Henvey Inlet Wind LP

Henvey Inlet Wind

Transmission Line

Appendix B9. Route A Cultural Heritage Assessment Report

Henvey Inlet Wind LP

Henvey Inlet Wind

Cultural Heritage Assessment Report Transmission Line – Route A

Unorganized Townships of Mowat, and Blair, District of Parry Sound, Ontario

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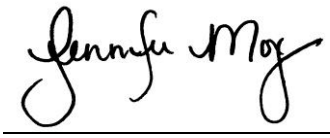
Report Prepared By:



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Executive Summary

This Cultural Heritage Assessment Report (CHAR) has been prepared to provide information regarding cultural heritage to the public, First Nation communities, municipalities, and agencies with respect to the Henvey Inlet Wind Energy Centre (HIWEC), a 300 megawatt (MW) wind energy generation centre on Henvey Inlet First Nation Reserve No. 2 (HIFN I.R. #2). The HIWEC is being jointly developed by Nigig Power Corporation (NPC), incorporated by Henvey Inlet First Nation (HIFN), and Pattern Renewable Holdings Canada, ULC (Pattern Development).

Two transmission lines (Route A and B) are being proposed to bring the power generated from the HIWEC to the Ontario electricity grid. Only one option will be constructed. This report is for Route A only. The Transmission Line Route A study area is located off-reserve in the unorganized Townships of Mowat and Blair in the District of Parry Sound. The HIWEC Transmission Line – Route A study area is comprised of a corridor of land 100 m wide and approximately 16 kilometres (km) east-west. The study area extends from Highway 69 at HIFN I.R. #2 east to the existing 500 kV Hydro One Networks Inc. (HONI) transmission line; approximately 75% of the study area is adjacent to Highway 522. The study area is primarily located on Crown-owned or managed lands with lesser portions of privately owned land, in a relatively remote area. The landscape consists mainly of wooded and wet areas that are characteristic of Canadian Shield terrain.

This assessment only pertains to off-reserve land. The on-reserve portion of the Transmission Line - Route A is incorporated within the HIFN EA process. The HIFN EA process has similar requirements for cultural heritage assessments as wind energy projects elsewhere in Ontario; however, Ontario Ministry of Tourism, Culture and Sport (MTCS) acceptance is not required as this is federal land. The off-reserve Transmission Line corridor is subject to a Category B Environmental Review as described in the Ministry of the Environment and Climate Change's *Guide to Environmental Assessment Requirements for Electricity Projects* (2011), outlined in O.Reg 116/01, Electricity Projects Regulation. An overview of the Transmission Line – Route A study area location is provided in **Figure 1**, and a detailed map of the Transmission Line – Route A study area is provided in **Figure 2**.

No listed, designated or otherwise recognized heritage features are present within the study area. In addition there are no historic plaques, cemeteries, national historic sites or properties protected by an Ontario Heritage Trust Easement. A property survey was undertaken to evaluate built heritage and cultural heritage landscapes present in the study area, and an inventory was created to identify and evaluate potential heritage resources.

The study area is primarily comprised of Canadian Shield landscape and transportation landscapes that are typical for this region of Ontario. These landscapes were evaluated against the criteria in *Ontario Regulation 9/06* and it was determined that they are not considered to retain cultural heritage value or interest due to their typical nature in the region.

Through the windshield survey, three sites 40 years of age or older were documented and evaluated according to *Ontario Regulation 09/06* and three structures were identified, including a residential structure and two outbuildings. Of these sites, the residence (Property #1) and one of the outbuildings (Property #2) were identified to have potential cultural heritage value or interest. Potential direct or indirect impacts to these cultural heritage resources were evaluated according to the criteria outlined in InfoSheet #5 in *Heritage Resources in the Land Use Planning Process, Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement 2005.* No negative impacts to cultural heritage resources are anticipated by the project.

As there are no impacts to heritage resources anticipated as a result of the project, mitigation is not required.

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1. Introduction

1.1 Project Context

This Cultural Heritage Assessment Report (CHAR) has been prepared to provide information regarding cultural heritage to the public, First Nation communities, municipalities, and agencies with respect to the Henvey Inlet Wind Energy Centre (HIWEC), a 300 megawatt (MW) wind energy generation centre on Henvey Inlet First Nation Reserve No. 2 (HIFN I.R. #2). The HIWEC is being jointly developed by Nigig Power Corporation (NPC), incorporated by Henvey Inlet First Nation (HIFN), and Pattern Renewable Holdings Canada, ULC (Pattern Development).

Two transmission lines (Route A and B) are being proposed to bring the power generated from the HIWEC to the Ontario electricity grid. Only one option will be constructed. This report is for Route A only. The Transmission Line Route A study area is located off-reserve in the unorganized Townships of Mowat and Blair in the District of Parry Sound. The HIWEC Transmission Line – Route A study area is comprised of a corridor of land 100 m wide and approximately 16 kilometres (km) east-west. The study area extends from Highway 69 at HIFN I.R. #2 east to the existing 500 kV Hydro One Networks Inc. (HONI) transmission line; approximately 75% of the study area is adjacent to Highway 522. The study area is primarily located on Crown-owned or managed lands with lesser portions of privately owned land, in a relatively remote area. The landscape consists mainly of wooded and wet areas that are characteristic of Canadian Shield terrain.

This assessment only pertains to off-reserve land. The on-reserve portion of the Transmission Line - Route A is incorporated within the HIFN EA process. The HIFN EA process has similar requirements for cultural heritage assessments as wind energy projects elsewhere in Ontario; however, Ontario Ministry of Tourism, Culture and Sport (MTCS) acceptance is not required as this is federal land. The off-reserve Transmission Line corridor is subject to a Category B Environmental Review as described in the Ministry of the Environment and Climate Change's *Guide to Environmental Assessment Requirements for Electricity Projects* (2011), outlined in O.Reg 116/01, Electricity Projects Regulation. An overview of the Transmission Line – Route A study area location is provided in **Figure 1**, and a detailed map of the Transmission Line – Route A study area is provided in **Figure 2**.

1.2 Study Process

For the purposes of this CHAR, the term "study area" consists of the proposed Route A alignment plus a 100 m buffer, 50 m on either side of the proposed route. Research was completed to investigate and document any and all cultural heritage resources within or on properties abutting the study area. As part of the CHAR study AECOM undertook the following tasks:

- A review of the land use history of the study area based on a review of primary and secondary sources as well as historical mapping.
- Requests via email for information on properties designated under the *Ontario Heritage Act* (O.Reg. 9/06) as well as properties listed on municipal registers or heritage inventories from the Municipality of Killarney.
- Requests for information regarding the presence of any sites with or having potential local heritage interest were made via e-mail to the Ontario Historical Society and the Parry Sound District Museum (Museum on Tower Hill).
- Requests for information on properties protected by an Ontario Heritage Trust easement agreement via email to Ontario Heritage Trust.

Figure 1: Transmission Line – Route A Study Area

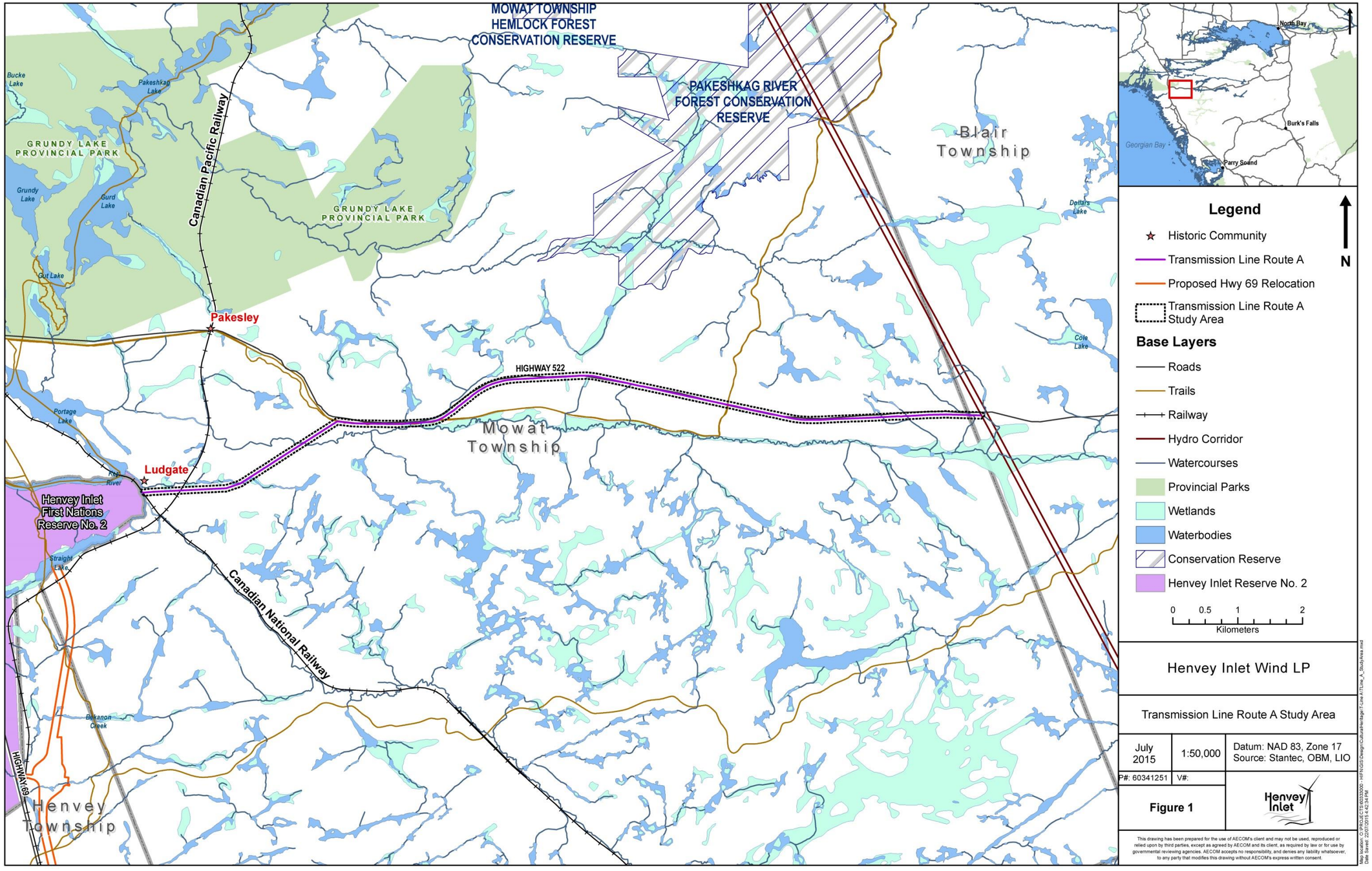
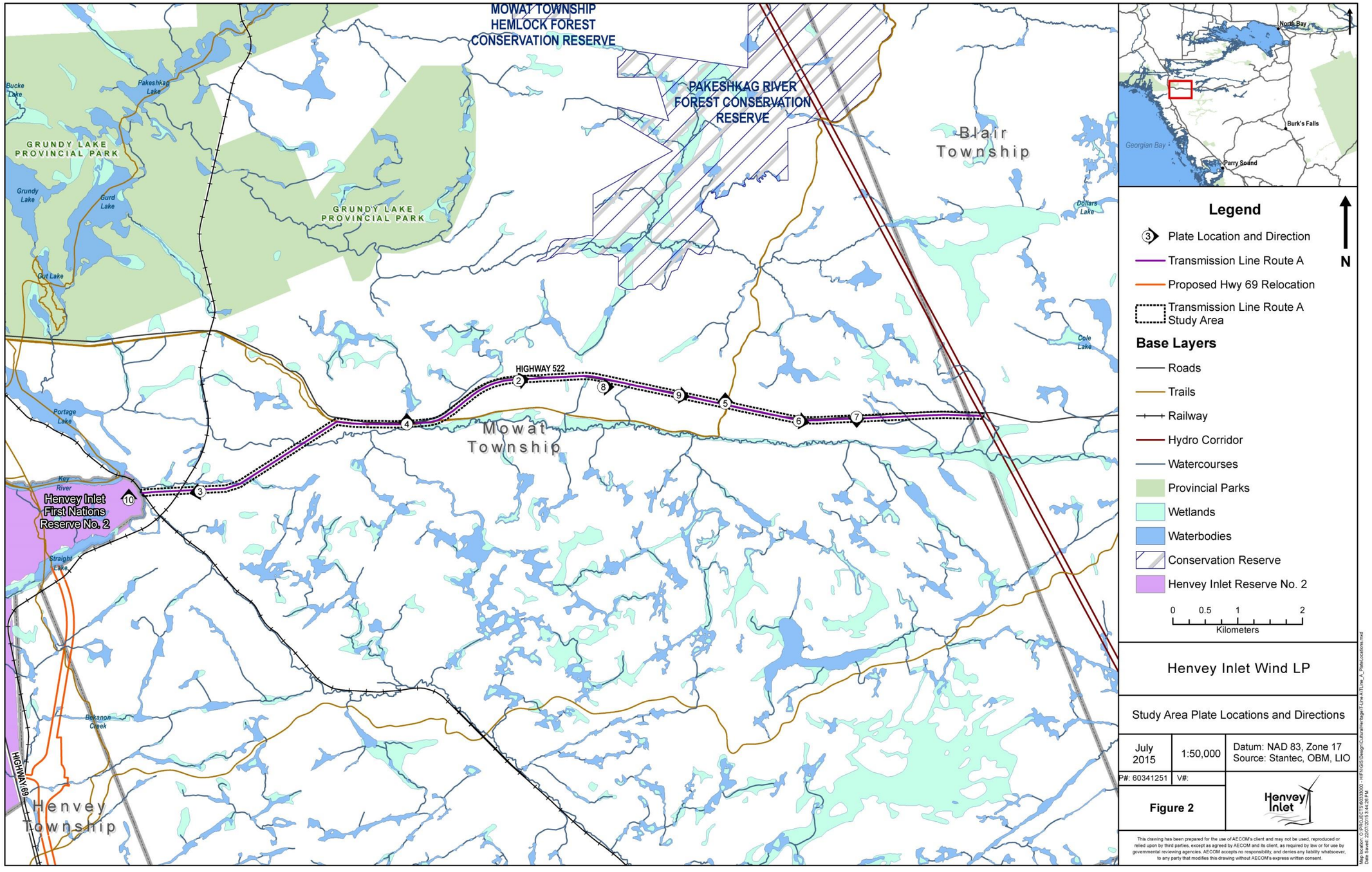


Figure 2: Study Area Photograph Locations and Directions



- Consultation via phone and email with Rosi Zirger Heritage Planner at the MTCS for information on properties included on the List of Provincial Heritage Properties as well as any Notices of Intention to Designate issued in accordance with section 34.6 of the Ontario Heritage Act (OHA).
- Consultation with HIFN regarding criteria established by the community for identifying heritage resources.
- A review of the Traditional Land use studies provided by HIFN to determine the presence of significant First Nation heritage resources and cultural landscapes within the study area.
- Results of searches of the Canadian Register of Historic Places, the Ontario Heritage Trust's Online Plaques Guide, the National Historic Sites database available through Parks Canada, and the Archaeological Sites Database.
- Results of searches of the registered Cemeteries and Crematoriums Database and the Ontario Genealogical Society's (OGS) list of unregistered cemeteries by County/District to determine the presence of any historically or culturally significant landscapes such as cemeteries and/or unmarked burial grounds.
- A windshield survey was undertaken between June 17 and 19, 2015 to identify all structures dating to greater than 40 years of age, which will be used to create an inventory (Appendix A), as well as identify the presence of cultural landscapes. Photograph locations and directions are provided in Figure 2.
- Analysis of the cultural heritage value or interest of identified potential heritage resources and cultural heritage landscapes (Section 5), according to *Ontario Regulation 9/06 Criteria for Determining Cultural Heritage Value or Interest*.
- Analysis of the potential adverse impacts (Section 5), according to guidelines set out in the MTCS' *Ontario Heritage Toolkit: Heritage Resources in the Land Use Planning Process* (Appendix A).

1.3 Provincial Regulatory Framework

1.3.1 Introduction

The present report has been produced to satisfy heritage mitigation measures recommended as part of the HIWEC Transmission Line – Route A corridor Category B Environmental Review. Pursuant to the *Environmental Assessment Act* (R.S.O. 1990), applicable infrastructure improvement and development projects are subject to cultural heritage assessment to determine related impacts on above-ground cultural heritage resources. Infrastructure development and improvement projects such as the construction of electrical Transmission Lines and their associated components have the potential to impact cultural resources in various ways including, but not limited to:

- Loss or displacement of resources through removal or demolition;
- Disruption of resources by introducing physical, visual, audible, or atmospheric elements that is not in keeping with the resources and their contextual surroundings.

The current study area limits (refer to Figure 1) were evaluated to confirm and document the presence of any and all cultural heritage resources, determine the cultural significance of these resources, and to recommend potential preservation/retention/avoidance strategies as they relate to these resources.

When considering cultural heritage resources in the context of the HIWEC Transmission Line – Route A, a threshold age value of 40-years is used as a general guiding principle. This threshold provides a means to collect information about resources within the study area that may retain heritage value. It should be noted that the identification of resources older than 40 years does not automatically confer definitive heritage value, nor does this preclude resources less than 40 years old from retaining heritage value.

The methods of analysis used in the cultural heritage resource assessment process addresses cultural heritage resources under various pieces of legislation and their supporting documentation:

- *Environmental Assessment Act* (R.S.O. 1990, Chapter E.18)
  - Guide to Environmental Assessment Requirements for Electricity Projects (O.Reg 116/01)
  - Guidelines for Preparing the Cultural Heritage Resource Component of Environmental Assessments (MCC-MOE 1992)
  - Guidelines on the Man-Made Heritage Component of Environmental Assessments (MCR-MOE 1981)
- *Ontario Heritage Act* (R.S.O. 1990, Chapter O.18) and Ministry of Tourism, Culture, and Sport
  - Ontario Heritage Toolkit (MCL 2006)
  - Standards and Guidelines for the Conservation of Provincial Heritage Properties (MTCS 2010)
- *Planning Act* (R.S.O. 1990, Chapter P.13)
  - Heritage Resources in the Land Use Planning Process, 2005 Provincial Policy Statement

1.3.2 Ontario Regulation 116/01, Environmental Assessment Act (R.S.O. 1990)

The Ontario *Environmental Assessment Act* (*EA Act)* sets out a planning and decision-making process so that potential environmental effects are considered before a project begins. The Ontario *EA Act* defines environment in a broad sense that includes natural, social, cultural, economic and built environments. The *EA Act* requirements are set out in O. Reg. 116/01. The Transmission Line is subject to O. Reg. 116/01 and has undergone a Category B ER as described in the Ontario Ministry of the Environment and Climate Change (MOECC) Guide to Environmental Assessment Requirements for Electricity Projects (January 2011).

1.3.3 Ontario Regulation 9/06, Ontario Heritage Act (R.S.O. 1990, Chapter O.18)

The MTCS is responsible for the administration of the *Ontario Heritage Act (OHA)* and is responsible for determining the policies, priorities and programs for the conservation, protection and preservation of Ontario's heritage, which includes both built heritage and cultural heritage landscapes. Section B.1.1 (4) also states that significant cultural heritage features should be avoided, where possible. In the event that they cannot be avoided, effects should be minimized where possible and every effort should be made to mitigate adverse impacts, in accordance with provincial and municipal policies and procedures. Cultural heritage features should be identified early in the assessment process in order to determine significant cultural features and potential impacts.

O. Reg. 9/06 provides criteria for determining cultural heritage value or interest. If a property meets one or more of the following criteria it may be designated under Section 29 of the *OHA*:

1. The property has design value or physical value because it:
   - Is a rare, unique, representative or early example of a style, type, expression, material or construction method;
   - Displays a high degree of craftsmanship or artistic merit; or
   - Demonstrates a high degree of technical or scientific achievement.
2. The property has historic value or associative value because it:
   - Has direct associations with a theme, event, belief, person, activity, organization, or institution that is significant to a community;

- Yields, or has the potential to yield information that contributes to an understanding of a community or culture; or
- Demonstrates or reflects the work or ideas of an architect, artist, builder, designer, or theorist who is significant to a community.

3. The property has contextual value because it:

   - Is important in defining, maintaining or supporting the character of an area;
   - Is physically, functionally, visually or historically linked to its surroundings; or
   - Is a landmark.

Should the potential heritage resource meet one or more of the above-mentioned criteria, and when there is no longer provincial ownership, the heritage property may be considered for designation under Section 34.5 of the *OHA.*

2. Land Use History

2.1 Physical Setting

The study area is located on the east side of Georgian Bay, north of Parry Sound and south of Sudbury and is characterized by forested area dotted with numerous lakes, streams and bedrock with outcrops of various minerals including quartz, mica and feldspar. The topography and drainage of the area is controlled entirely by the bedrock. It is located on the Georgian Bay Fringe as defined by Chapman and Putnam (1984). The Georgian Bay Fringe area is approximately 334,000 ha in size and covers most of the District of Parry Sound. The area is characterized by very shallow soil with exposed rock knobs and ridges. The physiography of the area is described as Shallow Till and Rock Ridges (Chapman and Putnam, 1984). In addition to quartz outcrops, copper deposits at the surface level were also important sources of trade items for First Nations groups. The Ministry of Northern Development and Mines' Mineral Deposit Inventory (2012) illustrates the occurrence of a few copper deposits within the study area; however, these deposits are not identified specifically as "outcrops" in the inventory and, therefore, it is unlikely that these copper deposits appear on the surface. According to the Mineral Deposit Inventory surface copper outcrops only occur north of Lake Huron and Georgian Bay. It is important to note that this inventory may not capture all copper outcrops in Ontario. The Canadian Shield had an abundance of dense forests dominated by white pine prior to European logging practices.

2.2 Settlement History

The study area is situated within an area of Ontario that exhibits evidence of an extended period of human settlement dating back at least 10,500 years. The nature of this settlement as it pertains to the pre-contact First Nations period has been well documented in the Stage 1 archaeological assessment conducted for this project and is assumed at this time to be a matter of archaeology (AECOM 2015). As such, this report will provide an overview of the contact period and early settlement history of the general region and study area in particular.

2.2.1 Early Surveys and Settlement History

Etienne Brule and Samuel de Champlain were the first Europeans to come to this area of Ontario, travelling the French River into Georgian Bay from the Ottawa River between 1610 and 1613. At the time of European contact, the Jesuits recorded a number of tribes in the Canadian Shield who spoke the Algonquin language (Thwaites 1896-1901). The first European to describe the Ojibway who were located near the mouth of the French River and Georgian Bay was Samuel de Champlain:

> *We met with three hundred men of a tribe named by us the Cheveau releves or 'High Hairs', (Ojibwa?) because they had them elevated and arranged very high and better combed than our courtiers, and there is no comparison in spite of the irons and methods these have at their disposal. This, seems to give them a fine appearance. They wear no breech cloths, and are much carved about the body in divisions of various patterns. They paint their faces with different colours and have their nostrils pierced and their ears fringed with beads. When they leave their homes, they carry a club. I visited them and gained some slight acquaintance and made friends with them. I gave a hatchet to their chief who was as happy and pleased with it as if I had made him some rich gift and, entering into conversation with him, I asked him about his country, which he drew for me with charcoal on a piece of tree-bark. He gave me to understand that they had come to this place to dry the fruit called blueberries to serve them as manna in the winter when they can no longer find anything. For arms they have only the bow and arrow.*
>
> *Schmalz 1991: 14-15*

The fur trade in Canada provided the principal motivation and economic base for the exploration by Europeans of the Canadian interior. During the period from 1670 to 1713, French traders began to leave established settlements and construct trading posts that enabled traders to make direct contact with the tribes of the interior. An examination of the Atlas of Canada's map "Posts of the Canadian Fur Trade, 1600-1870" indicates the presence of two Fur Trade Posts in close proximity to the study area; one Hudson's Bay Co. (HBC) and 1 Independent Canadian Post (***Figure 3***). The HBC post is located at the mouth of the French River, which opened in 1827 and operated for anywhere from 15 to 50 years. This would have been an influential location as fur traders travelled back and forth along the French River which acted as the gateway between Ottawa and the Great Lakes. The Canadian Independent Post was located along the coast of Lake Nipissing. There were multiple posts around the lake, but this specific one along the southern shore at the mouth of the French River opened in 1825 and was operational for approximately 4 to 16 years. Both of these posts would have facilitated the fur trade along the eastern coast of Georgian Bay as explorers and voyageurs canoed west along the French River to the Great Lakes in the spring, then back east towards Ottawa in the fall.

European settlement in the area along the eastern shore of Georgian Bay has its roots in timber and the lumber business of the 1860s. The Robinson-Huron Treaty of 1850 resulted in the conveyance to the Crown the title of the eastern and northern shores of Lake Huron. The First Nations who took part in the treaty included the Magnetawan, Henvey Inlet, French River, and Shawanaga First Nations and the reserve lands were surveyed in 1851-1852. In 1862, the Government of Ontario introduced the *Free Land Grant and Homestead Act* to encourage Euro-Canadian agricultural settlement in the Districts of Muskoka and Parry Sound. Trunk roads were developed to improve access into the area; however, as soils in the District were shallow and generally poor with bedrock outcrops, the agricultural economy remained marginal (Unterman McPhail Associates 2007).

For some time, the area remained relatively untouched by Euro-Canadian settlement until the Muskoka and Parry Sound Districts were surveyed between 1866 and 1870 (Campbell 2005). Despite the surveyors reporting that the land was unfit for farming, the wealth in timber was deemed highly profitable and settlement in the Parry Sound District began to increase with the first timber licenses being issued in the late 1860s. The lumbering industry also provided employment for many settled farmers to supplement their income. With the booming lumber industry, improvements such as dams and log chutes were made to a number of rivers in the Parry Sound District including the Magnetewan, Still, Shawanaga, Naiscoot, and Key Rivers. These rivers were all suitable for driving logs from the inland logging camps to Georgian Bay. In 1898, a provincial regulation was passed requiring all lumber cut on Crown land be manufactured in Canada before export. As a result, there was a significant expansion in the number and size of milling centres around Georgian Bay (Unterman McPhail Associates 2007).

The 1879 historical atlas of the Parry Sound District illustrates little settlement in the area. A historic roadway is visible through McDougall Township as well as a portion of Carling Township and appears to be in the approximate location of a section of present-day Highway 69 (Harrison and Rogers 1879; Figure 4). Though extensive efforts were made to locate the material, no historical maps could be located specific to the other relevant Townships. This is likely due to the discontinuous and spotty settlement throughout the 19th and early 20th centuries in this region of Ontario.

Early settlement of the Parry Sound District increased with improved access to the region as a result of the construction of two railway lines from Toronto to Sudbury through the District of Parry Sound in 1908. Stations were constructed in several small villages and towns including Point au Baril, Byng Inlet, and Britt. By the early 1900s, small-scale tourist camps, summer cottages, and hotels began to appear along the eastern shore of Georgian Bay and the area was promoted as a recreational destination (Unterman McPhail Associates 2007).

Figure 3: Posts of the Canadian Fur Trade, 1600-1870

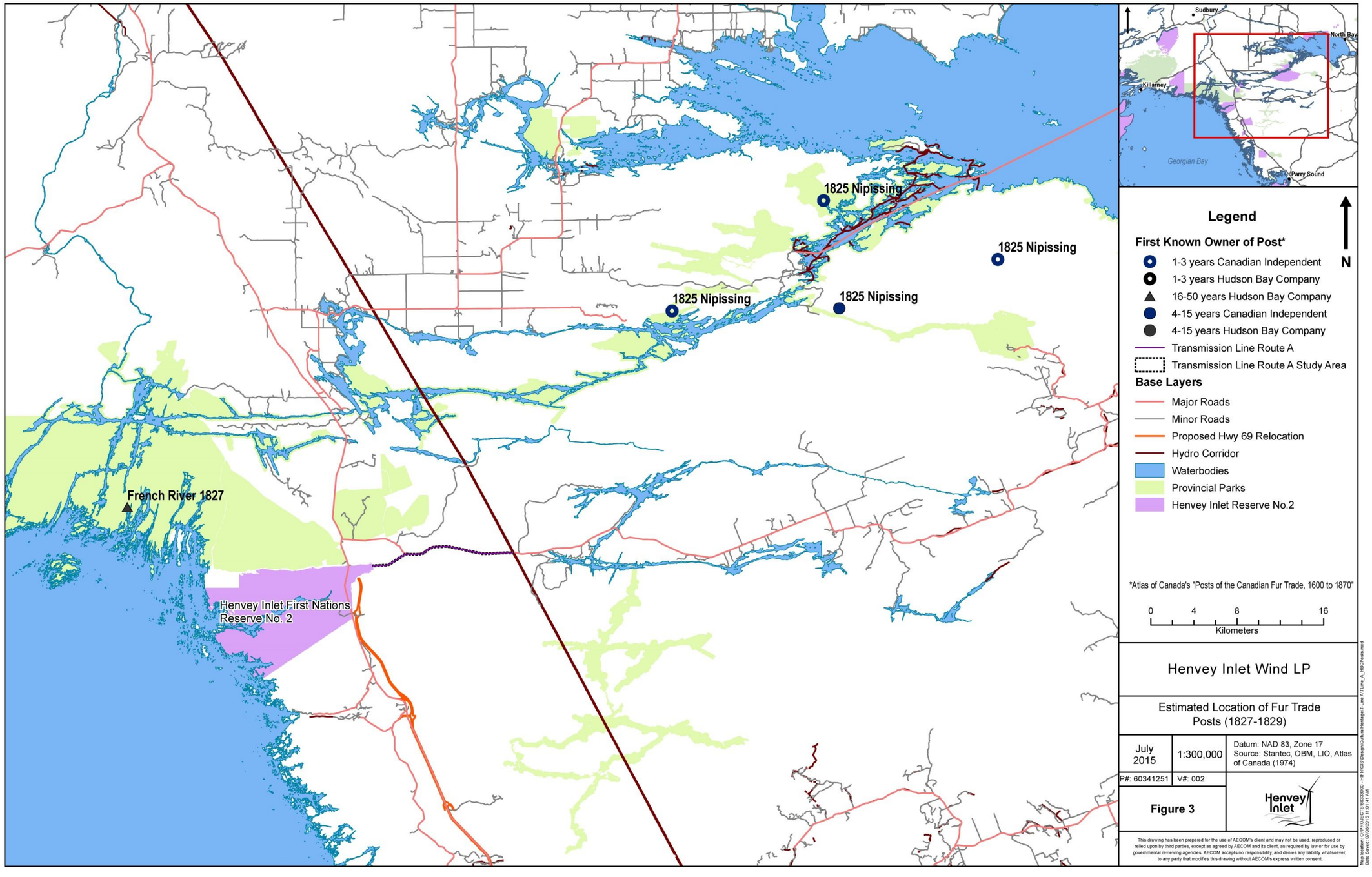
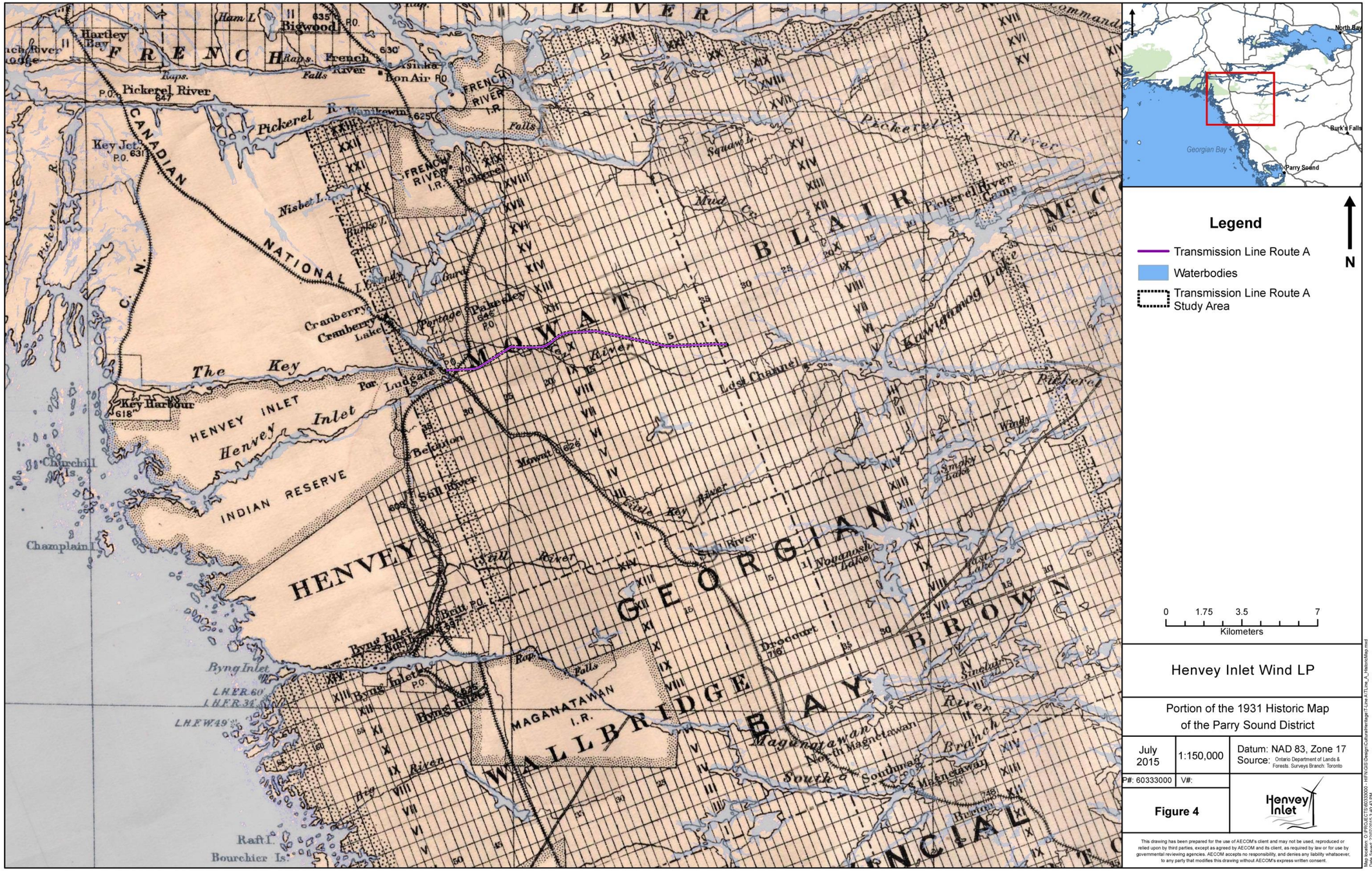


Figure 4: Portion of the 1879 Historical Atlas of the Parry Sound District



2.3 Agriculture and Drainage

In the early 20th century, the provincial government encouraged new immigrants to settle in the areas within and around the District of Parry Sound by selling them land and sending aid to help get farms started. However, the Canadian Shield is mostly, although not entirely, unsuitable for agriculture. Although sufficient enough to support boreal forests, the podzolic soils in this region of the province are extremely shallow and low in fertility. There are very few areas in the District of Parry Sound where farming forms a part of the cultural landscape (Wood 1975).

2.4 Industry

Despite the marginal agricultural economy, booming industries in the area included the lumber and mining industries, which supported small scale settlement and supplemented the income of struggling farmers. Dense boreal forests surrounded by a number of large rivers leading to Georgian Bay provided ideal conditions for a wealthy lumber industry. The first timber licenses in the area were issued in the 1860s and a few large sawmills were established at various harbours along Georgian Bay, including a large mill at Byng Inlet. The majority of the logs were towed in booms by steam tugs to centres in Michigan until 1898 when provincial regulations required all raw logs cut on Crown lands be manufactured within Canada prior to export (Unterman McPhail Associates 2007).

The arrival of railways in the Parry Sound District in 1908 changed the lumber industry by making available timber transportation by rail. Some lumber companies continued to use river log drives to Georgian Bay while others constructed smaller sawmills closer to the forest limits and shipped timber products by rail. In 1914, a number of large mills were constructed to take advantage of the now booming lumber industry (Belanger 1985). The Lauder Spears and Howland Company built a mill at Lost Channel and the Ludgate Thompson Mill operated at the rail crossing at the Key River. Although much of the study area is identified as Georgian Bay Provincial forest, the lumber industry dies out in the District of Parry Sound in the 1940s.

The tourism and cottage industry was originally introduced in the early 20th century with several small tourist camps popping up with the opening of the railways. When the Ludgate Thompson Mill was closed, the Hurd family converted the site to the Ludgate Tourist Camp and the District of Parry Sound became known widely as a recreational destination.

In addition to lumbering, mineral discoveries from the late 1880s to the mid-20th century resulted in the development of a number of mining industries in the District of Parry Sound. One of the world's largest deposits of nickel and copper, along with lead, zinc, silver, and platinum were found in the Sudbury Basin in 1883. Throughout the 20th century, large deposits of gold, silver, copper, and uranium were discovered. Iron ore deposits were also mined in the Algoma district north of Lake Superior. Three mines are located within Henvey Township; Ambeau Mine, Besner Mine, and Britt Station Occurrence. The Ambeau Mine deposit was worked for feldspar in 1926-1927 by Wanup Feldspar Mines Limited, with shipments totalling 907 tons (Sabina 1986). The Besner Mine (Bessner; Henvey pegmatite) consisted of a granite pegmatite dike, which was worked for feldspar from 1926 to 1929 by Wanup Feldspar Mines Limited, totalling shipments of approximately 2,268 tons of feldspar. It was the largest feldspar operation in the district (Kuroda and Sherrill 1977). The Britt Station Occurrence was a smaller operation consisting of a granite pegmatite dike in folded quartz paragneiss and hornblende gneiss. (Rose 1960).

Mining remains an extremely important and active industry in the provincial economy today, although the late 20th century was significantly less prosperous as the international markets for metals took a downturn. Today, Ontario still produces more gold, nickel, copper, platinum metals, and copper than any other province in Canada.

2.5 Urban and Rural Communities

As the area was not suitable for agriculture, communities in the District of Parry Sound originally developed not as rural service centres for surrounding farmlands, which was the case in southern Ontario, but as isolated ports, railway stops, or company mill and mining towns (Campbell 2005). The following settlements are located in relatively close proximity to the study area, with Key River and Ludgate being the closest.

2.5.1 Henvey Inlet First Nation Reserve No. 2 and French River Reserve No. 13

From the 1600s until the mid-1800s, the main settlement on the French River Reserve No. 13 experienced a growth in industry with the French River providing a main route of transportation between the St. Lawrence River and the Great Lakes. The area prospered with active fur trading as well as commercial logging and fishing. Timber cutting, logging, and lumber mills were constructed in the area in 1873 and continued to prosper until the 1930s (HIFN n.d.).

In 1822, admiralty surveyor Henry W. Bayfield named the area Henvey Inlet after Lt. William Henvey who had served the St. Lawrence in 1815 (Rayburn 1997). The initial survey of Henvey Inlet was conducted along the Still River in 1912, where multiple dwellings and barns were located on both sides of the river and along the CPR line (Survey Field Notes 1912).

In the fall of 1953, HIFN community relocated near the newly completed Highway 69. With the assistance of the Department of Indian Affairs, bunk houses were erected, as was a school. The main HIFN village and Band Office is located on the French River Reserve No. 13, along Pickerel River Road. HIFN had negotiated a land claim for HIFN I.R. #2 which included 1,112 acres at the northwest corner of the reserve south of the Key River. Those lands were expropriated in 1907 for railway purposes. After five years of non-use by the James Bay Railroad, the lands should have been returned to the First Nations status; however, parcels were sold and/or leased out as private patent land. HIFN successfully won a land claim for these lands, but HIFN decided to leave the private lands in exchange for lands granted by the Crown in a different location (Ken Noble, pers comm. 2014).

The Pickerel River band is now part of HIFN, and was first surveyed in May of 1853 by John Stoughten Dennis (Dennis 1851). HIFN I.R. #2 was surveyed in October and November of 1851 by Dennis, who met Chief Wagamake on the reserve “at their village for the purposes of pointing out the limits of their reserve” (Dennis 1851). The Band had chosen to reserve this location because of the valuable fisheries, the presence of an existing village on the south shore of the Inlet, a productive cornfield, and a sugar bush on the portage between the Key River and Henvey Inlet (Pollock 1999). HIFN I.R. #2 had been described in the Robinson-Huron Treaty text as: “… a tract of Land to commence at a place called Nekickshegeshing [Ojibway for ‘place for otters’] six miles from east to west by three miles in depth” (Morrison 1995). Through discussions between Dennis and Chief Wagemake at the village site, it was evident the band wanted a reserve twelve miles by six miles, however Dennis could not authorize this extension (Dennis 1851). Dennis returned the following year, accompanied by J. William Keating, a former Assistant Indian Superintendent, to meet with Chief Wagemake and his band to try and resolve the boundary disagreement. The reason Chief Wagemake gave to J.W. Keating in the summer of 1852 for wanting more lands was in order to relocate his village because the rattlesnakes had rendered the log huts inhabitable. The adjustment was made to the reserve lands, and is so reflected in the Treaty text, from 18 square miles (11,520 ac) to 41 square miles (26,000 ac) (Morrison, 1995: 109). The two reserves are currently described as follows:

- **HIFN I.R. #2** is located on the Northeast shore of Georgian Bay, approximately 90 km south of Sudbury on the west side of Highway 69 and 71 km north of Parry Sound, at approximately 40 degrees 50’ North latitude and 80 degrees 40’ west longitude.

- **French River Reserve No.13,** which is located 11 km north of the HIFN I.R. #2, is east of Highway 69 on Pickerel River, and approximately 45 degrees 58' North latitude and 80 degrees 30' West longitude. French River reserve No. 13 is the location for the community's main village. This village is located on Pickerel River Road. The community notes that Cantin Island is part of this Reserve, and the Island is located north of the mainland portion and separated by the Pickerel River and the French River on the north side.

2.5.2 Ludgate

The Ludgate Thompson Mill operated where the CNR crossed the Key River. A settlement was established around the mill to supply surrounding lumber camps. The settlement later became known as Ludgate, named after one of the mill partners, James Ludgate (Charbonneau 2000). In 1917, as a result of the purchase of additional timber reserves in Mowat Township, the mill was moved 3 km from its original location to a small CNR station stop south of Portage Lake where the CPR and CNR lines intersect. A bridge was built over the Little Key River and a cookery, blacksmith shop, and eight dwellings were located south of the tracks. A small school operated out of one of these dwellings and an informal station was located east of the bridge. In the 1920s, the mill was closed as timber supplies in the area diminished. The buildings were then sold to Charles Harris who operated a store, post office, and tourist camp at the location. In 1935, the business was sold to the Hurd family, nephews of Charles Harris. The post office and store operated from 1927 until 1954 when operations were closed and shifted to lands adjacent to the new Highway 69.

2.5.3 Key River

Early settlement of the community of Key River was located along the rail lines. With the construction of Highway 69, the community grew around the highway. In the early 1950s, the Hurd Family relocated the Ludgate Tourist Camp to Highway 69 near Key River and renamed the camp Hurd's Landing. Hurd's Landing expanded to include seven cabins, a general store, gas pumps, and a marina. Today, this business operates as Key Marina. In addition to Hurd's Landing, the Sedore family also opened a tourist camp, Camp Dore, at the Key River in 1952. Using lumber from the property, nine log cottages were constructed to support the growing tourism industry in the area.

2.5.4 Pakesely

Pakesley was established in 1912 as a whistle stop along the CPR line from Sudbury to Toronto (Charbonneau 2000). Following the completion of the Key Valley Railway (KVR) from Lost Channel to Pakesley in 1919, the Schroeder Lumber Company established a large lumber yard and Pakesley grew to become an important satellite village for the lumber operations situated at Lost Channels. In 1917, after construction began on the KVR, a store and post office opened which was later followed by employees' homes, a school, a hotel, and a ranger station.

By 1924, settlement at Pakesley had reached its peak, with a population of around 150 and nearly 30 structures. To reflect this new prosperity, the CPR added a larger seven-room station that same year (Charbonneau 2000). However, Pakesley faced a downturn during the Great Depression and in 1935 the mill at Lost Channel closed, as did the KVR. The post office closed in 1950, along with the majority of businesses in the village. By 1958, the ranger station watch tower was closed and replaced by aerial surveillance and the CPR section removed. The rail station was later torn down in 1971. All that remains of Pakesely today are three original dwellings, some partially in use, and some consisting only of building foundations (Charbonneau 2000).

2.6 Transportation

2.6.1 Roads

Throughout the 19th century, transportation was mainly by water and, in the winter, communications were maintained by rough forest trails from the Mill at Byng Inlet south to Parry Sound with a camp located midway near the Shawanaga River. Trunk roads were developed in the late 19th century to improve access for settlers in the area. One of these trunk roads, heading northwest from Gravenhurst up to Parry Sound and Pointe au Baril was assumed by the Department of Highways in 1937 and commissioned as Highway 69. In 1939, the highway was extended north from Pointe au Baril to Naiscoot River and on to Britt in the following year. Much of the highway work was carried out as part of an unemployment relief project during the Great Depression. At the outbreak of World War II, the increasing demand for resources halted the construction of Highway 69.

In 1949, the idea of establishing linkages and better communication between provinces to promote economic development across Canada resulted in the approval of the *TransCanada Highway Act*, signed on April 24, 1950. As part of this new initiative, the Department of Highways constructed Highway 69 between Sudbury and Parry Sound. Prior to this, there was no continuous north-south transportation route west of Highway 11. Road networks were extended north from Parry Sound as far as Britt and from Sudbury to Burwash. In 1951, the gap between Britt and Burwash was closed as part of the TransCanada Highway improvements. By 1952, the road reached the French River and temporary one-lane bridges were installed over the French and Pickerel Rivers until permanent structures could be built. The Parry Sound to Sudbury section of Highway 69 was completed and opened in 1955.

Highway 522 was initially designated in 1956 with a route that travelled from Trout Creek as far west as Loring. It was predominantly a gravel road with some paved areas into Trout Creek and between Loring and Arnstein. The route was paved between Arnstein and Golden Valley by 1958, and to east of Commanda in 1961. In 1965, Highway 522 was extended west to the Pickerel River at Kawigamog Lake and the remainder of the highway was paved in April of 1965 as work continued to extend the highway west (Ontario Department of Highways 1970). The route was extended to Highway 69 between 1974 and 1976 and the entire highway was paved in 1978.

Plate 1: Highway 69 (ca. 1955)

Plate 2: Highway 522 (ca. 1970s)

2.6.2 Railways

The early 20th century saw an improvement in access to the region with the construction of two railway lines from Toronto to Sudbury through the District of Parry Sound. The railways benefited the lumber and mining industries and supported the growing recreational development of the area. The Northern and Pacific Junction Railway was constructed in the 1880s to connect the railways of Southern Ontario to the new transcontinental line of the CPR. In June 1908, the CPR was opened from Parry Sound to Sudbury. Stations were constructed at Pointe au Baril, Byng Inlet, and Britt. The Canadian Northern Railway (CNoR), formerly the James Bay Railway also provided a route to the remote north and followed an inland route from Parry Sound, north to Key River. The CPR and CNR lines cross at Ludgate and both transect the Transmission Line - Route A study area. The small settlements of Key River and Ludgate grew up in proximity to this rail line. After 1917, the CNoR became the Canadian National Railway (CNR) (Unterman McPhail Associates 2007).

Plate 3: Portion of the CNR within the study area boundaries

2.7 Existing Conditions

The study area consists predominantly of Crown-owned or managed lands comprised of extensive mixed forest, exposed Canadian Shield bedrock, and numerous lakes, rivers, and watersheds. The study area is comprised of a rural landscape surrounded by small communities that are concentrated along shorelines, the railway and major roads outside of the study area. Current industries in the area include aggregates and quarries, fisheries, tourism, and logging.

Highway 69 is situated approximately 1.75 km west of the study area, which is part of the Trans-Canada Highway, linking Sudbury to Parry Sound. This highway is fairly modern, completed in the 1950s, and does not represent a historic road route. Highway 522 is adjacent to most of the study area. This highway was built to connect Loring with Trout Creek to the east in 1956. The route was extended from Loring to Highway 69 between 1974 and 1976. The study area also crosses several small roadways which intersect with Highway 522 as well as the CNR railway at two locations. Plates 4-7 illustrate the current existing conditions within the study area.

Plate 4: Typical wet area across the natural landscape

Plate 5: Typical rural forested area along small dirt side road

Plate 6: Portion of Highway 522

Plate 7: Typical rural Canadian Shield terrain

3. Description of Cultural Features

3.1 Protected Buildings and Properties

The *OHA* requires that municipalities keep a register of all properties that they consider to have cultural heritage value or interest. The register can contain World Heritage Sites, National Historic Sites, Provincially significant properties and any properties that the municipality decides to list as culturally significant or designate under the *OHA*. Properties may be listed as having cultural heritage value or interest but not be designated under the *OHA*. All properties that a municipality deems to have cultural heritage value or interested are listed in the municipal register; however, it is the municipality's decision whether or not to designate a property under the *OHA* as this designation protects a property under certain by-laws. As such, the lack of designated heritage properties in the Ontario Heritage Places (OHP) database and/or municipal records should not be taken as an indication that the potential for heritage significance within a given study area is low, as it is possible that additional listed heritage properties or features could be identified during the formal heritage assessment process.

Reasons for including buildings in municipal heritage inventories include architectural, contextual, and historical importance. Most buildings are listed as having some architectural significance, if only in so far as the architecture suggests possible age. Contextual significance refers to buildings that are a part of a group of significant buildings, or part of a streetscape. Historical significance may relate to a use of the building, an occupant, or to the period in which the building was built.

It should be noted that the study area falls within the Unorganized District of Parry Sound Centre. This District is comprised of Unorganized Townships which have no governing bodies and are not incorporated as municipalities. The study area is primarily in the Unorganized Township of Mowat, with a small section extending into Blair. As these townships have no governing bodies, property registers were not available for consultation and no culturally significant properties have been designated or listed.

A search of the OHP database was conducted to determine the presence of any designated or listed heritage properties within or abutting the study area. The results of this search indicated that there are no designated or listed heritage structures within or abutting the study area.

Further consultation was undertaken with Rosi Zirger, Heritage Planner at the MTCS, on May 20, 2015 which confirmed that there are no Provincial Heritage Properties or Notices of Intention to Designate issued in accordance with Section 34.6 of the *OHA* within or abutting the study area. The Ontario Heritage Trust was also contacted via email on May 21, 2015 regarding information on properties protected by an Ontario Heritage Trust easement agreement. Easement agreements offer property owners a means of preserving the heritage of private properties. It is a voluntary agreement between the heritage property owner and the Ontario Heritage Trust. The agreement establishes mutually accepted conditions that will ensure the preservation of a private heritage property in perpetuity. At the time of completion of this review, no response has been received.

Requests for information regarding the presence of any sites with or having potential local heritage interest were also made to the Ontario Historical Society and the Parry Sound District Museum, also known as the Museum on Tower Hill, between May 20 and 22, 2015. At the time of completion of this review, no response has been received by any of these parties.

Consultation with HIFN and reference to the Traditional Land use Study, prepared by URS (2013), also confirmed that there are no buildings or properties with cultural heritage significance within the study area.

3.2 Cultural Heritage Features

3.2.1 Built Heritage

During field survey, a total of 3 sites on a property abutting the study area were visually identified to be greater than 40 years old (Appendix A). All identifications were undertaken from public road allowances or within areas of granted property access. Each site was photographed and evaluated according to *Ontario Regulation 9/06.* The three identified sites include one residential structure and two outbuildings. As is typical in rural landscapes, the residential structure was located relatively close to Ludgate Trail, a local road, and set-back from Highway 522. The outbuildings were located in close proximity to the residence. **Figure 5** illustrates the locations of the three identified sites in relation to the study area.

The residential structure is an early to mid-20th century 1-storey homestead (Property #1) located adjacent to a second residence of recent construction. This homestead is in poor condition and has had visible modern renovations to the roof and heating system as evidenced by a new metal chimney and aluminum roofing. This homestead is consistent with the early 20th century settlement character of the Ludgate area focused around the rail lines.

The two outbuildings (Property #s 1, 2) appear to be associated with the residential structure and one appears to be of later 20th century construction (Property #3). These outbuildings appear to function as storage sheds currently and, although their original functions are unknown, may have also been associated with the rail line given the close proximity to the CNR.

3.2.2 Additional Cultural Heritage Features

In addition to an assessment of built structures, a search of the Ontario Heritage Trust's Online Plaques Guide, and the National Historic Sites database available through Parks Canada was conducted to determine if there were any provincial or federal historical plaques within the study area. No historical plaques were identified during the course of this research.

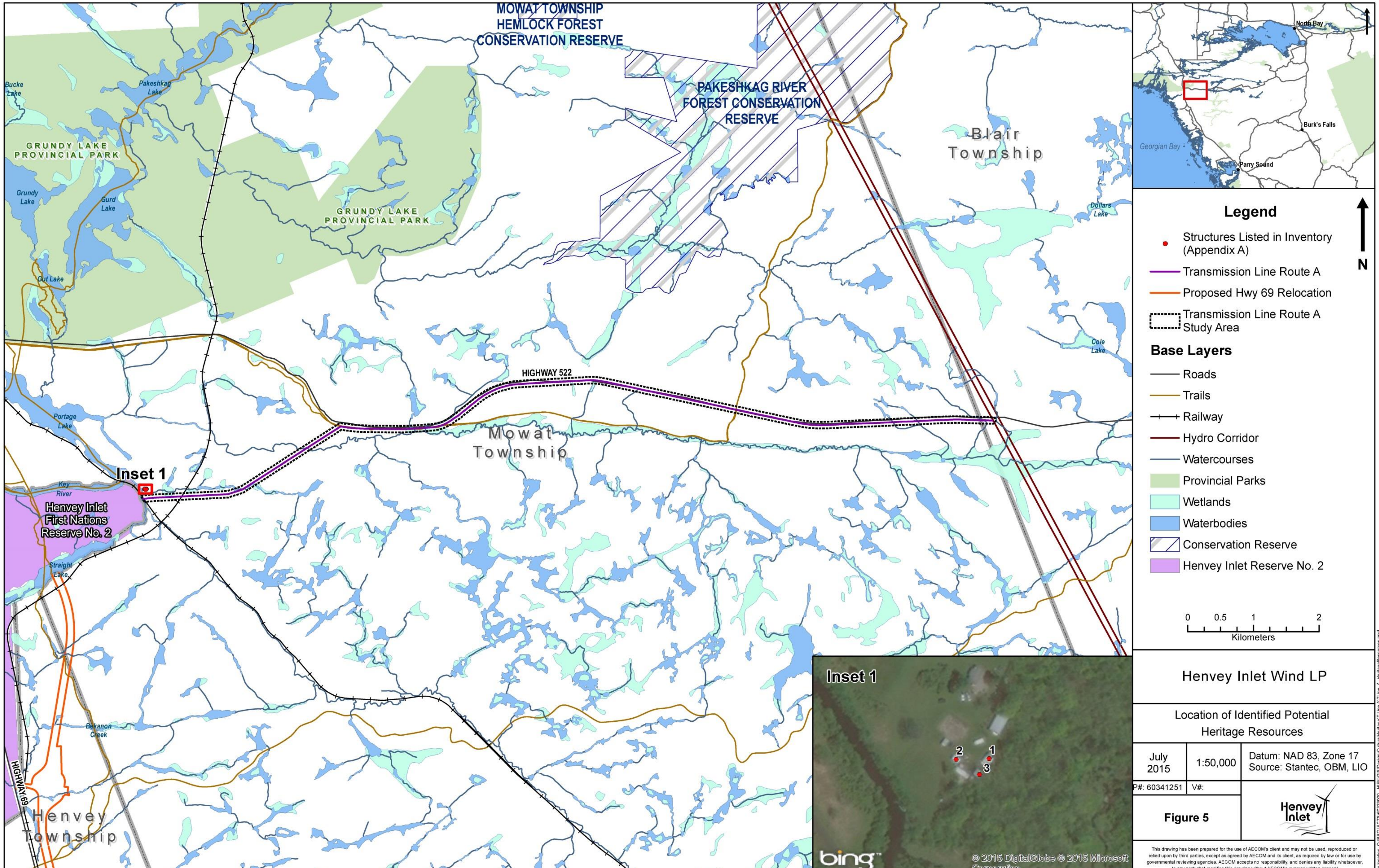
A request was also made to Archaeology Data Co-ordinator Robert von Bitter of the MTCS on February 10, 2015 for information on registered archaeological sites surrounding the study area from the provincial Archaeological Sites Database. The database search determined there are no registered archaeological sites within 1 km of the study area boundaries.

Finally, a review of the Henvey Inlet First Nation Traditional Land Use Study (URS 2013) determined that there are no cultural features that have been identified by HIFN as important cultural resources within the study area boundaries.

3.2.3 Summary of Built Heritage Features

Appendix A identifies three structures that were determined to be more than 40 years old and thus required evaluation to determine potential cultural heritage value or interest. When the criteria from O. Reg. 9/06 were applied (see Appendix A), two of these structures were determined to have cultural heritage value or interest. These structures include the early to mid-20th century residential structure and associated outbuilding which, given the proximity to the CNR, may have been associated with early settlement in Ludgate around the rail lines.

Figure 5: Location of Identified Potential Heritage Resources (Appendix A)


MOWAT TOWNSHIP
HEMLOCK FOREST
CONSERVATION RESERVE
PAKESHKAG RIVER
FOREST CONSERVATION
RESERVE
Blair
Township
GRUNDY LAKE
PROVINCIAL PARK
GRUNDY LAKE
PROVINCIAL PARK
Pakeshkag Lake
Grundy Lake
Gurd Lake
Gut Lake
Portage Lake
Dollars Lake
Cole Lake
HIGHWAY 522
Mowat
Township
Inset 1
Key River
Henvey Inlet
First Nations
Reserve No. 2
Straight Lake
Bekanon Creek
HIGHWAY 69
Henvey
Township
Inset 1
1
2
3
© 2015 DigitalGlobe © 2015 Microsoft Corporation
North Bay
Burk's Falls
Georgian Bay
Parry Sound
Legend
Structures Listed in Inventory (Appendix A)
Transmission Line Route A
Proposed Hwy 69 Relocation
Transmission Line Route A Study Area
Base Layers
Roads
Trails
Railway
Hydro Corridor
Watercourses
Provincial Parks
Wetlands
Waterbodies
Conservation Reserve
Henvey Inlet Reserve No. 2
N
0 0.5 1 2
Kilometers
Henvey Inlet Wind LP
Location of Identified Potential Heritage Resources
July 2015
1:50,000
Datum: NAD 83, Zone 17
Source: Stantec, OBM, LIO
P#: 60341251
V#:
Figure 5
Henvey Inlet

3.3 Cultural Heritage Landscapes

InfoSheet #2, Policy 2.6.1 of the *Provincial Policy Statement* defines cultural heritage landscapes as:

> *"…a defined geographical area of heritage significance which has been modified by human activities and is valued by a community. A landscape involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts under the Ontario Heritage Act; and villages, parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, trail ways and industrial complexes of cultural heritage value."*
>
> *PPS, 2005: InfoSheet #2, 1*

Based on this definition, cultural heritage landscapes can be comprised of entire communities and particular patterns of settlement, as well as other modified spaces such as areas of agricultural activity alongside urban developments.

A search of the registered Cemeteries and Crematoriums Database determined that there are no registered cemeteries within or in the vicinity of the study area. A search of the OGS list of unregistered cemeteries for the District of Parry Sound lists one unregistered cemetery in the Unorganized Township of Mowat; however, this cemetery is not located within or in close proximity to the study area. Sacred and burial locations identified during the course of ongoing First Nation consultation were not located within or adjacent to the study area.

3.3.1 Landscapes in the Study Area

The setting for the proposed alignment runs through a typical boreal forest and includes portions of transportation corridors, both road and rail. The landscape is characteristic of rural northern Ontario, common throughout the region, and the road, railways and settlement patterns are typical for the area.

Plate 8: Typical transportation landscape for Northern Ontario, represented by Highway 522

Plate 9: Typical transportation landscape, Highway 522 and associated road improvements

Plate 10: Typical transportation landscape represented by the CNR

3.3.2 Cultural Heritage Value or Interest of Landscapes

The majority of the study area remains a deeply forested landscape. The defining attributes of the forest landscape within the study area include areas of bedrock, forest, marshlands, rivers, and streams. This is quite typical of the Canadian Shield landscape throughout this region of Ontario. As such, it was determined that this landscape does not contain cultural heritage value or interest according to *Ontario Regulation 9/06*.

Outside of the forest landscape, the study area includes rural northern Ontario transportation landscapes which are common in the region as the relationship of the highway and railway to the forest, and each other, is a typical spatial arrangement for northern Ontario. The potential significance of the transportation landscape was evaluated against *Ontario Regulation 9/06* as defined in Section 1.3 of this report. The results of this evaluation are provided in Table 1.

Table 1: Evaluation of Cultural Heritage Value or Interest According to O.Reg. 9/06

Criteria O. Reg. 9/06	Highway 522 Corridor	CP Rail Crossing	CN Rail Crossing
Design Value	None	None	None
Historic or Associative	None	None	None
Contextual	Normal / Ordinary	Normal / Ordinary	Normal / Ordinary

Highway 522, CN Rail crossing and CP Rail crossing transportation landscapes do not meet the criteria of *Ontario Regulation 9/06* and are not considered to retain cultural heritage value or interest due to their typical nature in the region. Based on the narrative description provided in this report, the landscapes associated with this undertaking do not present significant characteristics of a cultural heritage landscape.

4. Impact Assessment

4.1 Potential Impacts

Where potential cultural heritage value or interest was determined according to *Ontario Regulation 9/06* and the *Historic Sites and Monuments Board of Canada* (Government of Canada 2008), the anticipated direct and indirect impacts to cultural heritage were evaluated based on current understandings of the project boundaries and scope. Impacts were identified according to the MTCS' *Ontario Heritage Toolkit: Heritage Resources in the Land Use Planning Process.* Table 2 and Table 3 outline the impacts as identified by MTCS guidelines, and their relationship to the overall HIWEC Transmission Line – Route A project.

Table 2: Potential Direct Impacts and Relevance to the Project

Direct Impacts		Relevance to the Project	
Loss/Destruction:	of any, or part of any, significant heritage attribute or feature.	**None anticipated:**	No heritage attribute or feature to be demolished.
Displacement/Alteration:	that is not sympathetic, or is incompatible, with the historic fabric or appearance	**None anticipated:**	No alterations anticipated.

Table 3: Potential Indirect Impacts and Relevance to the Project

Indirect Impacts (Disruption)		Relevance to the Project	
Shadows:	created that alter the appearance of a heritage attribute or change the visibility of a natural feature or plantings, such as a garden	**None anticipated:**	Transmission line poles to be placed a substantial distance from built heritage features.
Isolation:	of a heritage attribute from its surrounding environment, context or a significant relationship	**None anticipated:**	Nature of transmission line will not isolate features.
Land Disturbance:	such as a change in grade that alters historic patterns of topography or drainage	**None anticipated:**	No alteration to topography or drainage.
Changes in Land Use:	such as rezoning a battlefield from open space to residential use, allowing new development of site alteration to fill in the formerly open spaces	**None Anticipated:**	Existing land use is minimal and study area is primarily natural rural landscape.
Obstruction:	of significant views or vistas from, within, or to a built and natural feature	**None anticipated:**	Transmission poles are placed a substantial distance from identified built heritage features.

4.2 Impact to Cultural Heritage Features

Two built cultural heritage features on a property abutting the study area were determined to have potential cultural heritage value or interest. Given the substantial distance of these features from the study area boundaries, over 150 m away, no direct or indirect impacts are anticipated. No cultural heritage landscapes were identified within the study area as the landscape is typical for the region.

If there are significant changes to the study area alignment it is possible that there may be indirect impacts to cultural heritage features and the landscape on which they are situated, specifically minimal land disturbance, obstruction or shadows. As such, should the study area boundaries change, an additional assessment of impacts to cultural heritage resources may be required.

5. Recommendations

No listed, designated or otherwise recognized heritage features are present within the study area. In addition there are no historic plaques, cemeteries, national historic sites or properties protected by an Ontario Heritage Trust Easement. A property survey was undertaken to evaluate built heritage and cultural heritage landscapes present in the study area, and an inventory was created to identify and evaluate potential heritage resources.

5.1 Cultural Heritage Landscapes

The study area is primarily comprised of Canadian Shield landscape and transportation landscapes that are typical for this region of Ontario. These landscapes were evaluated against the criteria in *Ontario Regulation 9/06* and it was determined that they are not considered to retain cultural heritage value or interest due to their typical nature in the region.

5.2 Built Heritage

Through the windshield survey, three sites 40 years of age or older were documented and evaluated according to *Ontario Regulation 09/06I* and three structures were identified, including a residential structure and two outbuildings. Of these sites, the residence (Property #1) and one of the outbuildings (Property #2) were identified to have potential cultural heritage value or interest. Potential direct or indirect impacts to these cultural heritage resources were evaluated according to the criteria outlined in InfoSheet #5 in *Heritage Resources in the Land Use Planning Process, Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement 2005.* No negative impacts to cultural heritage resources are anticipated by the project.

5.3 Mitigation Measures

As there are no impacts to heritage resources anticipated as a result of the project, mitigation is not required.

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Appendix A

Built Heritage Inventory

Appendix A

Built Heritage Inventory

Property #1 - Ludgate Trail, Unorganized District of Parry Sound		
 	**Date:** Early- mid 20th century **Description:** 1 storey timber frame residence with cross-gable, modern aluminum roof, small double casement windows, modern metal chimney. **Heritage Attributes:** Timber frame construction	**Description:** 1 storey timber frame residence with cross-gable, modern aluminum roof, small double casement windows, modern metal chimney. **Heritage Attributes:** Timber frame construction.
Potential Direct/Indirect Impacts to Identified Heritage Attributes: None Anticipated		
Mitigation of Negative Impacts: Impacts were not identified; therefore, mitigation is not recommended or necessary		

Property #2 – Ludgate Trail, Unorganized District of Parry Sound		
	**Date:** Early to mid-20th century **Description:** 1 storey, front-gable roofed outbuilding, aluminum roofing, unknown window types. **Heritage Attributes:** Timber frame construction	**Cultural Heritage Value/Interest (CHVI) According to O. Reg 9/06** **Design or Physical Value:** None **Historical or Associated Value:** None **Contextual Value:** Supports the early 20th century character of the rural landscape settlement around the rail lines.
Potential Direct/Indirect Impacts to Identified Heritage Attributes: None Anticipated		
Mitigation of Negative Impacts: Impacts were not identified; therefore, mitigation is not recommended or necessary		

Property #3 – Ludgate Trail, Unorganized District of Parry Sound		
	**Date:** Late 20th century **Description:** 1 storey, front-gable roofed outbuilding, fibre-board siding, aluminum roofing, small casement windows at the back end. **Heritage Attributes:** None	**Cultural Heritage Value/Interest (CHVI) According to O. Reg 9/06** **Design or Physical Value:** None **Historical or Associated Value:** None **Contextual Value:** None
Potential Direct/Indirect Impacts to Identified Heritage Attributes: None anticipated		
Mitigation of Negative Impacts: No CHVI identified, mitigation is not recommended or necessary		

Appendix B

Summary of Qualifications

Adria E. Grant, BA, CAHP
Business Operations Manager, Cultural Resources

Professional Qualifications

Education

BA, Anthropology (Honors), University of Western Ontario, 2000

Master of Arts Candidate, University of Western Ontario, Canada (2010-current)

Registrations & Memberships

Ontario Ministry of Tourism, Culture and Sport (MTCS) Archaeological Research Associate, License # R131

Canadian Association of Heritage Professionals (CAHP)

Ontario Association of Professional Archaeologists (APA)

RAQS Certification

Canadian Archaeological Society

Ontario Archaeological Society

Years of Experience

With AECOM: 3
With Other Firms: 13

Ms. Grant has been active in the field of cultural resource management since 1999, specializing in Stages 1 through 4 archaeological assessments and cultural heritage assessments for both provincial government and private sector organizations. Ms. Grant is an experienced project manager, field supervisor, heritage researcher and Aboriginal engagement liaison with years of experience and a firm understanding of legislative requirements for archaeological and cultural heritage assessments in Ontario. Adria has a wealth of experience working with municipal heritage planners in the context of development activities and has the ability to provide sound technical advice to proponents on the heritage process in Ontario. Ms. Grant specializes in pre-contact Aboriginal and early Euro-Canadian occupations in Ontario and is the author of over 200 reports submitted to the Ontario Ministry of Tourism, Culture and Sport. She is experienced working as technical lead for large multi-disciplinary projects across a wide variety of sectors and has well-practiced capability communicating between legislative bodies, stakeholders, and proponents. Adria holds a Research Associate license issued by the Ontario Ministry of Tourism, Culture and Sport, is a member of the Canadian Association of Heritage Professionals and is an Associate member with the Ontario Association of Professional Archaeologists. Ms. Grant currently acts as the Manager of Business Operations for the cultural resources group in Ontario.

Experience

City of London, 78-88 Oxford Street Cultural Heritage Evaluation Report, London, Ontario. Project manager for the CHER of a row of six residential structures in the City of London that will be negatively impacted by proposed road widening. The CHER determined that the houses as a group had cultural heritage value and would be eligible for designation.

Union Gas, Stratford Reinforcement Project Cultural Heritage Evaluation Report, Perth County, Ontario. Project manager for the CHER conducted as part of an Environmental Assessment for a natural gas pipeline twinning project. The study involved a windshield study, the identification of built heritage and cultural heritage landscapes, creation of a heritage inventory, and the assessment of impacts to identified cultural heritage resources. The report included the direct application of the *Ontario Heritage Toolkit* and the *Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005.*

MHBC Planning, Cobourg Heritage Master Plan, Cobourg, Ontario. Technical specialist providing information on archaeological heritage resources and archaeological management of resources for the background Heritage Report and Heritage Master Plan created for the Town of Cobourg. The document is intended to provide high level legal advice to Town staff on a variety of conservation matters.

York Region, Stouffville Road Improvements Cultural Heritage Evaluation Report, Regional Municipality of York, Ontario. Technical lead for the CHER conducted as part of an Environmental Assessment for the proposed realignment of Stouffville road east of Yonge Street. Research identified a cultural heritage conservation district, listed and designated heritage structures as well as cultural heritage landscapes that should be considered during project design. A Heritage Impact Assessment was recommended once project design was better understood to mitigate any negative impacts to the identified heritage resources.

City of Toronto, Heritage Impact Assessment - Downsview Secondary Area Plan, Toronto Ontario. Primary researcher and technical lead for the HIA conducted as part of the Downsview Secondary Area Plan redevelopment. Numerous built heritage features are present within the study area, impacts to heritage features were assessed and it was determined that there were no anticipated direct or indirect impacts as a result of the undertaking.

Metrolinx, Technical Cultural Resource Services - Eglinton Crosstown Light Rail Transit (ECLRT), Toronto, Ontario. Peer reviewer of cultural heritage evaluation, assessment and impact assessment reports for the project. Provided strategic advice to the greater project team in relation to heritage requirements and .

Varna Wind Inc., Bluewater Wind Energy Centre Heritage Assessment Addendum, Huron County, Ontario. Technical specialist for an addendum to the original Heritage Assessment Report, conducted as part of an Application for a Renewable Energy Approval under Ontario Regulation 359/09 made under the *Environmental Protection Act*. The additional participating properties were screened for potential heritage resources and if potential heritage resources were identified they were evaluated according to the criteria outlined in O. Reg. 09/06 under the *Ontario Heritage Act*, as required by O. Reg. 359/09. A total of 49 structures were identified as as having cultural heritage value or interest according to O. Reg. 09/06. No further mitigation was recommended as it was determined that there were no anticipated direct or indirect impacts as a result of the undertaking.

Goshen Wind Inc., Goshen Wind Energy Centre Heritage Assessment Addendum, Huron County, Ontario. Technical specialist for an addendum to the original Heritage Assessment Report, conducted as part of an Application for a Renewable Energy Approval under Ontario Regulation 359/09 made under the *Environmental Protection Act*. The additional participating properties were screened for potential heritage resources. No features were identified as as having cultural heritage value or interest according to O. Reg. 09/06. No further mitigation was recommended as it was determined that there were no anticipated direct or indirect impacts as a result of the undertaking.

Jericho Wind Inc., Jericho Wind Energy Centre Heritage Assessment Addendum, Lambton and Middlesex Counties, Ontario. Technical specialist for an addendum to the original Heritage Assessment Report, conducted as part of an Application for a Renewable Energy Approval under Ontario Regulation 359/09 made under the *Environmental Protection Act*. The additional participating properties were screened for potential heritage resources and if potential heritage resources were identified they were evaluated according to the criteria outlined in O. Reg. 09/06 under the *Ontario Heritage Act*, as required by O. Reg. 359/09. A total of 51 structures were identified as as having cultural heritage value or interest according to O. Reg. 09/06. No further mitigation was recommended as it was determined that there were no anticipated direct or indirect impacts as a result of the undertaking.

NextEra Energy Canada ULC, Northpoint Wind Energy Centre, Eastern Ontario. Project manager for the identification and assessment of cultural heritage resources within the proposed limits of a large wind energy centre. Research included searches of the Ontario Heritage Properties Database, Parks Canada, municipal heritage planners, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

NextEra Energy Canada ULC, Northpoint Wind Energy Centre Transmission Line, Eastern Ontario. Project manager for the identification and assessment of cultural heritage resources for a proposed transmission line related to a wind energy centre. Research included searches of the Ontario Heritage Properties Database, Parks Canada, municipal heritage planners, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

MHBC Planning, Toronto Garden Heritage Conservation District Technical specialist providing information on archaeological heritage resources and archaeological management of resources for Toronto Garden District HCD Report.

Trout Lake I Solar, LP, LRP Cultural Heritage Resources Review, Trout Lake I Solar Energy Centre. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Battersea Solar, LP, LRP Cultural Heritage Resources Review, Battersea Solar Energy Centre. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Cordukes Solar, LP, LRP Cultural Heritage Resources Review, Cordukes Solar Energy Centre. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Trout Lake I Solar, LP, LRP Cultural Heritage Resources Review, Trout Lake I Solar Energy Centre. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Clarabelle I Solar, LP, LRP Cultural Heritage Resources Review, Clarabelle I Solar Energy Centre. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Clarabelle II Solar, LP, LRP Cultural Heritage Resources Review, Clarabelle II Solar Energy Centre. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Clarabelle III Solar, LP, LRP Cultural Heritage Resources Review, Clarabelle III Solar Energy Centre. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Northpoint I, LP, Northpoint I Wind Energy Project. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Northpoint II, LP, Northpoint II Wind Energy Project. Technical lead for information gathering as part of the LRP process related to heritage and archaeology. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases.

Jennifer A. Morgan, PhD
Cultural Resources Specialist

Education

BSc, Anthropology, Trent University (2006)

MA, Anthropology (Forensic). University of Manitoba, (2009)

PhD., Bioarchaeology, University of Western Ontario (2014)

Memberships

Canadian Association for Physical Anthropology

Years of Experience

With AECOM: 3 years
With Other Firms: 1 year

Dr. Jennifer Morgan, PhD, is a cultural resource specialist with over three years of research experience in archaeological, heritage and cultural resource studies. Jennifer's experience includes research and report production for built heritage and cultural resource projects as well as Stage 1-4 archaeological assessments. Jennifer has produced dozens of archaeological reports and a number of heritage assessment reports for public and private sector clients and has directly applied the *Ontario Heritage Toolkit* as well as the *Standards and Guidelines for the Conservation of Historic Places in Canada*. In addition to her experience as an archaeologist, Jennifer Morgan has over 10 years of training and experience in the fields of bioarchaeology, medical imaging, and human skeletal biology. As a result of this extensive training, Jennifer has developed excellent research and writing skills that are applicable across disciplines.

Experience

Trout Lake I Solar, LP, LRP Cultural Heritage Resources Review, Trout Lake I Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Trout Lake I Solar Energy Centre in the City of North Bay. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of North Bay Planning Department regarding the municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Battersea Solar, LP, LRP Cultural Heritage Resources Review, Battersea Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Battersea Solar Energy Centre in Kingston, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of Kingston Planning Department regarding a municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Cordukes Solar, LP, LRP Cultural Heritage Resources Review, Cordukes Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Cordukes Solar Energy Centre in Kingston, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of Kingston Planning Department regarding a municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Trout Lake I Solar, LP, LRP Cultural Heritage Resources Review, Trout Lake I Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Trout Lake I Solar Energy Centre in the City of North Bay. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of North Bay Planning Department regarding the municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Battersea Solar, LP, LRP Cultural Heritage Resources Review, Battersea Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Battersea Solar Energy Centre in Kingston, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of Kingston Planning Department regarding a municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Cordukes Solar, LP, LRP Cultural Heritage Resources Review, Cordukes Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Cordukes Solar Energy Centre in Kingston, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of Kingston Planning Department regarding a municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Clarabelle I Solar, LP, LRP Cultural Heritage Resources Review, Clarabelle I Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Clarabelle I Solar Energy Centre in the City of Greater Sudbury, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of Greater Sudbury Planning Department regarding a municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Clarabelle II Solar, LP, LRP Cultural Heritage Resources Review, Clarabelle II Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Clarabelle II Solar Energy Centre in the City of Greater Sudbury, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of Greater Sudbury Planning Department regarding a municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Clarabelle III Solar, LP, LRP Cultural Heritage Resources Review, Clarabelle III Solar Energy Centre. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed

Clarabelle III Solar Energy Centre in the City of Greater Sudbury, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the City of Greater Sudbury Planning Department regarding a municipal heritage register, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Northpoint I, LP, Northpoint I Wind Energy Project. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Northpoint 1 Wind Energy Project in Frontenac County, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the Planning Clerk and Community Planner regarding a municipal heritage register for the Township of North Frontenac and Frontenac County, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Northpoint II, LP, Northpoint II Wind Energy Project. Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed Northpoint II Wind Energy Project in Lennox and Addington County, Ontario. Research included all consultation and research requirements for Large Renewable Energy Project application processes. Research and documentation included consultation with the Ontario Registrar Heritage Advisor, requests to the Ontario Heritage Trust for heritage easement property information, consultation with the Community Planners regarding a municipal heritage register for several Townships in Lennox and Addington County, and searches of the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and the Directory of Federal Heritage Designations. [July 2015]

Henvey Inlet Wind, LP, Cultural Heritage Assessment Report, Henvey Inlet Wind Energy Centre, Transmission Line-Route A. Primary report writer, field technician, and researcher for the cultural heritage evaluation of lands to be impacted by a proposed Transmission Line option for the Henvey Inlet Wind Energy Centre in various Townships and municipalities in the District of Parry Sound. The assessment included a windshield study, the identification of built heritage and cultural heritage landscapes, creation of a heritage inventory, and the assessment of impacts to identified cultural heritage resources. The report included the direct application of the *Ontario Heritage Toolkit* and the *Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005.* [June-July 2015]

Henvey Inlet Wind, LP, Cultural Heritage Assessment Report, Henvey Inlet Wind Energy Centre, Transmission Line-Route B. Primary report writer, field technician, and researcher for the cultural heritage evaluation of lands to be impacted by a proposed Transmission Line option for the Henvey Inlet Wind Energy Centre in various Townships and municipalities in the District of Parry Sound. The assessment included a windshield study, the identification of built heritage and cultural heritage landscapes, creation of a heritage inventory, and the assessment of impacts to identified cultural heritage resources. The report included the direct application of the *Ontario Heritage Toolkit* and the *Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005.* [June-July 2015]

Henvey Inlet Wind, LP, Cultural Heritage Assessment Report, Henvey Inlet Wind Energy Centre. Primary report writer, field technician, and researcher for the cultural heritage evaluation of lands to be impacted by the proposed Henvey Inlet Wind Energy Centre located on Henvey Inlet First Nation Reserve No. 2 in the District of Parry Sound. The assessment included a windshield study, the identification of built heritage and cultural heritage landscapes, creation of a heritage inventory, and the assessment of impacts to identified cultural heritage resources. The report included the direct application of the *Ontario Heritage Toolkit* and the *Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005.* [June-July 2015]

City of Toronto, Preliminary Cultural Resource Assessment/ EA requirements, Billy Bishop Toronto City Airport (BBTCA). Primary Researcher for the identification and assessment of cultural heritage resources within and adjacent to the proposed runway expansion for the BBTCA. Research included searches of the Ontario Heritage Properties Database, the City of Toronto Inventory of Heritage Properties, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, consultation with the MTCS Heritage Planner, requests to the Ontario

Heritage Trust for heritage easement property information, and searches of the unregistered and registered cemetery databases. A preliminary report was written and provided for inclusion in the overall environmental assessment report for the project [June 2015]

York Region, Cultural Heritage Evaluation Report & Heritage Impact Assessment, Stouffville Road Improvements. Primary report writer, field technician, and researcher for the cultural heritage evaluation of lands to be impacted by proposed road improvements to Stouffville Road in the Regional Municipality of York, Ontario . The assessment included a windshield study, the identification of built heritage and cultural heritage landscapes, creation of a heritage inventory, and the assessment of impacts to identified cultural heritage resources. The report included the direct application of the *Ontario Heritage Toolkit* and the *Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005.* [April 2015]

City of London, Preliminary Cultural Resource Assessment, Western Road Widening. Primary researcher and field technician for the identification and assessment of cultural heritage resources for the proposed widening of Western Road in London, Ontario. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases. A preliminary report was written and provided for inclusion in the overall environmental assessment report for the project [April 2015]

City of London, Preliminary Cultural Resource Assessment, Western/Sarnia Road/Philip Aziz Road Improvements. Primary researcher and field technician for the identification and assessment of cultural heritage resources for the proposed improvements to Western Road, Sarnia Road, and Philip Aziz Avenue in London, Ontario. Research included searches of the Ontario Heritage Properties Database, the City of London Inventory of Heritage Resources, the Canadian Register of Historic Places, the Ontario Heritage Trust Plaques Database, and unregistered and registered cemetery databases. [April 2015]

Publications:

Morgan, J.A., N. Lynnerup and R.D. Hoppa, 2013:
The Lateral Angle Revisited: A Validation Study of the Lateral Angle Method for Sex Determination Using Computed Tomography. *Journal of Forensic Sciences,* 58(2): 442-447.

Morgan, J.A., 2014:
The Methodological and Diagnostic Applications of Micro-CT to Palaeopathology: A Quantitative Study of Porotic Hyperostosis. *University of Western Ontario, Electronic Thesis and Dissertation Repository.*