggests Presque for the location of this incident, while E.R. Seary's identification of Pesmarck as being Breton for "Horse's Head," suggests Great Gallows Harbour (St. Josephs), a prominent landmark of which is a peak of that name (Harris 1993; Marshall 1996:23-24). In French cartography "Pennemark" is consistently depicted being on the main due north of "Cap Judas." Great Gallows Harbour is about 20 km due north of Cape Jude.

Similarly, there is only one document concerning cultural contact between a people presumed to be Beothuk and Europeans in Fortune Bay, which it is conjectured occurred in the vicinity of Belleoram. In 1694, Monbeton de Brouillian, the French Commandant at Placentia, remarked of Simon de Bellorme, who had an establisse on St. Pierre "where I had chosen him to command on the King's behalf," that he had recently taken to wintering in Fortune Bay. William Taverner's remark in 1714 that Sieur de Belorme had wintered at "Bandalore" for 20 years confirms that this new settlement was at the site of modern-day Belleoram. Intriguingly, the de Brouillian document states on the next page that:

> *Much advantage may still be derived from that settlement since the discovery of savages living in the south of the island of Newfoundland. These people are so unwarlike that the presence of a few Europeans puts them to flight, and they are given only to hunting* (de Brouillan 1694:20).

[15] Marshall (1996:278). See also Figure 4, "Distribution of Beothuk Archaeological Sites."

The passage can be interpreted as a reference to Beothuk living in the Belleoram / Bay du Nord area during the late 17th century.

4.2 Fishers and Settlers on the Outer Coast

A European migratory fishery, chiefly conducted by the Basques and French, was established by the mid-16th century. While little is known of the precise locations of their earliest fishing stations in southeastern Newfoundland, it is presumed from linguistic and cartographic evidence that the major fishing stations were Placentia, Little Placentia (Argentia), Chapeau Rouge (St. Lawrence) and St. Pierre, but that Merasheen, Paradise, Oderin, Burin, Fortune, and Grand Bank were important outposts (see Appendix A, An early seasonal fishing station).

From 1628, John Mason's map depicts two inlets at the bottom of Placentia Bay, showing some knowledge of Pipers Hole, and the narrowness of the isthmus between Placentia Bay and Trinity Bay. However English knowledge of Fortune Bay would appear to be rudimentary. Perhaps Mason viewed, or took report of, the bay over land, mistaking it for a body of fresh water, *Lacus incognitus* (see Appendix A, John Mason's "The Iland called of olde Newfovnd Land").

The dominant tradition in 18th century French cartography, as exemplified in the work of Nicolas Bellin, was to depict a group of islands, usually designated Isles aux Renards, to the north of Petit Plaisance, but otherwise to leave Placentia Bay's northern reaches open, with a notation to the effect le fond est inconnu.

In English cartography the most notable depictions come from the works of Herman Moll in the early 18th century, wherein islands to the north of Placentia are designated Isla Rua. Intriguingly, beginning in about 1708 (that is, during Queen Anne's War), he places two square symbols in the north of Placentia Bay. While the significance of these symbols is not explained, perhaps the word "Platform" is a label for these. A similar box on Anticosti Island is labelled "French Factory." The squares are placed on numerous Moll charts in similar positions: one at the bottom of Placentia Bay (Bordeaux or North Harbour Point?) and one on its west side, south of an inlet which may be a representation of Pipers Hole (Greeps Nest?). It is not possible to match historic cartography with a precise topography, but the three rivers or inlets at its head could be a representation of Pipers Hole, North Harbour and Come by Chance (see Appendix A, An 18th Century Map of Placentia Bay).

While visitation of the whole Bay is presumed to date from the establishment of year-round settlement at Placentia and Argentia, there are very few documents of sufficient geographic precision as to be very informative. William Taverner's 1718 account is of a journey he made, in 1713, to inventory the new English possessions "round the bottom of the Great Bay of Chapeauxrouge." He notes several locales which are good for seals, salmon, small game and "deere" (caribou) based on what is presumably seasonal French usage. He also found a French winterhouse, "an Old house in the woodes," when stayed by weather at Bay de Largent (Pipers Hole / Swift Current).

> *…the Bay de Largent, which is about 3 Leag. Deep, Commodious for Ships and Boates. It affords very good Woodes, For building Stages, house &ca and large trees fit for Board, or Plank, of which the ffrench from Placentia, did land Great Quantities, its alsoe good for Seales, Beaver, Fox, Otter &a. There is Two Rivers empty Themselves into it, Tolerably good, for Salmon… we found an Old house in the woodes (*transcription by Cuff 1995:11*).*

Taverner's observations may be related to intensified usage of Pipers Hole, as it has been noted that during Queen Anne's War and the blockade of Plaisance by the English, that settlers were forced to resort to the woods for subsistence. In 1711, 130 of 238 matelots, pesceurs ou chasseurs at Plaisance, were obliged to winter in the woods and live off game (Humphrey 1970:7). Taverner makes reference to a cod fishery and inhabitants at three harbours: Merishon, Cummins Harbour and Isle Ogeron (Merasheen, Paradise and Oderin).

Fortune Bay was also frequented by French fishers and was even settled to a limited degree (at Hermitage, Grand Bank and Fortune) from late in the 17th century until the French abandoned Plaisance, St. Pierre and other outposts in 1713. Taverner described their use of the interior:

> *Bay de Noor is the best place in all the Bays for Deer and Seale. The French Yearly took a great many in that Bay, the hunters told me, that in the Bottom of it the Country is so plaine it's like a Cornefield or Meadow. In travelling 20 Miles its hard to find shelter to keep a Man from the sight of a Deer, that in these places are abundance of Deer, and Hares, between this Bay and Long Harbour is good Woods… to Bandalore [Belleoram] the Country is all barron, and full of Hills – at Bandalore is a large Beech and several houses wch belong to Monsr. Belorm, a Malouin Gentleman, who hath wintered in that place 20 Year successively one after the other (*transcription by Cuff 1995:14*).*

Inner Fortune Bay was frequented by the Mi'kmaq in historic times. The earliest that Mi'kmaq can be definitively documented to be living along the south coast is 1705-07, when 20 families were recorded in Fortune Bay and area. After Queens Anne's War ended in 1713 some left for Cape Breton and for the next 50 years the documentary record is maddeningly scarce, but it is clear that they continued to frequent the south coast, and presumably its inner bays (Martjin 2003:77-78).

After 1713 English fishers displaced the French at Placentia and St. Pierre, and increasingly settled year-round at the major French fishing stations. Settlement spread from the old "fishing capitals" to nearby outharbours, generally from east to west (Head 1976). As seasonal fishing stations on the frontier were settled year-round, fall and winter use of the "bottoms" of the bays and inlets became an increasingly important supplement to the resident fishery.

There is potential within the Overview Assessment Area for archaeology to add to the body of knowledge concerning the practice of winterhousing or seasonal settler transhumance (see Smith 1994 for a summary of his research into this aspect of settlement). A careful reading of Edward Wix (1836) assists in locating a number of early winterhouses. Hugh MacDermott (1938) also contains some useful material concerning winterhouses early in the 20th century. While, there is no indication that they were ever located more than a day's travel from the coast, the Pipers Hole to Come by Chance portion of the Study Area is indicated as a winterhousing area for residents of inner islands of Placentia Bay.

Commercial herring and lobster fisheries have not been the subject of much academic interest to date (although see Reeves 1971 for a study of diplomacy in relation to the late 19th century herring fishery). However, it was these marine resources that determined settlement patterns through much of the Overview Assessment Area. Both species continue to be a focus of the commercial fishery in inner Fortune and Placentia Bays and dictate modern-day use of this "abandoned" coast.

4.3 The Interior

In the 19th century the interior north of Fortune Bay and northwest of Placentia Bay was exploited by Mi'kmaq groups who were primarily resident in Bay d'Espoir or Pipers Hole, and who referred to this general area as the "East Country." Guided by Mi'kmaq, several observers (1827-1906) describe the southeastern interior.

In the fall of 1822 William E. Cormack, who set out from Trinity Bay (near what is now Clarenville) to walk to St. George's Bay, was guided by a Mi'kmaq hunter from Bay d'Espoir, Joseph Sylvester. Their route kept them 30-40 km north of the Study Area. Cormack's journal and map indicate that the southeastern interior was at least occasionally hunted and/or traversed by Mi'kmaq travelling between Bay d'Espoir, Gander Bay and Bonavista Bay, although they did not meet anyone on this portion of the journey. Cormack described the interior barrens as "savannah country" where "the proportion of water to land is very great." Further, his map of their progress indicates a number of features well to the south of their track which were probably sketched by Sylvester based on personal knowledge, including Kaguedeck Lake (dubbed Barrows Lake by Cormack, although the name did not stick) and the course of the Bay du Nord River (Cuff 2012; see Appendix A, W.E. Cormack's Map).

The next account of the southeastern interior is from Frederick N. Gisborne, who crossed from Pipers Hole to Port aux Basques in 1851, scouting out a route for a proposed telegraph line. Unfortunately, the first half of his journal has not survived. At the start of the surviving fragment, Gisborne and a party of Newfoundlanders from Conception Bay were lost in the interior between Bay du Nord and Long Harbour, nearing starvation[16]. As they made for the shore, at Bay East, Gisborne "picked up an Indian drinking cup of birch bark, frequently came across the prints of moccasins & furthermore saw the remains of an old tilt in the woods," the first sign of a human presence they had seen since leaving Long Harbour (Gisborne 1851:1). Eventually they made their way to Conne River, where Gisborne was informed by the Indians that the better route across country to was to stay well to the north after leaving Pipers Hole, "clear of the bad lay of country" of the Fortune Bay proximal interior.

Although the intent of this study is not to comment extensively on Mi'kmaq presence in the East Country, it is worth pointing out the limited 19th century aboriginal use of the Bay du Nord and Long Harbour river systems. Geologist J.P. Howley's account of his 1887 journey into the interior (Howley 2009:692-769) and sportsman J.G. Millais' detailed account of the Long Harbour River (Millais 1907:262- 302) both describe Mi'kmaq use of the East Country, but state un-categorically that the country south of Mount Sylvester had never been used, or even seen excepting from the top of the mountain, by Europeans: "I wished to ascend and map the Long Harbour River, the largest unknown stream in Newfoundland. No white man had ever passed up its waters" (Ibid: 262). As with Howley and the Bay du Nord, Millais indicates some Mi'kmaq use of the Long Harbour corridor – following the course of the river on foot, well away from the banks – but very little use otherwise of the near-coastal interior by either the Mi'kmaq or European-descended settlers (see Appendix A, J.G. Millais' 'Compass Sketch' of the Long Harbour River).

[16] The name Hungry Grove Pond (AOI-17 and AOI-18) is said to have originated with Gisborne's party losing a significant proportion of their provisions while attempting to raft across. "Once again let me caution all travellers in this country about depending upon game for support. At certain seasons and in certain localities there is abundance, but at other times & in other districts even Indians are necessitated to eat their wretched dogs" (Gisborne 1851:2).

Howley's 1887 expedition, guided by Mi'kmaq from Conne River, mapped the course of the Bay du Nord River and the larger lakes of what is now the Bay du Nord Wilderness Area. His account indicates extensive Mi'kmaq use, although they did not use the "exceedingly rough" river for transport, but rather walked over land to Lake Medonnegonix, from whence they dispersed to their trapping grounds by canoes, stowed at the end of the portage. Between Medonnegonix and the outlet of the Bay du Nord River into the sea, Howley was quite dismissive of the prospects for human habitation:

> *The country around here is very rugged and surrounded by high, bare granite hills. The houses area all huddled together under the cliffs with a few miserable gardens scattered here and there in nooks and crannies amongst the rocks… desperately rugged and barren in all directions. Hills succeed hills with many deep ravines in which a few stunted trees only grow (Howley 2009:778-79).*

Upon reaching Lake Medonnegonix, Howley came into country which was much more familiar to his guides, and indeed he sent some to walk out along the telegraph line: 12 miles west to Conne River to bring back a birch bark canoe, and 30 miles east to Long Harbour telegraph station to direct that supplies there be packed in over land rather up the river. Young guide Joe Jeddore walked to Long Harbour in one day, returning by dusk the following day.

It is worthy of note that Mi'kmaq travel through the interior, as described by Howley and Millais, was not typically by canoeing along major watercourses, as is sometimes presumed by those familiar with Laurentian Indian modes of travel. Rather they walked great distances over barren ground to certain favoured locales (Metoqonikanik), generally sand beaches on lakes, where canoes[17] were kept and which were gathering-places or campsites used from year to year. One such campsite is presently the location of a hunting and fishing lodge owned by the Miawpukek Band, approximately 3.5 km north of AOI-13, which is at the outlet of the Bay du Nord River from Lake Medonnegonix.

Millais' description of travel along the Long Harbour River is of interest – "endless falls, boiling runs, and sudden drops… the worst river I have seen in Newfoundland. It is a very bad stream" (Millais 1907:270, 277). Of even greater interest are this hunter's detailed observations of the habits and migration paths of the Middle Ridge-Bay du Nord caribou herd. He concluded that the bulk of the herd summered between Middle Ridge and the Terra Nova River, and that deer:

> *… moved southward about the end of October with converging trails… Joe Jeddore informed me [that north of Medonnegonix] the country became high, rocky and open… [it was] well-known to the Fortune Bay men that the great body of the deer appear in great numbers in the open country immediately to the north of Fortune Bay about 20th November… [following this theory] I did find the ideal hunting-ground… All the district north of Long Harbour telegraph station was practically unknown, except the immediate neighbourhood of the coast, where a*

[17] The Mi'kmaq did use birch bark canoes extensively, including for ocean travel. Birch bark was harvested for canoe-manufacture in the spring, and both Bay d'Espoir and Pipers Hole were known for producing trees of sufficient girth for canoes. Obviously, the raw material to produce birch bark canoes was not found in much of the Maritime Barrens ecoregion, but in an extremity the Mi'kmaq manufactured canoes from caribou skins. Ethnographic accounts of the Newfoundland Mi'kmaq also contain many accounts of making rafts by lashing and using thick evergreen trees as sails for crossing the larger ponds.

> *few Fortune Bay men go in annually for a short distance to kill deer in the late fall (*Millais 1907:262-263).

4.4 Mi'kmaq Trapping Territories

Lists of Mi'kmaq trapping territories as compiled by Millais in 1906 and ethnographer Frank Speck in 1914 indicate that there were a number of trappers active in the East Country, out of both Conne River and Pipers Hole (Jackson 1993:125). Speck, who relied on informants in St. George's Bay and at Badger, seems to be harkening back to the 19th century when he listed only Louis John in the East Country, trapping an extensive territory from the Long Harbour River to Johns Pond, on the Terra Nova River system:

> *Louis John (1817?-1906) was the son of Peter John – who had been living at Gander Bay when employed by Cormack in 1827, but was living at the bottom of Fortune Bay in the 1830s. Louis was living at Long Harbour in the 1850s when the telegraph line was built and there is a family tradition that "men of the John family then living in Fortune Bay maintained the line from Long Harbour to Pipers Hole" (*Jackson 1993:78*).*
>
> *It was presumably while working for the telegraph company that John met his second wife, Catherine Mansfield or Banfield, from Southern Harbour, Placentia Bay… The John families of Conne River are descended from Louis John's sons Mickey and Steve John. Many Johns of Glenwood are descended from another son of Louis, noted 20th century sporting guide Jim John (*Cuff and Penney 2011:17-18*).*

Relying on informants from Conne River, Millais' list of trapping territories is contemporary and much more detailed. Of the 18 territories listed, nine are in the East Country:

John Bernard	Middle Ridge and Glenwood
John Stride	North side of Mount Sylvester
Reuben Lewis	Kaguedeck
Steve Bernard	Shoe Hill Ridge, Sandy Pond (Jubilee Lake)
Peter & Mickey John	Eastern Maelpaeg to Johns Pond
John, Paddy & Johnny Hinx	Wiskomonagodie, East Partridgeberry Hills, S of Maelpaeg
Matty Burke & Johnny Benoit	Tolt and Pipers Hole Brook
John Barrington	East of Tolt
Lewis John	East of Tolt

5.0 ARCHAEOLOGICAL POTENTIAL MAPPING

Informed by the background information reviewed and summarized above, including the available literature, past archaeological studies, and the nature and location of known historic resources within the Study Area and larger Overview Assessment Area, this study also includes an archaeological potential mapping component.

The objective of this exercise was to identify any particular areas within the transmission line ROW (approximately 40 m wide) and surrounding area (1 km wide) with some degree of potential to contain as yet undiscovered historic resources. Again, this information will be used and considered in Project planning and design, and/or in determining whether further study and/or mitigation may be required or appropriate.

5.1 Criteria for Assessing Archaeological Potential

GPA has developed a system of objective criteria for assessing the potential of identified areas of interest to contain archeological sites, for use in large-area desk-based assessments. This system employs 10 broad categories of High historic resources potential (Criteria 1-10) and 10 categories of Medium historic resources potential (11-20), each of which have been applied to the Study Area for this assessment as described below. Because the proposed TL 267 is primarily inland, criteria which are specific to the coast (Criteria 5, 6 and 11) were not applied in the current study and are therefore not discussed further.

For the Isthmus of Avalon, objective criteria were also developed and used by Stantec (2010). The only feature identified in that study as having archaeological potential was Big Gull Pond, based on its being a lake of greater than two kilometres in length, its shoreline proximate to the ROW being classed as "contemporary generic shoreline" (Stantec's zone type 2, applied to their map zone NTL 0523, assessed as Medium potential), with a small portion of Big Gull Pond's eastern shoreline being classed as "contemporary strategic shoreline" (Stantec's zone type 1, applied to their map zone NTL 0524, assessed as High potential).

5.1.1 High Potential Areas

The 10 criteria (site characteristics) that are considered to have High historic resources potential include the following:

1) Registered, geo-referenced archaeological sites
2) Abandoned settlement areas
3) Core settlement areas of present communities
4) Mouths of major[18] rivers, 250 m of coast adjacent, 250 m upriver
5) Islands, and shorelines on the main adjacent to islands[19]

[18] A "major" river is a deliberately subjective determination, but includes all scheduled salmon rivers. Objective/determinant Criteria for a large area assessment include length of greater than 50 km, or a drainage of more than 10,000 ha. For linear assessments, a high-potential major river crossing is where both banks of the river are visible at crossing on 1:50,000 NTS maps. A medium-potential river crossing is Criteria 14 ("riverbank").

6) Beaches and barrisways[20]
7) Headlands and major interior vantage points
8) Constrictions in major rivers and large lakes,[21] and outflows of major rivers from large lakes
9) Seasonal stations (winterhouses / trappers' home tilts / fishing stations / lobster factories)
10) Traditional overland transportation routes, including telegraphs and railway lines prior to 1939[22]

These criteria and their application in this study are described further below, including the areas and locations of each type that have been identified within the Study Area through a detailed review of the available topographic mapping, background information and other sources as discussed in the preceding Chapters.

1 - Registered, Geo-Referenced Archaeological Sites and Surrounding Areas are classified as being of High potential. The only such locale in the Study Area is North Harbour Bottom (AOI-33), based on its proximity to ClAm-01, a historic-era site that is approximately 150 m away from the ROW centre line (see Appendix A, North Harbour Bottom and Archaeological Site ClAm-01).

2 - Abandoned Settlement Areas are places where documentary sources indicate previous settlement. Each abandoned or resettled former community is regarded as having High potential for historic resources on this basis, as a habitation site and also because of the principle that "a good spot is a good spot," meaning that site advantage for resource exploitation in the recent historic era is reflective of early-historic site advantage and possibly also reflective of pre-contact site advantage. The fact that many abandoned or resettled communities ceased to be inhabited year-round in the 1950s and 1960s, usually because there was no viable road connection, contributes to expectations of their preservation in that they have never been excavated through mechanized earth-moving. In addition to being classified as High potential based on proximity to a known site, North Harbour Bottom (AOI-33) is part of an abandoned settlement area which extends east to North Harbour River (AOI-34), and includes the entire east side of North Harbour.

4 - Mouths of Major Rivers are classified as being of High potential in that salmon runs were a major protein source for pre-contact peoples and had early commercial fisheries. The river valleys were also primary corridors of access to the interior. Objective / determinant criteria for a large area assessment include lengths of greater than 30 km, or a drainage of more than 10,000 ha. For linear assessments, a high-potential major river crossing is where both banks of the river are visible at crossing on 1:50,000 NTS maps. For purposes of this present study the major rivers are:

- Conne River
- Little River
- Bay du Nord River
- Long Harbour River (including tributaries Kane Brook, Beaver Brook and Pin Hill Brook)

---

[19] Islands larger than 250 m, within 1 km of the main [or parts of chains separated by less than 1 km.
[20] For settled areas, Agricultural landscapes [visible evidence of cultivation or anthropogenic clearings] and/or other contemporary land-use features are Criteria 6.
[21] A "large" lake: more than 2 km long.
[22] From 1st edition NTS map sheets, generally based on aerial photography pre-1951.

- Dunnes Brook
- Pipers Hole River
- Black River
- North Harbour River
- Come by Chance River

However, the only Criteria 4 locales along the Study Area which are classified as High potential based on proximity to the mouth of a river are Pipers Hole River (AOI-30), North Harbour River (AOI-34), and Come by Chance River (AOI-35).

7 - Headlands of Bays and Major Interior Vantage Points. Headlands have established High potential for pre-contact habitation (particularly Palaeoeskimo sites) based on site advantage for the taking of seals and seabirds. Headlands are also indicators of shoals offshore, for the taking of groundfish and lobsters. Typical sites for early historic fishing stations are as close to headlands as it is possible to land a boat. Although there are no headlands in the Study Area, there is one major interior vantage point, Train Hill (AOI-11), designated High potential under Criteria 7.

8 - Constrictions in Major Inland Waterways are considered High potential as these comprise places to lay in wait for crossing caribou, as well as for their potential shelter and landings[23]. In the present Study Area, Criteria 8 is applied to Conne River (AOI-6) and Bay du Nord River (AOI-13), both culturally important rivers to the Mi'kmaq people and scheduled salmon rivers. Outflows of major rivers from large lakes are site-advantaged for the taking of salmon and caribou and are also typically the inland destinations of historic winter paths. In the Study Area, the Bay du Nord River (AOI-13) is the only such outflow. Stantec's (2010) rationale for designating a portion of the shoreline of Big Gull Pond (NTL 0524) as being of High potential is similar to Criteria 8 used in the current study.

10 - Traditional Overland Transportation Routes are indicators for cultural use of the interior. One locale is identified as High potential based on Criteria 10, the Old Country Path (AOI-7) between the Mi'kmaq community of Conne River and the caribou-hunting grounds of Sipaqmekek Pond and the East Country. The Study Area at Pipers Hole River (AOI-30) includes the route of a rail bed for a line (which was never completed) to the bottom of Fortune Bay, and Come by Chance River (AOI-35) which is proximate to the former main line of the Newfoundland Railway (1893-1988). Both are also identified as High potential under Criteria 4.

5.1.2 Medium Potential Areas

The 10 criteria (site characteristics) that are considered to have Medium historic resources potential include the following:

11) All coast not deemed high potential – "generic shoreline" vs. "strategic shoreline"
12) Major rivers, 250 m up from mouth to fall-line or 15 m contour
13) Natural features indicative of ancient shorelines / glacial moraines / eskers
14) Riverbanks

[23] Renouf and Bell (2006:18).

15) Winter paths
16) Shorelines of large lakes, and pond sides near (within 500 m) traditional overland routes
17) Drokes (site-advantaged potential shelter); lookouts
18) Logging camps, WWII installations, other 20th century ethnographic sites
19) Current cabin areas, and
20) Other (specified)

The designation of Medium historic resources potential attempts to identify inland prospects based on historic land-use patterns. While any dry, level, inland area could be regarded as a potential transit camp site, established potential is typically identified in association with water features. Whereas Criteria 8, 9 and 10 are inland areas with identified High potential, Criteria 15, 16, 17 and to an extent 19 are preliminary attempts to identify potential locations for winterhouses and also Mi'kmaq "home tilts." Although the archaeology of inland winter settlement sites has only been explored to a limited degree, it is considered likely that shorelines which offer good shelter from the north wind are indicated potential winterhouse sites, as well as wooded / drier areas in the barrens ("drokes").

11 - All Coast not Deemed High Potential Areas are designated as being of Medium potential, in that there is some potential for a degree of pre-contact and/or historic use of the coast. All Newfoundland and Labrador cultures relied primarily on marine resources, but "non-strategic" or featureless coastline must be considered of lesser potential than areas where there is identified site advantage. In the current study, the only coastal approaches of the Study Area have been identified as High potential under other criteria.

12 - Major Rivers, 250 m up from Mouth to Fall line or 15 m Contour are classed as being of Medium potential. The 15 m contour was selected as a convenient inland limit, as this is easily discerned on topographic maps (the 50 foot contour can be used on older sheets).[24] The only major river which the Study Area crosses nearshore in the present study is Black River (AOI-32)).

13 - Natural Features Indicative of Ancient Shoreline, Moraines and Eskers are represented in the present Study Area by two locales: the Koscaecodde esker (AOI-16) and Pin Hill Brook esker (AOI-25). In much of Northern Canada, eskers have been demonstrated to function as natural routes across country for caribou, and hence are attractive to human hunters.

14 - Riverbanks Above the Fall line or 15 m Contour are criteria applied to several AOIs where the Study Area crosses the following:

- Brook near the Bay d'Espoir Terminal Station (AOI-1)
- Southeast Brook (AOI-3)
- Southeast Brook (tributary) (AOI-4)
- Little River (AOI-8)
- Beaver Brook (tributary of Long Harbour River) (AOI-22)
- Long Harbour River West (AOI-23)
- Long Harbour River East (AOI-24)

[24] On much of the Northern Peninsula, the 15 m contour has been hypothesized to be coincident with an ancient shoreline. See Bell and Renouf (2003:363), for a projected ancient shoreline at Green Island Brook, north of Flowers Cove.

- Pin Hill Brook (tributary of Long Harbour River) (AOI-25)
- Dunnes Brook (AOI-26)
- Sandy Harbour River (AOI-27)
- Wigwam Brook West (tributary of Sandy Harbour River) (AOI-28)
- Wigwam Brook East (tributary of Sandy Harbour River) (AOI-29)
- Kane Brook (AOI-20)

15 - Winter Paths were primarily slide paths between coastal communities and interior sources of fuel, many of which are presently used as snowmobile / ATV trails. Mechanized transport has damaged and considerably widened the old system of paths. Both the Bear Droke Trail (AOI-10) and Long Harbour Trail (AOI-19) are considered to follow historic routes.

16 - Pond Sides within 500 m of Winter Paths are likely locations for winterhouses. Because present-day ATV trails and historic winter paths largely coincide, this selection factor is also still operative for the siting of modern-day cabins. In fact, this might be said for all criteria indicative of winterhouses (see below). Pond sides designated as being of Medium potential through Criteria 16 include Spruce Pond (AOI-9), Lake Medonnegonix (AOI-14), an unnamed pond east of Medonnegonix (AOI-15), Hungry Grove Pond (AOI-17 and AOI-18) and Blue Hill Pond (AOI-20).

17 - Drokes (site-advantaged potential shelter) and Lookouts include nooks on the north side of ponds with potential as aboriginal interior campsites and/or settler winterhouses. In the present Study Area a lookout overlooking Western Pond (AOI-12) is designated as being of Medium potential under Criteria 17 and this criteria can also be applied to the droke on the west side of nearby Train Hill (AOI-11), which has been designated High potential given its designation as a "major" vantage point under Criteria 7, and to Pipers Hole Lookout (AOI-31).

After spending a month in the East Country, Millais (1907) made several useful observations about the kinds of locales selected by the Mi'kmaq for their "home tilts." Steve Bernard's home tilt was located in a "droke on Shoe Hill Ridge [which] commanded wide views for miles, which embraced an area to the north from Maelpaeg to Mount Sylvester, and along which the main body of travelling deer came every fall" (Millais 1907:277). Mickey and Steve John's ground centred on a tilt in Kesoquit droke (Millais 1907: 302), while John Hinks had a tilt in a droke beside the Long Harbour River (see Appendix A).[25]

18 - Logging Camps, 20th Century Ethnographic Sites and 19 - Current Cabin Areas are identified as having Medium potential. Archaeologists recognize that site selection is multi-faceted and that present-day researchers cannot fully appreciate the complexity of pre-industrial selection determinates. The study team has often been told offhand that digging foundations or toilets for cabins had often encountered ceramics and other material from winterhouses, for instance. Two areas have indicated Medium potential under Criteria 18. These include Farm Access Road (AOI-5) because of its proximity to a farm. The Old Country Path from Conne River (AOI-7), already designated High potential as a traditional overland route, is also proximate to a logging road and camp. There are

[25] Kesoquit and Shoe Hidge are approximately 16 km north of AOI-21 and AOI-22. "Hinx's" tilt was near the confluence of Long Harbour River with Little Tolt Brook, about 6.2 km NNE of AOI-24.

cabins located within the Study Area at AOI-17; AOI-25 and AOI-33, all of which have higher indicated potential under other criteria.

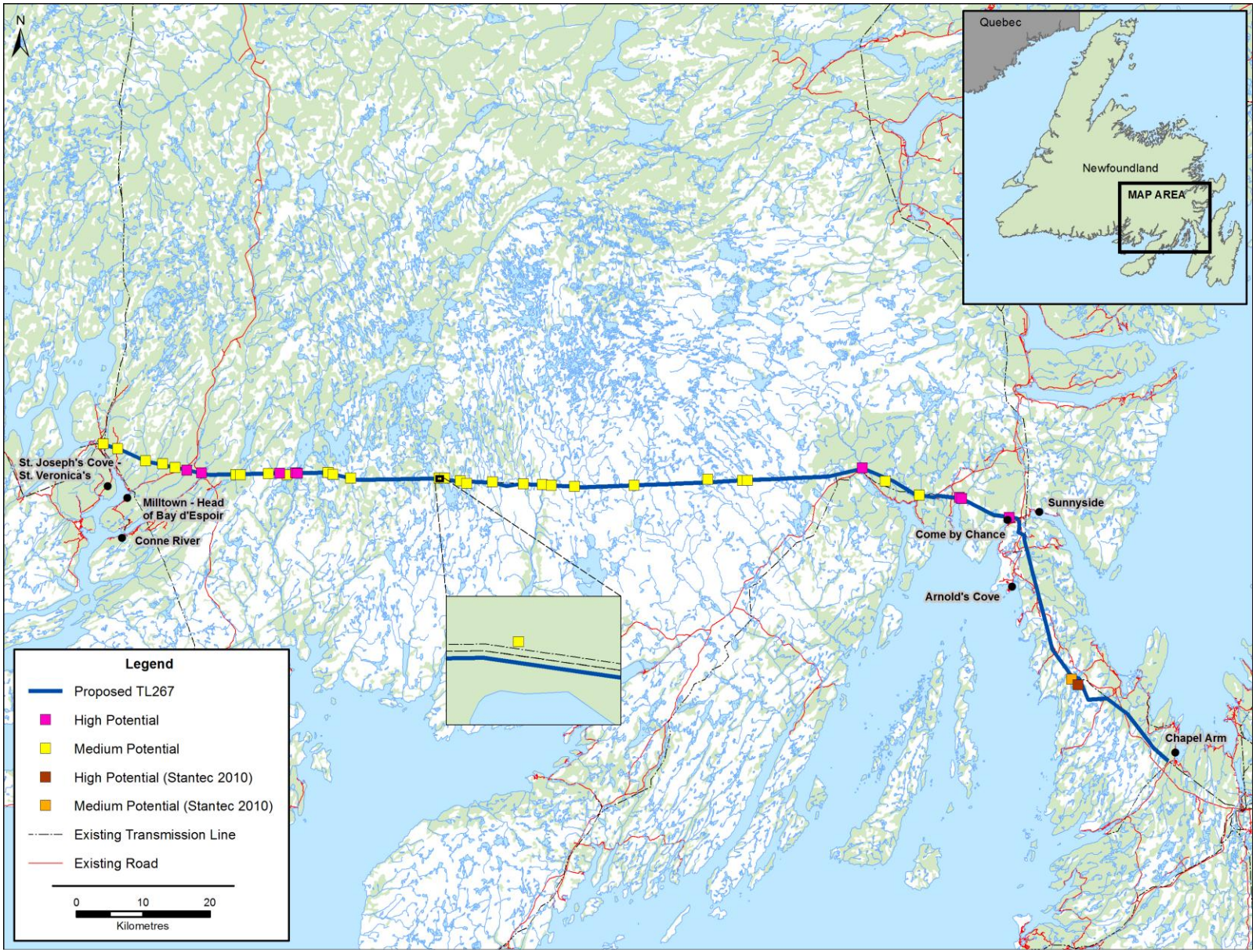
20 - Other is a catch-all category for Medium archaeological potential based on geographic anomalies that are not otherwise classified. In the present study a single AOI (2, Forebay Access Road) has been designated as being of Medium potential under Criteria 20.

Figure 3 provides a general illustration of the locations and distribution of the identified AOIs in the Study Area and their evaluated potential to contain archaeological resources. More detailed mapping is provided in the accompanying Appendices.

5.1.3 Low Potential Areas

All inland areas with no identified strategic advantage (as identified through the above described Criteria) are considered to have Low historic resources potential.

Figure 3 – Identified Areas of Interest and Their Evaluated Potential to Contain Archaeological Resources (High or Medium)



6.0 DISCUSSION AND SUMMARY

Construction activities and associated ground disturbance have the potential to disturb or destroy historic resources where they are located within the "footprint" of such projects. Historic resources are protected under provincial legislation and valued by Aboriginal and other people in the province.

Through this study, information on any known historic resources in the vicinity of the proposed TL 267 Project has been reviewed and assessed, and background research has been undertaken to further understand the history of human presence, occupation, activities and movements to and within this region. The level of past archaeological research and investigation within and adjacent to the Study Area varies greatly from west to east. There is one known archeological site within the one km wide Study Area (ClAm-01), and one which is either within or very close to the Study Area (ClAm-02). There are, however, no known and registered sites within the proposed Project Area (ROW) itself.

Notwithstanding the lack of known archaeological sites identified through past research, particular segments of the proposed transmission line ROW and surrounding Study Area have varying degrees of potential to contain as yet undiscovered historic resources. This study has therefore included an archeological potential mapping exercise, which involved a detailed review of the available topographic mapping, background information and other sources and the application of established criteria to identify and evaluate particular AOIs along the Study Area. Based on that analysis, there are only 37 locales with identified historic resources potential in the entire Study Area (which is approximately 144 km² in size) which is reflective of the fact that TL 267 is primarily inland and approaches within several kilometers of the coast in only very limited segments. The current knowledge of the pre-contact peoples of Newfoundland and Labrador is derived primarily from archaeological sites located at or near the coast, and early historic archaeology is likewise primarily coastal.

The nine High potential locales that have been identified through the various criteria described earlier are discussed and summarized briefly below.

North Harbour Bottom (AOI-33) is the only AOI where the Study Area includes a known archaeological site (Criteria 1, see Appendix A "North Harbour bottom and archaeological site ClAm-01"). It and nearby North Harbour River (AOI-34) are indicated as High potential under multiple criteria as areas with readily apparent anthropogenic clearings, near flats at the mouth of a salmon river, and because both also have some present-day recreational use. A "major" river is a deliberately subjective determination, but includes all scheduled salmon rivers.

At both Pipers Hole River (AOI-30) and Come by Chance River (AOI-35), the Study Area crosses a salmon river near its mouth (Criteria 4). These two AOIs are also proximate to historic railway lines and thus are also deemed High potential under Criteria 10.

Train Hill (AOI-11) is designated as being of High potential under Criteria 7. In addition to being a well-known landmark to the Mi'kmaq, with a campsite on Train Hill Pond, this locale is also associated with the 1906 death of noted guide Louis John (Jeddore 2015:82, 91).

Conne River (AOI-6) is classified as an area of High potential, on the basis of its historic usage and the cultural importance of this waterway to the Mi'kmaq. It is also a scheduled salmon river. The banks on the southeast side of Conne River are quite steep, but the northwest bank is traversed by a salmon-fisher's path and is generally the better prospect archaeologically. The Bay du Nord River (AOI-13), located near the outflow of another scheduled salmon river from Lake Medonnegonix, is proximate to known historic Mi'kmaq caribou hunting areas, transportation routes and portages. These two AOIs are designated High potential under Criteria 8.

About three km east of Conne River, the Study Area crosses the traditional Old Country Path (AOI-7), to Sipaqmekek Pond and into the East Country and Middle Ridge caribou hunting areas (Jeddore 2015:130-135). This locale is considered to have High potential under Criteria 10.

A portion of the shoreline of Big Gull Pond (Stantec 2010, NTL 0524), was designated as being of High potential based on it being assessed as "contemporary strategic shoreline" (Stantec 2010). Stantec (2010) also identified High potential areas at the coast near Sunnyside (NTL 0511) and Chapel Arm (NTL 0525 and NTL 0526), but these are outside of the TL 267 Study Area (see Figure 3).

The information gathered through this study has been and will continue to be used in Project planning and design to avoid potential interactions where possible, and to develop and implement mitigation to help further identify and protect any historic resources that may be present in or near the Project Area as the proposed development moves forward.

7.0 REFERENCES

Abstract Census and Return of the Population &c of Newfoundland and Labrador (title varies) 1857, 1869, 1874, 1884, 1891, 1901, 1911. Verbatim (or nominal) census forms for Newfoundland and Labrador are available for 1921, 1935 and 1945.

Baker, Melvin; J.E. Miller Pitt and R.D.W. Pitt. 1990. *The Illustrated History of Newfoundland Light and Power*. Creative Publishers, St. John's.

Barkham, Selma. 1989. *The Basque Coast of Newfoundland*. Great Northern Peninsula Development Corporation, St. Barbe.

Bellin, Nicolas. 1754. *Carte Reduit du Grand Banc de Terre Neuve…* Fabian O'Dea map collection, Memorial University.

Brouillan, Jacques-Francois Monbeton de. 1694. Letter to the Minister, Archives Nationales de France, Colonies, C11C/2, ff. 19-21.

Brown, Howard C. 1974. "Inner Placentia Bay: the Evolution of Settlement and Trade." B.A. Dissertation, Memorial University, St. John's. 1983. "Impact of Modernization on a Traditional Regional System: the Case of Inner Placentia Bay." M.A. Thesis, Memorial University, St. John's.

Catto, N., H. Griffiths, S. Jones and H. Porter. 2000. "Late Holocene Sea-Level Changes, Eastern Newfoundland." *Current Research (2000).* Newfoundland Department of Mines and Energy Geological Survey, St. John's.

Chang, Margaret A. 1974. "Newfoundland in Transition: the Newfoundland Trade of Robert Newman & Company, 1780-1805." M.A. Thesis, Memorial University, St. John's.

Cook, James. 1766. *Directions for Navigating on part of the South Coast of Newfoundland….* Mount & Page, London. 1767. *A Chart of Part of the South Coast of Newfoundland…* Mount & Page, London.

Crompton, Amanda and Blair Temple. 2004. "The Placentia Archaeology Project, 2004: Interim Report." Report on file, Historic Resources Division.

Cuff, Robert. 1995. "Taverner's Second Survey." *Newfoundland Quarterly*, Spring/Summer 1995, St. John's. 2012. "The Journey of William E. Cormack and Joseph Sylvester, 3 September – 2 November, 1882." Report, for the Miawpukek First Nation, on file at GPA.

Cuff, Robert and Gerald Penney. 2011. "An Indian fall – 19th century Mi'kmaq guides and the opening of Newfoundland's interior, 1851-1881." Submission paper, Historic Sites and Monuments Board of Canada.

Cuff, Robert and Derek Wilton (eds.). 1993. *Jukes' Excursions*. Harry Cuff Publications, St. John's.

Damman, Antoni W.H. 1983. "An ecological subdivision of the Island of Newfoundland," in *The Biogeography and Ecology of the Island of Newfoundland*, G. Robin South (ed.). Dr. W. Junk, Boston.

Dodds, Donald. 1983. "Terrestrial Mammals," in *The Biogeography and Ecology of the Island of Newfoundland*, G. Robin South (ed.). Dr. W. Junk, Boston.

FitzGerald, Conrad Trelawney. 1935 *The "Albatross": being the biography of Conrad FitzGerald, MRCS, LSA, 1847-1933.* J.W. Arrowsmith, London.

Fizzard, Garfield. 1988. *Master of His Craft: Captain Frank Thornhill.* Grand Bank Heritage Society, Grand Bank.

Gerald Penney Associates Limited. 1985. "Placentia Bay Environmental Impact Study Evaluation of Historic Resources." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 1988. "Historic Resources Overview Assessment Paradise River Hydro Development." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 1998. "Historic Resources Overview Assessment: Re-routing of TL 220-907, Connaigre Peninsula." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 2006a. "Historic Resources Component Report: Historic Resources Overview Assessment (Stage 1) Long, Harbour, Placentia Bay." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 2006b. "Historic Resources Overview Assessment (Stage 1) of a proposed quarry at Belleoram, Fortune Bay, Archaeological Investigation Permit # 06.18)." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 2008. "Western Placentia Bay – Indicated Historic Resource Potential." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 2011a. "Burin Peninsula – Indicated Historic Resource Potential." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 2011b. "Inner Fortune Bay Indicated Historic Resource Potential." Report on file, Historic Resources Division.

Gerald Penney Associates Limited. 2014. "Ten Mile Lake Area, Northern Peninsula: Overview Assessment and Archaeological Potential Mapping." Report on file, Historic Resources Division.

Gilbert, William. 1996. "Baccalieu Trail Archaeology Project, 1995, Phase 4: Anderson's Cove". Report on file, Historic Resources Division, St. John's.

Gisborne, F.N. 1851. "Journal of the Telegraph Survey Across Newfoundland in 1851." Typescript, Centre for Newfoundland Studies, MUN.

Harris, Leslie. 1993. "Placentia Bay." *Encyclopedia of Newfoundland and Labrador, Volume Four*. J.R. Smallwood Heritage Foundation, St. John's.

Head, C. Grant. 1976. *Eighteenth Century Newfoundland*. McClelland and Stewart, Toronto.

Holly, Donald H. Jr., and John Erwin. 2009. "Terra Incognita, Still: Archaeological Investigations in the Interior of the Island of Newfoundland." *Archaeology of Eastern North America* 37:65-84.

Holly, Donald H., Christopher B. Wolff, and John Erwin. *2010. "The Ties that Bind and Divide: Encounters with the Beothuk in Southeastern Newfoundland." Journal of the North Atlantic* 3:31-44.

Howley, James P. 1915. *The Beothucks or Red Indians*. University Press, Cambridge. 1997. *Reminescences of J.P. Howley, Selected Years*. The Champlain Society, Toronto. 2009. "Reminiscences of Forty-two Years of Exploration in and about Newfoundland," Memorial University Digital Archives Initiative.

Humphrey, John. 1970. *Plaisance: Problems in Settlement in this outpost of New France.* National Museums of Canada, Publications in History no. 3, Ottawa.

Hydrographic Department, Great Britain. 1929. *Newfoundland and Labrador Pilot* 6th ed. H.M.S.O., London.

Jackson, Doug. 1993. *"On the Country": the Micmac of Newfoundland*. Harry Cuff Publications, St. John's.

Jeddore, John Nick. 2015. *Moccasin Tracks: A Memoir of Mi'kmaw Life in Newfoundland.* ISER, Memorial University, St. John's. Presently in press, with publication due in the summer of 2015. Page numbers refer to a manuscript dated February, 2015, on file at GPA.

Jukes, Joseph Beete. 1842. *Excursions in and About Newfoundland During the years 1839 and 1840*. John Murray, London.

Kitchin, Thomas. 1762. *A new map of the only useful and frequented part of New Found Land.* GPA collection.

La Morandiere, Charles. 1962. *Histoire de Pêche francaise de la morue dans l'Amérique septentrionale*. Paris.

Lane, Michael. 1772. *Chart of the Bay of Placentia, on the South Coast of Newfoundland, Surveyed by Order of Commodore Shuldham…* Fabian O'Dea map collection, Memorial University. 1810. *Directions for Navigating the Bay of Placentia*. 2nd edition, Hamblin and Soufang, London.

LeBlanc, Sylvie. 2010. *Middle Dorset Variability and Regional Cultural Traditions: a Case Study from Newfoundland and St. Pierre and Miquelon*. BAR International Series 2158.

Leigh, Charles. 1600. "The voyage of Master Charles Leigh, and divers others to Cape Breton and the Isle of Ramea," extract from Richard Hakluyt, *The Principall Navigations of the English Nation*. Bishop and Newberie, London.

Linnamae, Urve. 1971. "Preliminary Report of an Archaeological Survey of Placentia Bay, Newfoundland." Ottawa, National Museums of Canada. Report on file, Historic Resources Division, St. John's.

Lovell, John. 1871. *Lovell's Province of Newfoundland directory for 1871*. John Lovell, Montreal.

MacDermott, Hugh. 1938. *MacDermott of Fortune Bay, as told by himself.* London, Hodder and Stoughton.

MacKenzie, Stan. 2010. "Kayaking Dreaming," http://kayakingdreamin.blogspot.com

McLean, Laurie. 2013. "An Archaeological Survey of Piper's Hole, Placentia Bay". Report on file, Historic Resources Division, St. John's.

Marshall, Ingeborg. 1996. *A History and Ethnography of the Beothuk*. McGill-Queens, Toronto-Kingston.

Martijn, Charles A. 2003. "Early Mi'kmaq Presence in Southern Newfoundland: An Ethnohistorical Perspective, c. 1500-1763." *Newfoundland Studies*, v19 #1.

Martin, Wendy. 1983. *Once Upon a Mine.* Canadian Institute of Mining and Metallurgy, Montreal

Matthews, Keith. 1983. "Robert Newman." *Dictionary of Canadian Biography V.* University Press, Toronto.

Millais, J.G. 1907. *Newfoundland and its Untrodden Ways*. London: Longman.

Moll, Herman. 1716. *A new map of Newfound Land, New Scotland, the isles of Breton, Anticoste, St. Johns &c., together with the fishing bancks / by H. Moll, geographer*. Fabian O'Dea map collection, Memorial University, St. John's.

Murray, Alexander. 1876. "Summary of the Newfoundland Railway Survey, 1875," *Journals of the House of Assembly 1875*.

Murray, Alexander and James P. Howley. 1879. *Newfoundland*. Edward Stanford, London. [Map] 1881. *Geological Survey of Newfoundland.* Edward Stanford, London.

Pastore, Ralph T. 1993. "Archaeology, History and the Beothuks." *Newfoundland Studies*, v9 #2.

Penney, Gerald. 1984. "The Prehistory of the Southwest Coast of Newfoundland." M.A. Thesis, Memorial University, St. John's.

Pope, Glenn. 1979. "Location Choice in the Resettlement of Stone's Cove," Memorial University student paper, Centre for Newfoundland Studies, St. John's.

Pope, Lloyd F. 1970. "The History of Stone's Cove, Fortune Bay," Memorial University student paper, Centre for Newfoundland Studies, St. John's.

Pope, Peter. 2004. *Fish into Wine: the Newfoundland Plantation in the Seventeenth Century*. University of North Carolina Press, Chapel Hill.

Prowse, D.W. 1895. *A History of Newfoundland*. Macmillian and Co., London. Facsimile reprint (2002), Boulder Publications, Portugal Cove.

Rast, Tim. 1999. "Investigating Paleo-Eskimo and Indian Settlement patterns Along a Submerging Coast at Burgeo, Newfoundland." M.A. Thesis, Memorial University, St. John's.

Rast, Tim, M.A.P. Renouf and Trevor Bell. 2004. Patterns in Precontact Site Location on the Southwest Coast of Newfoundland. *Northeast Anthropology* 68 (Fall):41-55.

Reeves, William G. 1971. "The Fortune Bay dispute: Newfoundland's place in imperial treaty relations under the Washington treaty, 1871-1885." M.A. Thesis, Memorial University, St. John's.

Renouf, M.A.P., and T. Bell. 2006. "Maritime Archaic Site Locations on the Island of Newfoundland." In, *The Archaic of the Far Northeast,* edited by David Sanger and M.A.P. Renouf. University of Maine Press, Orono.

Roestenberg, Tony. 2009. "My Newfoundland Kayak Experience", http://mynewfoundlandkayakexperience.blogspot.com

Schwarz, Frederick. 1992. "Archaeological Investigations in the Newfoundland Interior." On file, Provincial Archaeology Office, St. John's. 1993. "Archaeological Investigations in the Exploits Basin: Report on the 1992 Field Survey." On file, Provincial Archaeology Office, St. John's.

Shaw, John and Donald L. Forbes. 1995. "The Postglacial Relative Sea-level Lowstand in Newfoundland." *Canadian Journal of Earth Sciences* 32(9):1308-1330.

Smith, Philip E. 1994. "Winter-houses and Winter Migrations." *Encyclopedia of Newfoundland and Labrador, Volume Five*. J.R. Smallwood Heritage Foundation, St. John's.

South, G. Robin (ed.) 1983. *Biogeography and Ecology of the Island of Newfoundland*. Junk, The Hague and Boston.

Stantec Consulting Limited. 2010. "Labrador-Island Transmission Link Environmental Assessment Historic and Heritage Resources Component Study." Stantec Consulting Ltd., St. John's. 2011 "Labrador-Island Transmission Link Historic and Heritage Resources Component Study Supplementary Report. Stantec Consulting Ltd., St. John's.

Steele, D.H., J.M. Greene and J. Carter. 1979. *A Biological and Oceanographic Study of the Atlantic Southeast Coast Marine Region*. Department of Indian and Northern Affairs.

Taverner, William. 1716. "Some Remarks on the present State of the South Part of Newfoundland." [CO 194/6, ff 44-44v, 47-51. 1718. "Captain Taverner's Second Report." [CO 194/6, ff. 226-241v].

Tocque, Philip. 1878. *Newfoundland: as it was, and as it is in 1877*. John B Magurn, Toronto.

Tuck, J.A. 1979. "Archaeological Potential of the Gull Island to Soldier's Pond Transmission Line Route." On file, Provincial Archaeology Office, St. John's. 1981. "Final Report: Lower Churchill Development Corporation Muskrat Falls Generating Project: Archaeological Report. On file, Provincial Archaeology Office, St. John's.

Tuck, James A. and Ralph T. Pastore. 1985. A Nice Place to Visit, but…Prehistoric Extinctions on the Island of Newfoundland. *Canadian Journal of Archaeology* v9 #1.

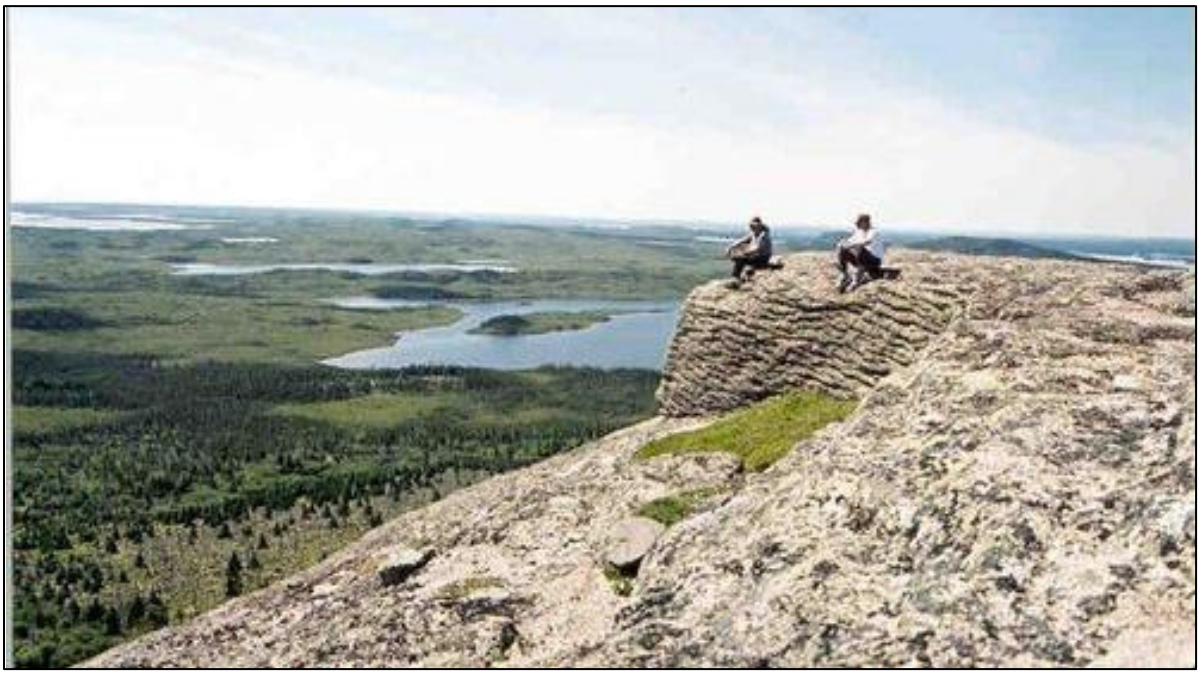
Wix, Edward. 1836. *Six Months of a Newfoundland Missionary's Journal, from February to August 1835*. Smith, Elder & Co., London.

Appendix A

Background and Supporting Figures and Maps

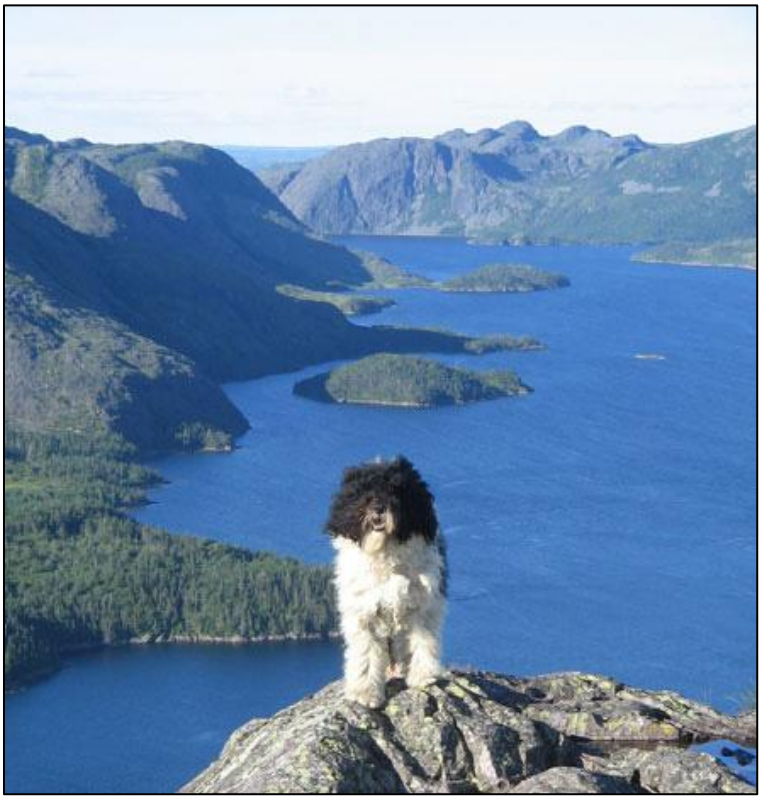
This page has been intentionally left blank for double-sided printing

Figure A1 - A View of the East Country from Mount Sylvester



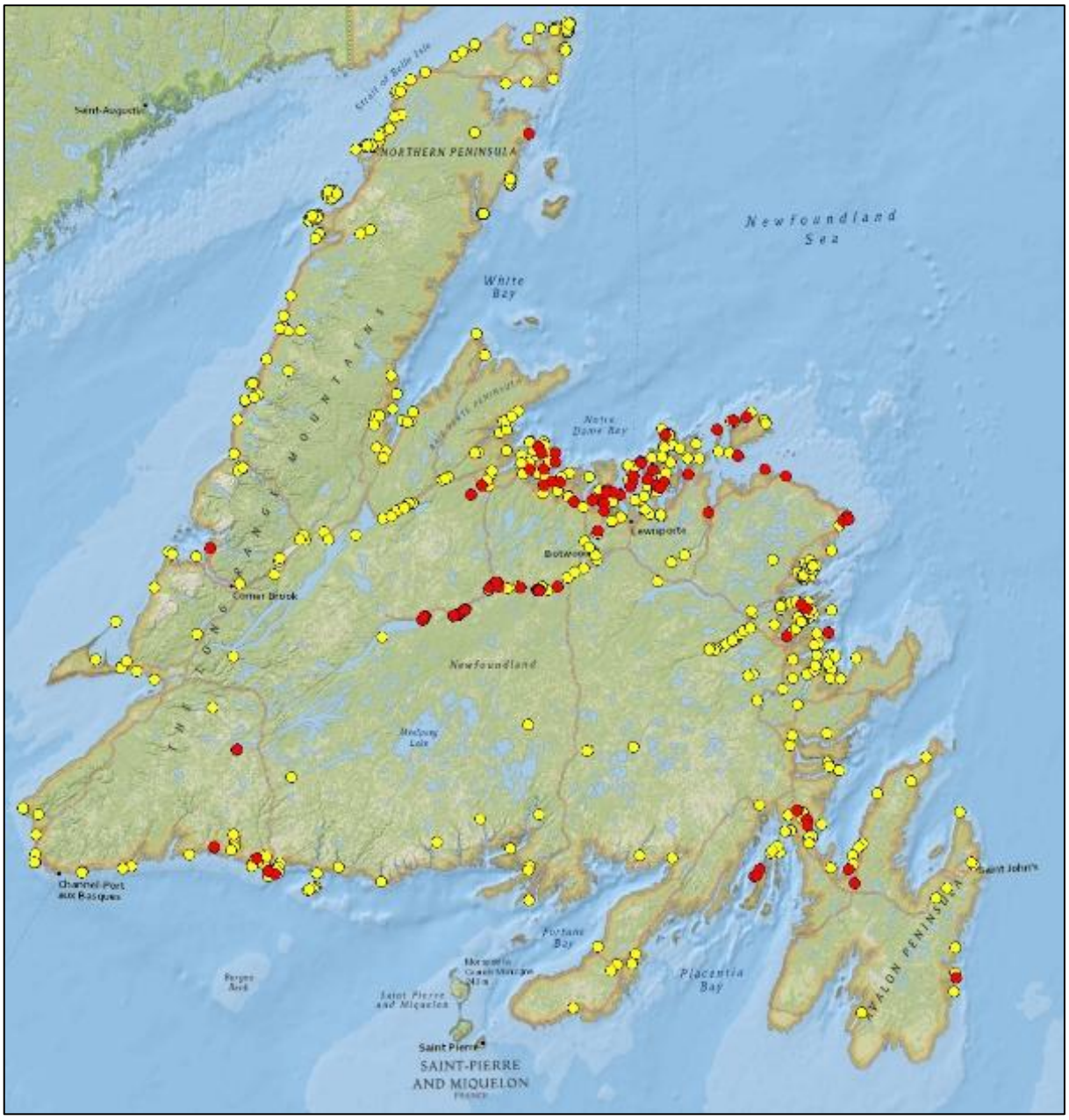
Looking southeast (G. Paul Rideout photo, 2000).

Figure A2 - A View of Long Harbour



Long Harbour, looking north from Tickle Head. Herring Island is just above the dog's head (Coastal Safari).

Figure A3 - Distribution of Beothuk Archaeological Sites



Distribution of pre-contact archaeological sits in Newfoundland, Beothuk sites in red (Stephen Hull, PAO).

Figure A4 - An Early Seasonal Fishing Station

"Petit Plaisance, a fishing station." c. 1690. Oil on wood, by Gerard van Edema (1652-1700), Royal Ontario Museum, 957.91.

Figure A5 - John Mason's "The Iland called of olde Newfound Land" (1628)

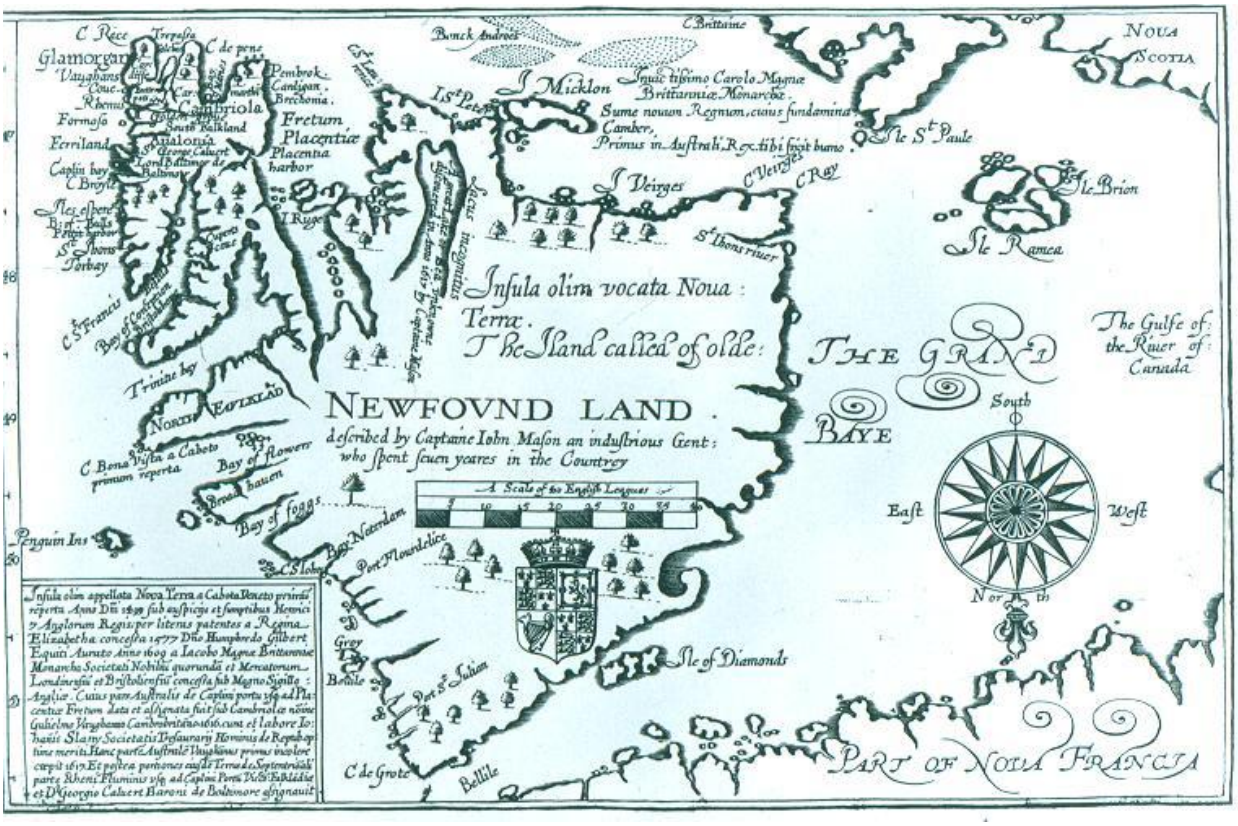


Figure A6 - An 18th Century Map of Placentia Bay

Moll, 1716? (detail).

Figure A7 - W.E. Cormack's Map, 1822

Cormack (1822, detail) showing track and distance walked 11 September to 7 October 1822, at top [see Cuff 2012:12-1].

Figure A8 - J.G. Millais' "Compass Sketch of Long Harbour River" (1906)

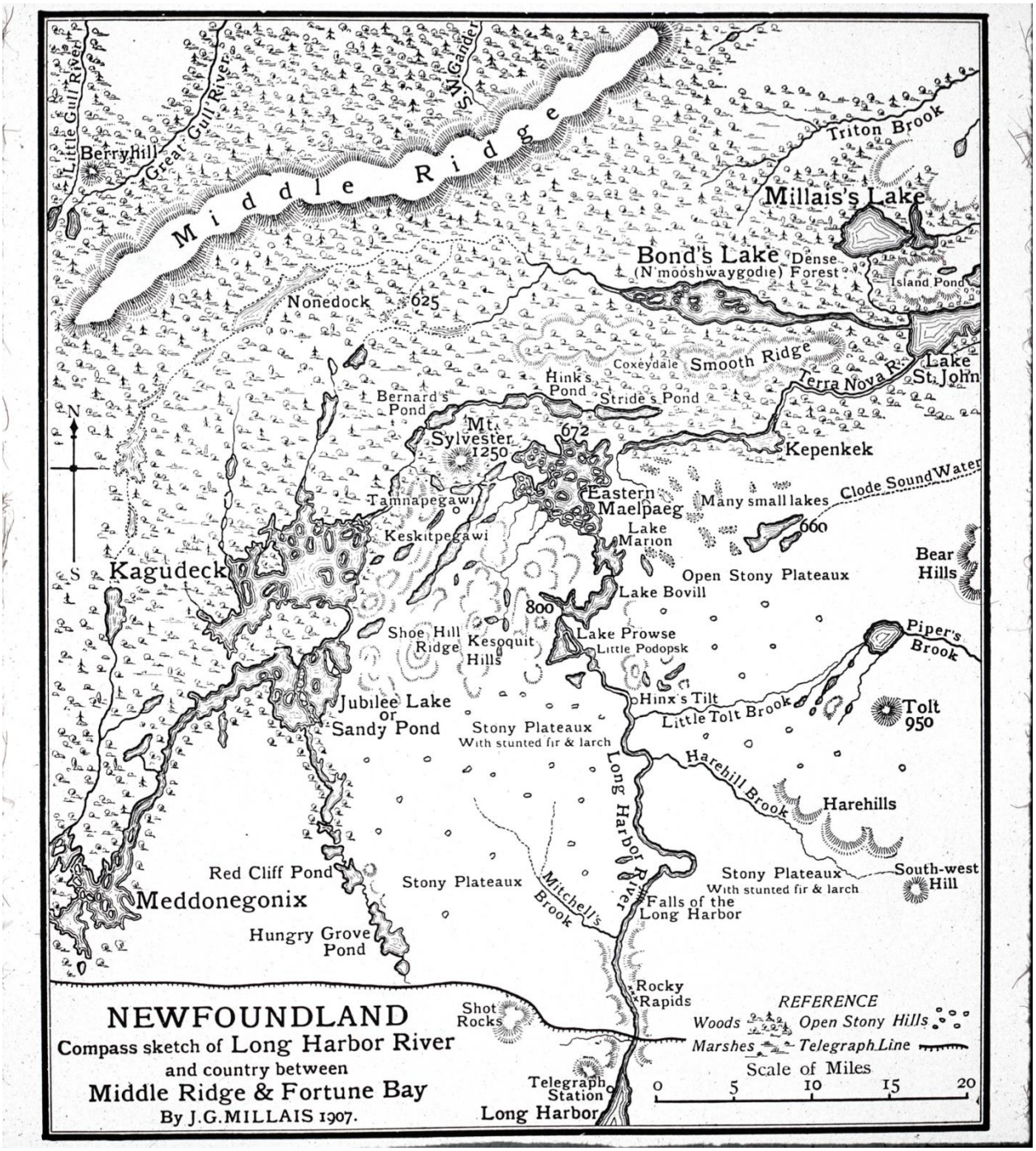


Figure A9 - North Harbour Bottom and Archaeological Site ClAm-01

Appendix B

Index Table of Archaeological Potential Sites

This page has been intentionally left blank for double-sided printing

Index Table for Archaeological Potential Maps

High potential, criteria

1. Registered, geo-referenced archaeological sites
2. Abandoned settlement areas
3. Core settlement areas of present communities
4. Mouths of major rivers, 250 m of coast adjacent, 250 m upriver
5. Islands, and shorelines on the main adjacent to islands
6. Beaches and barrisways
7. Headlands and major interior vantage points
8. Constrictions in major rivers and large lakes, and outflows of major rivers from large lakes
9. Seasonal stations [winterhouses / trappers' home tilts / fishing stations / lobster factories], and
10. Traditional overland transportation routes, including telegraphs and railway lines prior to 1939

Medium potential, criteria

11. All coast not deemed high potential – "generic shoreline" vs "strategic shoreline"
12. Major rivers, 250 m up from mouth to fall-line or 15 m contour
13. Natural features indicative of ancient shorelines / glacial moraines / eskers
14. Riverbanks
15. Winter paths
16. Shorelines of large lakes, and pondsides near traditional overland routes
17. Drokes (site-advantaged potential shelter), and lookouts
18. Logging camps, WWII installations, other 20th century ethnographic
19. Current cabin areas, and
20. Other (specified)

AOI	Name / Location	M asl	Potential	Tide water	Criteria	Comments
1 M/13 –St Albans						
1	Bay d'Espoir Terminal Station	12 m	M	4.0 km	14	Transformed waterway, former traverse corridor
2	Forebay Access Rd	197 m	M	3.1 km	20	
3	Southeast Brook	97 m	M	5.2 km	14	
4	Road East of SE Brook	59 m	M	6.2 km	14	
5	Farm Access Road	145 m	M	7.8 km	18	Farm (point)
6	Conne River	39 m	H	9.3 km	8	SR 116, road/trail Culturally important river
7	Old Country Path	171 m	H	10.5 km	10, 18	Logging road & traditional country route
8	Little River	153 m	M	22.3 km	14	
9	Spruce Pond	155 m	M	22.2 km	16	
1 M/14 – Hungry G						
10	Bear Droke Trail	210 m	M	26.8 km	15	Winter trail, point
11	Train Hill	206 m	H	25 km	7, 17	200 x 200 m
12	Western Pond LO	228 m	M	25 km	17	
13	Bay du Nord River	149 m	H	25.7 km	8	SR 111, 12.5 km LR Pond
14	Medonnegonix	154 m	M	25.5 km	16	East Arm of Lake Medonnegonix
15	Pond east of Medonnegonx	156 m	M	24 km	16	
16	Koscaecodde Esker	165 m	M	24 km	13	1.9 km upriver from Koscaecodde Pond
17	Hungry Grove Pond cabin	177 m	M	21.5 km	16, 19	
18	Hungry Grove Pond East	177 m	M	21.5 km	16	
19	Long Harbour Trail	178 m	M	18.4 km	15	
20	Blue Pond Hill	178 m	M	17.7 km	16	
21	Kane Brook	157 m	M	15.7 km	14	Long Hr River (SR 110) tributary, trail
1 M/15 – Gisbourne						
22	Beaver Brook	100 m	M	14.5 km	14	Long Hr River (SR 110) tributary
23	Long Hr River W	97 m	M	14.2 km		SR 110
24	Long Hr River E	125 m	M	14.1 km		SR 110
25	Pin Hill Brook / Esker	156 m	M	16.5 km		NB-flows north

AOI	Name / Location	M asl	Potential	Tide water	Criteria	Comments
26	Dunnes Brook	178 m	M	27 km		
27	Sandy Harbour River	195 m	M	19 km		
28	Wigwam Brook W	172 m	M	19 km		Sand Harbour River tributary
29	Wigwam Brook E	172 m	M	18.2 km		NB – NTS "Wigman" Brook
1 M/16 – Sound Is						
30	Pipers Hole River	15 m	H	1 km	4, 10	Former Provincial Park SR 95
31	Pipers Hole Lookout	270 m	M	1.7 km	17	
32	Black River	10 m	M	1.3 km	12	SR 94
33	North Harbour Bottom	15 m	H	0.19 m	1, 2	C1Am-01 (historic)
34	North Harbour River	11 m	H	0.38 km	2, 4	SR 93
1 N/13 – Sunnyside						
35	Come by Chance River	3 m	H	1 km	4, 10	1 km walk RW

Stantec (2010)

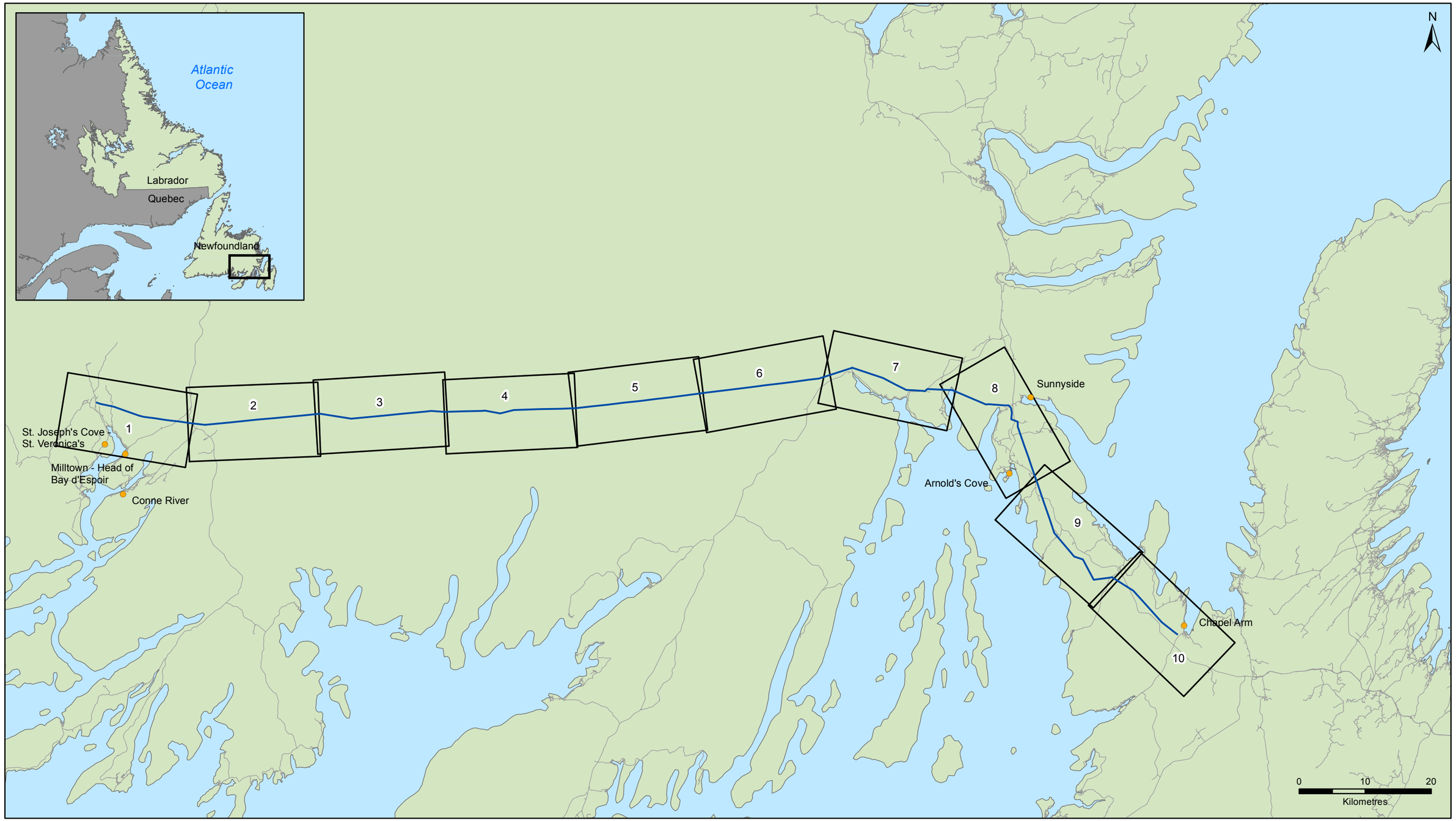
NTL 0523	Big Gull Pond
NTL 0524	Eastern shore of Big Gull Pond

This page has been intentionally left blank for double-sided printing

Appendix C

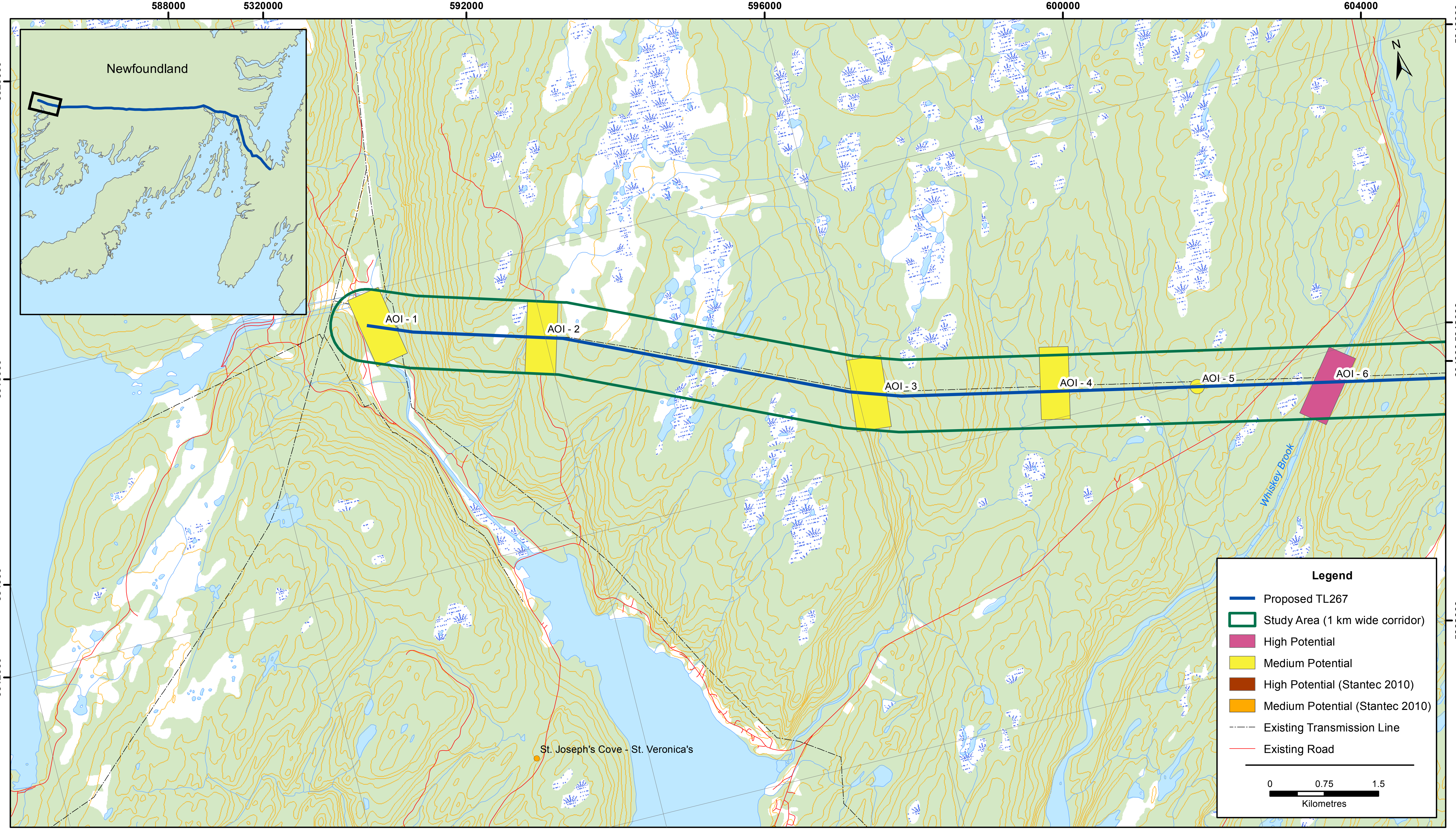
Archaeological Potential Mapping (Map Atlas – High and Medium Potential Sites)

This page has been intentionally left blank for double-sided printing



MAP INDEX

PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

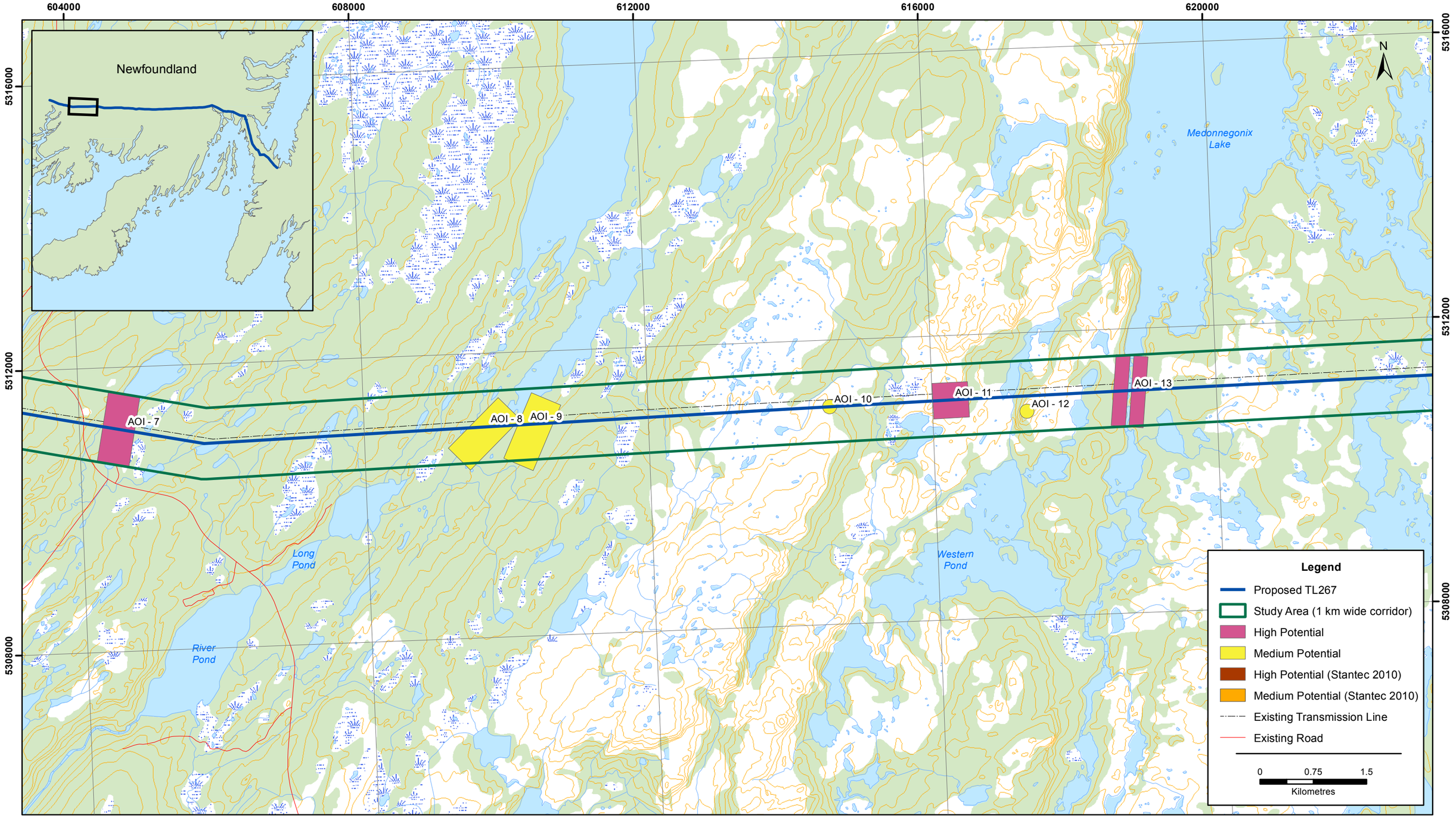


588000
5320000
592000
596000
600000
604000
5316000
5312000
5308000
584000
Newfoundland
AOI - 1
AOI - 2
AOI - 3
AOI - 4
AOI - 5
AOI - 6
Whiskey Brook
St. Joseph's Cove - St. Veronica's
N
Legend
Proposed TL267
Study Area (1 km wide corridor)
High Potential
Medium Potential
High Potential (Stantec 2010)
Medium Potential (Stantec 2010)
Existing Transmission Line
Existing Road
0
0.75
1.5
Kilometres

newfoundland labrador hydro
a nalcor energy company

PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

amec foster wheeler



PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

624000 628000 632000 636000 640000

5316000 5312000 5308000

Newfoundland

N

Red Cliff Pond

AO1 - 14

AOI - 15

AOI - 16

AOI - 17

AOI - 18

Legend

- Proposed TL267
- Study Area (1 km wide corridor)
- High Potential
- Medium Potential
- High Potential (Stantec 2010)
- Medium Potential (Stantec 2010)
- Existing Transmission Line
- Existing Road

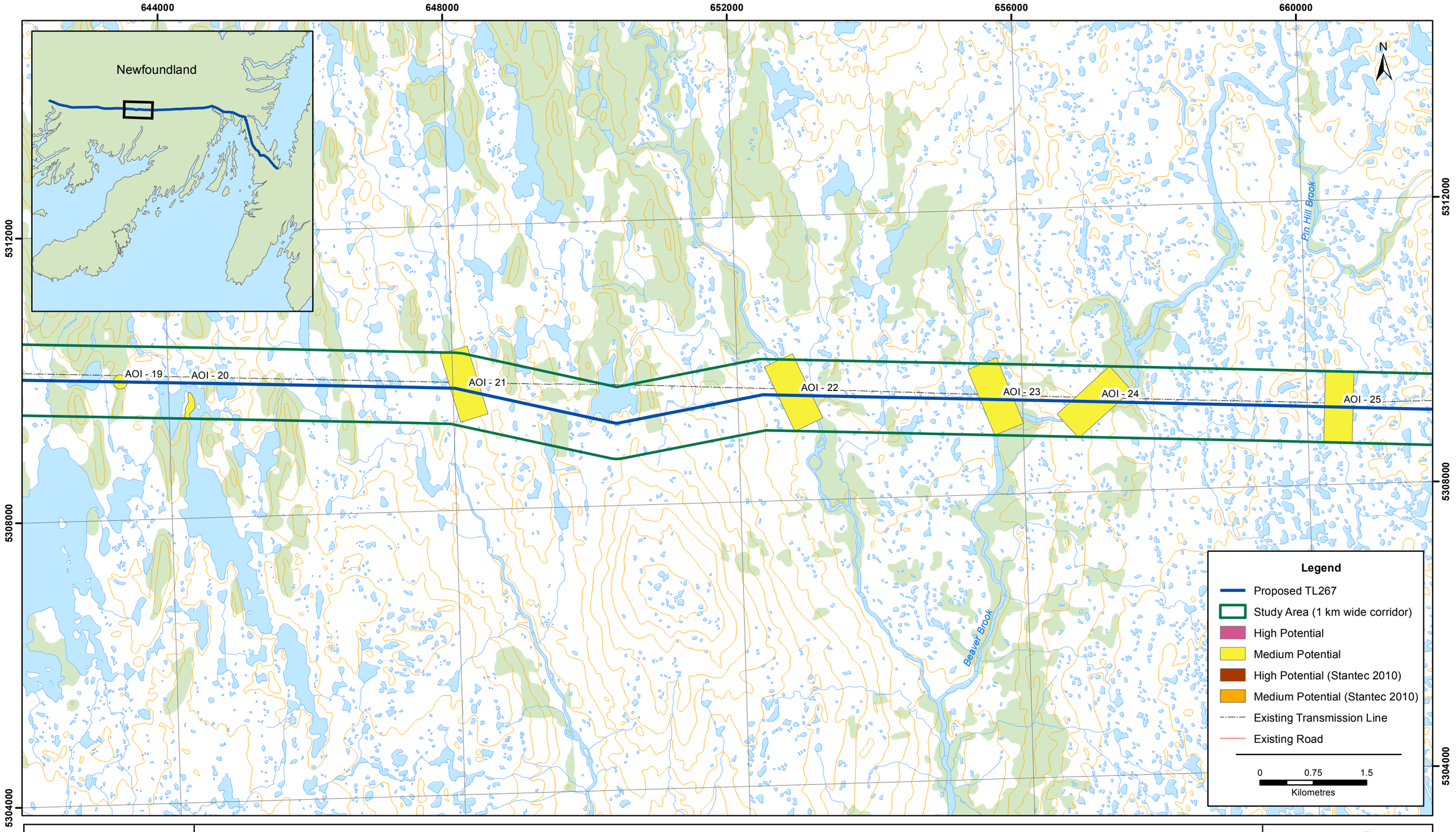
0 0.75 1.5

Kilometres

PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

newfoundland labrador hydro a nalcor energy company

amec foster wheeler


644000
648000
652000
656000
660000
5312000
5308000
5304000
N
Newfoundland
AOI - 19
AOI - 20
AOI - 21
AOI - 22
AOI - 23
AOI - 24
AOI - 25
Pin Hill Brook
Beaver Brook
Legend
Proposed TL267
Study Area (1 km wide corridor)
High Potential
Medium Potential
High Potential (Stantec 2010)
Medium Potential (Stantec 2010)
Existing Transmission Line
Existing Road
0
0.75
1.5
Kilometres

664000
668000
672000
676000
680000
5312000
5308000
5304000
N
Newfoundland
Pin Hill Pond
AOI - 26
AOI - 27
Dunns Mountain Pond
Legend
Proposed TL267
Study Area (1 km wide corridor)
High Potential
Medium Potential
High Potential (Stantec 2010)
Medium Potential (Stantec 2010)
Existing Transmission Line
Existing Road
0
0.75
1.5
Kilometres

PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

680000 684000 688000 5316000 692000 696000

5312000 5308000 5304000

Newfoundland

N

AOI - 27

AOI - 28

AOI - 29

Long Pond

5316000 700000 5312000 5308000

Legend

- Proposed TL267
- Study Area (1 km wide corridor)
- High Potential
- Medium Potential
- High Potential (Stantec 2010)
- Medium Potential (Stantec 2010)
- Existing Transmission Line
- Existing Road

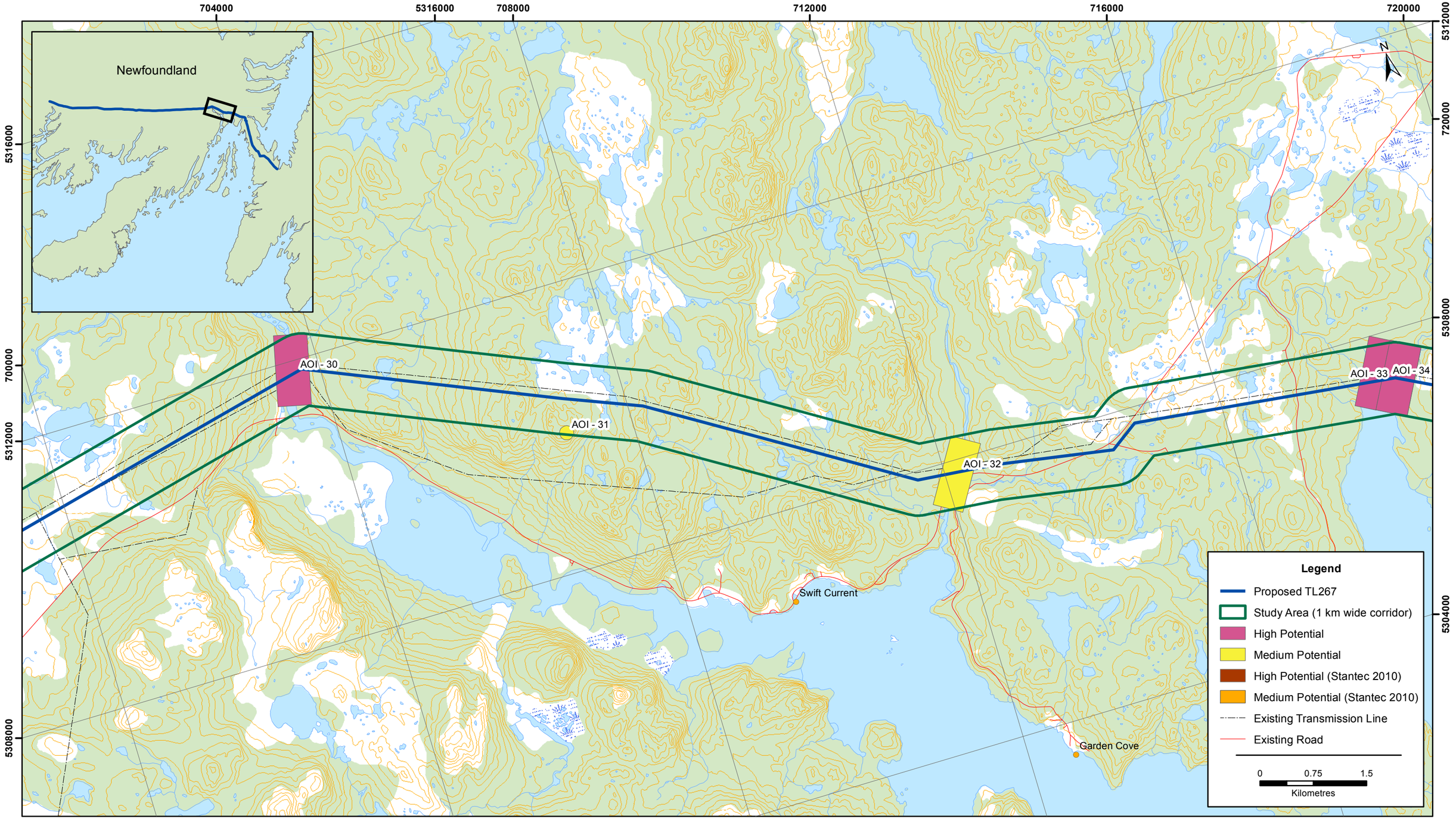
0 0.75 1.5

Kilometres

PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

newfoundland labrador hydro a nalcor energy company

amec foster wheeler



PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

5312000 728000 5308000 5304000 732000 5300000 5296000

724000 720000 732000 728000 5292000

Newfoundland

Sunnyside

Island Pond

Jacks Pond

Placentia Bay

AOI - 35

AOI - 34

AOI - 33

N

Legend

- Proposed TL267
- Study Area (1 km wide corridor)
- High Potential
- Medium Potential
- High Potential (Stantec 2010)
- Medium Potential (Stantec 2010)
- Existing Transmission Line
- Existing Road

0 0.75 1.5

Kilometres

PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

newfoundland labrador hydro a nalcor energy company

amec foster wheeler

732000 5292000 736000 5288000 740000 5284000 744000

728000 724000 744000 740000 5280000

N

Chance Cove

Chance Cove Pond

Rocky Pond

Doe Hills Pond

Long Pond

Big Gull Pond

Southern Harbour

Placentia Bay

Newfoundland

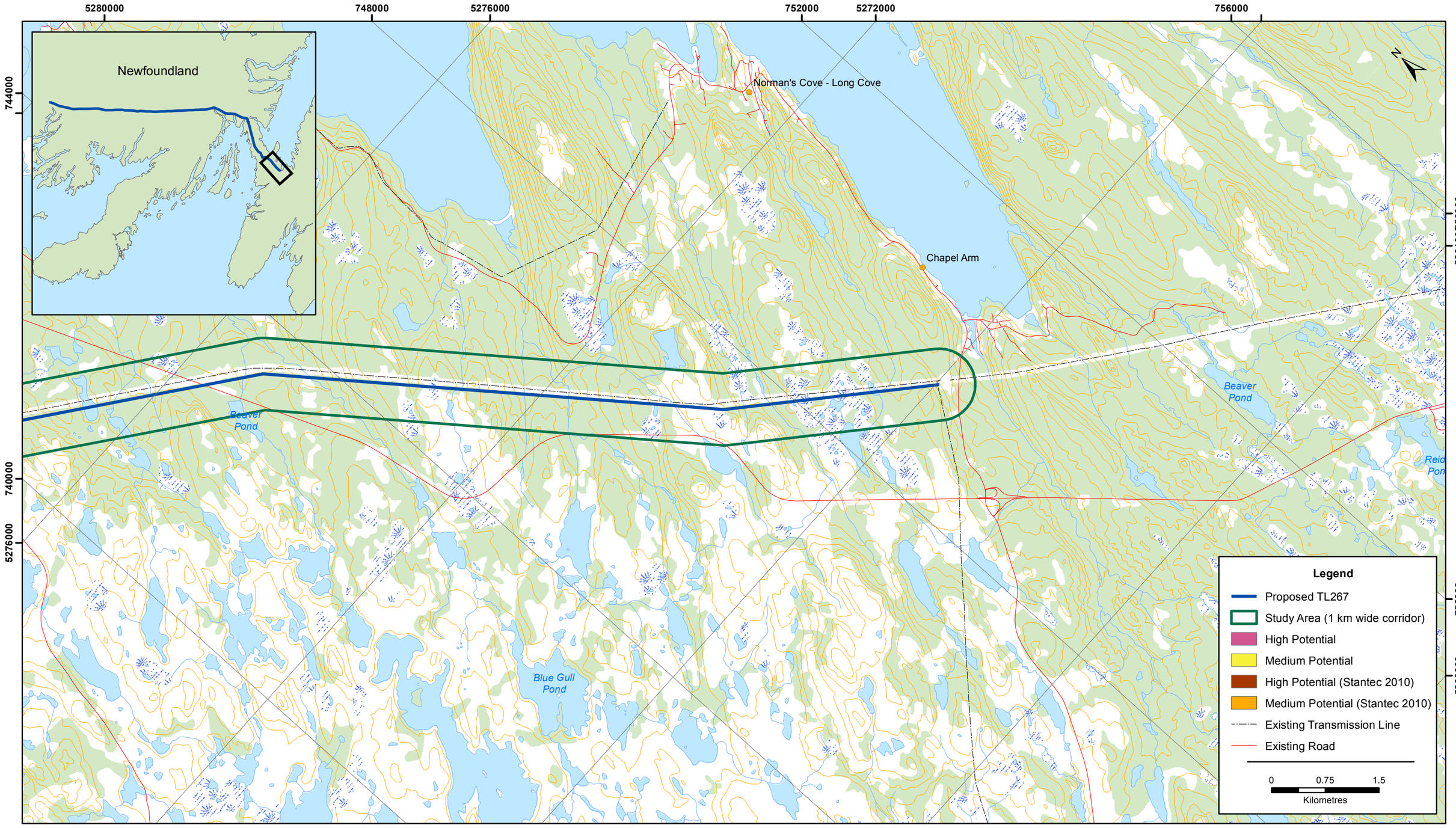
Legend

- Proposed TL267
- Study Area (1 km wide corridor)
- High Potential
- Medium Potential
- High Potential (Stantec 2010)
- Medium Potential (Stantec 2010)
- Existing Transmission Line
- Existing Road

0 0.75 1.5

Kilometres

PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES



PROPOSED BAY D'ESPOIR TO WESTERN AVALON TRANSMISSION LINE (TL 267) – HISTORIC AND HERITAGE RESOURCES

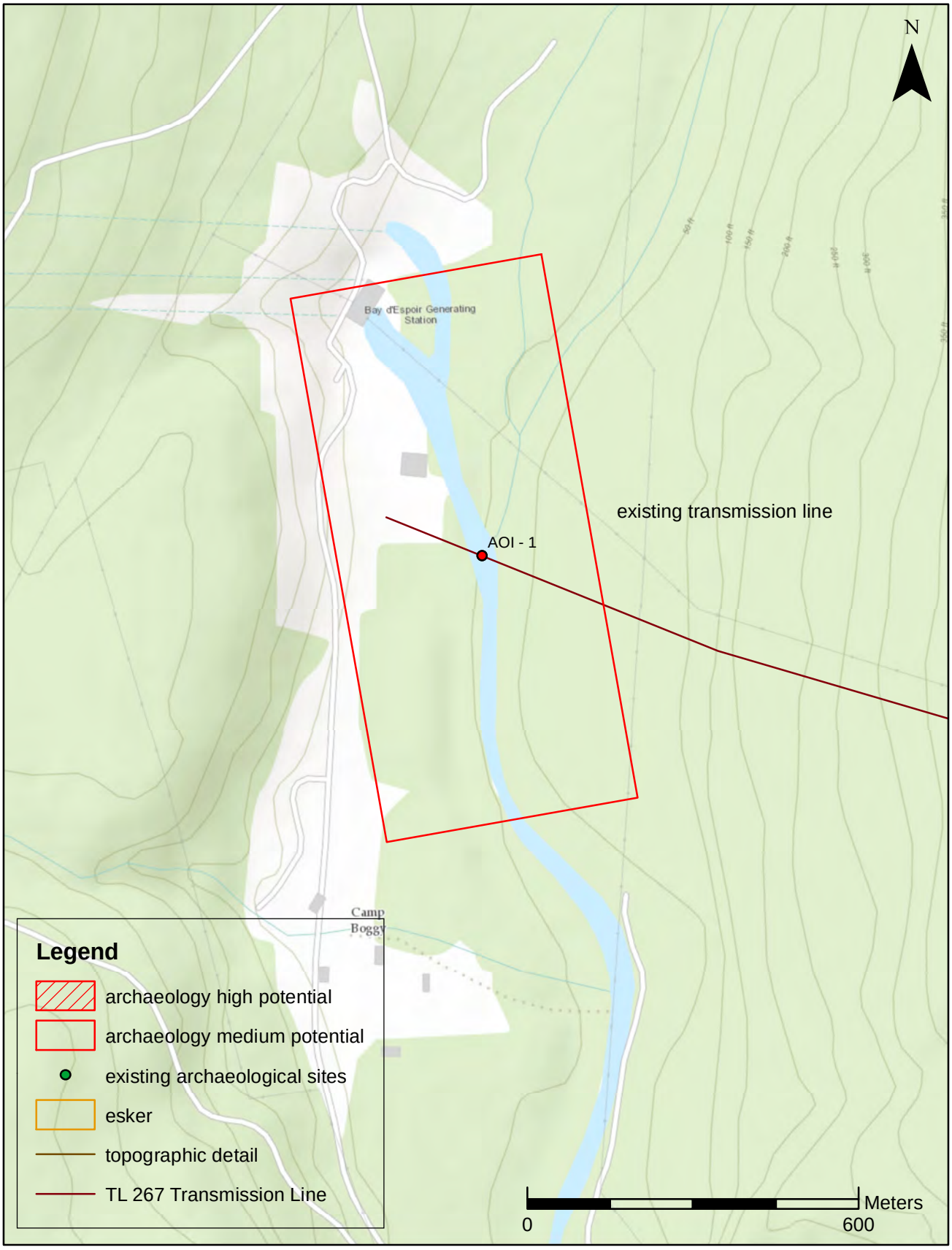
This page has been intentionally left blank for double-sided printing

Appendix D

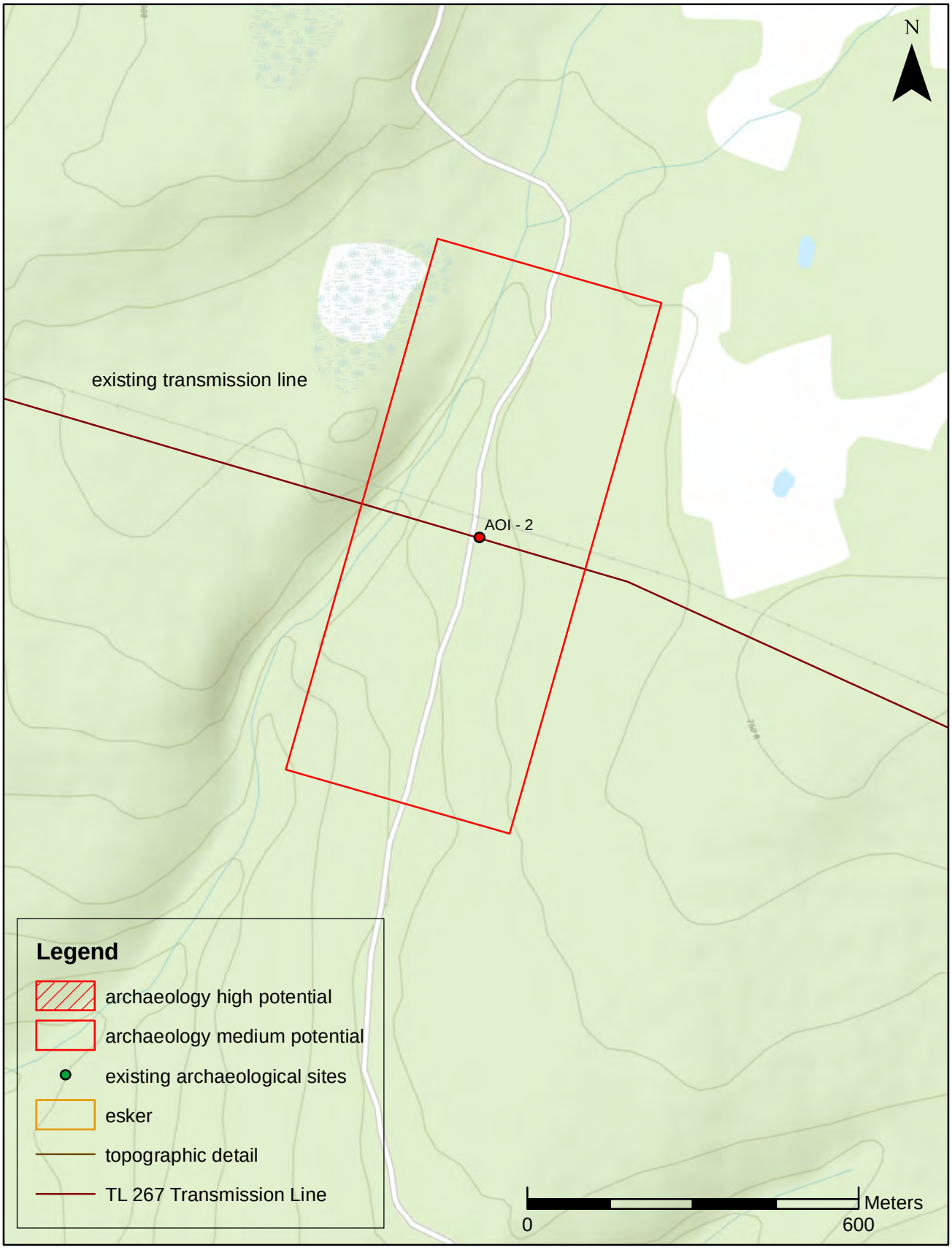
Mapping of Individual Areas of Identified Archaeological Potential

This page has been intentionally left blank for double-sided printing

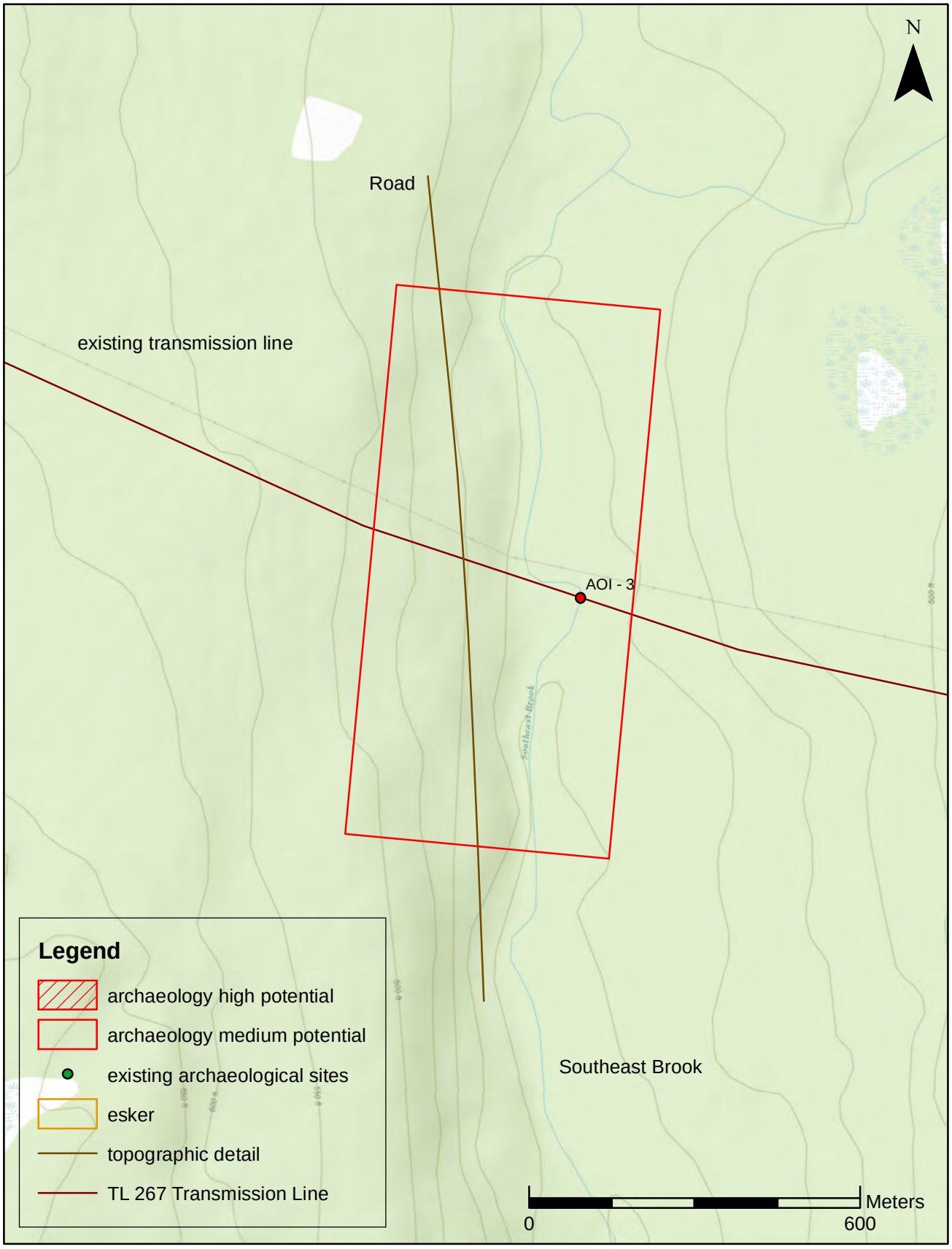
Bay d'Espoir Terminal Station



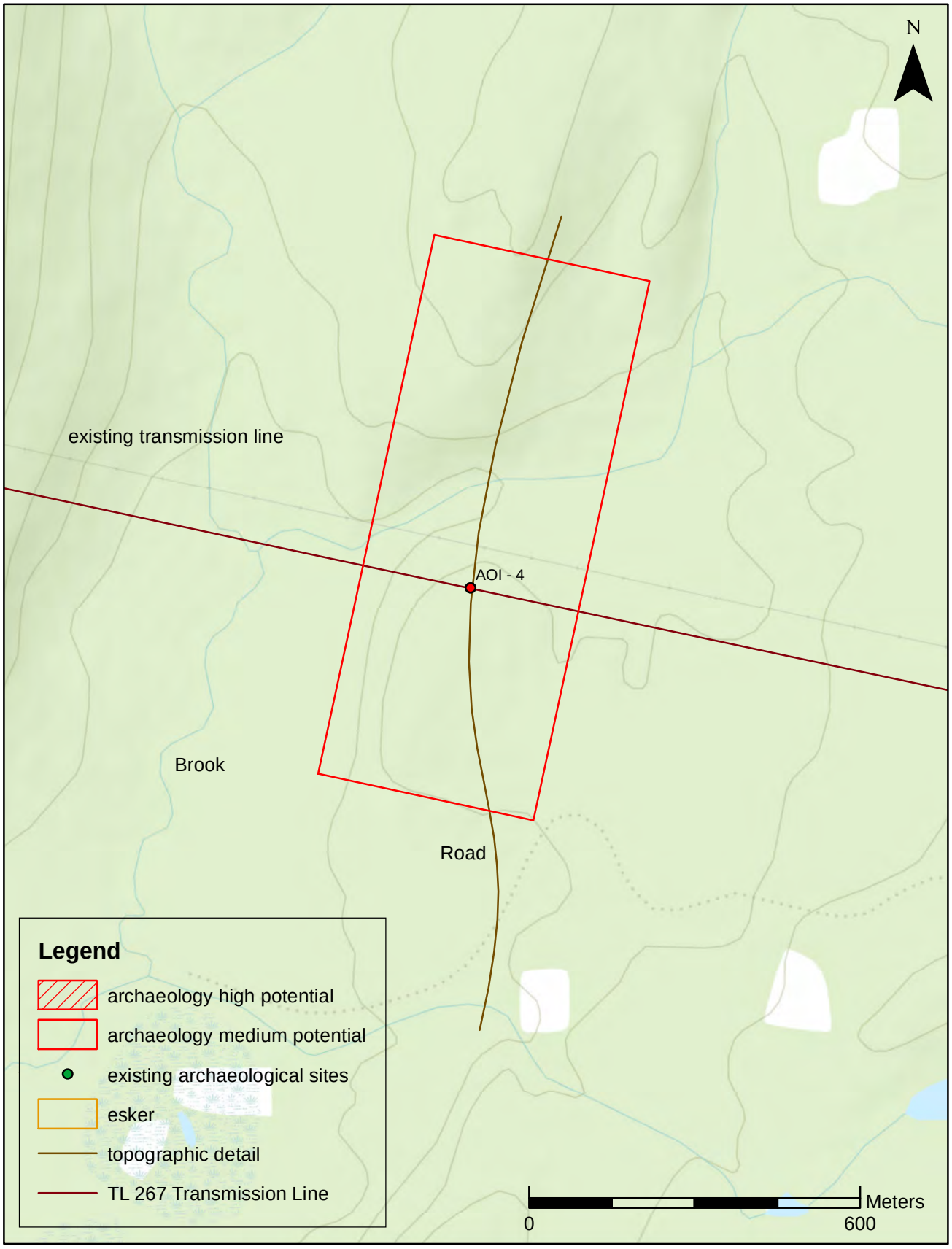
Forebay Access Road



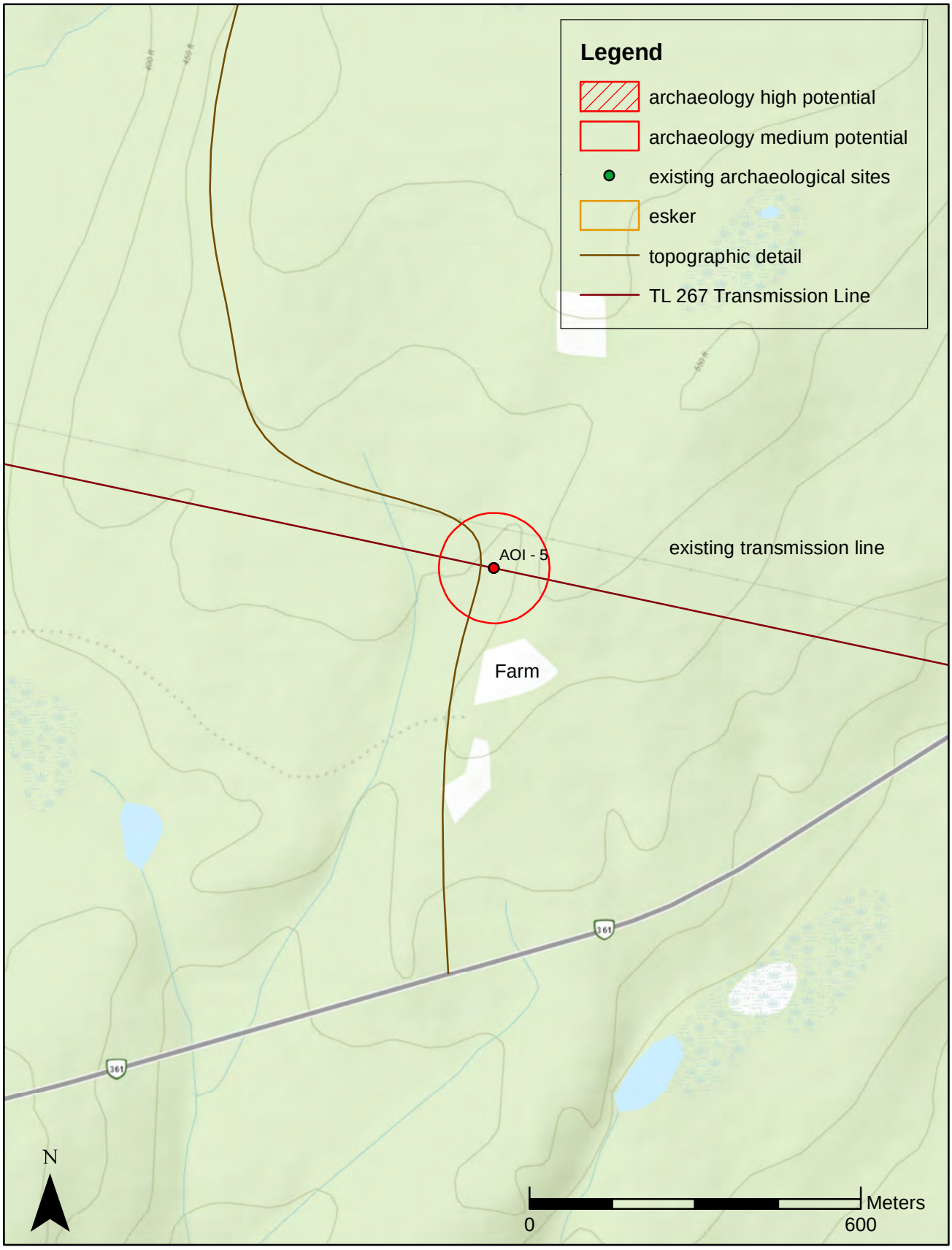
Southeast Brook



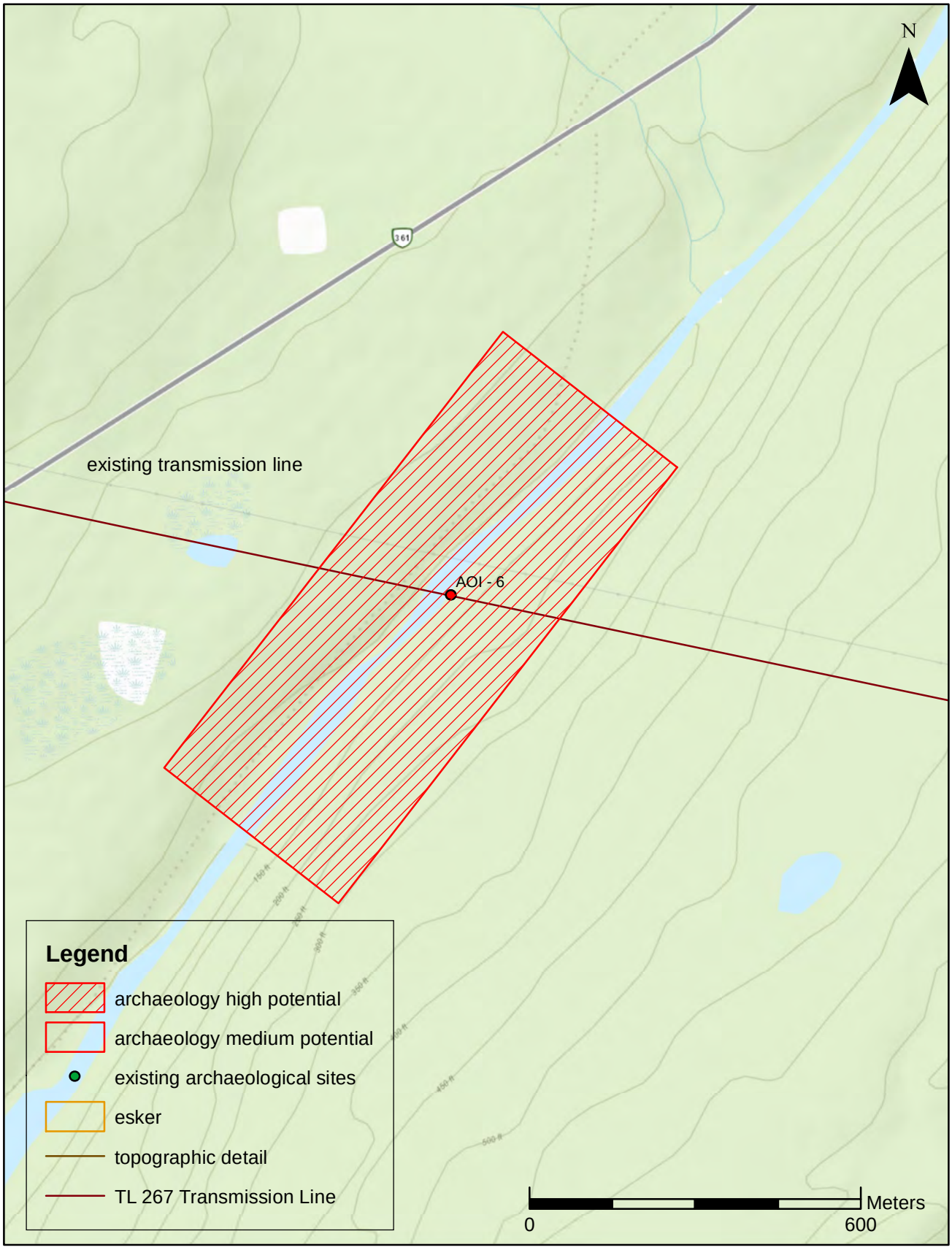
Road east of Southeast Brook



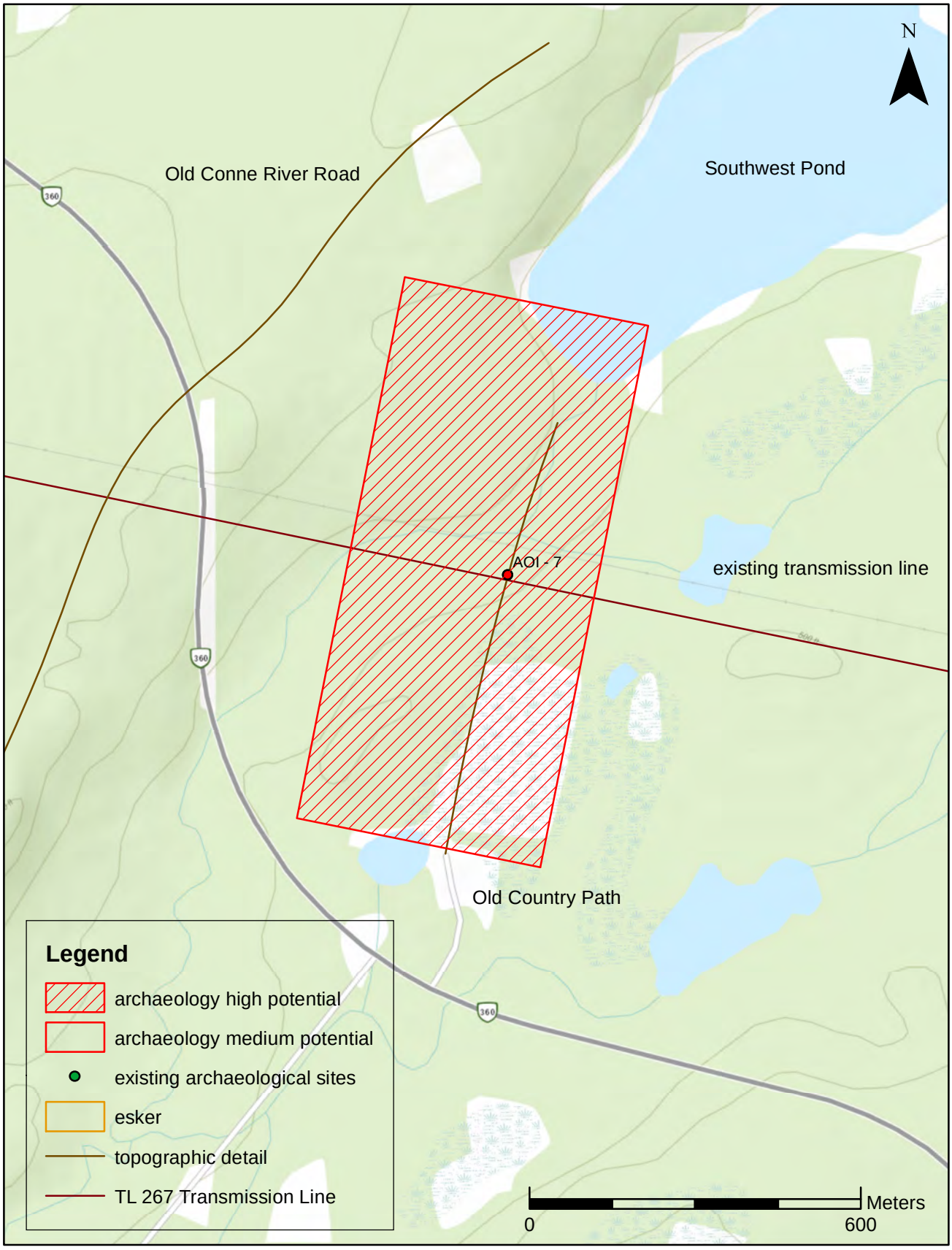
Farm Access Road



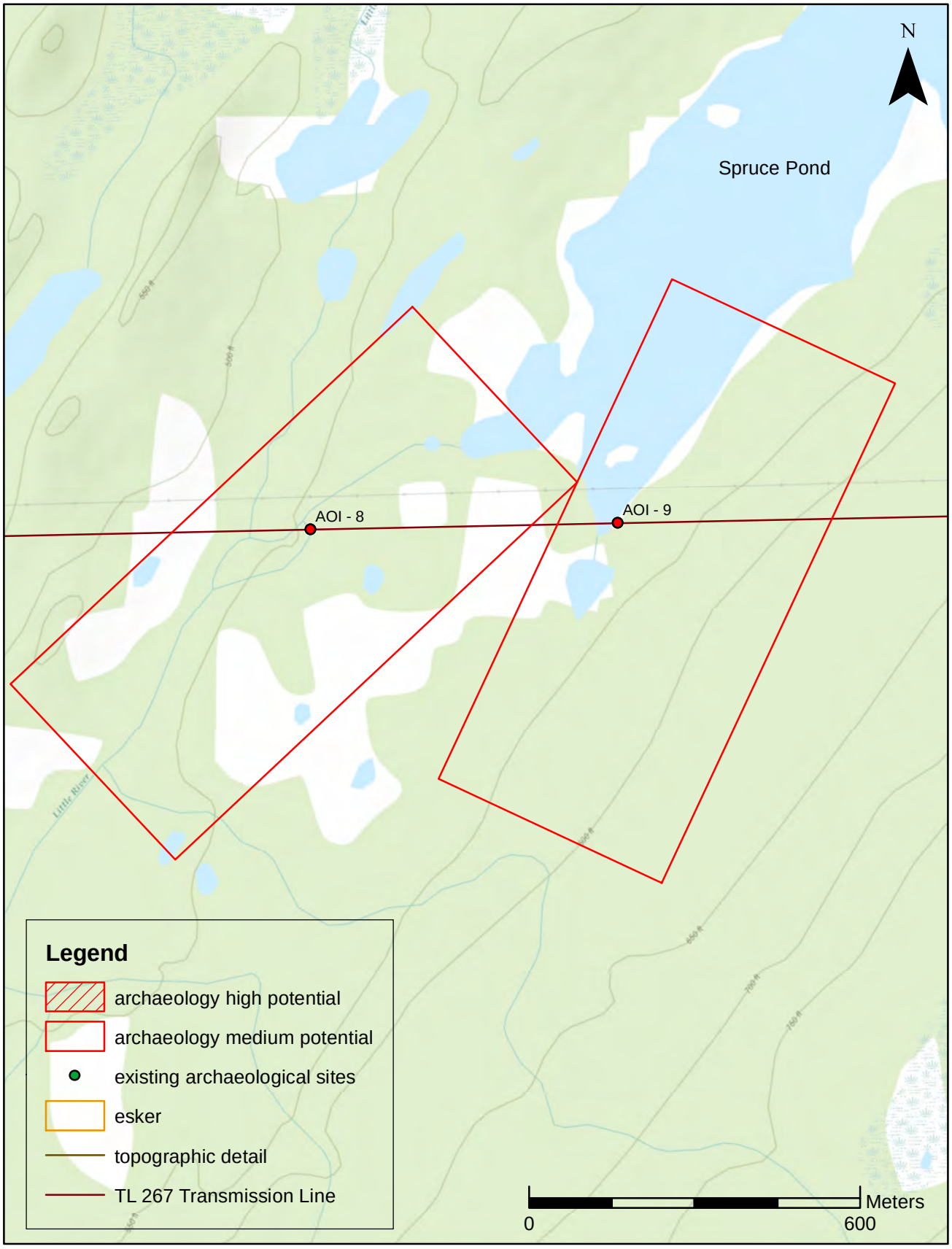
Conne River


N
361
existing transmission line
AOI - 6
Legend
archaeology high potential
archaeology medium potential
existing archaeological sites
esker
topographic detail
TL 267 Transmission Line
0
600
Meters

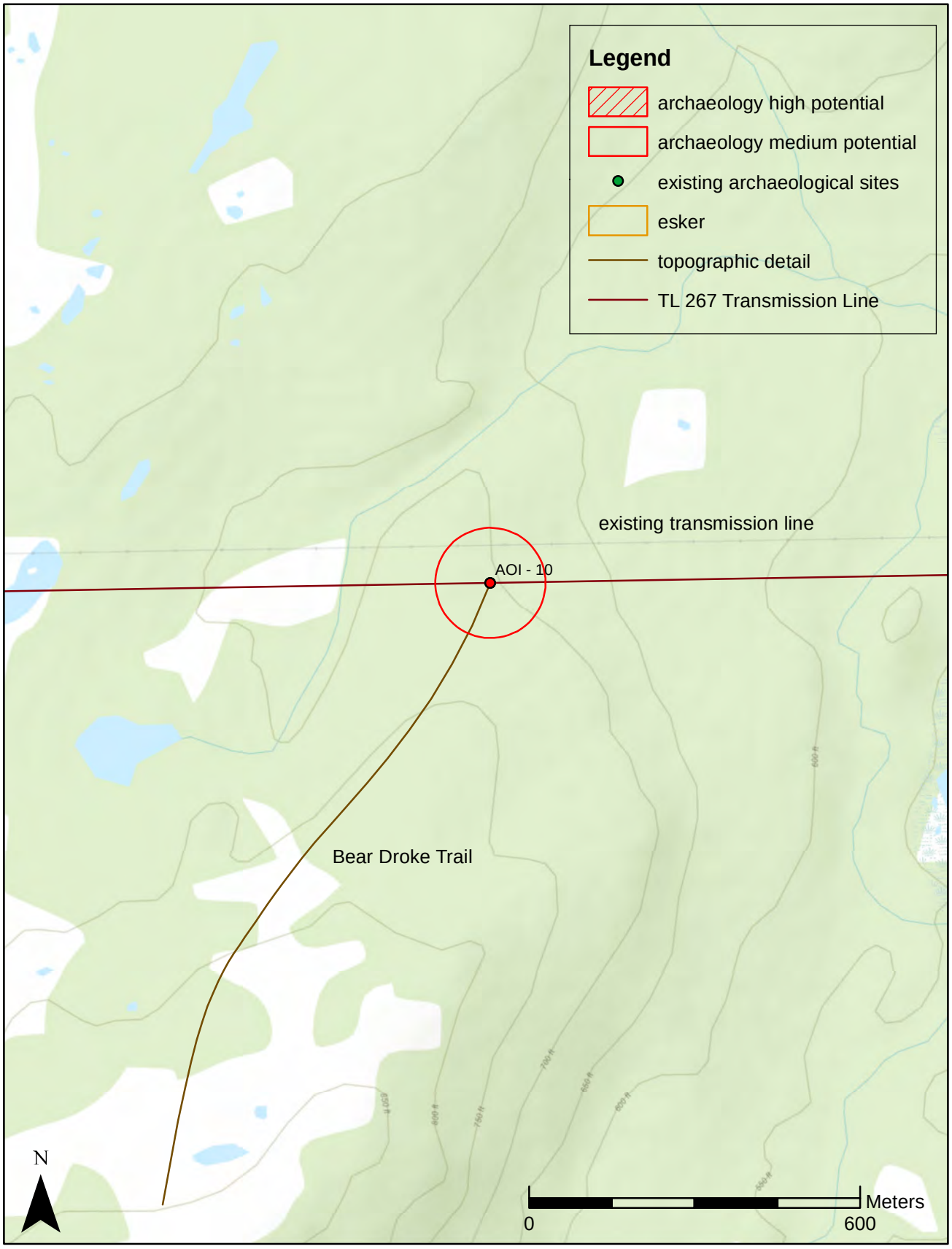
Old Country Path



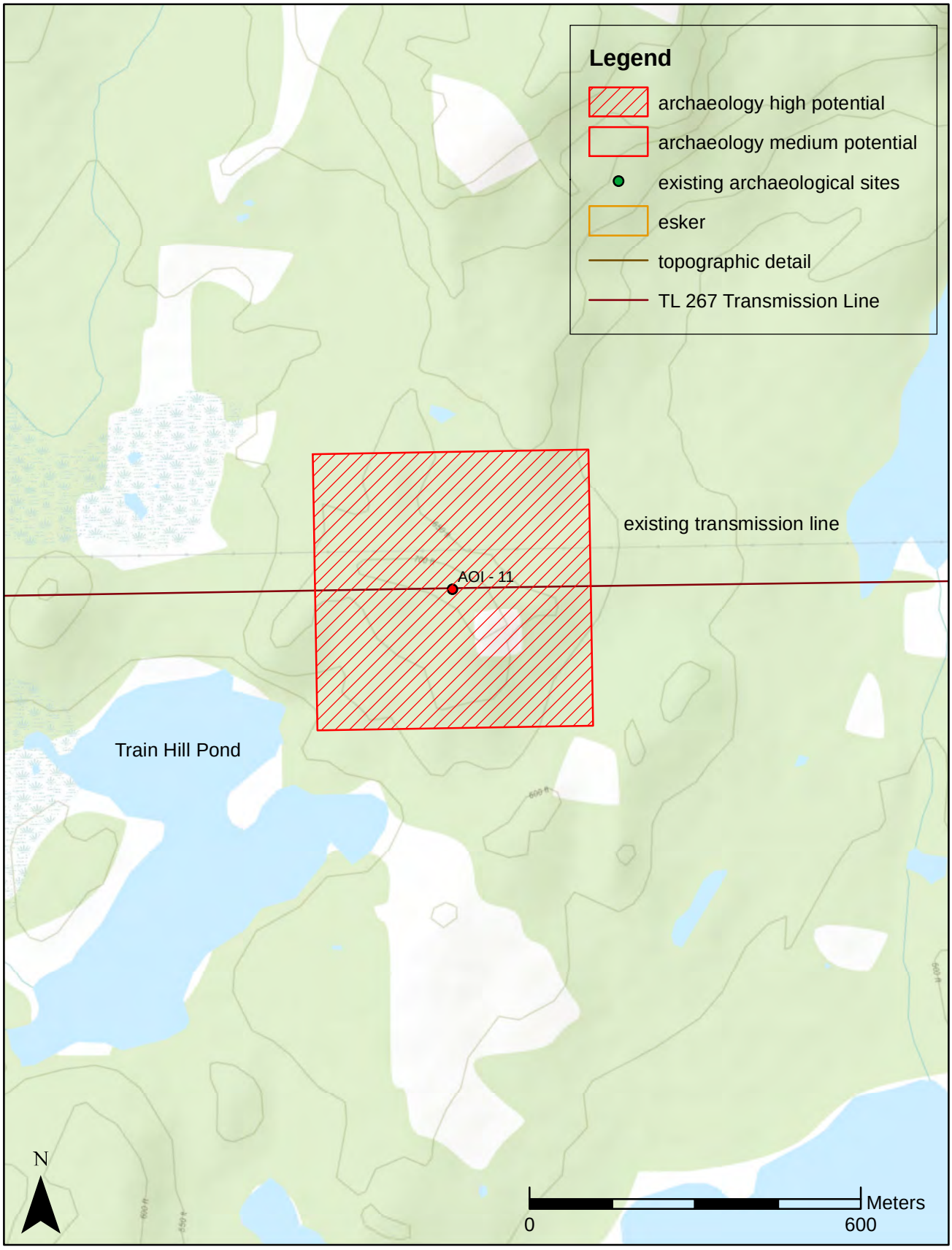
Little River / Spruce Pond



Bear Droke Trail

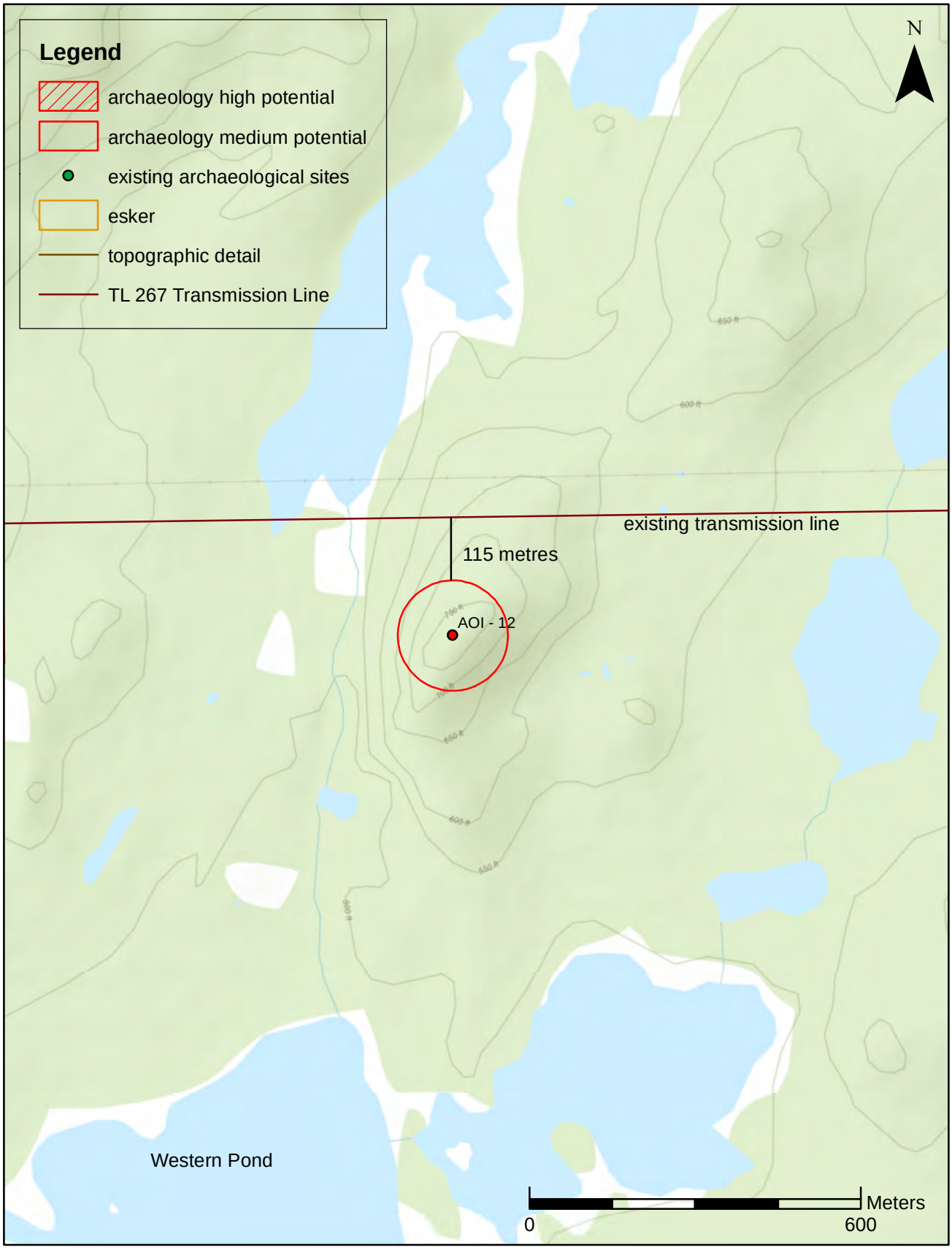


Train Hill

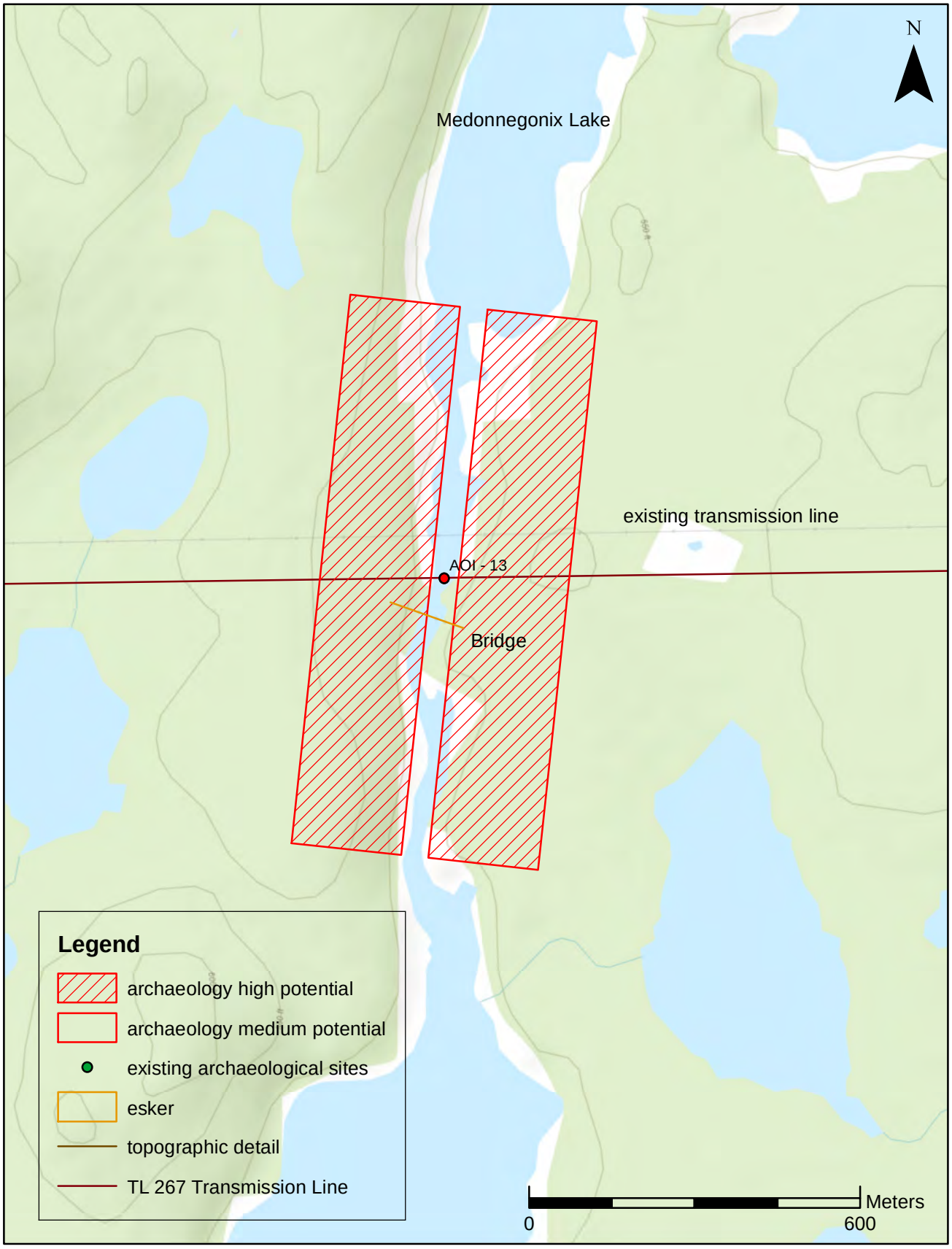


Gerald Penney Associates Limited. 10

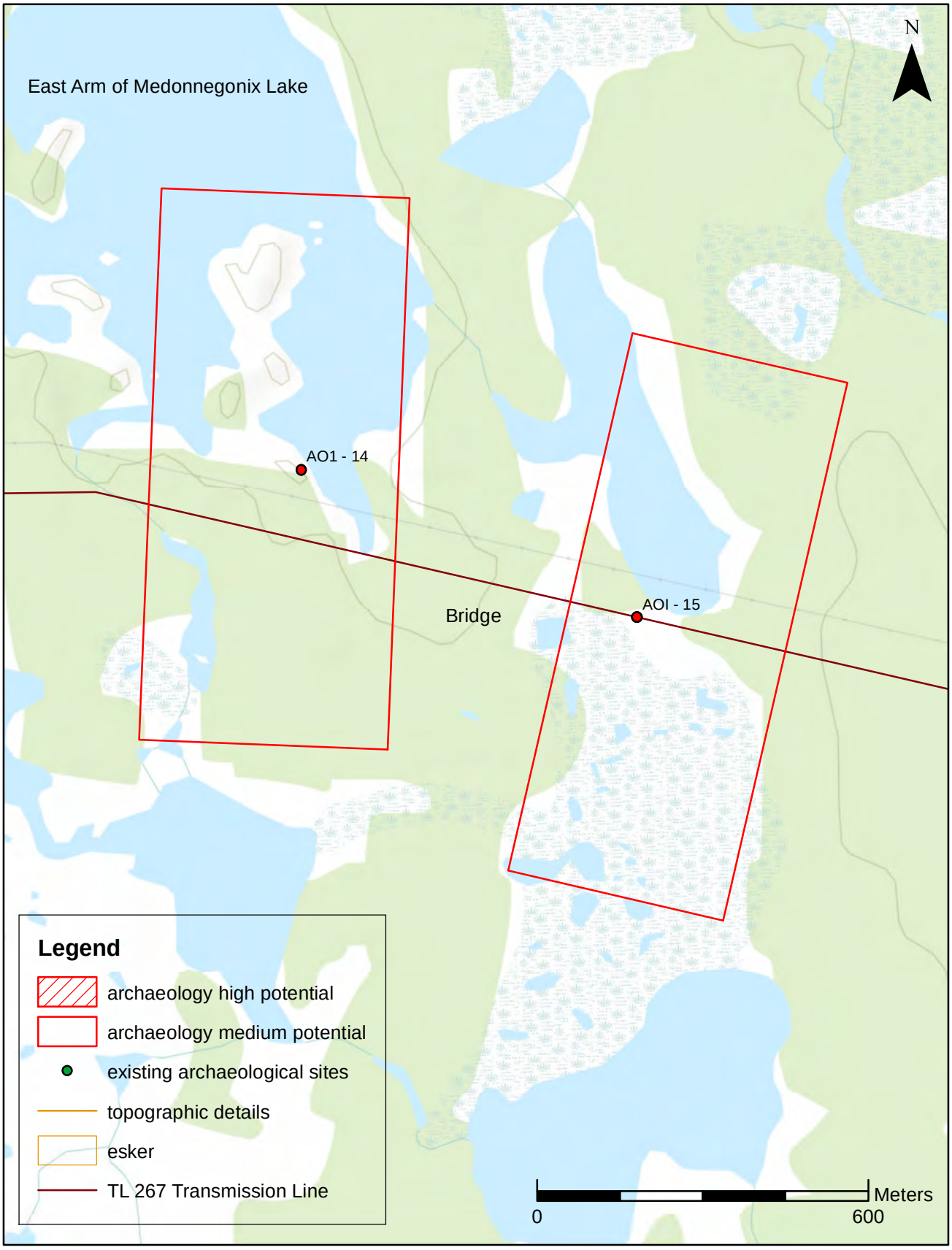
Western Pond Lookout



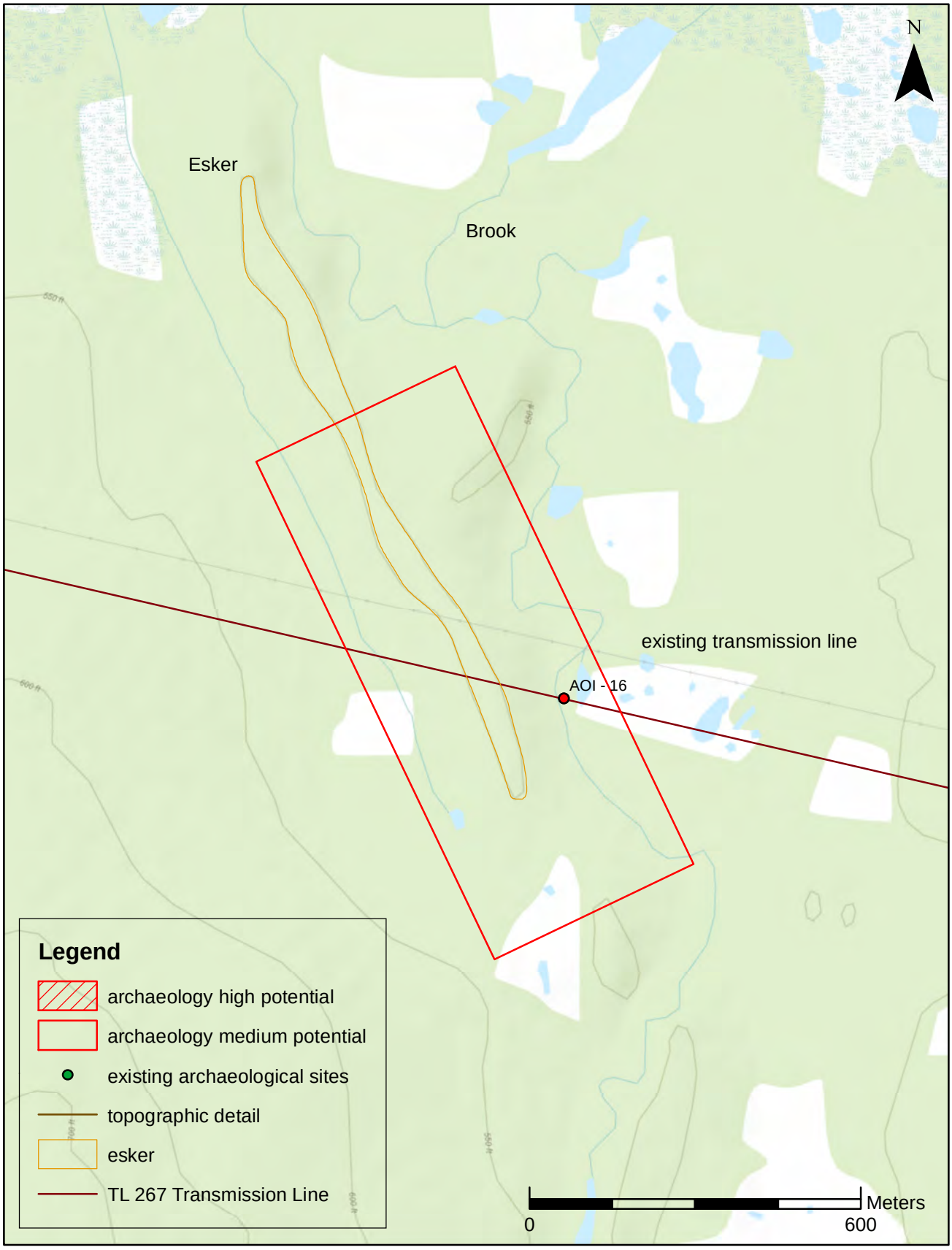
Bay du Nord River



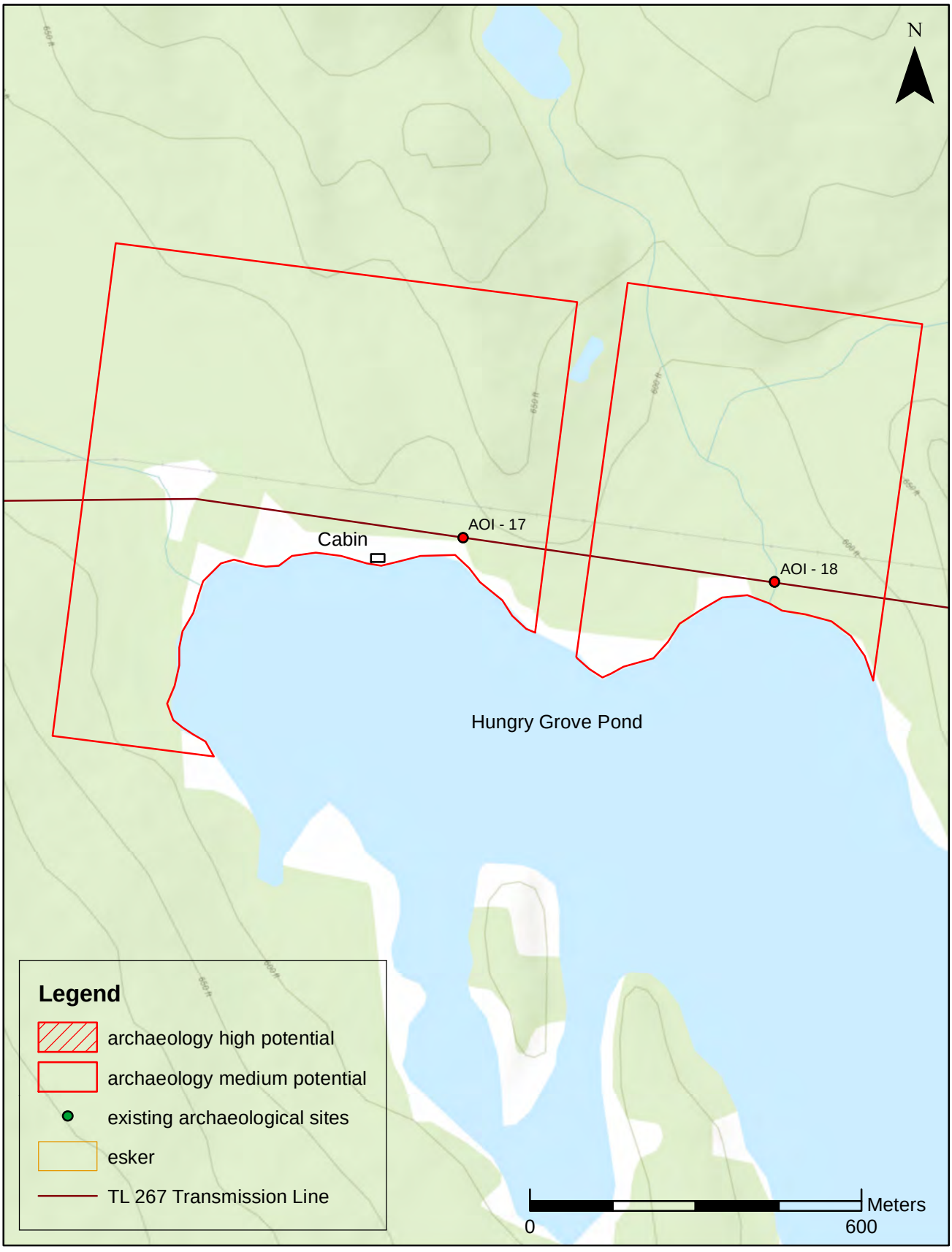
Medonnegonix / Pond east of Medonnegonix



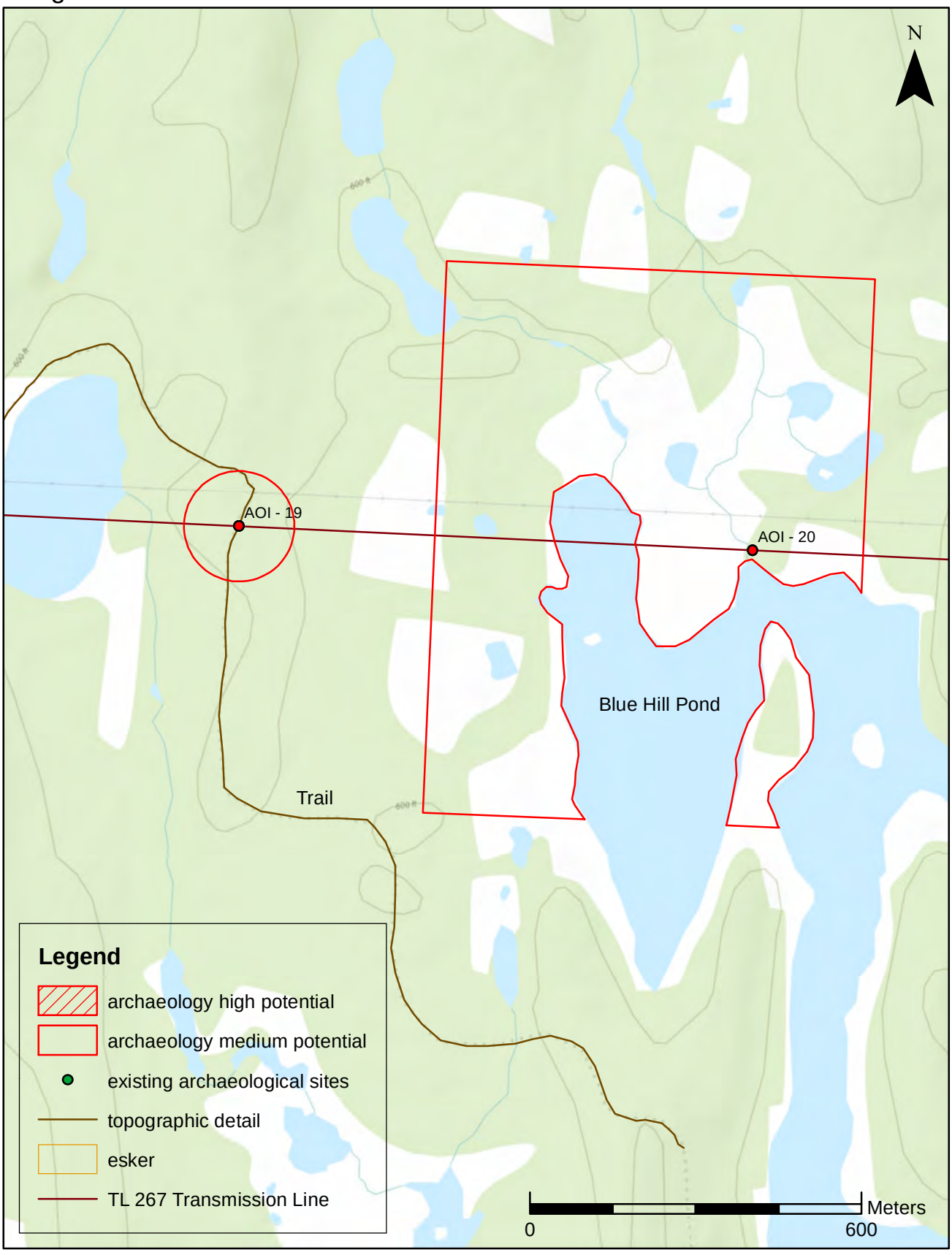
Koscaecodde Esker



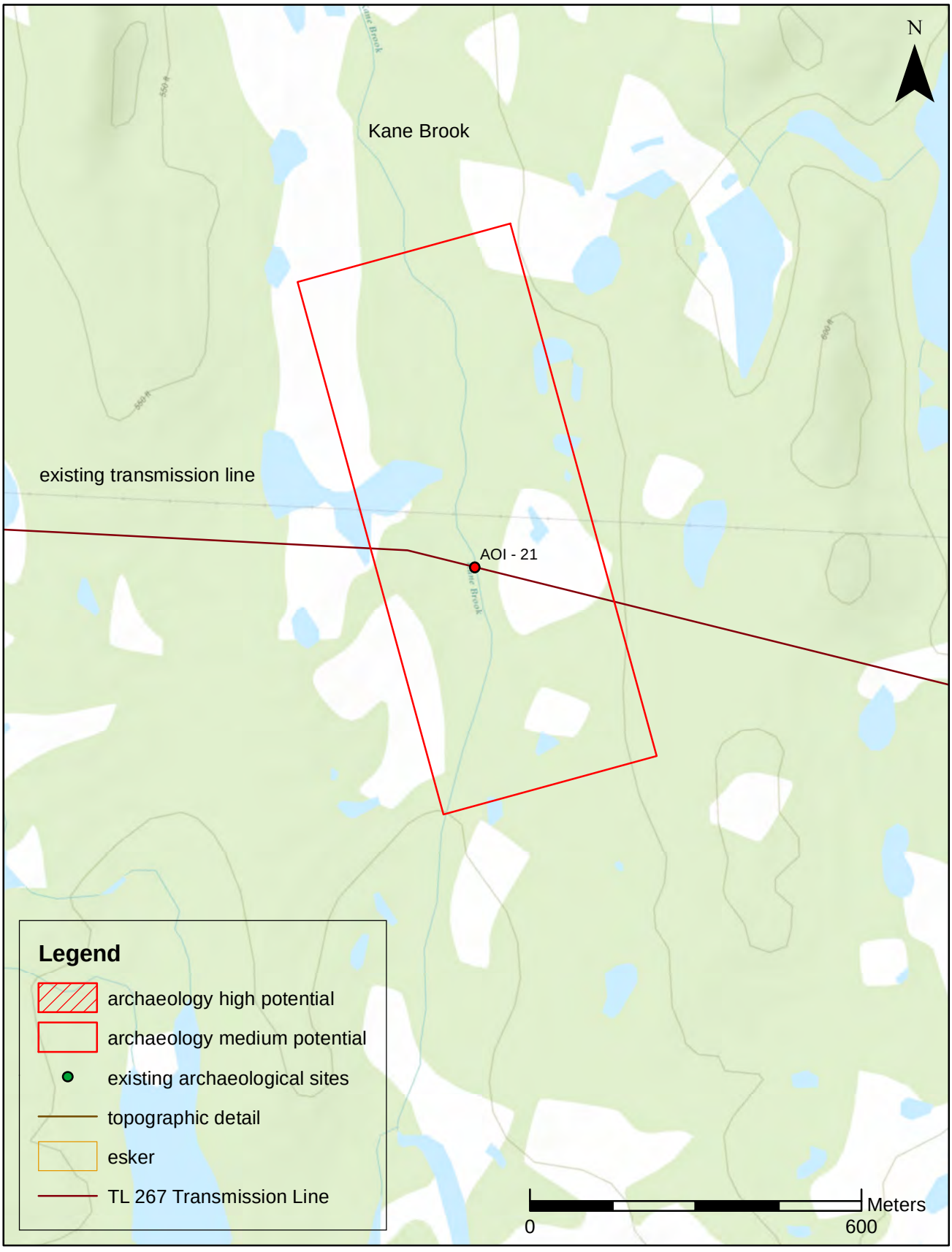
Hungry Grove Pond Cabin / Hungry Grove Pond East



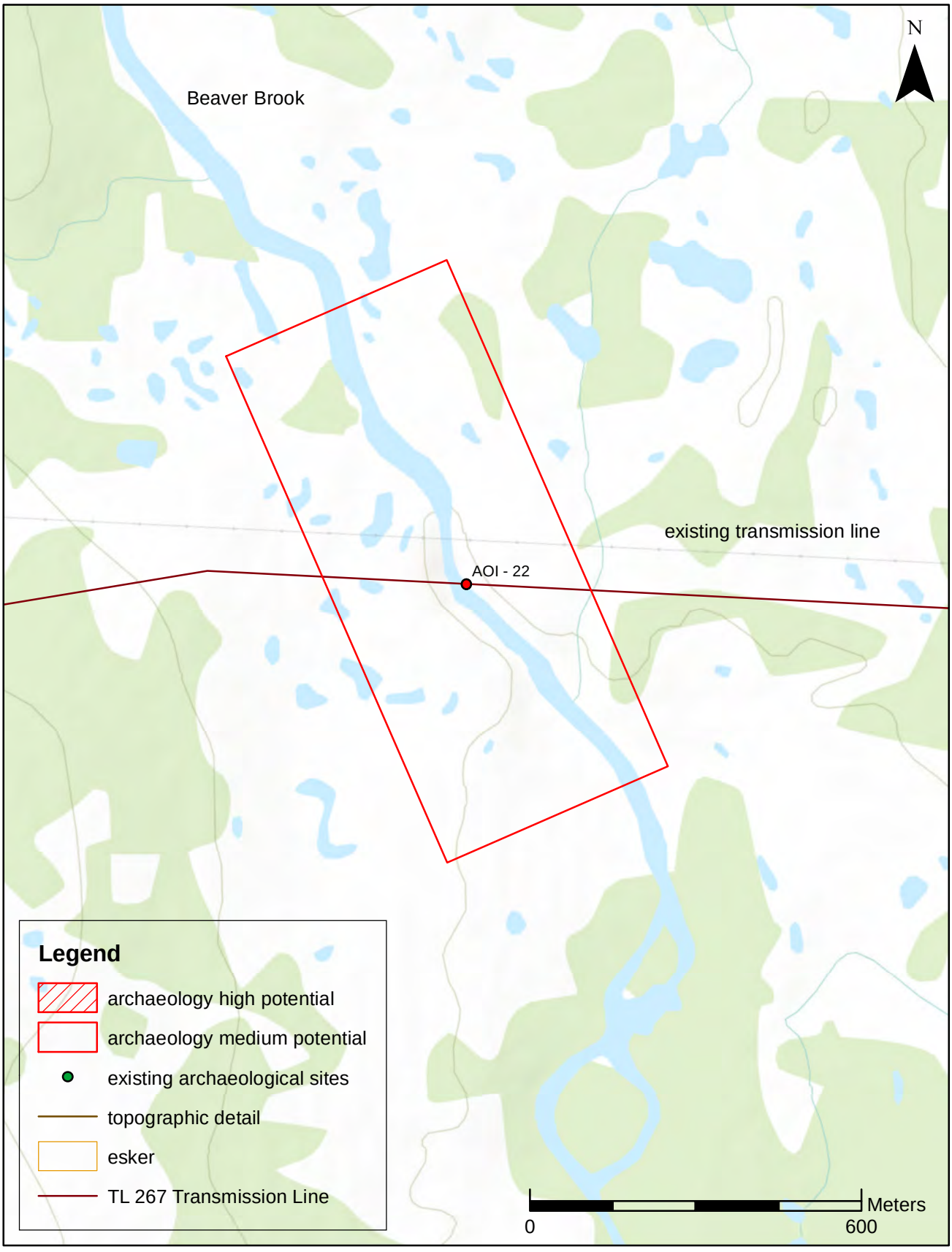
Long Harbour Trail / Blue Hill Pond



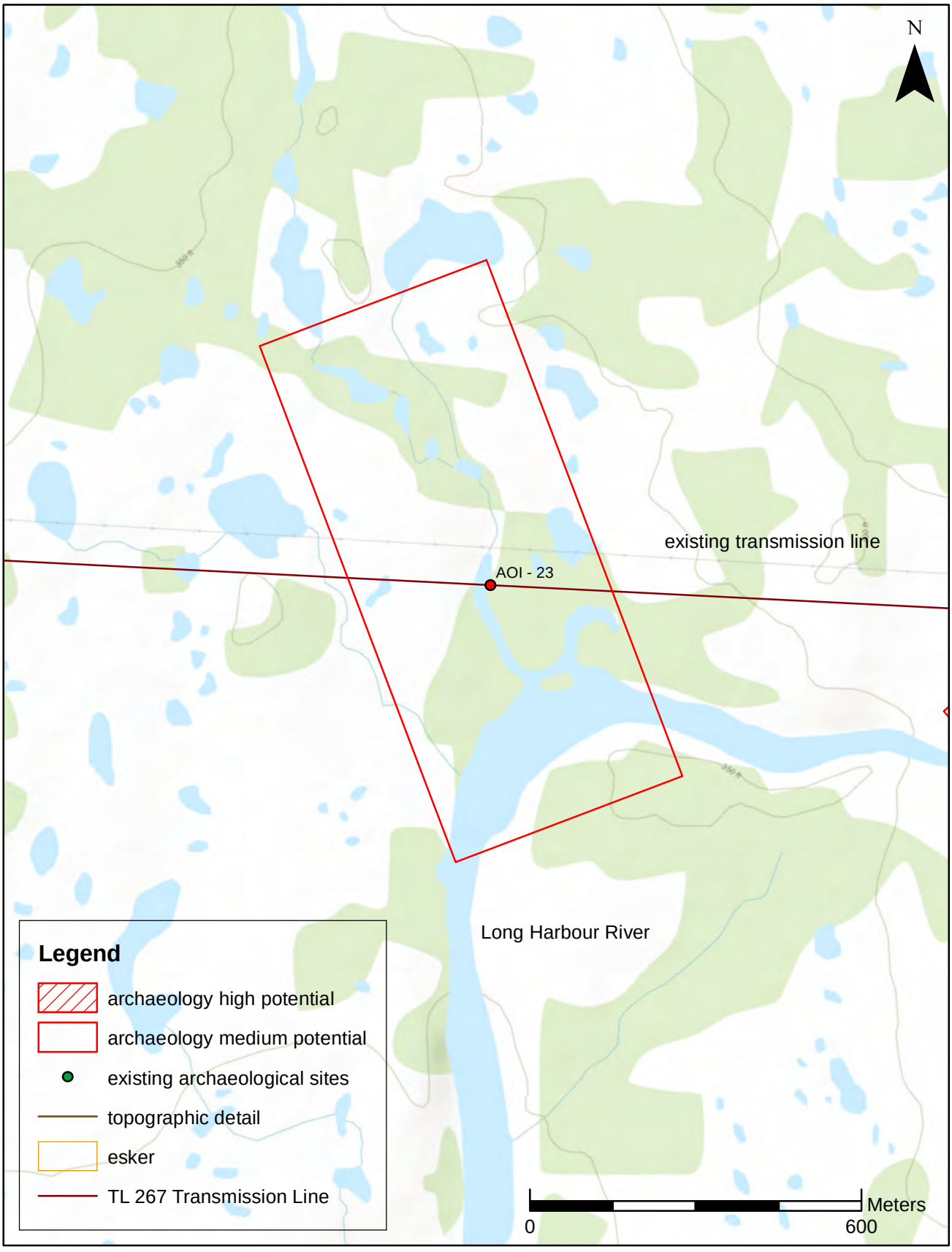
Kane Brook


N
Kane Brook
existing transmission line
AOI - 21
Legend
archaeology high potential
archaeology medium potential
existing archaeological sites
topographic detail
esker
TL 267 Transmission Line
0
600
Meters

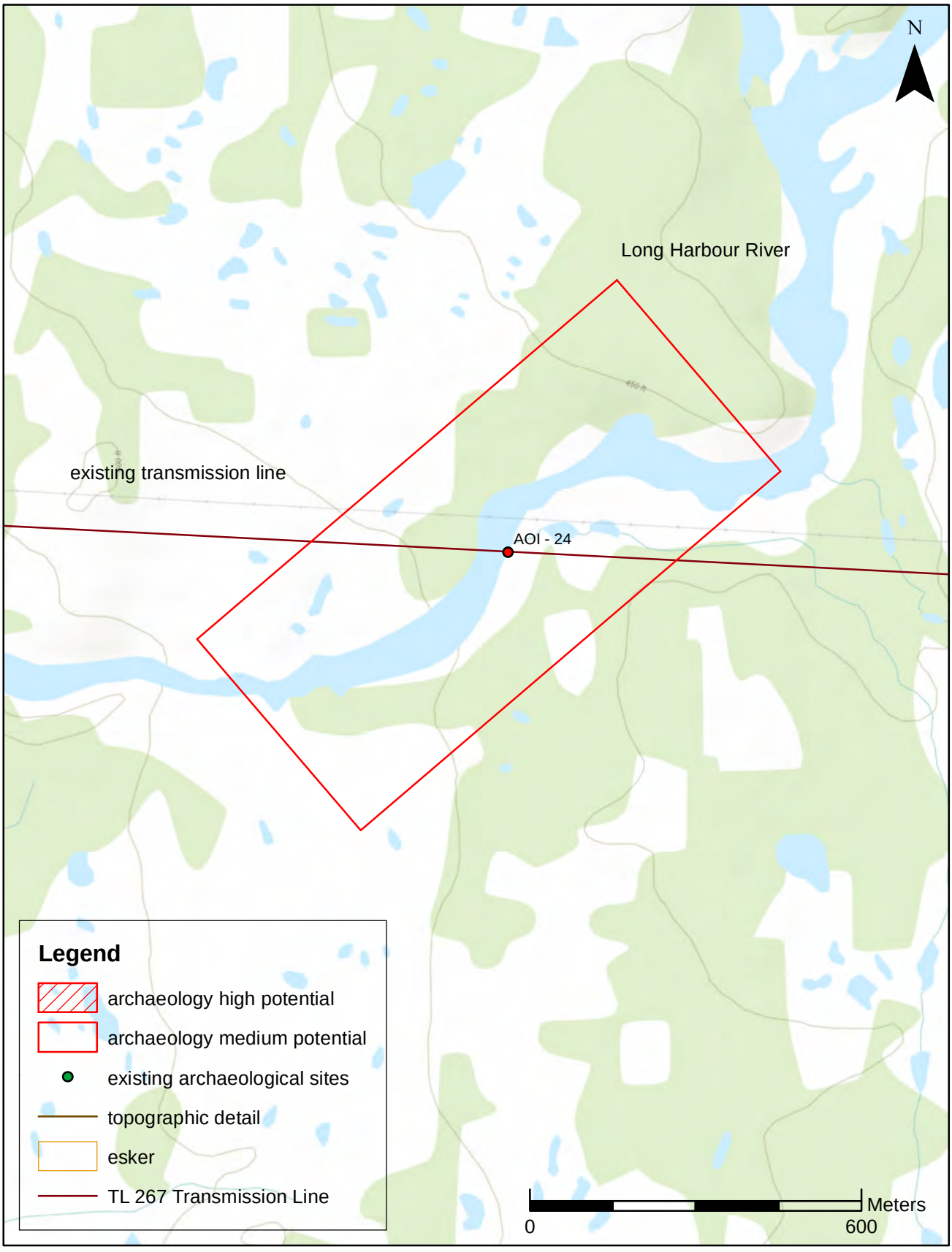
Beaver Brook



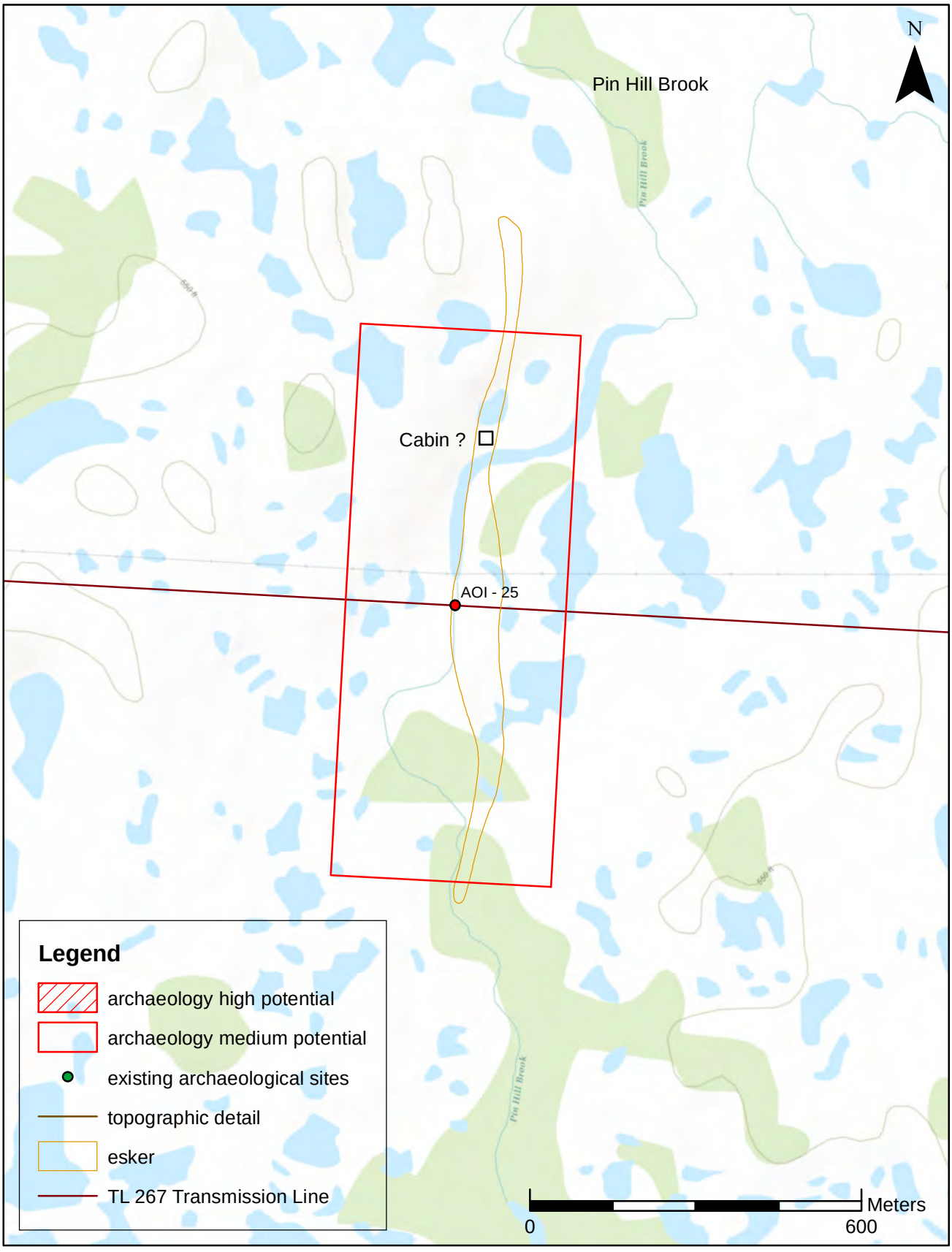
Long Harbour River West



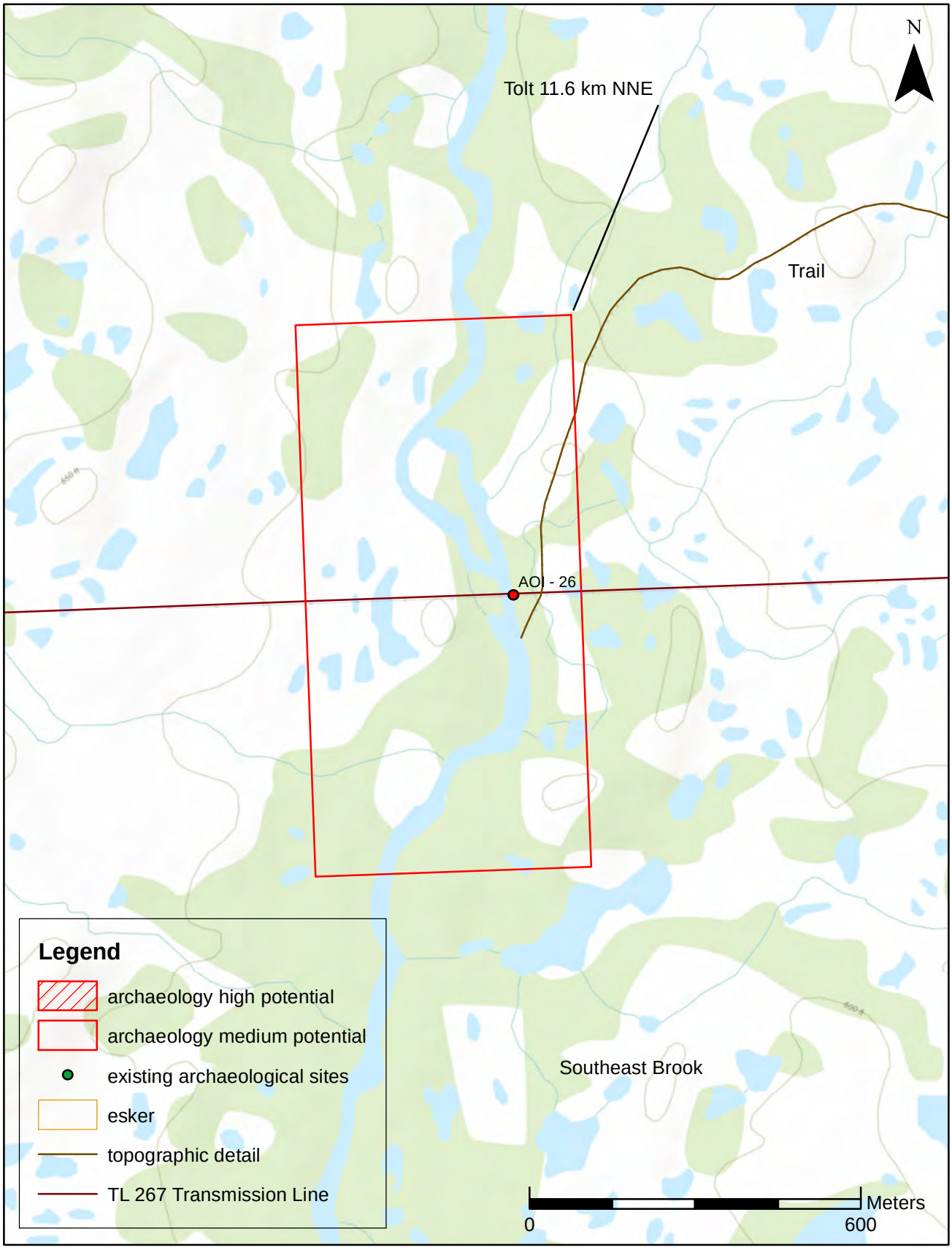
Long Harbour River East



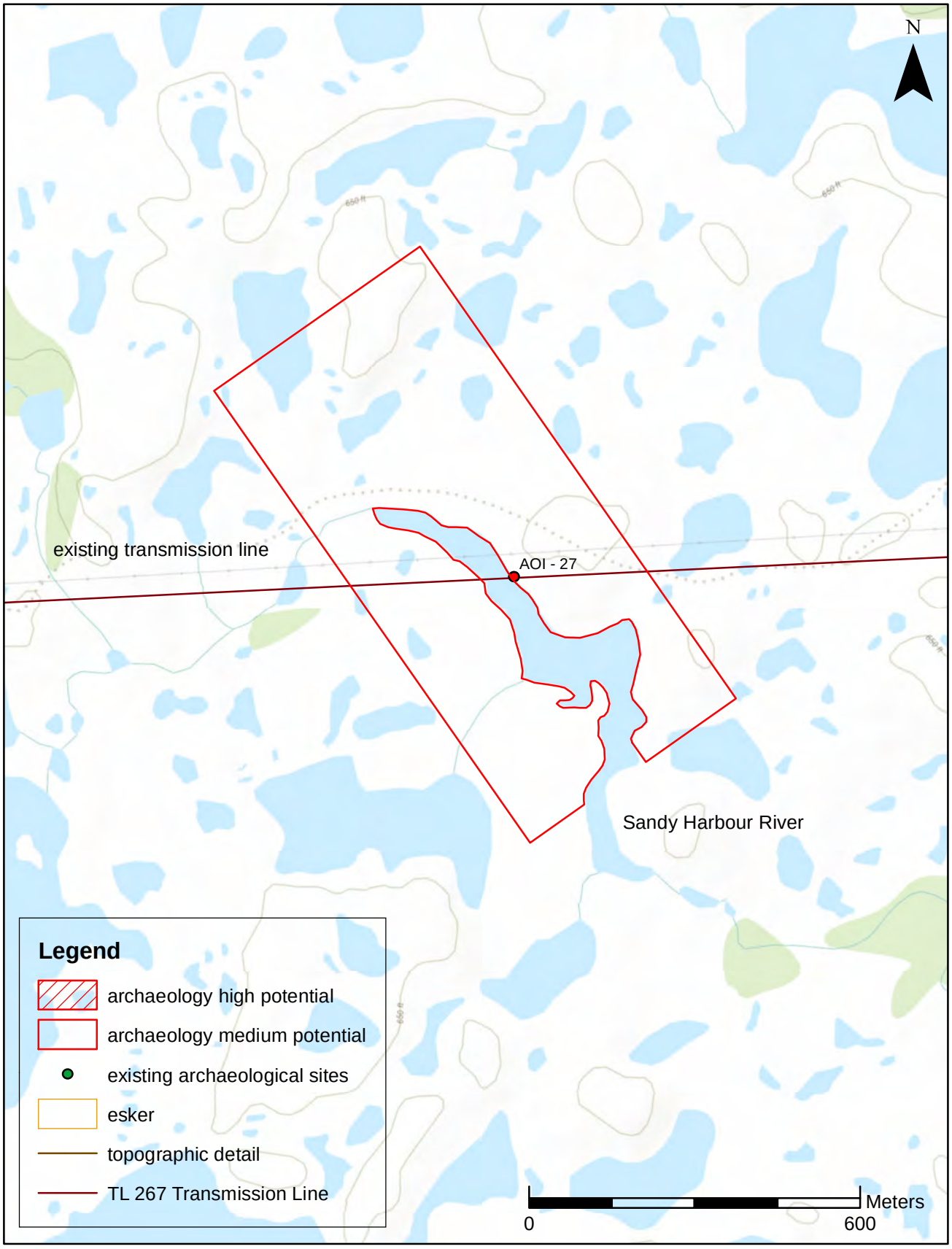
Pin Hill Brook Esker



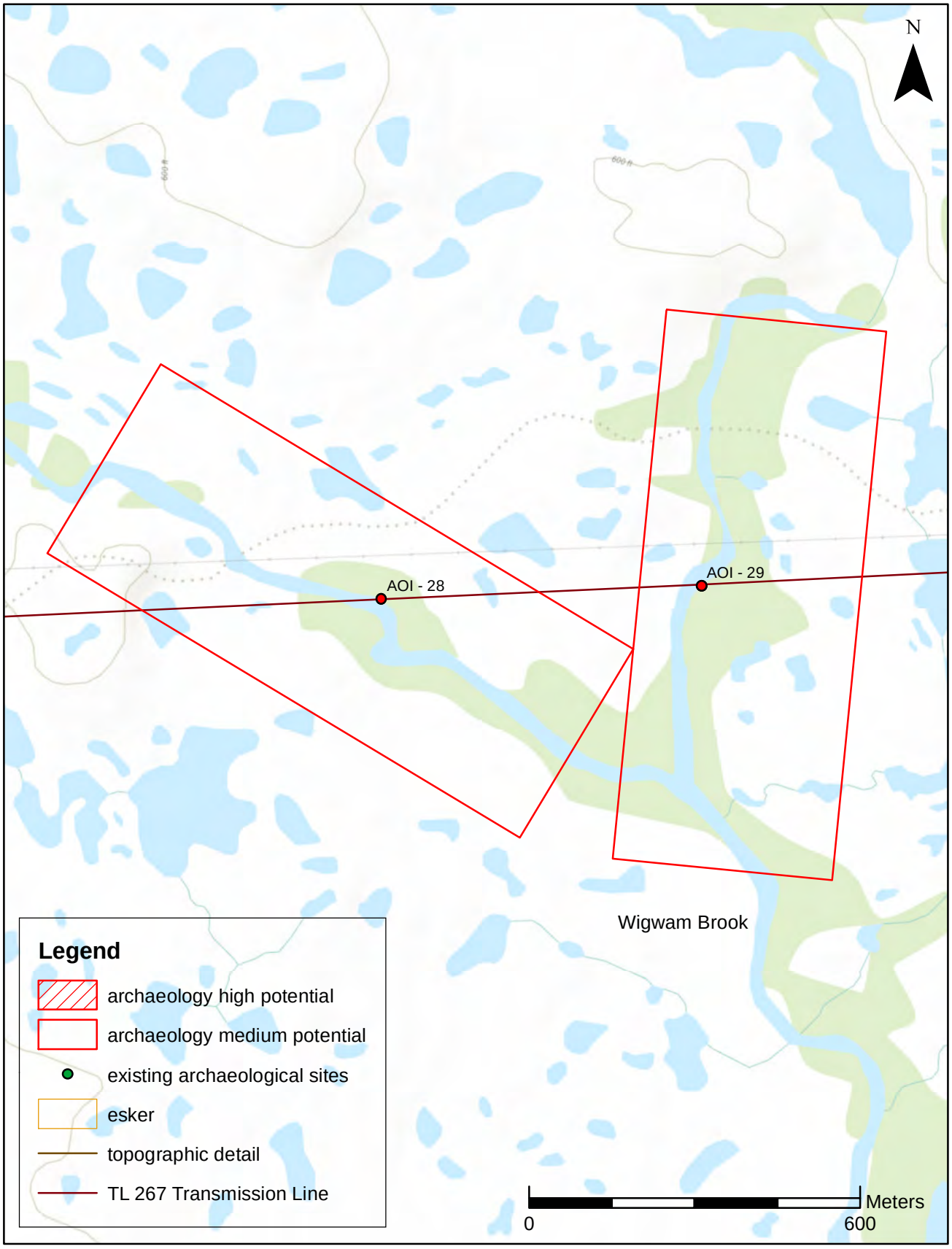
Dunnes Brook



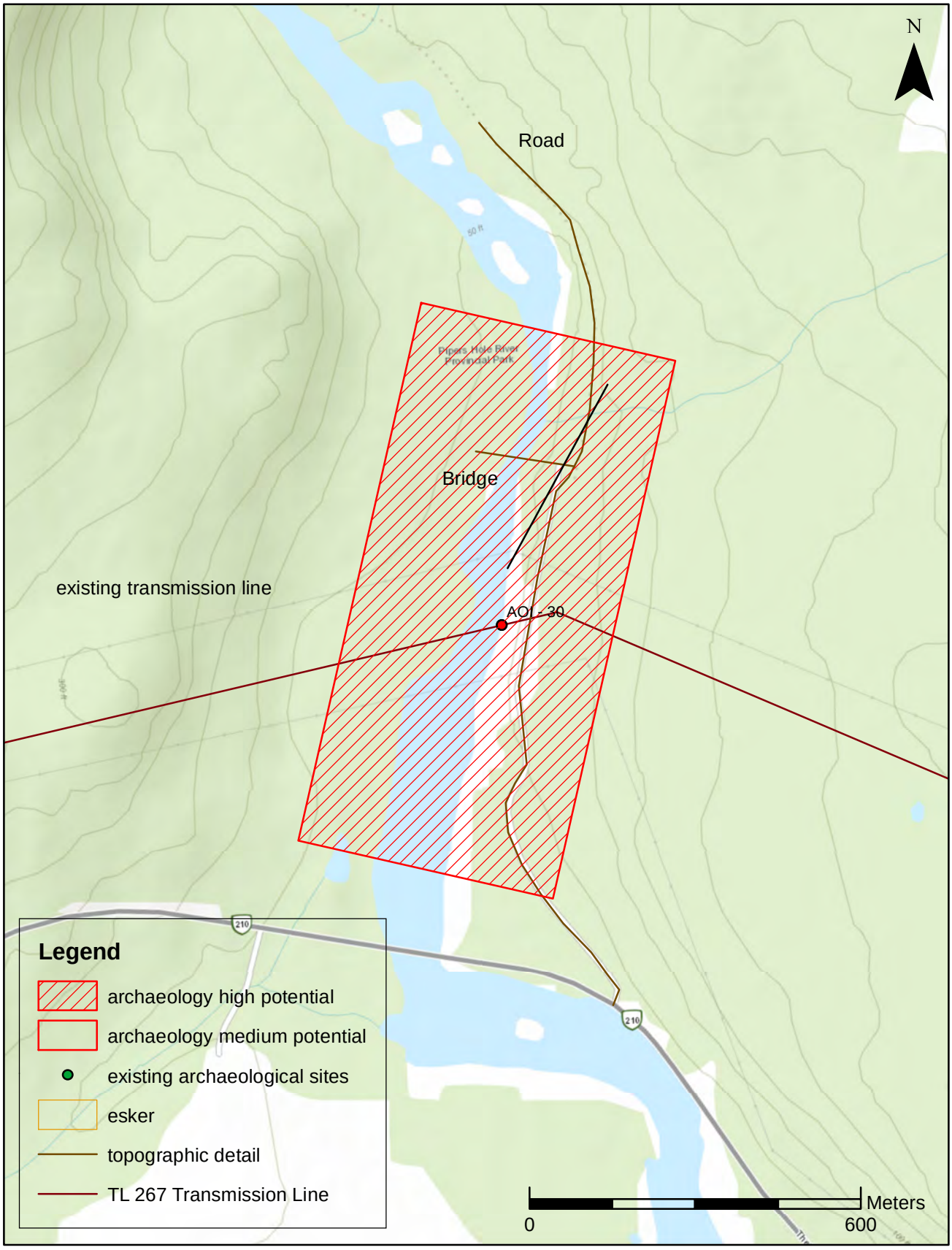
Sandy Harbour River



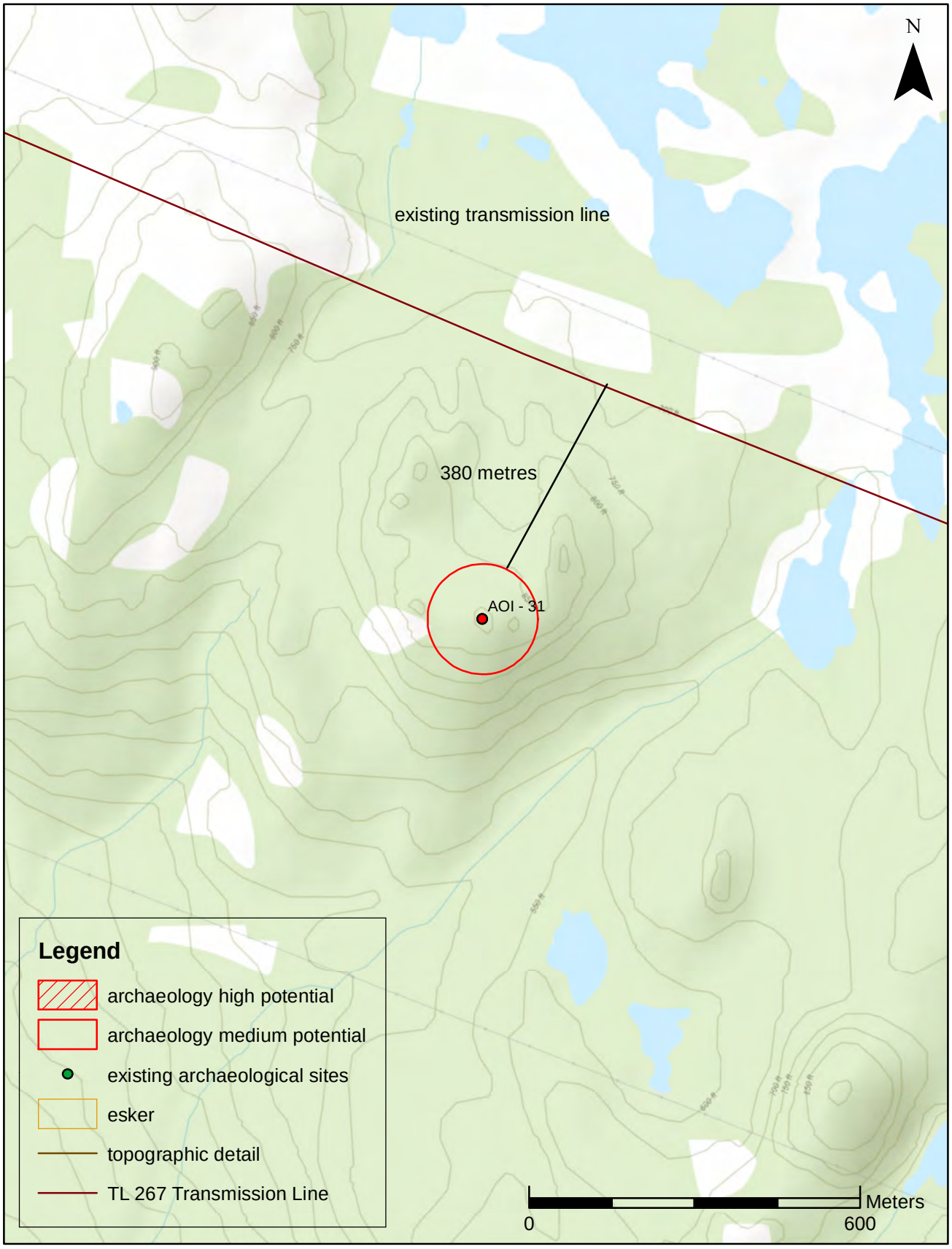
Wigwam Brook East / Wigwam Brook West



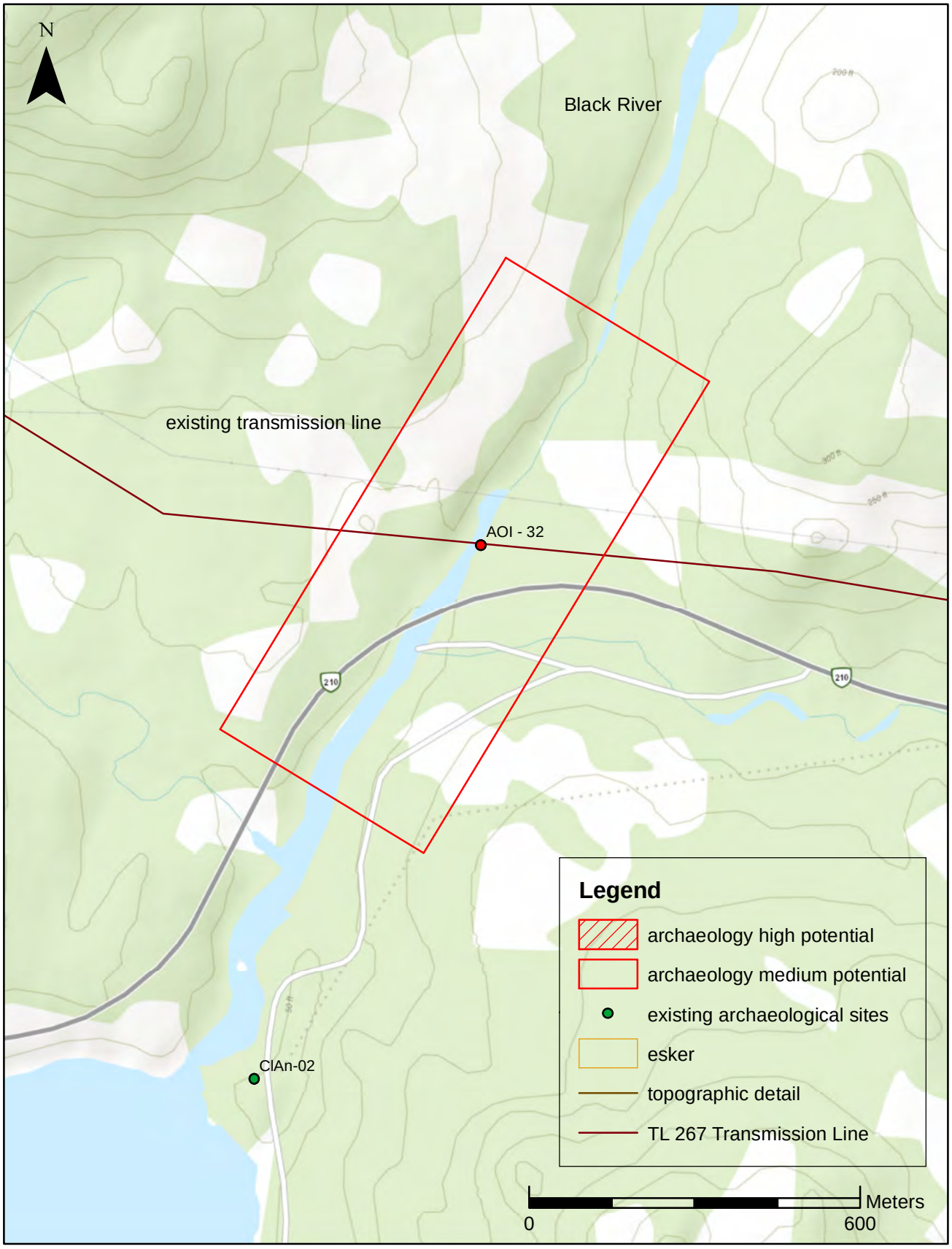
Pipers Hole River



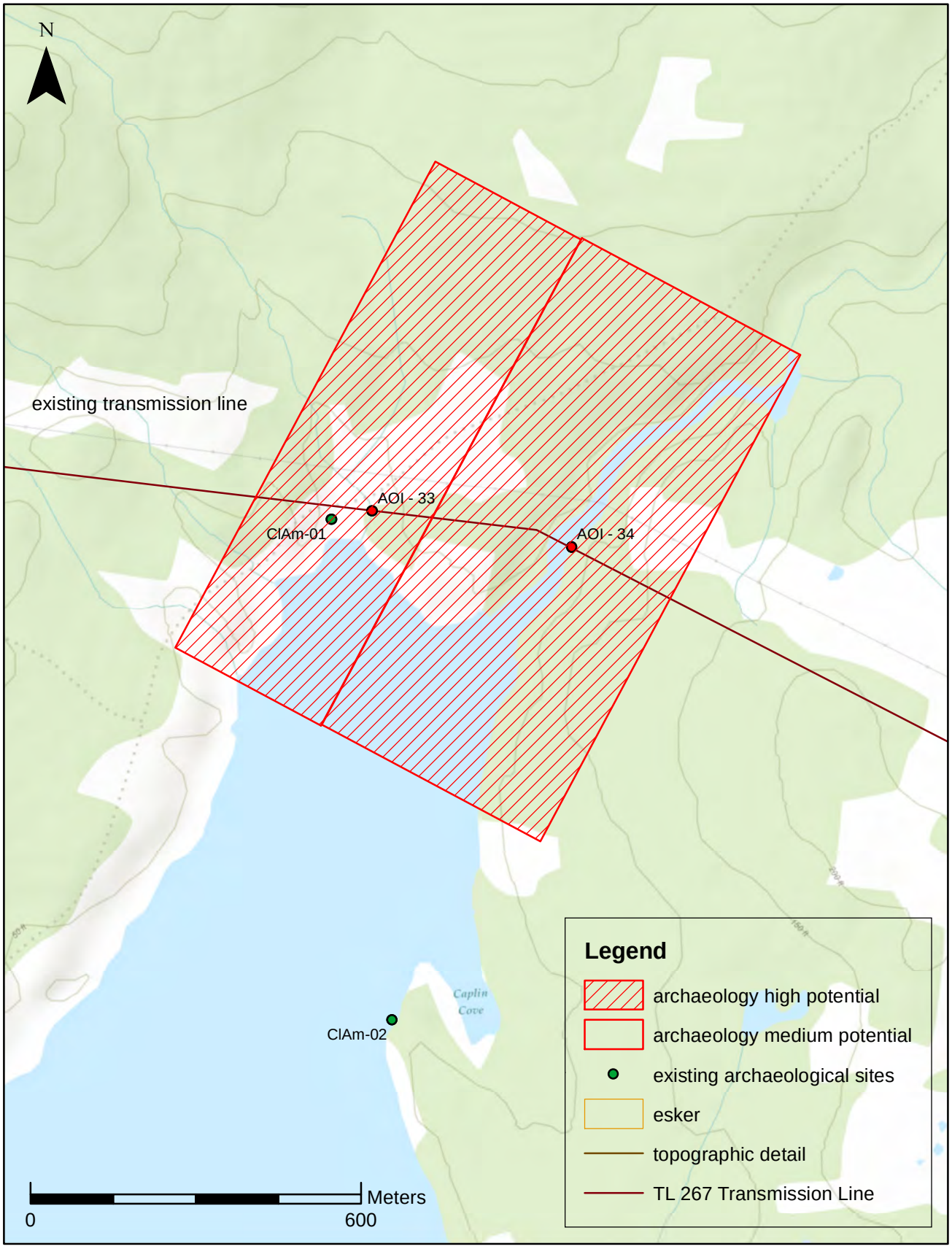
Pipers Hole Lookout

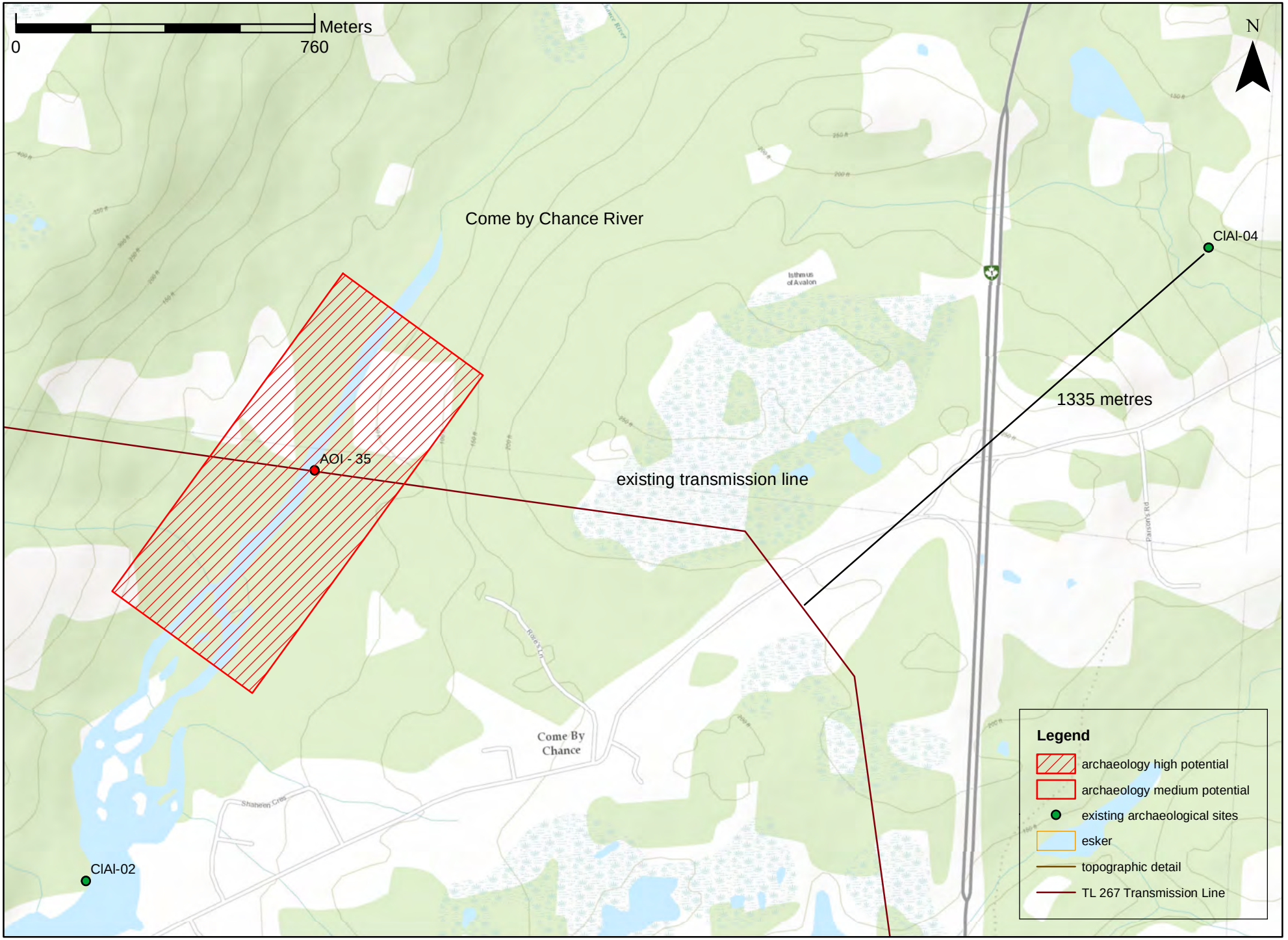


Black River


N
Black River
existing transmission line
AOI - 32
210
210
ClAn-02
Legend
archaeology high potential
archaeology medium potential
existing archaeological sites
esker
topographic detail
TL 267 Transmission Line
0
600
Meters

North Harbour Bottom / North Harbour River




Meters
0
760
N
Come by Chance River
ClAl-04
1335 metres
AOI - 35
existing transmission line
Come By Chance
ClAl-02
Legend
archaeology high potential
archaeology medium potential
existing archaeological sites
esker
topographic detail
TL 267 Transmission Line