



June 26, 2012

## STAGE 1 ARCHAEOLOGICAL ASSESSMENT

**NextEra Energy Canada, ULC  
Goshen Wind Energy Centre  
Various Lots and Concessions  
Geographic Townships of Hay, Stephen  
and Usborne  
now Municipalities of Bluewater and South  
Huron  
Huron County, Ontario**

ORIGINAL REPORT

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4 Copies - AECOM Canada Ltd.  
1 Copy and 1 CD Copy - Ministry of Tourism,  
Culture and Sport  
2 Copies - Golder Associates Ltd.





## Executive Summary

A Stage 1 archaeological background study was conducted by Golder on behalf of AECOM Canada Ltd. for the proposed Goshen Wind Energy Centre being developed by Goshen Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC. The study area is located on various lots and concessions in the Geographic Townships of Hay, Stephen and Usborne, now Municipalities of Bluewater and South Huron, Huron County, Ontario. The study area is approximately 35,260 hectares in area. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the *Environmental Protection Act* (Government of Ontario 1990b).

The *Green Energy Act* (Government of Ontario 2009) enabled legislation governing project assessments and approvals to be altered to allow for a more streamlined Renewable Energy Approval (REA) process. Under Section 22 (1) of the REA, an archaeological assessment must be conducted if the proponent concludes that engaging in the project may have an impact on archaeological resources. Currently, Ontario Regulation 359/09 of the *Environmental Protection Act* governs the REA process for renewable energy projects such as wind, anaerobic digestions, solar and thermal treatment facilities.

The objective of the Stage 1 assessment was to compile all available information about the known and potential cultural heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources, consistent with Ontario Ministry of Tourism, Culture and Sport's (MTCS) *Archaeological Assessment Technical Guidelines* (Government of Ontario 1993).

Golder applied archaeological potential criteria commonly used by the MTCS to determine areas of archaeological potential within the study area. The archaeological potential for Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. For pre-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, agriculturally suitable soils, and known archaeological sites. For post-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, and historic Euro-Canadian anecdotal evidence. The determination of historic Euro-Canadian archaeological potential is based on the documentation indicating occupation from the early 19<sup>th</sup> century onwards as well as the presence of historic transportation routes. As a result, **Stage 2 archaeological assessment is recommended for potential wind turbine sites and their associated infrastructure.**

Further Stage 2 archaeological assessment is recommended for any areas to be impacted by turbine construction, access road construction, or other infrastructure construction related activities. The MTCS is asked to review the results presented and to accept this report into the Ontario Provincial Register of Archaeological Reports. Additional archaeological assessment is still required; hence the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* (Government of Ontario 1990a) and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.

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



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## Acknowledgments

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## **1.0 INTRODUCTION**

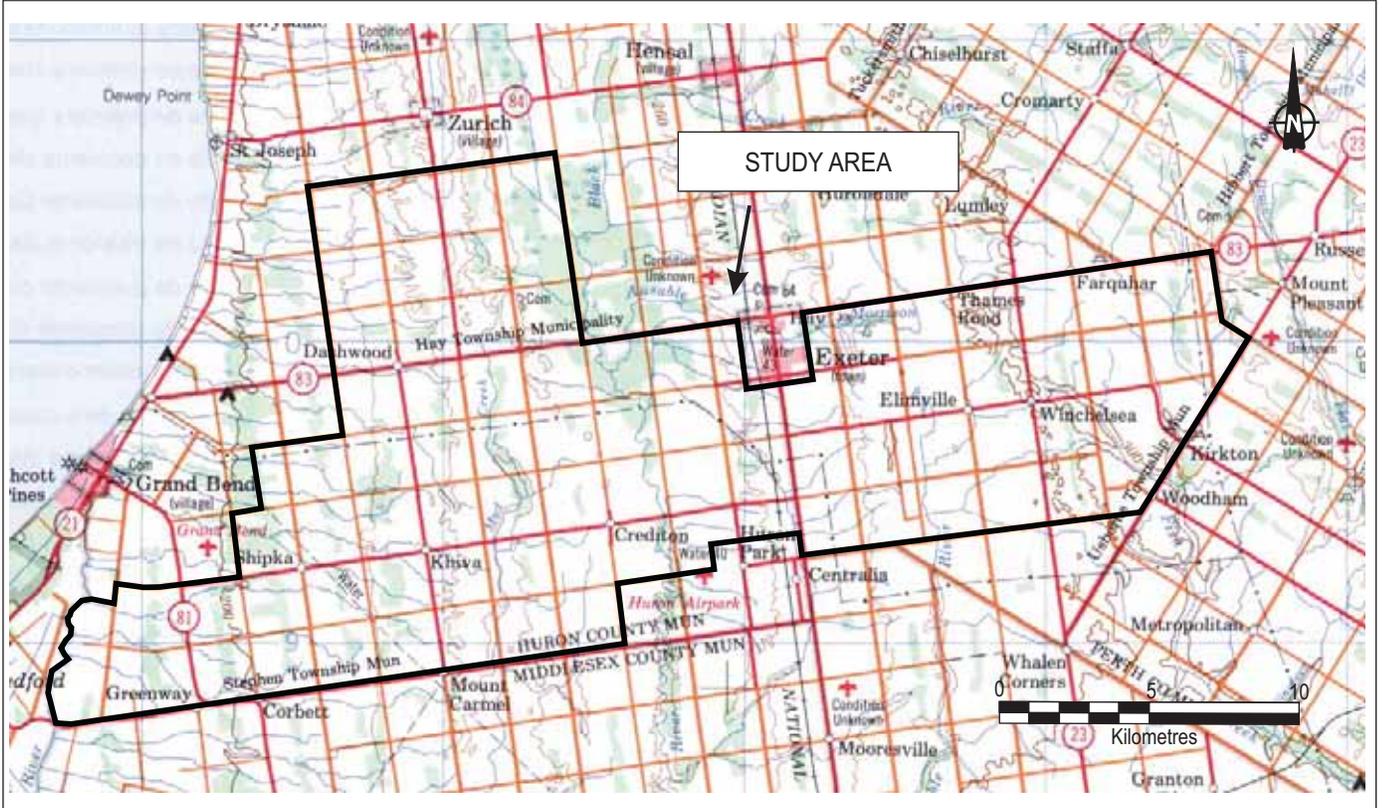
A Stage 1 archaeological background study was conducted by Golder on behalf of AECOM Canada Ltd. for the proposed Goshen Wind Energy Centre being developed by Goshen Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (Figure 1). The study area is located on various lots and concessions in the Geographic Townships of Hay, Stephen and Usborne, now Municipalities of Bluewater and South Huron, Huron County, Ontario. The study area is approximately 35,260 hectares in area. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the *Environmental Protection Act* (Government of Ontario 1990b).

The *Green Energy Act* (2009) enabled legislation governing project assessments and approvals to be altered to allow for a more streamlined Renewable Energy Approval (REA) process (Government of Ontario 2009). Under Section 22 (1) of the REA, an archaeological assessment must be conducted if the proponent concludes that engaging in the project may have an impact on archaeological resources. Currently, Ontario Regulation 359/09 of the *Environmental Protection Act* governs the REA process for renewable energy projects such as wind, anaerobic digestions, solar and thermal treatment facilities.

The objective of the Stage 1 assessment was to compile all available information about the known and potential cultural heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources, consistent with Ontario Ministry of Tourism, Culture and Sport's (MTCS) *Archaeological Assessment Technical Guidelines* (Government of Ontario 1993).

The site visit component of the Stage 1 assessment was conducted on August 4, 2010 under archaeological consulting licence P001, issued to Jim Wilson, M.A., by the MTCS and on June 12, 2012 under archaeological consulting licence P218, issued to Scott Martin, Ph.D., by the MTCS. Golder applied archaeological potential criteria commonly used by the MTCS to determine areas of archaeological potential within the study area. The archaeological potential for Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. For pre-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, agriculturally suitable soils, and known archaeological sites. For post-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, and historic Euro-Canadian anecdotal evidence. The determination of historic Euro-Canadian archaeological potential is based on the documentation indicating occupation from the early 19<sup>th</sup> century onwards as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment is recommended for potential wind turbine sites and their associated infrastructure.

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**LEGEND**

 STUDY AREA

**REFERENCE**

DRAWING BASED ON

- GOVERNMENT OF CANADA  
1998 TOPOGRAPHIC MAP SHEET 40 P/05: GRAND BEND (EDITION 6). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.
- 2000 TOPOGRAPHIC MAP SHEET 40 P/04: PARKHILL (EDITION 8). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.
- 2001 TOPOGRAPHIC MAP SHEET 40 P/06: ST. MARYS (EDITION 6). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.

**NOTES**

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT				<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>			
TITLE							
<b>LOCATION OF THE STUDY AREA</b>							
		PROJECT No. 10-1151-0201-1000-1200		FILE No. 1011510201-1000-1200-R01001		<b>FIGURE 1</b>	
		CADD SWJM MAY 15/12		SCALE AS SHOWN REV.			
		CHECK					



## **2.0 PROJECT BACKGROUND**

In compliance with the provincial guidelines set out in the *Archaeological Assessment Technical Guidelines* (Government of Ontario 1993), the Stage 1 Archaeological Overview/Background Study included:

- a review of the land use history, including pertinent historic maps;
- a property inspection of the study area; and
- an examination of the Ontario Archaeological Sites Database (ASDB) to determine the presence of known archaeological sites in and around the study area.

In addition to the property inspection of the study area, background research was conducted at the MTCS Office in Toronto, the Crown Land Survey Records Office at the Ministry of Natural Resources in Peterborough, McMaster University's Mill's Memorial Library and Lloyd Reeds Map Collection and Golder's corporate library.



### 3.0 BACKGROUND RESEARCH

#### 3.1 The Natural Environment

The study area is an approximately 35,260 hectare parcel located in the Geographic Townships of Hay, Stephen and Usborne, Huron County, Ontario. Table 1 outlines the various lots and concessions within each township that the study area encompasses.

**Table 1: Properties within the Goshen Wind Farm, Huron County**

<b>Geographic Township</b>	<b>Concession</b>	<b>Lot</b>
Hay	Abutting South Boundary	11 to 27
	7	3 to 16
	8	3 to 16
	9	3 to 16
	10	3 to 16
	11	3 to 16
	12	3 to 16
	13	3 to 16
	14	3 to 16
Stephen	Abutting North Boundary	2 to 27
	Abutting on River aux Sables	9 to 19
	1	8 to 19
	2	8 to 23
	3	8 to 23
	4	6 to 23
	5	6 to 23
	6	6 to 23
	7	3 to 23
	8	3 to 23
	9	3 to 23
	10	3 to 23
	11	3 to 23
	12	3 to 23
	13	3 to 23
	14	3 to 23
	15	3 to 20
	16	3 to 20
17	3 to 20	
18	3 to 15	



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Geographic Township	Concession	Lot
	19	3 to 10
	20	3 to 10
	21	3 to 10
	22	8 to 18
	Abutting South Boundary	12 to 43
Usborne	Abutting South Eastern Boundary	1 to 15
	Abutting South Side of Thames Road	5 to 27
	1	1 to 15
	2	1 to 20
	3	1 to 20
	4	1 to 18
	5	1 to 18
	6	1 to 18
	7	1 to 18
	8	1 to 18
	9	1 to 18
	10	1 to 18
	11	2 to 18
	12	7 to 18
	13	8 to 18
14	11 to 18	
15	14 to 18	

The study area is situated within four physiographic regions: the Huron Fringe, the Huron Slope, the Horseshoe Moraines and the Stratford Till Plain (Chapman and Putnam 1984:127, 160-161).

The Huron Fringe physiographic region:

*....comprises the wave-cut terraces of glacial Lake Algonquin and Lake Nipissing with their boulders, gravel bars and sand dunes....Across the mouth of the Saugeen Valley, Lake Algonquin built a massive beach of sand and gravel. Behind it was a lagoon in which fine sand and silt were deposited to a considerable depth. Delta sands were spread outside the beach, also, ending at a distinct bluff about half a mile from the present shore. The terrace below the bluff is ribbed with gravel bars built by Lake Nipissing and, as is the case along so much of the shoreline, the waves have washed most of the overburden off the bedrock on the lower or Nipissing terrace.*

(Chapman and Putnam 1984:161)

The Huron Slope physiographic region occupies:



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*an area of about 1,000 sq miles along the eastern side of Lake Huron, the land between the Algonquin shorecliff and the Wyoming moraine [and] slopes gently upward from 600 feet to 850 or 900 feet a.s.l. It is essentially a clay plain modified by a narrow strip of sand, and by the twin beaches of glacial Lake Warren which flank the moraine...Farmers on this slope generally emphasize the raising of livestock, grazing is featured, and grass farms...are common.*

(Chapman and Putnam 1984:160-161)

The Horseshoe Moraines physiographic region is described in the below passage:

*The Port Huron Moraine system forms the core of a horseshoe-shaped region flanking the upland that lies to the west of the highest part of the Niagara cuesta. The associated meltwater stream deposits are also included giving the region two chief landform components: (a) the irregular, stony knobs and ridges which are composed mostly of till and with some sand and gravel deposits (kames); and (b) the more or less pitted sand and gravel terraces and swampy valley floors.*

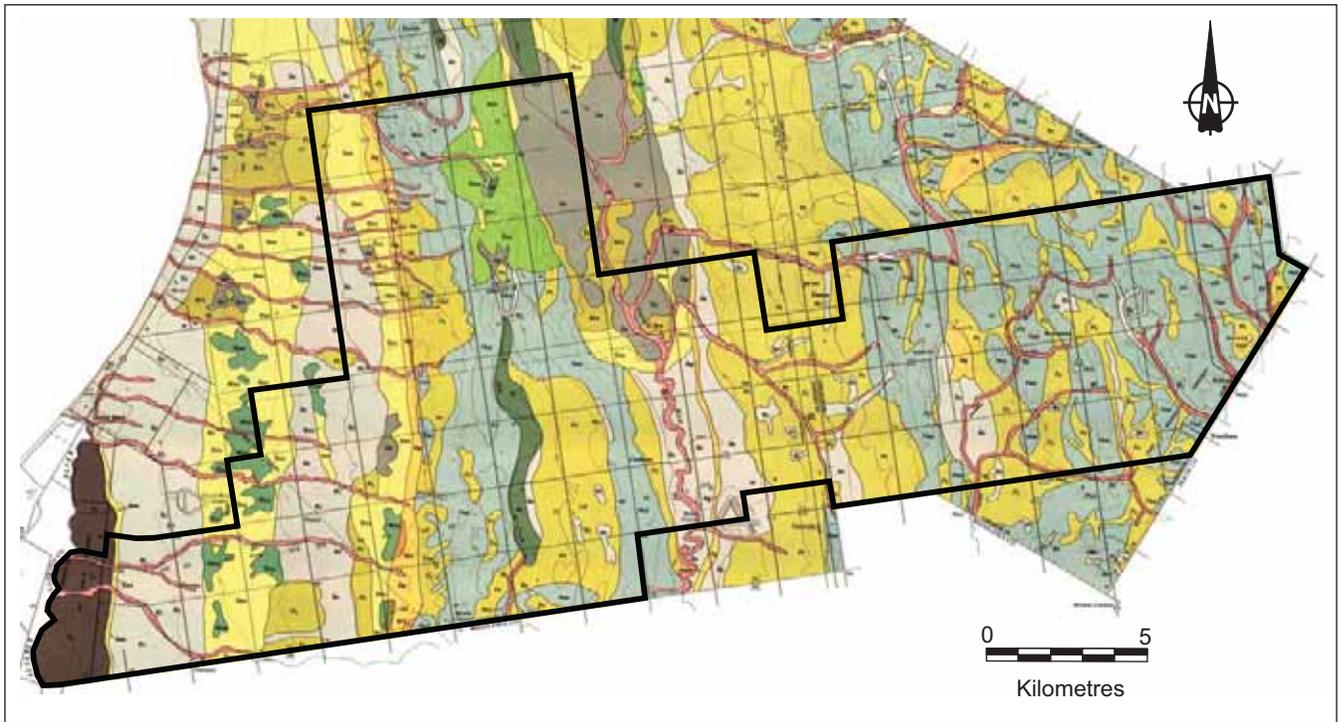
(Chapman and Putnam 1984:127)

Finally, the Stratford Till Plain physiographic region comprises a:

*...broad clay plain of 1,370 square miles, extending from London in the south to Blyth and Listowel in the north with a projection toward Arthur and Grand Valley. It is an area of ground moraine interrupted by several terminal moraines. The moraines are more closely spaced in the southwestern portion of the region; consequently that part resembles the Mount Elgin Ridges....Throughout the area the till is fairly uniform, being a brown calcareous silty clay whether on the ridges or the more level ground moraine. It is a product of the Huron ice lobe. Some of the silt and clay is calcareous rock flour, probably a good deal of it coming from previously deposited varved clays of the Lake Huron Basin.*

(Chapman and Putnam 1984:133)

Belden and Company (1879:xix-xx) considered the soils of Usborne to be fertile and productive. The four major soil series in the study area are Perth series (Perth clay loam), Huron series (Huron clay loam), Brookston series (Brookston clay loam) and Berrien Series (Berrien sandy loam) (Figure 2). The Perth soils are well suited to growing modern day crops such as beets, corn and cabbage (Hoffman *et al.* 1952:48). Perth clay is described as imperfectly drained and tends to yield fairly even during dry seasons due to the soil's reserve supply of moisture. Huron clay series are susceptible to erosion because of their presence within sloped areas (Hoffman *et al.* 1952:45). Modern day crops are generally wheat, cereal grains and corn (Hoffman *et al.* 1952:45). Brookston clay is poorly drained and therefore modern drainage improvements are required in order for the land to produce good yields (Hoffman *et al.* 1952:49-50). The natural vegetation of Berrien sandy loam comprises deciduous and coniferous trees and is used for pasture and woodland (Hoffman *et al.* 1952:65-67).



**LEGEND**

 STUDY AREA

**SOILS**

 PERTH	 BOTTOMLAND	 BROOKSTON
 HURON	 BERRIEN	 BRADY
 GRANBY	 BURFORD	 BOOKTON
 TOLEDO	 WAUSEON	 MUCK
 BRISBANE		

**REFERENCE**

DRAWING BASED ON  
 GOVERNMENT OF CANADA  
 1979 *SOILS OF HURON COUNTY, ONTARIO*. SOIL SURVEY  
 REPORT NO. 13. CARTOGRAPHY SECTION, LAND  
 RESOURCE RESEARCH INSTITUTE, RESEARCH BRANCH  
 AGRICULTURE CANADA, OTTAWA.

**NOTES**

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ  
 IN CONJUNCTION WITH ACCOMPANYING TEXT.  
 ALL LOCATIONS ARE APPROXIMATE.

PROJECT		<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>	
TITLE		<b>THE STUDY AREA ON A PORTION OF THE SOILS OF HURON COUNTY MAP</b>	
PROJECT No. 10-1151-0201-1000-1200		FILE No. 1011510201-1000-1200-R01002	
CADD SWJM MAY 30/12		SCALE AS SHOWN REV.	
CHECK		<b>FIGURE 2</b>	





Berrien soils are imperfectly drained and benefit from fertilizer for arable crops, however drainage and fertility limit successful cropping of wheat, oats and hay (Hoffman et al. 1952:66-67). Underlying clay layers make the installation of tile drains difficult in Berrien sandy loam (Hoffman et al. 1952:79). The Perth and Huron series would be suitable for pre-contact Aboriginal practices, but not ideal given the drainage and erosion issues.

There are many potable water sources associated with the study area (Figure 1). Numerous small creeks, such as Mud Creek and Black Creek, transect the study area at various locations, most of these run to Lake Huron, located between one kilometre and 10 kilometres of the western edge of the study area. The Ausable River (Plate 1) flows south through the central portion of the study area and turns north again to form the extreme southwestern boundary of the study area. Black Creek is a tributary of the Ausable, joining it in the north-central portion of the study area. Mud Creek runs north and west through the western part of the study area. Fish Creek, flowing through the eastern portion of the study area, is a tributary of the North Thames River.

*Plate 1: Topography, Ausable River, From Greenway Road, Facing North*



### **3.2 Pre-contact Aboriginal Archaeological Resources and Surveys**

In order that an inventory of archaeological resources could be compiled, the registered archaeological site records kept by the MTCS were consulted. In Ontario, information concerning archaeological sites is stored in the ASDB maintained by the MTCS. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially



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as they are found. The study area under review is located in Borden Blocks AiHk, AiHj, AiHi, AiHh, AhHk, AhHj, AhHi and AhHh.

Information concerning specific site locations is protected by provincial policy, and is not fully subject to the Freedom of Information Act. The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MTCS will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

According to the ASDB, 18 archaeological sites are registered within or within one kilometre of the study area. These comprise: 14 pre-contact Aboriginal sites, three multi-component sites with both pre-contact Aboriginal and historic Euro-Canadian occupations or use and one historic Euro-Canadian commercial establishment (Robert von Bitter, personal communication, June 1, 2012; Government of Ontario n.d.). Table 2 briefly describes these sites. At least three of these sites were recommended for further archaeological assessment: AhHj-2 (Dawsey Homestead), AiHj-2, AiHj-4 (Sarepta Tavern/Post Office). The others are either not clearly indicated in the ASDB comments as being recommended for further work or have not been recommended.

**Table 2: Registered Archaeological Sites Located within the Study Area**

<b>Borden Number</b>	<b>Site Name</b>	<b>Site Type</b>	<b>Culture</b>	<b>Licence Year</b>	<b>Found</b>
AhHj-2	Dawsey Homestead	Homestead and Campsite?	Multi-component, Euro-Canadian and Pre-contact Aboriginal, Middle Archaic	1987	172 historic Euro-Canadian artifacts, 11 Pre-contact Aboriginal artifacts
AhHj-3	-	Findspot	Pre-contact Aboriginal	1987	1 biface
AiHi-1	-	Lithic Scatters	Pre-contact Aboriginal	1990	Diffuse scatter of lithics, 4 loci
AiHi-2	-	Campsite?	Pre-contact Aboriginal, Late Archaic	1990	10 artifacts per square, lithics, including 4 points and 1 bone fragment
AiHi-3	-	Undetermined	Pre-contact Aboriginal?	1990	6 artifacts
AiHi-4	-	Undetermined	Pre-contact Aboriginal	1990	11 lithics
AiHj-2	-	Findspot	Pre-contact Aboriginal	1987	2 pieces of chipping detritus, 5 metres apart
AiHj-3	-	2 Findspots	Pre-contact Aboriginal	1985	1 graver, 1 core



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<b>Borden Number</b>	<b>Site Name</b>	<b>Site Type</b>	<b>Culture</b>	<b>Licence Year</b>	<b>Found</b>
AiHj-4	Sarepta Tavern/Post office	Historic Commercial	Euro-Canadian	1992	Large amount of Euro-Canadian artifacts, hand-pump water well
AhHk-100	-	? and Campsite	Multi-component, Euro-Canadian and Pre-contact Aboriginal, Late Archaic	2004	42 historic Euro-Canadian artifacts, 2072 Pre-contact Aboriginal artifacts
AhHk-101	-	Campsite	Pre-contact Aboriginal, Middle Woodland and Late Woodland	2004	1184 artifacts
AhHk-102	-	Campsite	Pre-contact Aboriginal, Early Archaic and Woodland	2004	573 artifacts
AhHk-103	-	Campsite	Pre-contact Aboriginal, Late Woodland	2004	1231 artifacts
AhHk-104	-	Campsite	Pre-contact Aboriginal, Middle Archaic and Late Archaic	2004	1122 artifacts
AhHk-105	-	Lithic Scatter	Pre-contact Aboriginal, Late Archaic	2004	919 artifacts
AhHk-109	-	Camp	Pre-contact Aboriginal, Late Woodland	2004	260 artifacts
AhHk-111	-	Undetermined	Pre-contact Aboriginal, Early Woodland and Middle Woodland	2004	239 artifacts
AhHk-99	-	Scatter	Multi-component, Euro-Canadian and Pre-contact Aboriginal	2003	2 historic Euro-Canadian artifacts, 1 Pre-contact Aboriginal artifact



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The following two reports document work within 50 metres of the study area (Robert von Bitter, personal communication, June 1, 2012 and May 18, 2012; Government of Ontario n.d.):

Timmins Martelle Heritage Consultants

2012 *REVISED: Stage 2 Archaeological Assessment (Partial) Class Environmental Assessment, Lake Huron Primary Water Supply System, Lake Huron Transmission Main Twinning Project.* Report on file with the Ontario Ministry of Tourism, Culture and Sport, Toronto.

Wilson, Jim

2003 *A. A. (Stages 1-2) Exeter Sewer System Expansion Class EA, Town of Exeter, Municipality of South Huron, Huron County, Ontario.* Report on file with the Ontario Ministry of Tourism, Culture and Sport, Toronto.

Table 3 provides a general outline of the culture history of the Huron County, based on chapters in Ellis and Ferris (1990). Previous archaeological assessments and research surveys have demonstrated that Huron County was extensively utilized by pre-contact Aboriginal people.

**Table 3: Cultural Chronology for the Huron County Area**

Period	Characteristics	Time	Comments
Early Paleo-Indian	Fluted Projectiles	9000 - 8400 B.C.	spruce parkland/caribou hunters
Late Paleo-Indian	Hi-Lo Projectiles	8400 - 8000B.C.	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000 - 6000 B.C.	slow population growth
Middle Archaic	Brewerton-like points	6000 - 2500 B.C.	environment similar to present
Late Archaic	Lamoka (narrow points)	2000 - 1800 B.C.	increasing site size
	Broadpoints	1800 - 1500 B.C.	large chipped lithic tools
	Small Points	1500 - 1100B.C.	introduction of bow hunting
Terminal Archaic	Hind Points	1100 - 950 B.C.	emergence of true cemeteries
Early Woodland	Meadowood Points	950 - 400 B.C.	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 B.C. - A.D.500	increased sedentism
	Princess Point	A.D. 550 - 900	introduction of corn
Late Woodland	Early Ontario Iroquoian	A.D. 900 - 1300	emergence of agricultural villages
	Middle Ontario Iroquoian	A.D. 1300 - 1400	long longhouses (100m +)
	Late Ontario Iroquoian	A.D. 1400 - 1650	tribal warfare and displacement
Contact Aboriginal	Various Algonkian Groups	A.D. 1700 - 1875	early written records and treaties



Period	Characteristics	Time	Comments
Historic	Euro-Canadian	A.D. 1796 - present	European settlement

### 3.3 Post-contact Aboriginal Archaeological Resources and Surveys

The post-contact Aboriginal occupation of Southern Ontario was heavily influenced by the dispersal of various Iroquoian-speaking peoples by the New York State Iroquois and the subsequent arrival of Algonkian-speaking groups from northern Ontario at the end of the 17<sup>th</sup> century and beginning of the 18<sup>th</sup> century (Schmalz 1991). The nature of their settlement size, population distribution and material culture shifted as European settlers encroached upon their territory. However, despite this shift, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought” (Ferris 2009:114). As a result, First Nations of Southern Ontario have left behind archaeologically significant resources throughout Southern Ontario which show continuity with past peoples, even if they have not been recorded in historical Euro-Canadian documentation.

However, the study area first enters the historic record when the Ojibwa and Chippewa First Nations entered into Treaty 27½,

*...being an agreement made at Amherstburg in the Western District of the Province of Upper Canada on the 26th of April, 1825, between James Givens, Esquire, Superintendent of Indian Affairs, on behalf of His Majesty King George the Fourth and the Chiefs and Principal Men of the part of the Chippewa Nation of Indians, inhabiting and claiming the tract of land .... Wawanosh Township in the County of Huron was named after Way-way-nosh the principal Chief of the Band making this Treaty.*

(Morris 1943:26-27)

While it is difficult to exactly delineate treaty boundaries today, Figure 3 provides an approximate outline of the limits of Treaty Number 27½.

Historical Euro-Canadian records also mention that while the Huron Tract was being surveyed, First Nations guides were often employed because of their knowledge of the land. These historical mentions claim that First Nations communities often travelled through Huron County for hunting and gathering but never stayed very long (Hay Township Book Committee (HTBC) 1996:3). They also were known to help settlers clear their land and open roads and aid in advising women on medicinal herbs and medicines for the sick (HTBC 1996:3). Additionally, there is further documentation of groups along the Ausable River just to the west of the study area. In 1833, Presbyterian minister, Reverend J. Carruthers, met with a local First Nations group led by Omeok plus there were additional oral traditions of two battles that had been fought between Aboriginal communities within the area (Mack 1992:244-245). Despite the presence of post-contact Aboriginal communities within the study area, no archaeological sites of this affiliation have been registered with the ASDB for this area (Robert von Bitter, personal communication, August 26, 2011; Government of Ontario n.d.).



**LEGEND**

- Treaty Boundary
  - Approximate Location of Study Area
- Treaty No. 381, Volume 3 (May 9th, 1761); Mississauga and Chippewa  
 Crawford's Purchase (Oct. 9th, 1783); Algonquin and Iroquois  
 Crawford's Purchase (Oct. 9th, 1783); Mississauga  
 Crawford's Purchase (1784, 1787, 1788); Mississauga  
 John Collins' Purchase (1785); Chippewa  
 Treaty No. 2 (May 19th, 1790); Odawa, Chippewa, Potawatomi, and Huron  
 Treaty No. 3 (Dec. 2nd, 1792); Mississauga  
 Haldimand Tract: from the Crown to the Mohawk (1793)  
 Xenodicea: from the Crown to the Mohawk (1793)  
 Treaty No. 5 (May 22nd, 1796); from the Crown to Joseph Brant  
 Treaty No. 6 (Sep. 7th, 1796); Chippewa  
 Treaty No. 7 (Sep. 7th, 1796); Chippewa  
 Treaty No. 13 (Aug. 1st, 1805); Mississauga  
 Treaty No. 13A (Aug. 2nd, 1805); Mississauga  
 Treaty No. 16 (Nov. 18th, 1813); Chippewa  
 Treaty No. 17 (Oct. 17th, 1813); Chippewa  
 Treaty No. 18 (Oct. 28th, 1813); Chippewa  
 Treaty No. 19 (Oct. 28th, 1813); Chippewa  
 Treaty No. 20 (Nov. 9th, 1818); Chippewa  
 Treaty No. 21 (Mar. 9th, 1819); Chippewa  
 Treaty No. 27 (Mar. 31st, 1819); Mississauga  
 Treaty No. 27 1/2 (Apr. 25th, 1825); Ojibwa and Chippewa  
 Treaty No. 45 (Aug. 13th, 1833); Wawatod or Huron  
 Treaty No. 45 1/2 (Aug. 9th, 1836); Chippewa and Odawa  
 Treaty No. 57 (Jun. 1st, 1847); Sauguen  
 Treaty No. 61 (Robinson Treaty) (Sep. 9th, 1850); Ojibwa  
 Treaty No. 72 (Oct. 30th, 1854); Chippewa  
 Treaty No. 82 (Feb. 9th, 1857); Chippewa  
 Williams Treaty (Oct. 31st and Nov. 15th, 1823); Chippewa and Mississauga  
 Williams Treaty (Oct. 31st, 1823); Chippewa

**NOTES**

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ IN CONJUNCTION WITH ACCOMPANYING TEXT. ALL LOCATIONS ARE APPROXIMATE.

**REFERENCE**

1. Base Data - MNR NRVS, obtained 2004, CANMAP V2006.4
2. Treaty Boundary - Approximate Treaty Boundary was created by Goshen Wind Energy Centre, in consultation with the Ministry of Natural Resources, Ontario, and the Ministry of Lands and Forests, Toronto.
3. MORRIS, J.L. 1943. Indians Of Ontario. Reprinted 1984. Department Of Lands And Forests, Toronto.
4. Produced by Golder Associates Ltd under license from Ontario Ministry of Natural Resources. © Queens Printer 2008
5. Projection: Transverse Mercator Datum: NAD 83 Coordinate System: UTM Zone 17

PROJECT: STAGE 1 ARCHAEOLOGICAL ASSESSMENT  
 GOSHEN WIND ENERGY CENTRE  
 HURON COUNTY, ONTARIO

TITLE: TREATY BOUNDARIES BASED ON MORRIS 1943



PROJECT No.	101151	DATE	2008-03-20	FILE No.	101151001-1000-0000
DWG No.	1	DATE	2008-03-20	SCALE	1:25,000 (REV)
CHECKED	SWA	DATE	2008-03-20		
DATE					

FIGURE 3



## **3.4 Historic Euro-Canadian Archaeological Resources and Surveys**

### **3.4.1 Survey and Early Settlement**

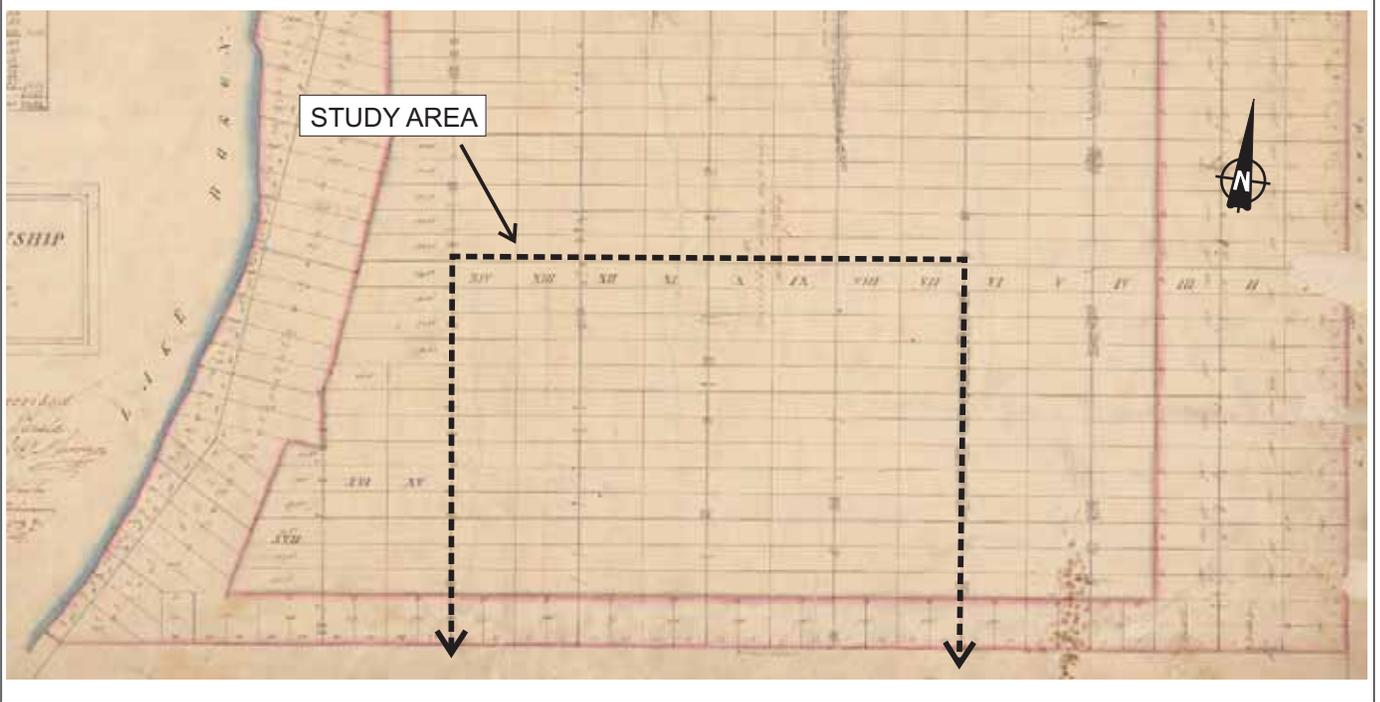
The Euro-Canadian creation and settlement of Huron County was largely due to the Canada Company (itself formed in 1824) purchasing a large parcel of land known as the Huron Tract and preparing it for settlement by British settlers. The townships of Hay and Stephen in Huron County were both included in the Huron Tract purchase. The Huron Tract was mostly surveyed by Deputy Provincial Surveyor John McDonald on behalf of the Canada Company. All three townships within the study area were surveyed by John McDonald in the 1830s and are discussed separately below.

#### **3.4.1.1 Hay Township**

Hay Township was one of nine townships that were initially part of the Huron Tract and that would become a portion of present-day Huron County (Scott 1966:140). John McDonald (McDonald 1835) surveyed the majority of the township (Figure 4) in 100 acre lots, where the concession roads and side roads are one and one quarter miles apart (HTBC 1996:6). The only exception to the 100-acre lots survey is the Lake Range Concessions East and West (HTBC 1996:6). The Canada Company soon realized after their purchase of land in Hay Township that it was rather difficult to clear and settle on these properties. They then decided to lease the land for five or ten year periods to immigrants who had little or no money (HTBC 1996:4).

The first wave of Euro-Canadian settlement began with the arrival of British families in 1833. The first two settlers were John C. Hillock (or Hullock) and Andrew McConnell (HTBC 1996:21). The second stage was the settlement of French-Canadians. This occurred in the 1840s after French-Canadian loggers who had temporarily come to Hay Township for work returned with their families to settle. This group was best known most for its settlement at St. Josephs (Scott 1966:58). They were the first loggers to come to the township in the 1830s who later settled permanently in the 1840s (Scott 1966:58). The third stage was the arrival of German immigrants in the 1850s. They settled mostly along the eastern and western borders of the township (HTBC 1996:30).

A good resource for identifying potential historic Euro-Canadian archaeological sites is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden and Co. 1879). The Hay Township map provides both the names of the landowners and the majority of structures as they were located on properties in the last half of the 19<sup>th</sup> century (Figure 5). In addition to houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills and schools. Not all are clearly labelled on the map. Table 4 lists those lots that hold a structure other than a house. Even though locations are only approximate on these maps, they do give an idea of potential for significant archaeological historic remains that could be impacted within the study area. Typically these locations no longer exhibit any visible evidence of their former structure and if they are to be impacted by a wind turbine placement the location would need to be archaeologically assessed to see if there are any archaeological remains.



**LEGEND**

 STUDY AREA

**REFERENCE**

DRAWING BASED ON  
 McDONALD, JOHN  
 1837a HAY TOWNSHIP. MAP ON FILE WITH THE  
 MINISTRY OF NATURAL RESOURCES CROWN LAND  
 SURVEY RECORDS OFFICE, PETERBOROUGH,  
 ONTARIO

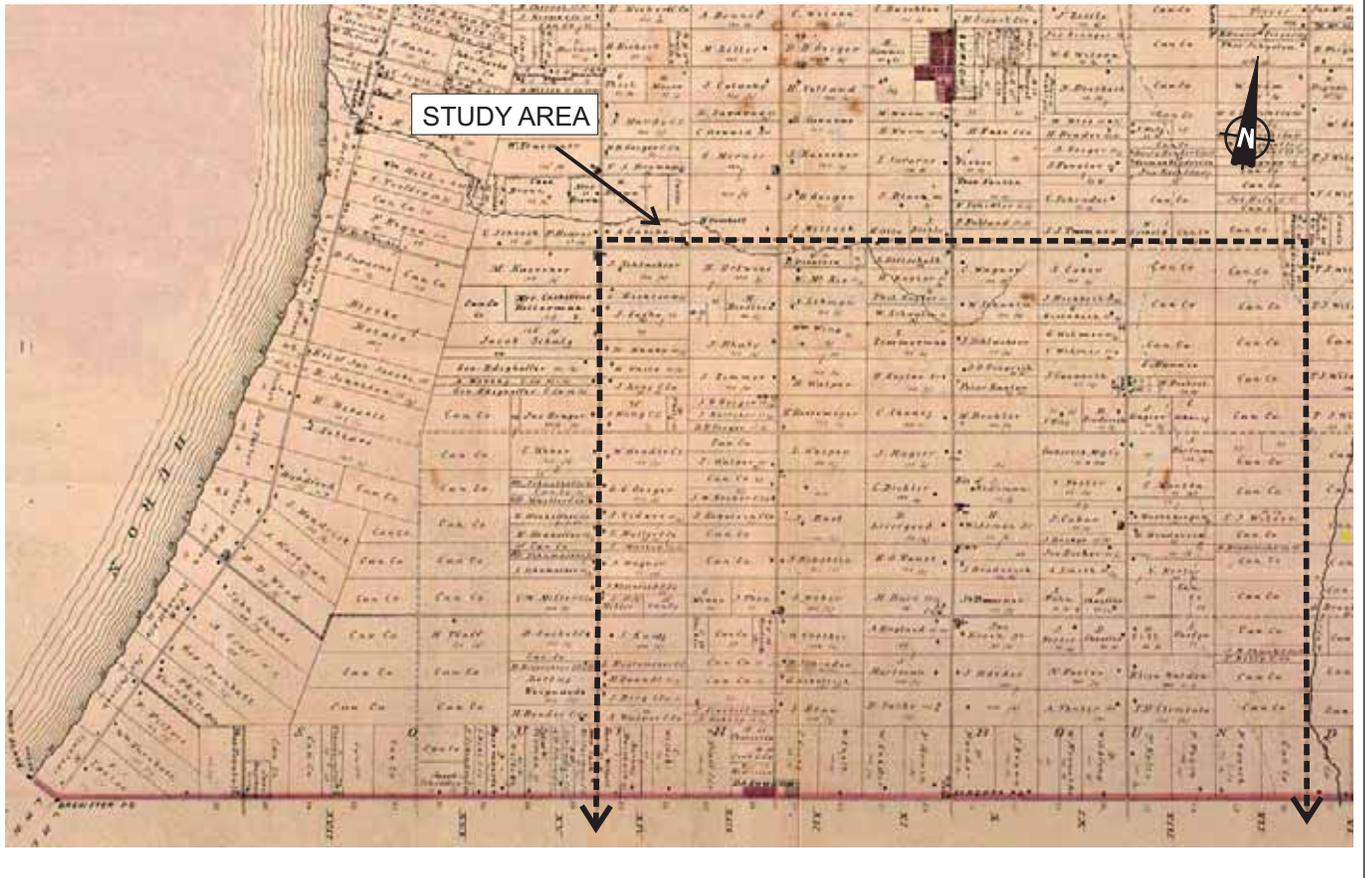
**NOTES**

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ  
 IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>	
TITLE		<b>A PORTION OF THE STUDY AREA ON A PORTION OF THE 1837 MAP OF HAY TOWNSHIP</b>	
PROJECT No. 10-1151-0201-1000-1200		FILE No. 1011510201-1000-1200-R01004	
SCALE		NOT TO SCALE REV.	
CADD SWJM MAY 30/12		<b>FIGURE 4</b>	
CHECK			





**LEGEND**

STUDY AREA

**REFERENCE**

DRAWING BASED ON  
 BELDEN, H. AND CO.  
 1879 ILLUSTRATED HISTORICAL ATLAS OF THE COUNTY OF  
 HURON, ONT. 1972 REPRINT. ROSS CUMMING,  
 OWEN SOUND, ONTARIO.

**NOTES**

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PROJECT		<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>	
TITLE		<b>A PORTION OF THE STUDY AREA ON A PORTION OF THE 1879 MAP OF HAY TOWNSHIP</b>	
PROJECT No. 10-1151-0201-1000-1200		FILE No. 1011510201-1000-1200-R01005	
CADD SWJM MAY 30/12		SCALE NOT TO SCALE REV.	
CHECK		<b>FIGURE 5</b>	





**Table 4: Historic Properties with Potentially Significant Structures According to the 1879 Map of Hay Township in the *Illustrated Historical Atlas of the County of Huron***

Structure	Lot	Concession	Status
Blacksmith	12	8	No longer standing
School House	8	9	No longer standing
Saw Mill	12	9	No longer standing
Saw Mill	12	9	No longer standing
Cemetery	13	9	Still existing
Church	5	10	No longer standing
Blacksmith	7	10	No longer standing
Church	8 and 9	10	No longer standing
Cemetery	8 and 9	10	Still existing
School House	6	12	Still standing
Cemetery	9	12	Still existing
School House	18	13	No longer standing, in its place is the Zurich United Church and Cemetery as well as St. Boniface Cemetery
Church	15	15	No longer standing
School House	18	15	1897 School House at location now
Saw Mill	33	SB	No longer standing
Saw Mill	12	Lake Road East	No longer standing

### Dashwood

In the early 1850s, Absolom and Noah Fried opened a saw mill and named the resulting community Friedsburg. The community was later named Dashwood (HTBC 1996:92) after Noah Fried opened a post office in 1872. In the later 19<sup>th</sup> century the community had a hotel, a blacksmith shop, a butcher shop, a harness shop, a carriage shop, a general store, a shoemaker, a tailor shop and a furniture store in the eastern portion of the village plus another hotel, a general store, a bakery, a creamery, a barber shop and other various shops in the western portion of the village (HTBC 1996:92). Throughout the years the community had many organizations and committees but the once bustling community is no longer and all that remains are a few small businesses and stores with some of the old hotels and stores having been converted into apartments (HTBC 1996:94). Plate 2 shows a streetscape of Dashwood of today. Given the abandonment and removal of former village buildings over time as the settlement contracted, significant archaeological resources could exist.



*Plate 2: Streetscape, Dashwood, Facing East*



### **Johnston's Mills/St. Joseph**

Johnston's Mills is located on Lot 17, Lake Road Concession West, Hay Township (Figure 5). The first post office opened in 1853 by Moses Johnston, who was a mill owner (HTBC 1996:78). The local school house, S.S. #11, opened on Lot 12, Lake Road Concession West and Lakeview Church was built just south of the school house on Lot 13, Lake Road Concession West. Both buildings were closed in the late 1890s (HTBC 1996:79). The church and the school house are no longer standing and therefore there is potential for archaeological remains to be found in those locations.

There was also a large French-Canadian presence since the 1840s, but mostly along the lake shore outside of the study area (Scott 1966:58). Immediately north of Johnston's Mills the community of Lakeview was planned. Although it was registered in Goderich in 1857 it was never developed past the buildings that already existed in the area (St. Joseph Historical Society 2009). In 1897, Johnston's Mills and Lakeview were incorporated as part of the proposed city of St. Joseph (HTBC 1996:79). By 1903, St. Joseph's developer, Narcisse Cantin, had planned a community that had grown to a population of 300 (St. Joseph Historical Society 2009). Schemes to position the city as a waterfront or railway hub never came to fruition and a number of buildings were torn down in the 1920s (St. Joseph Historical Society 2009). It is still referred to today as the "city that never was" (HTBC 1996:79). Although a majority of the present day community lies outside the study area, given the contraction of St. Joseph in the last century and the presence of Johnston's Mills in the late 19<sup>th</sup> century, significant archaeological resources could exist.



## **Sarepta**

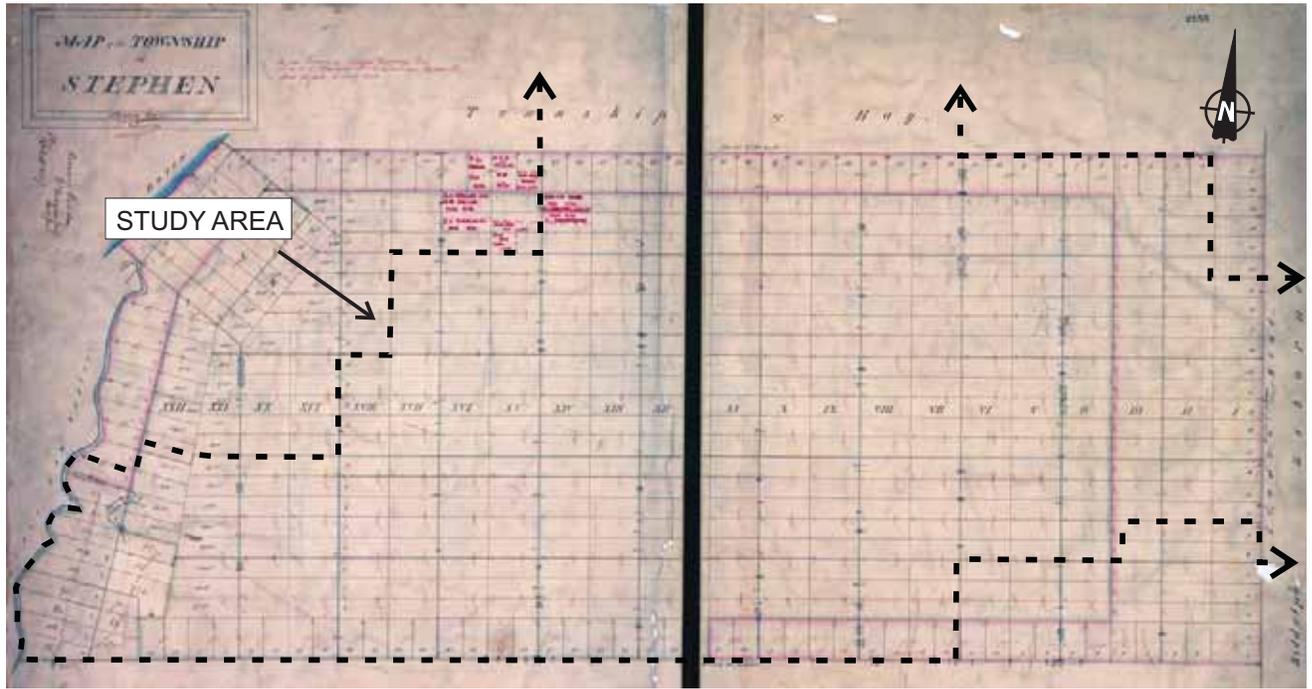
Sarepta is located just east of Dashwood on Concessions 10 and 11, Hay Township (Figure 5). There were only two residents in the early 1860s, James Balkwill and Christian Haist (HTBC 1996:94). The post office opened in 1865. William Reynolds was given the position of postmaster as a reward for his service in the Crimean War. Reynolds later built a hotel and moved the post office there. The post office was in operation in the hotel until 1914. The hotel closed and then became a seed cleaning business run by Horatio Reynolds, son of William Reynolds (HTBC 1996:94). This structure existed until 1958 when the building was purchased and demolished because of highway construction (HTBC 1996:94). No signs of businesses remain in Sarepta today. Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist. Archaeological resources have previously been identified related to the Sarepta Tavern/Post Office (AiHj-4) (Robert von Bitter, personal communication, August 26, 2011; Government of Ontario n.d.).

## **Zurich**

The village of Zurich is located on Lots 20 and 21, Concessions 10 and 11, Hay Township (Figure 5). Zurich's founder Frederick Knell resided on Concession 11, Lot 21 and opened a post office which ran from 1856 until 1864. He also ran the first general store in Zurich. Knell also opened Zurich's grist mill and saw mill on a property parcel called "the Mill Survey" (HTBC 1996:95). By 1863, Zurich was home to such businesses as a blacksmith shop, a wagon maker, a cabinet making shop, a haberdashery, a book seller, hotels, mills, a tailor, a carpentry shop and many others (HTBC 1996:95). Zurich is still a business oriented village with a few shops, banks and restaurants (Plate 3), but has contracted in size from a maximum population of approximately 300 at the beginning of the 20<sup>th</sup> century. Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

### **3.4.1.2 Stephen Township**

Stephen Township was one of nine townships that were initially part of the Huron Tract and that would become a portion of present-day Huron County (Scott 1966:140). The township was surveyed by John McDonald in 1837 using the 1000 acre section system (Figure 6). The Ausable River hindered settlement in the western portion of the study area until Euro- Canadian settlers interfered with its natural course (Scott 1966:178-179). The soil of this area was generally very sandy and not ideal for farming however it was ideal for pine trees which attracted many French Canadian lumbermen to the area (Scott 1966:179). After the land was cleared, farming gained a foothold and is still the main land use within the area today. The first known settler in the township was James Willis and his wife who arrived in 1831 (Scott 1966:181). There were many small and a few larger communities throughout the township; those that are within the study area will be discussed in greater detail below.



**LEGEND**

 STUDY AREA

**REFERENCE**

DRAWING BASED ON  
 McDONALD, JOHN  
 1837b STEPHEN TOWNSHIP. MAP ON FILE WITH THE  
 MINISTRY OF NATURAL RESOURCES CROWN LAND  
 SURVEY RECORDS OFFICE, PETERBOROUGH,  
 ONTARIO

**NOTES**

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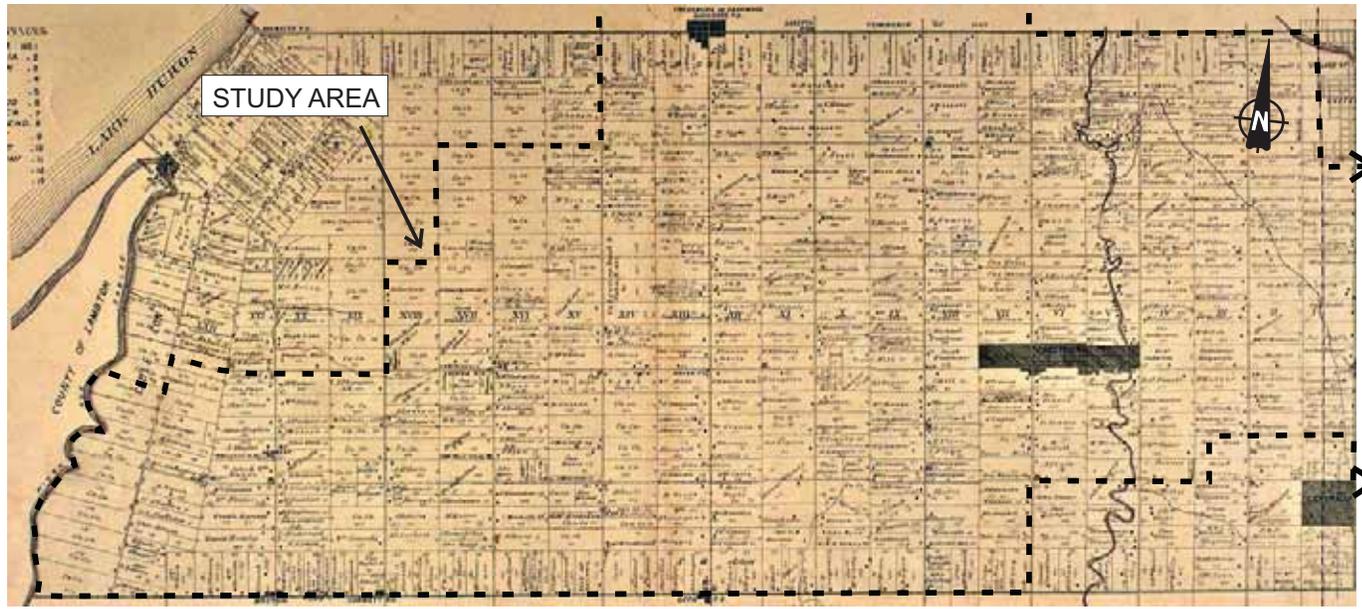
PROJECT		<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>	
TITLE		<b>A PORTION OF THE STUDY AREA ON THE 1837 MAP OF STEPHEN TOWNSHIP</b>	
PROJECT No. 10-1151-0201-1000-1200		FILE No. 1011510201-1000-1200-R01006	
SCALE		NOT TO SCALE REV.	
CADD		SWJM	MAY 30/12
CHECK			
		<b>FIGURE 6</b>	



*Plate 3: Streetscape, Zurich, Facing North*



A good resource for identifying potential historic Euro-Canadian archaeological sites is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden and Co. 1879). The Stephen Township map provides both the names of the landowners and the majority of structures as they were located on properties in the last half of the 19<sup>th</sup> century (Figure 7). In addition to houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills and schools. Not all are clearly labelled on the map. Table 5 lists those lots that hold a structure other than a house. Even though locations are only approximate on these maps, they do give an idea of potential for significant archaeological historic remains that could be impacted within the study area. Typically these locations no longer exhibit any visible evidence of their former structure and if they are to be impacted by a wind turbine placement the location would need to be archaeologically assessed to see if there are any archaeological remains.



**LEGEND**

 STUDY AREA

**REFERENCE**

DRAWING BASED ON  
 BELDEN, H. AND CO.  
 1879 ILLUSTRATED HISTORICAL ATLAS OF THE COUNTY OF  
 HURON, ONT. 1972 REPRINT. ROSS CUMMING,  
 OWEN SOUND, ONTARIO.

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PROJECT		<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>		FILE No.	1011510201-1000-1200-R01007
TITLE		<b>A PORTION OF THE STUDY AREA ON THE 1879 MAP OF STEPHEN TOWNSHIP</b>			
		PROJECT No.		10-1151-0201-1000-1200	
		SCALE		NOT TO SCALE REV.	
		CADD	SWJM	MAY 30/12	
CHECK					



**STAGE 1 ARCHAEOLOGICAL ASSESSMENT  
GOSHEN WIND ENERGY CENTRE, HURON COUNTY, ON**

**Table 5: Historic Properties with Potentially Significant Structures According to the 1879 Map of Stephen Township in the *Illustrated Historical Atlas of the County of Huron***

Structure	Lot	Concession	Status
Saw Mill	6	8	No longer standing
Church	8	8	No longer standing, plaque at location
Church	20	8	No longer standing
School House	21	8	No longer standing
Cemetery	21	8	No longer remains
School House	11	11	No longer standing
School House	20	14	1885 S.E.C. No.11 at location
Saw Mill	3	14	No longer standing
Saw Mill	11	16	No longer standing
School House	7	17	No longer standing
School House	6	21	No longer standing
Saw Mill	13	22	No longer standing
Casselmans Hall	13	22	No longer standing
Saw Mill	25	North Boundary	No longer standing
Church	1	Sable	No longer standing
Church	24	South Boundary	Still standing
Cemetery	24	South Boundary	Existing
Church	40	South Boundary	Newer church in its place

**Corbett**

Corbett is located on the border of Stephen Township, Lambton County and McGillivray Township, Middlesex County (Figure 7). It is located on Lot 36, South Boundary Concession. Corbett was named after John Corbett, a prominent figure in Middlesex County, who moved to the area in 1840 (Mack 1992:240). Corbett owned a saw mill, a grist mill and the village general store (Mack 1992:240). In the 1860s, J.E. McPherson had a thriving carriage business. The Corbett Hotel and a two storey blacksmith shop were also built in Corbett (Mack 1992:240). In 1888, the Corbett Cheese and Dairy Company was founded and it operated until it burned down in 1938 (Mack 1992:240). Corbett has diminished in size since the late 1890s (Plate 4). Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

**Crediton**

Crediton was originally called Sweet’s Corners because William Sweet was the first settler at this location (Mack 1992:214). In 1850, Crediton became the second community in the township to have a school house (Mack 1992:14). By the early 1860s, Crediton had three blacksmiths, a cabinet maker, bricklayers, wagon makers, boot and shoe makers, a doctor and an inn keeper. The first post office opened in 1861 (Mack 1992:215).



*Plate 4: Streetscape, Corbett, the Only Remaining Store in Corbett, Facing North*



Brick and tile making as well as the flax industry led to prosperity for Crediton during the last decades of the 19<sup>th</sup> century. With only a few buildings and homes remaining from the 19<sup>th</sup> century, Crediton has decreased in size in the last century (Plate 5). Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

### **Grand Bend**

Grand Bend is located on the bend of the Ausable River and lies outside the western edge of the study area (Figure 7). The earliest Euro-Canadian settler of the area was Richard Brewster who came in the 1830s and built a saw mill. Brewster constructed a pier and was the lumber supplier for the Canada Company for years to follow (Mack 1992:245-246). Other early settlers to the area were the MacArthur family, the Fallis family, the Armstrong family and the Mollard family (Mack 1992:246). In the 1860s, other businesses started opening in the village and there was another saw mill built, a blacksmith, a hotel, flour and seed mill and a general store (Mack 1992:246-47). Towards the turn of the century more businesses came and flourished in the area, as well as schools and churches (Mack 1992:247). It was also in these later years of the 19<sup>th</sup> century that Grand Bend became a popular summer destination as it continues to be in the present day. Although Grand Bend is outside of the study area to the west, archaeological resources related to the community's 19<sup>th</sup> century growth and development could be present within the study area.



*Plate 5: Streetscape, Crediton, Facing West*



### **Greenway/Boston**

Greenway is located on the border of Stephen Township, Lambton County and McGillivray Township, Middlesex County (Figure 7). The community of Greenway was originally called Boston (Figure 7) but was renamed in honour of Thomas Greenway. He was a former resident of Stephen Township and went on to be a prominent figure in the Manitoba government (Mack 1992:242). The first postmaster of Boston was W.J. Wilson (Mack 1992:242). He also built the village's first store (Mack 1992:242). Other early businesses in the village were another store, a chopping mill, a shingle mill, a blacksmith shop, a woodworking shop, a carpenter and a shoemaker (Mack 1992:242). Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

### **Harpley**

Harpley was a very small settlement between Concessions 20 and 21 (Figure 7). It once had two lumber mills and a post office (Mack 1992:245). Since Harpley was in close proximity to Grand Bend, it was overshadowed by Grand Bend's development and so it no longer exists. Given the ephemeral nature of this settlement, significant archaeological resources could exist where the lumber mills had been located.



### **Khiva**

Khiva is located just west of Crediton and was on the popular route from Crediton to Grand Bend (Figure 7). William Holt built a popular tavern in 1867 and in 1883 it was moved to the north side of the road where a larger hotel was erected (Mack 1992:238). In the late 1870s, a blacksmith shop opened (Mack 1992:232). After transportation methods changed the hotel's business declined and eventually had to be shut down (Mack 1992:233). There is no evidence of Khiva today except for its name on the map. Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

### **Mount Carmel/Offa**

Mount Carmel is located on the border of Stephen Township, Lambton County and McGillivray Township, Middlesex County (Figure 7). This settlement was first known as Cranford, then Offa, then Limerick and finally Mount Carmel (Mack 1992:238). The first settlers on Mount Carmel came in 1835, most of them being Irish immigrants (Mack 1992:236). The first post office opened in 1867 (Mack 1992:238). In the 1860s, the community prospered with three hotels, a general store, a shoemaker, two blacksmith shops, two doctor's offices, a dressmaker shop and a hat shop (Mack 1992:238). Our Lady of Mount Carmel Church was built in 1887 (Plate 6), which still remains today (Mack 1992:238). The village of Mount Carmel is still a substantial village today with a school, church, many businesses and homes. However, buildings have been removed over time and so significant archaeological resources could exist within the vicinity of Mount Carmel.

*Plate 6: Streetscape, Mount Carmel, Our Lady of Mount Carmel Church and Cemetery, Facing West*





## Shipka

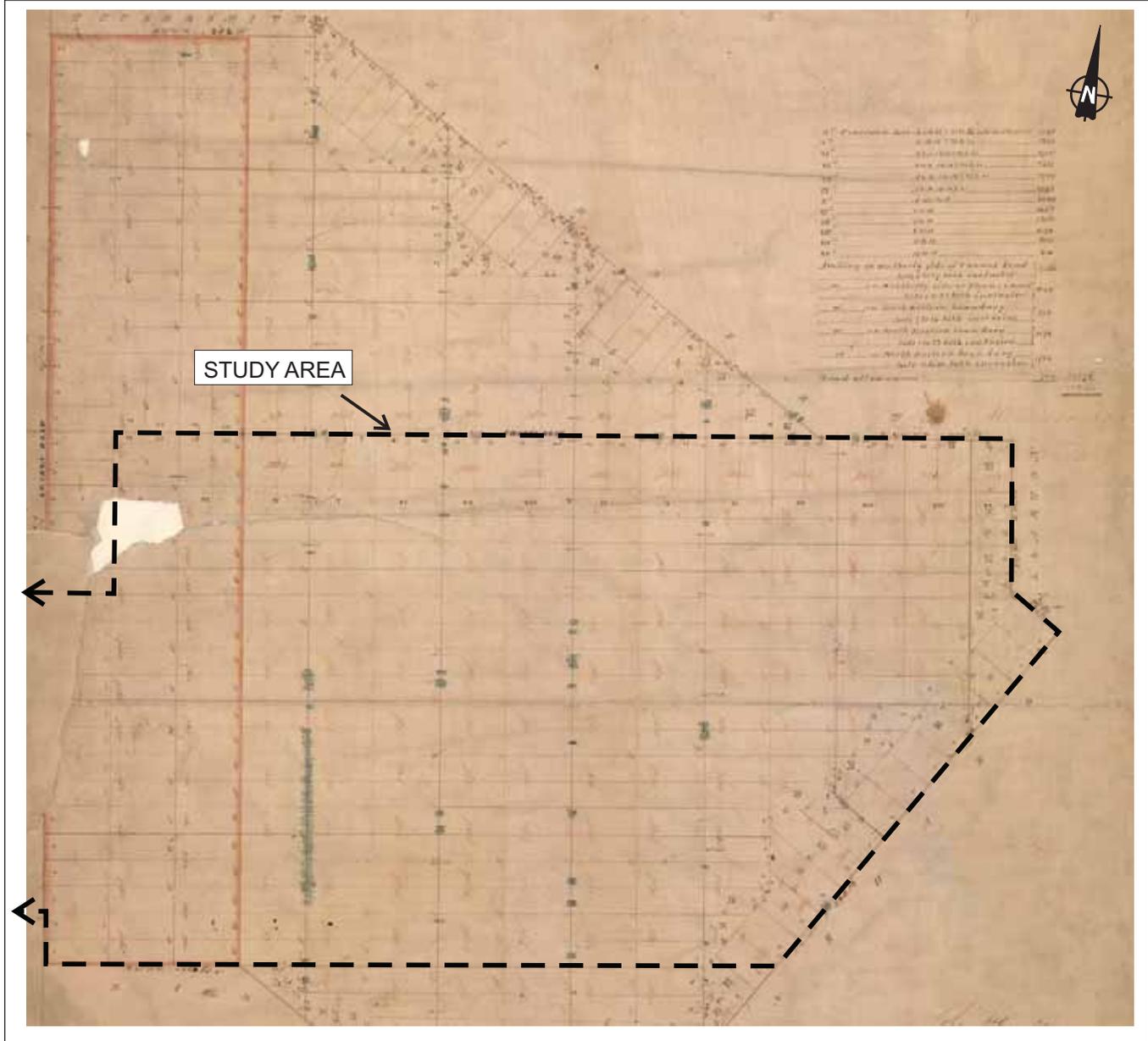
In 1876 Charles Eilber built a saw mill just west of Khiva in what would be known as Shipka (Mack 1992:233). Shipka was originally called Slabtown (Mack 1992:234). Three more saw mills opened in the area as well as a flax mill (Mack 1992:234). In the 1880s, Shipka had two stores, a hall, a hotel, an apple-butter factory, a blacksmith shop, saw mills, a flax mill, a harness shop, a tailor, a shoemaker and a nut and bolt factory (Mack 1992:234). Only homes still remain in Shipka today (Plate 7). Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

*Plate 7: Streetscape, Shipka, Facing Northwest*



### 3.4.1.3 Usborne Township

Usborne Township with its irregular shape was a challenge to survey for the Canada Company surveyors (Belden and Co. 1879:xx; Scott 1966:141) (Figure 8). The township has been called “one of the fairest sections” of Ontario (Belden and Co. 1879:xxi). Usborne was one of nine townships that were initially part of the Huron Tract and that would become a portion of present-day Huron County (Scott 1966:140). The township was named for Henry Usborne, an early director of the Canada Company, who was later also influential in the Canadian lumber industry (Ontario GenWeb 2012; Scott 1966:166). Usborne was united with Stephen and Hay Townships, also former Canada Company lands that remained within Huron County, and did not become fully independent until 1852 (Scott 1966:162, 168; cf. Belden and Co. 1979:xx). Until 1845, there were under 300 inhabitants in the township. Wheat, turnips, oats, potatoes, peas and hay were the main crops and sheep, pigs and cows were the main livestock kept (Ontario GenWeb 2012).



**LEGEND**

 STUDY AREA

**REFERENCE**

DRAWING BASED ON  
 McDONALD, JOHN  
 1839 *MAP OF THE TOWNSHIP OF USBORNE.*  
 MAP ON FILE WITH THE MINISTRY OF NATURAL  
 RESOURCES CROWN LAND SURVEY RECORDS  
 OFFICE, PETERBOROUGH, CANADA.

**NOTES**

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ  
 IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

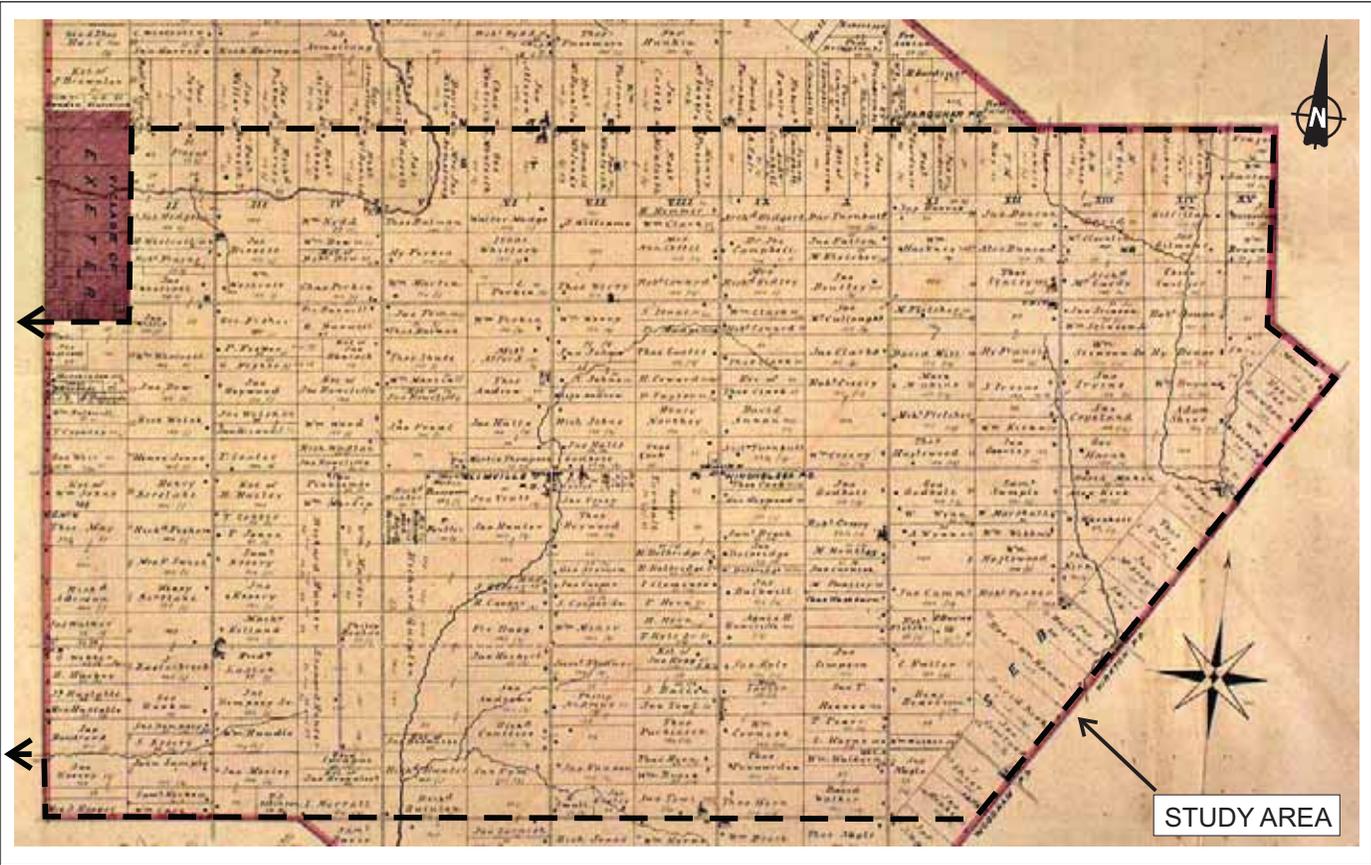
PROJECT		<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>	
TITLE		<b>A PORTION OF THE STUDY AREA ON A PORTION OF THE 1839 MAP OF USBORNE TOWNSHIP</b>	
PROJECT No. 10-1151-0201-1000-1200		FILE No. 1011510201-1000-1200-R01008	
CADD SWJM MAY 30/12		SCALE NOT TO SCALE REV.	
CHECK		<b>FIGURE 8</b>	





The first Euro-Canadian settlement in Usborne took place south of Exeter along the London Road (Scott 1966:62). The first settler was probably William May from England who arrived in 1832 and who was followed by Thomas Lamb, settling approximately five kilometres north of Exeter (Belden and Co. 1979:xx). Other settlement began in the Exeter area around this time as well (Wooden 1973:3-4). The hamlet of Devon, approximately five kilometres south of Exeter, developed after John Balkwill from Devonshire, England encouraged a small community to immigrate to Huron County (Ontario GenWeb 2012; Scott 1966:62, 167). Balkwill was William May's brother-in-law (Scott 1966:167). Balkwill had cleared four acres of land along the London Road in 1831 approximately two kilometres south of Exeter, but did not initially settle and returned to England to persuade his friends and relatives to join him (Scott 1966:62). The resulting influx into the area around the hamlet of Devon, flanking the London Road on the Usborne Township and Stephen Township sides, occurred mainly between 1833 and 1835 (Ontario GenWeb 2012). The Balkwill house was also known as the Devonshire Inn (Wooden 1973:4). As of 1835, a relative of Balkwill is listed as a constable and agent for the Canada Company for the township (Scott 1966:62, 167; cf. Ontario GenWeb 2012).

A good resource for identifying potential historic Euro-Canadian archaeological sites is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden and Co. 1879). The Usborne Township map provides both the names of the landowners and the majority of structures as they were located on properties in the last half of the 19<sup>th</sup> century (Figure 9). In addition to houses, the structures noted include brickyards, cemeteries (Plate 8), churches (Plate 9), hotels, manufactories, mills and schools. Not all are clearly labelled on the map. Table 6 lists those lots that hold a structure other than a house. Even though locations are only approximate on these maps, they do give an idea of potential for significant archaeological historic remains that could be impacted within the study area. Typically these locations no longer exhibit any visible evidence of their former structure and if they are to be impacted by a wind turbine placement the location would need to be archaeologically assessed to see if there are any archaeological remains.



**LEGEND**

 STUDY AREA

**REFERENCE**

DRAWING BASED ON  
 BELDEN, H. AND CO.  
 1879 ILLUSTRATED HISTORICAL ATLAS OF THE COUNTY OF  
 HURON, ONT. 1972 REPRINT. ROSS CUMMING,  
 OWEN SOUND, ONTARIO.

**NOTES**

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ  
 IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT				<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>			
TITLE				<b>A PORTION OF THE STUDY AREA ON A PORTION OF THE 1879 MAP OF STEPHEN TOWNSHIP</b>			
PROJECT No.		10-1151-0201-1000-1200		FILE No.		1011510201-1000-1200-R01009	
SCALE		NOT TO SCALE		REV.			
CADD	SWJM	MAY 30/12		<b>FIGURE 9</b>			
CHECK							





**STAGE 1 ARCHAEOLOGICAL ASSESSMENT  
GOSHEN WIND ENERGY CENTRE, HURON COUNTY, ON**

*Plate 8: Cemetery, No Longer Standing, Lot 16, Concession 2, Usborne Township, From Morrison Line, Facing Northwest*



*Plate 9: Church, No Longer Standing, Lot 10, Concession Abutting South Side of Thames Road, Usborne Township, From Elimville Line, Facing Northwest*





**Table 6: Historic Properties with Potentially Significant Structures According to the 1879 Map of Usborne Township in the *Illustrated Historical Atlas of the County of Huron***

Structure	Lot	Concession	Status
School House	17	3	No longer standing, S.S. No. 5 1901 in its place
Cemetery	16	2	No longer existing, plaque at location
Church and Cemetery	5	3	No longer standing, Eden Church closed 1910, plaque at location
School House	6	3	No longer standing
Church	10	Abutting South Side of Thames Road	No longer standing, foundation possibly visible
Church	10	7	No longer standing
Cemetery	10 and 10	6 and 7	Existing
School House	10	8	No longer standing, S.S. No. 6 1919 in its place
Church	1	8	Still standing, Zion United Church, addition to front 1956
Church	9	10	No longer standing
Church	16	12	No longer standing
School House	15	12	No longer standing
Church and Cemetery	5	Abutting South East Boundary	No longer standing

## Elimville

Elimville (Plate 10) was considered the municipal capital of Usborne in 1879 (Belden and Co. 1979:xxi) (Figure 9). At that time, it comprised a hotel, two stores, various mechanics' shops, two churches, a Union Sunday School built of brick and a brick Town Hall (Belden and Co. 1979:xxi; Scott 1966:170). Postmaster Henry Taylor was chosen for the village in 1869 (Scott 1966:170). Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.



*Plate 10: Streetscape, Elimville, Facing South*



## **Exeter**

The Town of Exeter straddles both Stephen and Usborne Townships (Figure 9). The first reference to Exeter was made in 1833 by Rev. William Proudfoot in his diary (Wooden 1973:2). Rev. Proudfoot described the area as having excellent soil (Wooden 1973:2). The forest was made up of maple, elm, oak, ironwood and black ash. The first settlers in Exeter were James Willis and William McConnell. Their dwellings had been constructed along the London Road, still a trail at that time. Rev. Proudfoot stayed overnight at McConnell's, also an inn and tavern, although reportedly did not think much of the hastily constructed dwelling (Wooden 1973:2). McConnell was a Canada Company contractor and was responsible for maintaining an approximately 32-kilometre stretch of the London Road between Clandeboye and Clinton and for employing his house as an inn. In 1833, McConnell also set up a saw mill, followed by a grist mill and dam in 1834. In the southeast part of Exeter on Lot 20, London Road Survey, James Willis and his wife Jane were some of the first Euro-Canadian settlers in the Huron Tract and first recorded in the Exeter area, arriving in 1832 (Wooden 1973:3). During these early years of settlement, wolves are reported to have carried off farm animals such as pigs and even venison roasting indoors (Wooden 1973:4). It was not until 1847 that further development occurred with Isaac Carling's general store and tannery (Wooden 1973:19), at a time when four log houses and the mills were the only structures in Exeter. In 1848, Joseph Acheson opened a boot and shoemakers shop on Main Street, although this burned down in 1865. In 1855, a postmaster for Exeter was named. By 1856, James Pickard had opened a large store, the third store in Exeter. A livery barn opened soon after (Wooden 1973:19). Although Exeter is not located within the study area, the study area skirts around the town and its influence would have been felt in the smaller communities in both Stephen and Usborne Townships and beyond.



### **Taunton/Farquhar**

Taunton was the first village in Usborne Township outside the Town of Exeter to have a post office established. Taunton was renamed Farquhar in 1862 (Scott 1966:169) (Figure 9). William Edmond, the postmaster, also ran a general store. The only other business at that time was a hotel with Davide Crawford as hotelier (Scott 1966:169; Wooden 1973:91). East of Farquhar, a cheese factory was established in the 1860s (Scott 1966:169). The County's first casualty insurance company, the Usborne and Hibbert Mutual Fire Insurance Company, was opened in the village in 1876 (Scott 1966:169). Farquhar was on one of the routes for travelling salesmen or 'commercial travelers', who would hire Thornton Baker, proprietor of a livery barn in Exeter, to run them from Exeter to Elimville, Winchelsea, Farquhar, Kirkton and Woodham (Wooden 1973:122). The livery was torn down in 1943 (Wooden 1973:122). Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

### **Winchelsea**

Winchelsea (Figure 9; Plate 11) is a small village one concession east of Elimville. A. Smith was chosen as postmaster for the village in 1863 (Scott 1966:170). Given the abandonment and removal of former village buildings over time, significant archaeological resources could exist.

*Plate 11: Streetscape, Winchelsea, Facing West*





### **3.4.2 Summary**

Euro-Canadian settlement extends back to the early 19<sup>th</sup> century within the study area. Each of the townships – Hay, Stephen and Usborne – retain evidence for the historic 19<sup>th</sup> century road grid and lot system. Larger settlements such as Grand Bend and Exeter, although outside the study area, are still vibrant communities today. Numerous communities within the study area have existed since the middle of the 19<sup>th</sup> century and have contracted over time in many cases. These contractions indicate that significant archaeological resources from abandoned structures could exist.



## **4.0 PROPERTY INSPECTION**

The study area was visually evaluated August 4, 2010 under archaeological consulting licence P001, issued to Jim Wilson, M.A., by the MTCS and on June 12, 2012 under archaeological consulting licence P218, issued to Scott Martin, Ph.D., by the MTCS. Figure 10 illustrates where each photograph was taken and if necessary which direction the photograph was taken within the study area. Visibility was excellent and the weather was partly cloudy but bright when the photographs were taken. The plates illustrate a typical woodlot in the study area (Plate 12), flat landscape typical of where turbines could be sited (Plates 13 and 14), a typical gently rolling landscape within the study area (Plates 15 and 16), and the occasional area of possible disturbance such as a hydro corridor (Plate 17), aggregate pits (Plates 18 and 19), a landfill site (Plate 20) and Morrison dam, serving to flood a portion of Ausable River (Plate 21) and to alter drainage and create a steep slope along Morrison Line (Plate 22).

*Plate 12: Topography, Woodlot, From Black Bush Line, Facing East*





*Plate 13: Topography, Flat Landscape, From Mollard Line, Facing East*



*Plate 14: Topography, Flat Landscape, From Crediton Road, Facing South*





*Plate 15: Topography, Gently Rolling Landscape and Small Seasonal Stream, From Bronson Line, Facing Northwest*



*Plate 16: Topography, Gently Rolling Landscape, From Plugtown Line, Facing West*





**STAGE 1 ARCHAEOLOGICAL ASSESSMENT  
GOSHEN WIND ENERGY CENTRE, HURON COUNTY, ON**

*Plate 17: Topography, Hydro Corridor, From Huron Street, Facing South*



*Plate 18: Topography, Aggregate Pit, From Bronson Line, Facing East*





*Plate 19: Topography, Aggregate Pit, From Road 164, Facing North*



*Plate 20: Topography, Landfill, From Cassidy Road, Facing West*



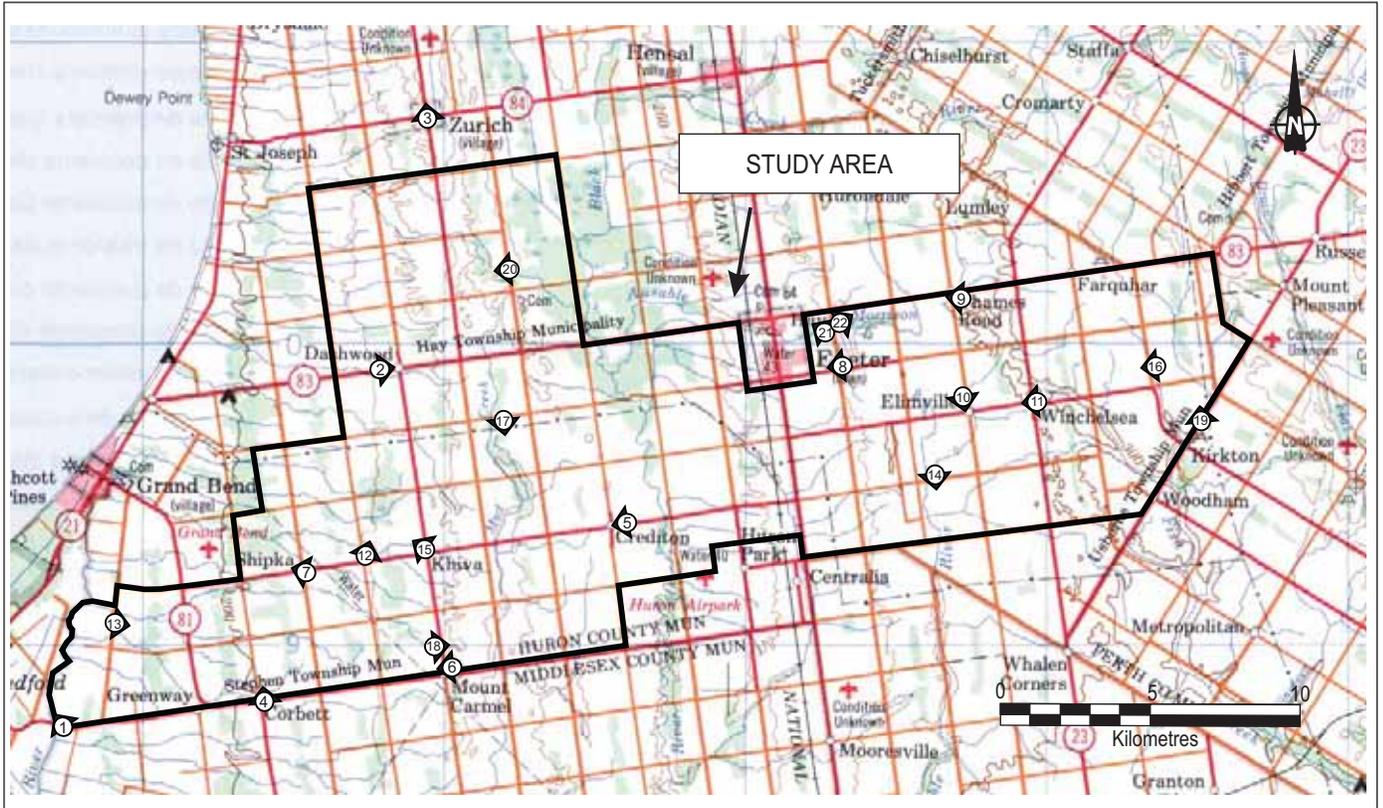


*Plate 21: Topography, Morrison Lake Above Morrison Dam, From Morrison Line, Facing Northeast*



*Plate 22: Topography, Morrison Dam Below Morrison Lake and Steep Slope, From Morrison Line, Facing Northwest*





**LEGEND**

STUDY AREA

PLATE NUMBER AND PHOTOGRAPHIC DIRECTION

**REFERENCE**

DRAWING BASED ON

- GOVERNMENT OF CANADA  
1998 TOPOGRAPHIC MAP SHEET 40 P/05: GRAND BEND (EDITION 6). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.
- 2000 TOPOGRAPHIC MAP SHEET 40 P/04: PARKHILL (EDITION 8). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.
- 2001 TOPOGRAPHIC MAP SHEET 40 P/06: ST. MARYS (EDITION 6). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.

**NOTES**

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT				<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>			
TITLE				<b>PLATE NUMBERS AND PHOTOGRAPHIC DIRECTIONS</b>			
PROJECT No.		10-1151-0201-1000-1200		FILE No.		1011510201-1000-1200-R01010	
CADD		SW/JM		SCALE		AS SHOWN REV.	
CHECK				MAY 15/12		<b>FIGURE 10</b>	





## **5.0 RESULTS**

### **5.1 Potential for Pre-contact Aboriginal Archaeological Sites**

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Archaeological potential criteria commonly used by the MTCS (Government of Ontario 1993, 1997) were applied to determine areas of archaeological potential within the study area. These variables include: distance to various types of water sources, soil texture and drainage, glacial geomorphology, and the general topographic variability of the area.

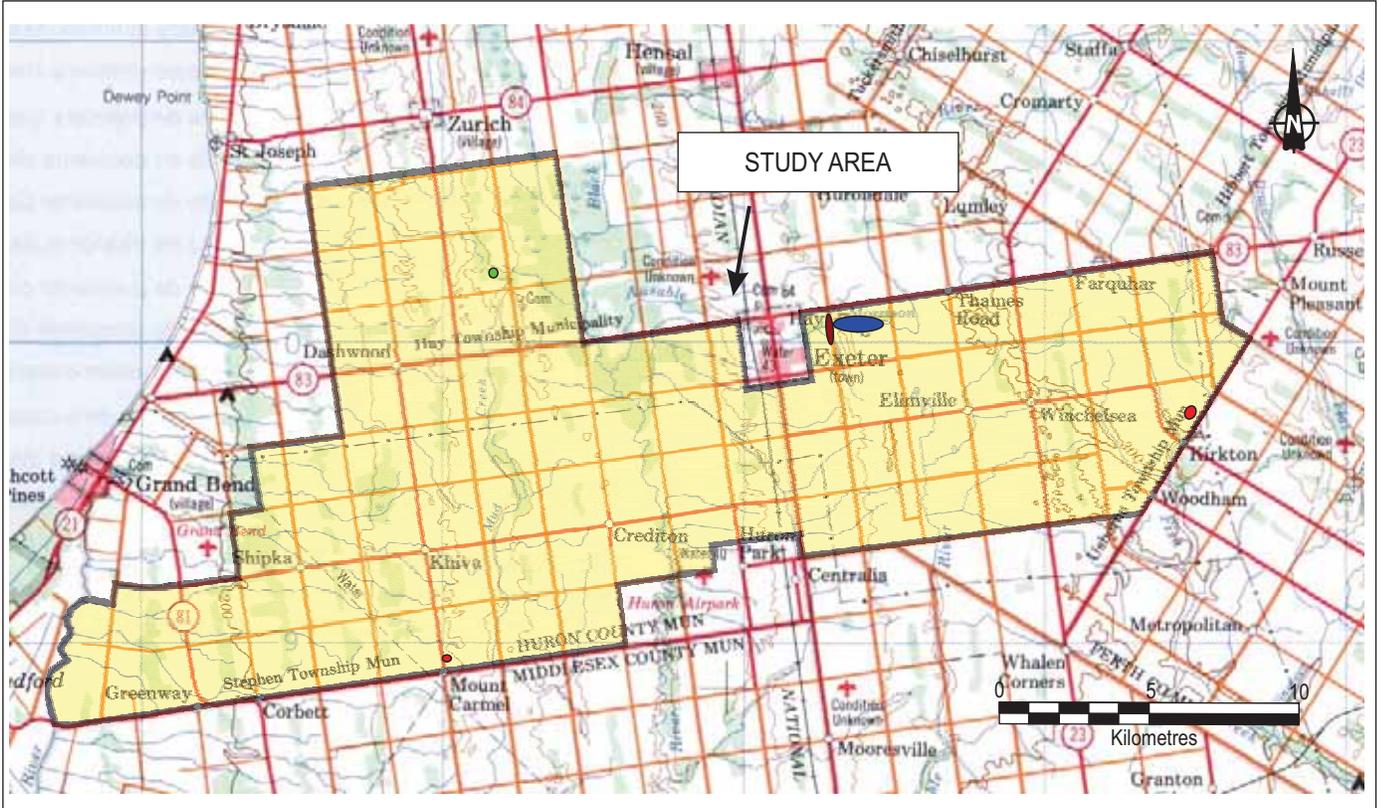
Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils, or topographic variability, may also indicate archaeological potential. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).

In archaeological potential modeling, a distance to water criterion of 300 metres is generally employed for primary water courses, such as lakes, rivers, streams and creeks as well as secondary watercourses, such as intermittent streams and creeks, springs, marshes and swamps. For the present project, there are numerous small streams as well as the Ausable River that run through the study area. Lake Huron is located within 500 metres to the west of the study area (Figure 1).

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. The study area is fairly level with no areas of steep slope that would not be suitable for settlement. With respect to soil texture, Aboriginal groups preferred well drained lighter (sandy) soils to heavier soils. The soils of the study area are imperfectly to poorly drained soils that are primarily clay. Although some areas might have been swampy in the past due to the imperfect drainage and relatively level topography, the rest of the study area would have been suitable for pre-contact Aboriginal agriculture, although not ideal. Therefore, these soils provide further archaeological potential for Aboriginal sites within the study area.

The presence of previously identified archaeological sites within the study area, recorded in the ASDB (Robert von Bitter, personal communication, June 1, 2012; Government of Ontario n.d.; see Table 2) establishes the possibility for other pre-contact Aboriginal activity elsewhere within the study area.

When the above noted archaeological potential criteria are applied to the study area, the archaeological potential for pre-contact Aboriginal sites is deemed to be moderate to high (Figure 11). This assessment is due to the presence of water sources and previously known archaeological sites; the level land without areas of steep slope; and the agriculturally suitable soils. While some areas of modern disturbance exist (for example, Plates 17 to 21, see also Figure 11), they can be further evaluated during any Stage 2 archaeological assessment, should these lands be chosen as optioned properties within the larger study area.



**LEGEND**

- STUDY AREA
- AREA OF MODERATE TO HIGH ARCHAEOLOGICAL POTENTIAL
- AREA OF LOW ARCHAEOLOGICAL POTENTIAL (AGGREGATE PIT)
- AREA OF LOW ARCHAEOLOGICAL POTENTIAL (LANDFILL)
- AREA OF LOW ARCHAEOLOGICAL POTENTIAL (FLOODED)
- AREA OF LOW ARCHAEOLOGICAL POTENTIAL (STEEP SLOPE)
- AREA OF POSSIBLE DISTURBANCE (HYDRO LINE)

**REFERENCE**

DRAWING BASED ON

- GOVERNMENT OF CANADA  
1998 TOPOGRAPHIC MAP SHEET 40 P/05: GRAND BEND (EDITION 6). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.
- 2000 TOPOGRAPHIC MAP SHEET 40 P/04: PARKHILL (EDITION 8). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.
- 2001 TOPOGRAPHIC MAP SHEET 40 P/06: ST. MARYS (EDITION 6). CENTRE FOR TOPOGRAPHIC INFORMATION, NATURAL RESOURCES CANADA, OTTAWA.

**NOTES**

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ALL LOCATIONS ARE APPROXIMATE.

PROJECT	<b>STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE HURON COUNTY, ONTARIO</b>		
TITLE	<b>ARCHAEOLOGICAL POTENTIAL OF THE STUDY AREA</b>		
PROJECT No.	10-1151-0201-1000-1200	FILE No.	1011510201-1000-1200-R01011
CADD	SWJM	JUN 15/12	SCALE AS SHOWN REV.
CHECK			<b>FIGURE 11</b>





## **5.2 Potential for Post-contact Aboriginal Archaeological Sites**

The criteria used by the Ontario Ministry of Tourism and Culture to determine potential for post-contact Aboriginal archaeological sites includes the presence of: previously identified archaeological sites; particular, resource-specific features that would have attracted past subsistence or extractive uses; early historic transportation routes; elevated topography; and properties designated under the *Ontario Heritage Act* (Government of Ontario 1990a, 1997:14).

Due to the presence of creeks and streams within the study area as possible waterways and potable water sources, the proximity to marshlands and forest resources, the relatively level topography and the documented presence of First Nations families and communities in the study area during the historic period, the potential for post-contact Aboriginal archaeological resources is judged to be moderate to high for the study area with the exception of the previously disturbed areas. While some areas of modern disturbance exist (for example, Plates 17 to 21, see also Figure 11), they can be further evaluated during any Stage 2 archaeological assessment, should these lands be chosen as optioned properties within the larger study area.

## **5.3 Potential for Historic Archaeological Sites**

The criteria used by the Ontario Ministry of Tourism, Culture and Sport to determine potential for historic Euro-Canadian archaeological sites includes the presence of: previously identified archaeological sites; particular, resource-specific features that would have attracted past subsistence or extractive uses; areas of initial, non-Aboriginal settlement; early historic transportation routes; elevated topography; and properties designated under the *Ontario Heritage Act* (Government of Ontario 1990a, 1997:14).

The area has been the location of generalized agricultural practices in the past and is still used in that fashion today. There is evidence of Euro-Canadian settlement extending back to the early 19<sup>th</sup> century, during the initial settlement of Hay, Stephen and Osborne Townships. The 19<sup>th</sup> century road grid is still in use. Numerous small communities located within the study area have decreased in size since the 19<sup>th</sup> century and may have left behind significant archaeological remains. Three more substantial historic communities – Exeter, Crediton, and Dashwood – are also located within the study area. The presence of previously identified archaeological sites within the study area, recorded in the ASDB (Robert von Bitter, personal communication, June 1, 2012; Government of Ontario n.d.; see Table 2) establishes the possibility for other historic Euro-Canadian activity elsewhere within the study area. While some areas of modern disturbance exist (for example, Plates 17 to 21, see also Figure 11), they can be further evaluated during any Stage 2 archaeological assessment, should these lands be chosen as optioned properties within the larger study area.



## 6.0 RECOMMENDATIONS

A Stage 1 archaeological background study was conducted by Golder on behalf of AECOM Canada Ltd. for the proposed Goshen Wind Energy Centre being developed by Goshen Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (Figure 1). The study area is located on various lots and concessions in the Geographic Townships of Hay, Stephen and Usborne, now Municipalities of Bluewater and South Huron, Huron County, Ontario. The study area is approximately 35,260 hectares in area. This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval, as outlined in Ontario Regulation 359/09 section 22(3) of the *Environmental Protection Act* (Government of Ontario 1990b).

The property inspection of the study area determined that the study area consists of a rural landscape, largely in agricultural use. It confirmed that the area was well drained by numerous tributaries and that there is minimal previous disturbance on the landscape. As such, the field review supports the findings of the background research that the majority of the study area retains moderate to high archaeological potential (Figure 11).

Golder applied archaeological potential criteria commonly used by the Ontario Ministry of Tourism, Culture and Sport to determine areas of archaeological potential within the study area. The archaeological potential for Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. For pre-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, agriculturally suitable soils, and known archaeological sites. For post-contact Aboriginal sites this assessment is based on the presence of nearby potable water sources, level topography, and historic Euro-Canadian anecdotal evidence. The determination of historic Euro-Canadian archaeological potential is based on the documentation indicating occupation from the middle of the 19<sup>th</sup> century onwards as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment is recommended for potential wind turbine sites and their associated infrastructure.

The Stage 2 archaeological assessment should employ both pedestrian survey of agricultural fields and test pit survey methodology for bushlots and existing road ditch margins, as outlined in the Ministry of Tourism, Culture and Sport's *Archaeological Assessment Technical Guidelines* (Government of Ontario 1993). Prior to conducting the pedestrian survey portion of the field work, the area should be re-ploughed and allowed to weather. The test pit survey should consist of 30 centimetre test pits laid out at five metre intervals and should be excavated by hand to a depth of five centimetres within the subsoil.

**Further Stage 2 archaeological assessment is recommended for any areas to be impacted by turbine construction, access road construction or other infrastructure construction related activities.** The Ontario Ministry of Tourism, Culture and Sport is asked to review the results presented and to accept this report into the Ontario Provincial Register of archaeological reports. **Additional archaeological assessment is still required;** hence the archaeological sites recommended for further archaeological fieldwork remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological licence.



## **7.0 ADVICE ON COMPLIANCE WITH LEGISLATION**

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the archaeological heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed fieldwork on the site, submitted a report to the Minister stating that the site has no further archaeological heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.



## **8.0 REFERENCES CITED**

Belden, H. and Co.

1879 *Illustrated Historical Atlas of the County of Huron*. 1972 reprint. Ross Cumming, Owen Sound.

Chapman, Lyman John and Donald F. Putnam

1984 *The Physiography of Southern Ontario*. 3rd ed. Ontario Geological Survey Special Volume 2. Ontario Ministry of Natural Resources, Toronto.

Ellis, Chris J. and Neal Ferris (editors)

1990 *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Ferris, Neal

2009 *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. University of Arizona Press, Tucson.

Government of Canada

1998 *Topographic Map Sheet 40 P/05: Grand Bend* (Edition 6). Centre For Topographic Information, Natural Resources Canada, Ottawa.

2000 *Topographic Map Sheet 40 P/04: Parkhill* (Edition 8). Centre For Topographic Information, Natural Resources Canada, Ottawa.

2001 *Topographic Map Sheet 40 P/06: St. Marys* (Edition 6). Centre For Topographic Information, Natural Resources Canada, Ottawa.

Government of Ontario

1990a *The Ontario Heritage Act*. Electronic Document: [http://www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90o18\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o18_e.htm). Last Accessed on May 29, 2012.

1990b *The Environmental Protection Act*. Electronic Document: [http://www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90e19\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e19_e.htm). Last Accessed on May 29, 2012.

1993 *Archaeological Assessment Technical Guidelines*. Archaeology and Heritage Planning Unit, Cultural Programs Branch, Ontario Ministry of Culture, Tourism and Recreation, Toronto.



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## STAGE 1 ARCHAEOLOGICAL ASSESSMENT GOSHEN WIND ENERGY CENTRE, HURON COUNTY, ON

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- 1997 *Conserving a Future for Our Past: Archaeology, Land Use Planning & Development in Ontario*. Ministry of Citizenship, Culture and Recreation, Archaeology and Heritage Planning Unit, Toronto.
- 2009 *The Green Energy Act*. Electronic Document: [http://www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_09g12\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_09g12_e.htm). Last Accessed on May 25, 2012.
- n.d. Ontario Archaeological Sites Database Files. Culture Services Unit, Ministry of Tourism, Culture and Sport, Toronto.

### Hay Township Book Committee

- 1996 *Hay Township Highlights, 150 Years of Diversified Progress*. The Corporation of the Township of Hay, Zurich.

### Hoffman, D.W., N.R. Richards and F.F. Morwick

- 1952 *Soil Survey of Huron County*. Report Number 13 of the Ontario Soil Survey. Experimental Farms Service, Canada Department of Agriculture and the Ontario Agricultural College, Guelph.

### Mack, Susan Muriel

- 1992 *The History of Stephen Township*. The Corporation of the Township of Stephen, CREDITON.

### McDonald, John

- 1835 *Part of Stanley, Hay, and Stephen 1835*. Notebook on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.
- 1837a *Hay Township*. Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.
- 1837b *Stephen Township*. Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.
- 1839 *Map of the Township of Usborne*. Map on file with the Ministry of Natural Resources Crown Land Survey Records Office, Peterborough, Ontario.

### Morris, J.L.

- 1943 *Indians of Ontario*. 1964 reprint. Department of Lands and Forests, Government of Ontario.



Ontario GenWeb

2012 *Huron County, Townships, Usborne Township*. Electronic Document:  
<http://www.rootsweb.ancestry.com/~onhuron/twp/usborne.htm>. Last Accessed on May 30, 2012.

Schmalz, Peter S.

1991 *The Ojibwa of Southern Ontario*. University of Toronto Press, Toronto.

Scott, James

1966 *The Settlement of Huron County*. Ryerson Press, Toronto.

St. Joseph Historical Society

2009 *St. Joseph Museum and Archives*. Electronic document: <http://www.stjosephmuseum.ca/>. Last Accessed on September 26, 2010.

Wilson, J.A. and M. Horne

1995 *City of London Archaeological Master Plan*. City of London, Department of Planning and Development, London.

Wooden, Joseph

1973 *Exeter situate on the London & Goderich Road in the Township of Stephen and Usborne, 30 Miles from London and in the County of Huron, C.W.: A History of Exeter, Ontario*. University of Toronto, Toronto.



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## Report Signature Page

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