# Stage 1&2 Archaeological Assessment of Napanee TS Taylor Kidd, Part of Lots 27 and 28, Concession 1, Township of Loyalist, Regional Municipality of Lennox and Addington, Ontario

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Archaeological Consulting Licence # P052
(PIF #P052-225-2010)

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## PROJECT PERSONNEL

| | |
|---|---|
| Project/Field Director: | Mr. T. Keith Powers |
| Field Archaeologists | Mr. T. Keith Powers<br>Ms. Karen Powers<br>Mr. Misha Stecyk<br>Mr. Hubert Ka<br>Ms. Sandra Sousa<br>Mr. Corey Beckett<br>Mr. Etienne Jacobson |
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## 1 INTRODUCTION

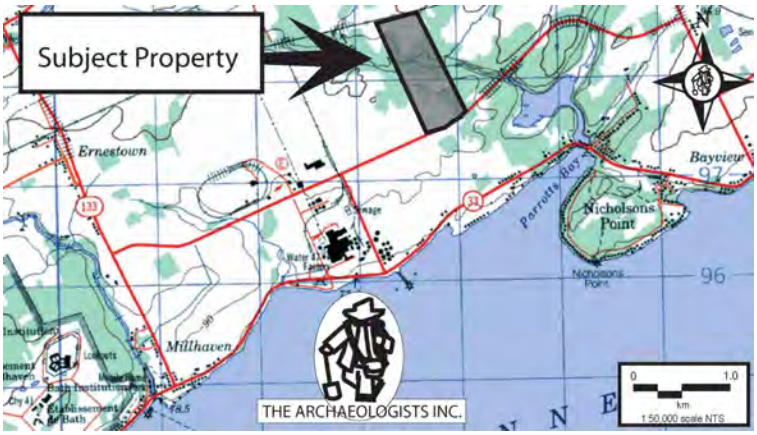



**Figure 1**: The location of the study area in the Township of Loyalist.

The Archaeologists Inc. was contracted by Axio Power Canada Inc.**,** of Kingston, Ontario, to conduct a Stage 1 and 2 Archaeological Assessment of Napanee TS Taylor Kidd, Part of Lots 27 and 28, Concession 1, Township of Loyalist, Regional Municipality of Lennox and Addington, Ontario (Figure 1). The subject property, which comprised approximately 93.9 hectares, is located in Ernestown, east of Jim Snow Drive and north of Kenneth Taylor Blvd. Axio Power Canada Inc. is applying for a Renewable Energy Approval under Ontario Regulation 359/09 of the *Green Energy Act*.

Under O. Reg 359/09, s. 20 (1) and s. 21, the project must determine if there will be an impact to archaeological resources, and the carry out an archaeological assessment under s. 22. The Stage 1 and 2 Archaeological Assessment was conducted under the project direction of Mr. T. Keith Powers. Fieldwork was performed in accordance with the Ontario Heritage Act (1990) under an archaeological consulting license (P052-225-2010) issued to Keith Powers of *The Archaeologists Inc.* Permission to access the study area, and undertake all activities required to complete this archaeological assessment, was granted to *The Archaeologists Inc.* by the client. Mr. Powers conducted fieldwork of the subject property in July 15th -22nd, 2010.

## 2 BACKGROUND RESEARCH

### 2.1 Previous Archaeological Research

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site record forms for registered sites housed at the Ministry of Culture; published and unpublished documentary sources; and the files of *The Archaeologists Inc.*

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (O.A.S.D.), a database maintained by the Ministry of Culture. This database

contains archaeological sites registered within the Borden system. The Borden system was first proposed by Dr. Charles E. Borden, and is based on a block of latitude and longitude. A Borden block is approximately 13 kilometers east west by 18.5 kilometers north south. Sites within each block are numbered sequentially as they are found. The study area under review is located within Borden block BbGe.

Information on the known archaeological sites in the vicinity of the study area was obtained from Mr. Robert von Bitter, Ministry of Tourism and Cutlure. No archaeological sites have been registered within 1 kilometer of the subject property. Regional sites can be expected to relate to the cultural/temporal categories outlined in Table 1.

**Table 1: Outline of Southern Ontario Prehistory**

| Period | Archaeological Culture | Date Range | Attributes |
|---|---|---|---|
| **PALEO-INDIAN** | | | |
| Early | Gainey, Barnes,Crowfield | 9000-8500 BC | Big game hunters |
| Late | Holcombe, Hi-Lo, Lanceolate | 8500-7500 BC | Small nomadic groups |
| **ARCHAIC** | | | |
| Early | Nettling, Bifurcate-base | 7800-6000 BC | Nomadic hunters and gatherers |
| Middle | Kirk, Stanly, Brewerton, Laurentian | 6000-2000 BC | Transitional to territorial settlements |
| Late | Lamoka, Genesee, Crawford Knoll, Innes | 2500-500 BC | Polished/ground stone tools (small stemmed points) |
| **WOODLAND** | | | |
| Early | Meadowood | 800-400 BC | Introduction of pottery |
| Middle | Point Peninsula, Saugeen | 400 BC- AD 800 | Incipient horticulture |
| Late | Algonkian, Iroquoian | AD 800-1300 | Transition to village life and agriculture |
| | Algonkian, Iroquoian | AD 1300-1400 | Establishment of large palisaded villages |
| | Algonkian, Iroquoian | AD 1400-1600 | Tribal differentiation and warfare |
| **HISTORIC** | | | |
| Early | Huron, Neutral, Petun, Odawa, Ojibwa | AD 1600-1650 | Tribal displacements |
| Late | Six Nations Iroquois, Ojibwa | AD 1650-1800's | |
| | Euro/Canadian | AD 1800-present | European settlement |

## 2.2 Historical Land Use Summary

The 1878 *Illustrated Historical Atlas of the Counties of Frontenac, Lennox and Addington, Ontario,* was reviewed to determine the potential for finding historical archaeological remains within the study area (Figure 2).

The 1878 *Atlas* indicates that the western part of Lot 27 was owned by John Hartman and the eastern half by William Van Winkle. Two structures are depicted in the southern portion of the lot. However these are not within the study area. The western part of Lot 28 is owned by Nelson Snider, while the Atlas indicates that the eastern part if owned by Thomas Smith. One structure is depicted in the southern portion of Thomas Smiths land. However, this structure lies outside of the study area.

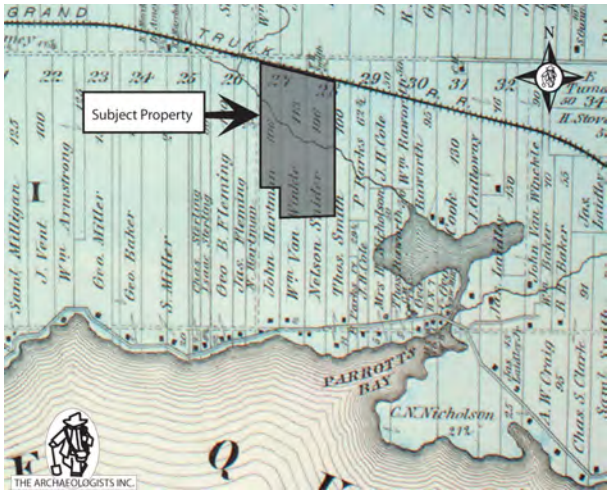



Figure 2: The subject property as depicted in the *1878 Illustrated Historical Atlas of the Counties of Frontenac, Lennox and Addington Ontario*

The Grand Trunk Railway borders the lots on the north. According to the Trent University Archives "The Grand Trunk Railway (GTR) was built to provide a main trunk line throughout the entire length of the Province of Canada. Under the sponsorship of Sir Francis Hincks, the Grand Trunk Railway was formally incorporated in 1852 to build a railway line from Toronto to Montreal. The Grand Trunk Railway of Canada East was also incorporated to build a line from Quebec City to Trois Pistoles, Quebec. The GTR also purchased the newly completed St. Lawrence and Atlantic Railroad in 1853. Much of the financing for the Railway was to come from investors in England, and as a result, much of the construction of the new lines was done by English construction firms. The "Trunk-Line" from Montreal to Toronto opened in 1856. The railway expanded quickly, existing small railway companies were purchased, and new lines were added, some of which were destined for the United States. By 1867, the GTR was the largest railway system in the world with 2 055 km of track. By the 1880's the company had over 700 locomotives, 578 cars, 60 post-office cars, 131 baggage cars, 18 000 freight cars and 49 snow plows. The high cost of construction, absentee management (Head Office in England), and failure to generate anticipated levels of traffic left the GTR debt ridden and unable to upgrade its equipment. In October 1919, the federal government took over the GTR after a disastrous attempt to create a transcontinental railway with the creation of the Grand Trunk Pacific Railway. The GTR and the GTPR were placed under the management of the Canadian National Railways on January 30, 1923 (http://www.trentu.ca/admin/library/archives/76-1008.htm).

The Atlas also depicts a watercourse flowing through the property to Parrotts Bay.

It must be noted that not all features of interest today would have been considered within the scope of the *Atlas* at the time of publication. Nevertheless, the *Atlas* is considered one source for the assessment of archaeological potential. It can therefore be concluded that the study area has potential for the identification of historic archaeological remains.

### 2.3 Physiography

The study area lies within the Napanee Plain physiographic region (Chapman and Putnam 1984:186). This is a limestone plain of flat-to-undulating characteristics covering approximately 700 square miles. Limestones are mainly of the Gull River and Bobcaygeon Formation. The surfaces have been stripped of overburden due to glacial action.

Soils within the Napanee Plain are generally shallow (less than 30cm in thickness) and consist of clays with some Farmington Loam soils. The plain supported sugar maple, white elm, silver and red maple, white cedar, basswood, beech, white pine, hemlock, balsam fir, and white spruce.

The study area is located northwest of Parrotts Bay marsh which drains into Parrots Bay. A watercourse that feeds into the marsh flows through the subject property.

The Ministry of Culture (former Ministry of Citizenship, Culture and Recreation) Primer on Archaeology, Land Use Planning and Development in Ontario (1997: 12-13) stipulates that undisturbed land within 300 metres of a primary water source (lakeshore, river, large creek, etc.), and undisturbed land within 200 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres of an ancient water source, are considered to have archaeological potential. Given the location of the wetland and tributaries of Glenvale Creek in vicinity of the subject property, the study area exhibits high archaeological potential.

## 3 STAGE 2 FIELD ASSESSMENT

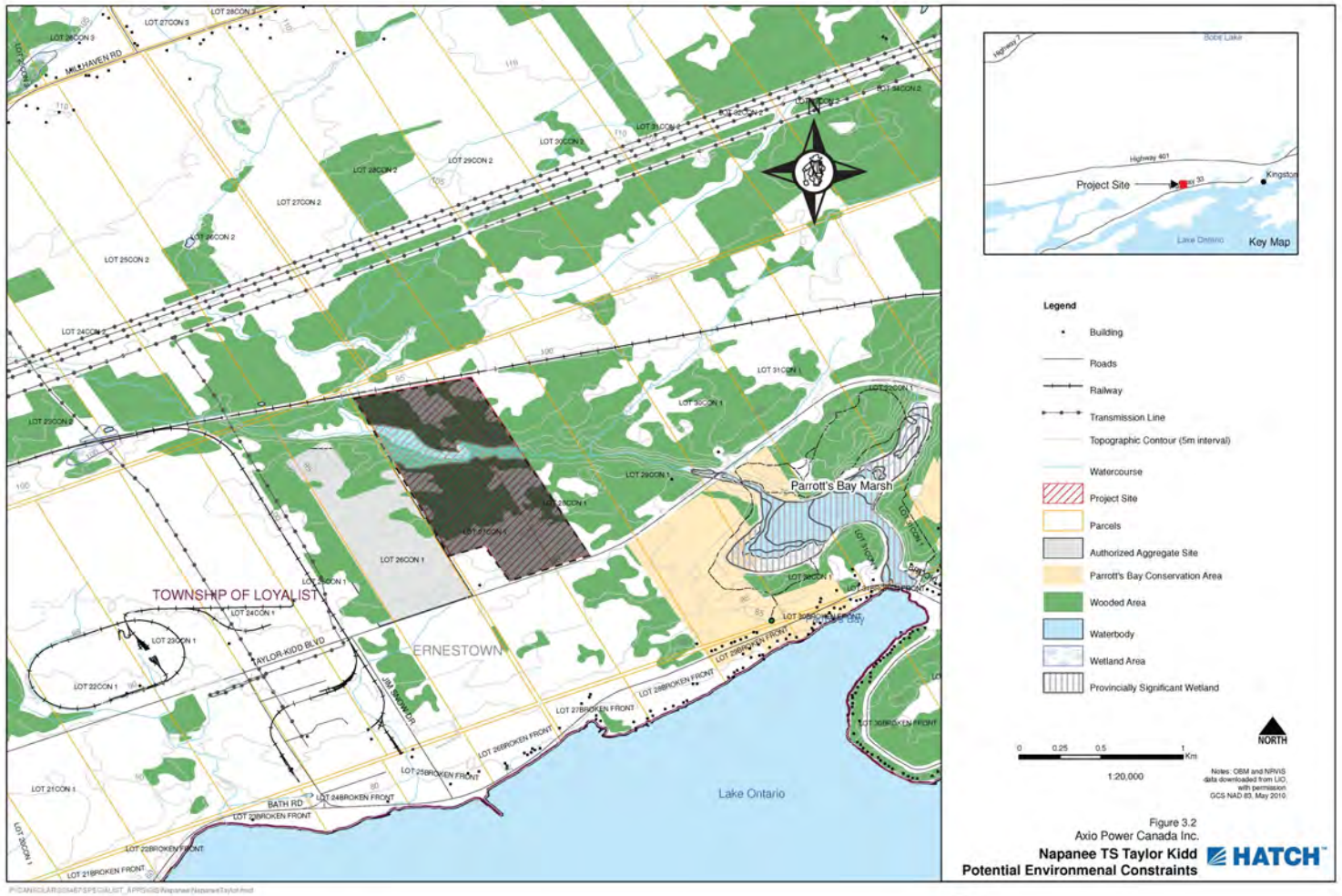
### 3.1 Methods

The Stage 2 archaeological field assessment of Napanee TS Taylor Kidd, Part of Lots 27 and 28, Concession 1, Township of Loyalist, Regional Municipality of Lennox and Addington, Ontario was completed under the field direction of Mr. Keith Powers on July 15th -22nd , 2010. Weather conditions and visibility were excellent with sunny skies and warm temperatures. The subject property, which comprised approximately 93.9 hectares, is located in Ernestown, east of Jim Snow Drive and north of Kenneth Taylor Blvd.

The majority of the subject property consisted of bushed woodlot. There was a watercourse running which cut the property and an associated wet area (Plate 1 -2). Those areas identified as wet were not surveyed as they exhibit no potential for the recovery of archaeological resources. The remaining study area was subject to a Stage 2 assessment conducted by means of a shovel test pit survey at 5 metre intervals (Figure 3; Plate 3). Test pits measured approximately 30cm in diameter and were excavated to bedrock. All soil fills were screened through 6mm wire mesh and test pits were backfilled. Soil depths were shallow (<15cm on average) and soils were loamy.

### 3.2 Results of the Stage 2 Assessment

Despite careful scrutiny, no archaeological resources were identified during the Stage 2 archaeological assessment of the subject property.




Area Test Pitted at a 5 metre Interval

Area Assessed as Low and Wet --No Archaeological Potential

Subject Property Boundary

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Figure 3; The assessment of the subject property….

## 4 CONCLUSIONS AND RECOMMENDATIONS

During the course of the Stage 1 and 2 archaeological assessment of Napanee TS Taylor Kidd, Part of Lots 27 and 28, Concession 1, Township of Loyalist, Regional Municipality of Lennox and Addington, Ontario it was determined that the physiographic setting of the property demonstrates a high potential for the recovery of cultural resources. Background research revealed that no archaeological sites had been registered previously within the study area and none were located within a one-kilometre radius, and no structures were depicted on the illustrated historical atlas of the area. The historic Grank Trunk Railway borders the northern portion of the subject property. Given this information, a Stage 2 archaeological assessment was conducted.

Approximately 20% of the study area were identified as low and wet and were not surveyed as they were assessed as exhibiting no potential for the recovery of archaeological resources. The remainder of the study area consisted of wood and bushlot and was subject to a Stage 2 field assessment by means of a shovel test pit survey at 5 metre intervals. Despite careful scrutiny, no archaeological resources were discovered.

In light of these results, it is recommended that:

1. The entire study area as depicted by Figure 3 should be considered free of any archaeological concern.

2. Should deeply buried archaeological remains be found on the property during construction activities, the Culture Programs Unit of the Ministry of Tourism and Culture (MTC) should be notified immediately.

3. In the event that human remains are encountered during construction, the proponent should immediately contact both Ministry of Culture, and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Business Services (416) 326-8404.

The documentation related to the Archaeological Assessment of the subject property shall be curated by *The Archaeologists Inc.* until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the landowner, the Ministry of Culture, and any other legitimate interest groups.

## 5 REFERENCES CITED


Chapman, L.J. and F. Putnam
1984 *The Physiography of Southern Ontario, Ontario Geological Survey Special Volume 2*, Toronto: Government of Ontario, Ministry of Natural Resources.

*Illustrated Historical Atlas of the Counties of Frontenac, Lennox and Addington, Ontario*
1878 Toronto: Meacham & Co.

Ministry of Citizenship, Culture and Recreation
1997 Conserving A Future For Our Past: Archaeology, Land Use Planning & Development in Ontario. Cultural Programs Branch, Archaeology & Heritage Planning Unit. Toronto.

Trent University Archives (http://www.trentu.ca/admin/library/archives/76-1008.htm).

## PLATES

Plate 1; Traversing watercourse on the property

Plate 2; Standing water in wet areas of the property

Plate 3; Test pit survey at a 5 metre interval