

STAGE 2 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

Submitted to:

Mr. Marc Rose AECOM Canada Ltd. 300 Town Centre Boulevard, Suite 300 Markham, ON L3R 5Z6

Tel: (905) 477-8400 ext. 388 Fax: (905) 477-1456

Licensee: Scott Martin, Ph.D.

License Number: P218

PIF Number: P218-038-2011

FIT Number: FIT-FETX82X

Report Number: 10-1151-0201-2000-2200-R01

Distribution:

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Executive Summary

This Stage 2 archaeological 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*. It was conducted on behalf of AECOM Canada Ltd. for NextEra Energy Canada, ULC's (NEEC) proposed Goshen Wind Energy Centre. The study area, which spans approximately 2262.72 hectares, incorporates the laydown and storage areas, a transformer substation, underground electrical collection lines, a transmission line, turbine access roads, three permanent meteorological towers, and an operations and maintenance building. The Goshen Wind Energy Centre includes 72 wind turbines (63 to be constructed) with a total nameplate capacity of 102 megawatts.

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. 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. Golder Associates Ltd. (Golder 2012.) previously determined potential for the recovery of pre-contact Aboriginal and historic Euro-Canadian archaeological resources within the study area. 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 Stage 2 archaeological assessment, conducted between May 5, 2011 and September 10, 2012, resulted in the identification of 61 sites: 36 pre-contact Aboriginal, 20 historic Euro-Canadian and five multi-component. Stage 3 archaeological assessments are recommended to further evaluate the cultural heritage value or interest of 33 of these sites.

The Ministry of Tourism, Culture and Sport is asked to accept this report into the Ontario Public 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.

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.





Project Personnel

Project Director Jim Anderson, Principal

Project Manager Carla Parslow, Ph.D. (P243)

Project Coordinator Kalena Metcalfe, MSc.

Licensed Consultant Archaeologist Scott Martin, Ph.D. (P218)

Licensed Field Directors Aaron Clemens, B.A. (R329), Angela Finnie, B.A. (R358),

Kiersten Green, B.A. (R357), Darren Kipping, M.A. (R422), Krista Lane, B.A. (R382), Scott Martin, Ph.D. (P218), Shane

McCartney, B.A. (R321)

Report Production Emily Anson, M.A., Jamie Davidson, B.A. (R305), Lindsay

Foreman, Ph.D. (R300), Irena Jurakic, M.A. (P319), Jeffrey

Muir, B.A. (R304), Martha Tildesley, B.A. (R399)

Graphics Production John Campo, B.Sc., Ben Clark, Irena Jurakic M.A. (P319)

Field Technicians Darren Benallick, Andy Chillman, John Clemens, Adam

Coquim, Joshua Dent, B.A., Sarah Dewitt, B.A., Fiona Doherty, B.A., Rhiannon Fisher, B.A., Chris Gervais, Conrad Goericke, B.Sc., Mike Gullons, Beth Henderson, B.Sc., Andrew Herman, B.A., Cara Hernould, Stephanie Hill, Dave Knill, B.A., Amanda Laprise, B.A., Jon Lasarge, Kevin Lieu, B.Sc., Mike Lindon, Christopher Lemon, B.A. (R289), Sarah Nicole Magee, B.A., Carey Matthews, B.A. (R404), Ken McCann, Alex McKinstry, Lafe Meicenheimer, B.A., John Mackenzie., Shannon Neill-Sword, B.A., L.D., Allison Nott, B.A., Leanne Pearn, Mike Pitul, B.A., Philip Rees, B.Sc., Bethany Staubitz, B.A., Jordan Steinmann, Jake Stolee, Martha Tildesley, B.A. (R399), Quinton Wilson, Peter Wronowiecki, Lauren Zapishny, B.A.





Office Assistants Greta Francis, B.A., Krista Lane, B.A. (R382)

First Nations Observers Brandy George, Luis Machinho

Senior Review Carla Parslow, Ph.D. (P243)

Land Access Contact Thomas Bird, NextEra Energy Canada, ULC

Acknowledgments

Proponent Contacts Marc Rose, MES, MCIP, RPP, AECOM Canada Ltd., Thomas

Bird, NextEra Energy Canada, ULC

Ministry of Tourism and Culture Robert von Bitter, B.A., Shari Prowse, M.A.

Ministry of Natural Resources Lisa Casselman, Survey Records Clerk





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APPENDICES

APPENDIX A

Background on Historic Euro-Canadian Artifacts



1.0 PROJECT CONTEXT

1.1 Development Context

A Stage 2 archaeological assessment was conducted by Golder Associates Ltd. (Golder) on behalf of AECOM Canada Ltd. (AECOM) for the proposed Goshen Wind Energy Centre. This project, developed by Goshen Wind, Inc., a wholly owned subsidiary of NextEra Energy Canada, ULC (NEEC), spans approximately 2262.72 hectares (Figure 1) in the Geographic Townships of Hay, Stephen and Usborne, now Municipalities of Bluewater and South Huron, Huron County, Ontario. Table 1 lists the relevant concessions and lots located within the study area.

Table 1: Properties within the Goshen Wind Energy Centre, Huron County

Geographic Township	Concession	Lot	
	Abutting South Boundary	11 to 27	
	7	3 to 16	
	8	3 to 16	
	9	3 to 16	
Hay	10	3 to 16	
	11	3 to 16	
	12	3 to 16	
	13	3 to 16	
	14	3 to 16	
	Abutting North Boundary	12 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	
Ctanhan	6	6 to 23	
Stephen	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	





Geographic Township	Concession	Lot	
	15	3 to 20	
	16	3 to 20	
	17	3 to 20	
	18	3 to 15	
	19	3 to 10	
	20	3 to 10	
	21	3 to 10	
	22	8 to 18	
	Abutting South Boundary	12 to 43	
	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	
Usborne	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	

This assessment was undertaken in order to meet the requirements for an application for a Renewable Energy Approval (REA), 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 project will be referred to as the Goshen Wind Energy Centre (the Project) and will be located on private lands in the vicinity of the shoreline of Lake Huron. The wind turbine technology proposed for the project is the GE 1.6-100 Wind Turbine and GE 1.56-100 Wind Turbine. With a total nameplate capacity of 102 MW, the project is categorized as a Class 4 facility. Although NextEra is seeking a Renewable Energy Approval (REA) for up to 72 wind turbines, only 63 will be constructed for the Project, as well as associated infrastructure. This includes laydown and storage areas, a transformer substation, underground electrical collection lines, a transmission line, turbine access roads, three permanent meteorological towers, and an operations and maintenance building. Permission to enter the optioned lots within the study area and to remove archaeological resources was given by Mr. Thomas Bird of NEEC. For the purposes of this Stage 2 assessment, the Ministry of Tourism, Culture and Sport's (MTCS) 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011) were followed. The objectives of the Stage 2 assessment were to document archaeological resources present within the study area, to determine whether any of the resources might be artifacts or archaeological sites with cultural heritage value or interest requiring further assessment, and to provide specific Stage 3 direction for the protection, management, and/or recovery of the identified archaeological resources (Government of Ontario 2011).

1.2 Archaeological Context

1.2.1 The Natural Environment

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 consists mostly of gravel bars and sand dunes that were created by glacial Lake Algonquin and Lake Nipissing (Chapman and Putnam 1984:161). The Huron Slope is clay plain located along the eastern side of Lake Huron. It is modified by a narrow strip of sand and by the twin beaches of glacial Lake Warren which flank the Wyoming Moraine. The land within this region slopes gently upward from 600 feet to 850 or 900 feet above sea level. Soil types vary from clays to loams (Chapman and Putnam 1984:160-161).

The Horseshoe Moraines are characterized by irregular, stony knobs and ridges, which are composed mostly of till with some sand and gravel deposits (kames), pitted sand and gravel terraces, and swampy valley floors. This region is characterized by the well-drained Huron clay loam and varies in elevation from 800 to 1700 feet above sea level (Chapman and Putnam 1984:127). Lastly, the Stratford Till Plain is a broad clay plain within an area of ground moraine that is interrupted by several terminal moraines; the till is uniform throughout the area and consists of a brown calcareous silty clay (Chapman and Putnam 1984:133).

Belden and Company (1879:xix-xx) considered the soils of Usborne to be fertile and productive. The study area includes 14 soils series, the most prevalent of which are: the Perth series (Perth clay loam), the Huron series (Huron clay loam), the Brookston series (Brookston clay loam) and the Berrien Series (Berrien sandy loam). 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 yields 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). Wheat, cereal grains and corn are grown in this area today (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





includes deciduous and coniferous trees and it is generally used for pasture and woodland (Hoffman et al. 1952:65-67). The Perth, Huron, and Brookston series would have been suitable for pre-contact Aboriginal practices, but not ideal given their poor drainage and susceptibility to erosion.

Figure 1 illustrates the numerous potable water sources associated with the study area. Several small creeks, such as Mud Creek and Black Creek, transect the study area at various locations. The majority of these run east from Lake Huron which is located between one kilometre and 10 kilometres from the western edge of the study area. The Ausable River 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.

1.2.2 Previously Known Archaeological Sites and Surveys

Golder (2012a) previously conducted a Stage 1 archaeological assessment for the Goshen study area. In conducting this assessment, Golder archaeologists applied archaeological potential criteria commonly used by the MTCS (Government of Ontario 2011) to determine areas of archaeological potential within the region of study. 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 documentation indicating occupation from the middle of the 19th century onwards, as well as the presence of historic transportation routes. As a result, Stage 2 archaeological assessment was recommended for potential wind turbine sites and their associated infrastructure for the Goshen Wind Energy Centre.

According to the Archaeological Sites Database (ASDB) (personal communication, Robert von Bitter, June 1, 2012), there are 18 registered archaeological sites located within or within one kilometre of the study area. Table 2 summarizes these sites, while Table 3 provides a general outline of the culture history of Huron County (based on Ellis and Ferris 1990). Fourteen of the previously identified sites are pre-contact Aboriginal, three are multi-component, consisting of both pre-contact Aboriginal and historic Euro-Canadian occupations, and one site is historic Euro-Canadian. At the time of their identification, six of these sites were recommended for further archaeological assessment. These include: the Dawsey Homestead (AhHj-2), the M.T. Johnstone site (AhHk-117), AhHk-118, the Simmons Drain site (AhHk-119), AiHj-2 and the Sarepta Tavern/Post-Office site (AiHj-4). If they are to be impacted by turbine or infrastructure construction, sites AhHj-2, AhHk-117, AhHk-118, AhHk-119, AiHj-2 and AiHj-4 would require further archaeological assessment.





Table 2: Archaeological Sites Located within the Limits of the Study Area

Borden Number	Site Name	Site Type	Culture	Licence Year	Found
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 scatter	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
AiHj-4	Sarepta Tavern/Post -office	historic commercial	historic Euro-Canadian	1992	large amount of Euro- Canadian artifacts, hand-pump water well
AhHk- 100	-	undetermined 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





Table 3: Cultural Chronology for the Huron County Area (Ellis and Ferris 1990)

	1	i	i			
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			
	Lamoka (narrow points)	2000 - 1800 B.C.	increasing site size			
Late Archaic	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			
	Dentate/Pseudo-Scallop Pottery	400 B.C A.D.500	increased sedentism			
Middle Woodland	Princess Point	A.D. 550 - 900	introduction of corn			
widdie woodand	Riviere au Vase	A.D. 500 - 800	thin-bodied, low, uncollared and uncastellated vertical to weakly everted rim pottery			
	Ontario Iroquoian Tradition					
	Early Ontario Iroquoian	A.D. 900 - 1300	emergence of agricultural villages			
	Middle Ontario Iroquoian	A.D. 1300 - 1400	long longhouses (100 metres +)			
	Late Ontario Iroquoian	A.D. 1400 - 1650	tribal warfare and displacement			
Lata Mara Harri		Western Basin Tradi	tion			
Late Woodland	Younge	A.D. 800 - 1100	intensification of farming, heterogeneous vessel forms, sizes, and decorative motifs			
	Springwells	A.D. 1100-1400	intensification of settlement, collared, castellated, and decorated rim vessels			
	Wolf	A.D. 1400 -1550/1600	Parker festooned pottery vessels			
Contact Aboriginal	various Algonkian Groups	A.D. 1700 - 1875	early written records and treaties			
Historic	Euro-Canadian	A.D. 1796 - present	European settlement			

Generally, the pre-contact Aboriginal presence in much of southern Ontario reflects occupation by Iroquoian groups. However, the Middle Woodland Saugeen Complex, including the Donaldson site, known best from locations just north of Huron County in the Saugeen River valley, is often interpreted as ancestral Algonkian (Fiedel 1999). Combined with the presence of Algonkian-speaking groups in the area at the time of European contact, this evidence argues for the occupation of Huron County by Algonkian-speaking peoples for over a millennium.





Dating somewhat later than the Donaldson site, Wright (1974:303) argued that the palisaded Late Woodland Nodwell village in Bruce County demonstrated Huron immigration to the area. More recently, however, Rankin (2000) suggested that the Nodwell village represents a short-lived sedentary farming experiment by huntergatherers, probably indigenous Algonkians, who may have been ancestral to the Odawa (see also Warrick 2008:159). French missionaries indicated relatively close ties between the Odawa and the Huron-Petun (Fox 1990; cf. Feest and Feest 1978:773). It therefore appears, based on ethnohistoric evidence, that there is potential to identify both ancestral Algonkian and Iroquoian sites in the study area.

1.2.3 Pre-contact Aboriginal Resources and Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Golder archaeologists applied archaeological potential criteria commonly used by the MTCS (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography 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. The closest potable water sources are the Ausable River, Little Ausable River, Mud Creek, Black Creek, and Lake Huron (Figure 1). Lake Huron is approximately one to 10 kilometres to the west of the study area, and was likely frequently visited by pre-contact Aboriginal peoples.

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. The area surrounding the region of interest is mainly glacial till with predominantly clay soils (Chapman and Putnam 1984). These areas of glacial till have been called Horseshoe Moraines (Hagerty and Kingston 1992:11). The soils of the study area consist of Huron Brookston silt loam characterized by moderately well to imperfect drainage (Hagerty and Kingston 1992: Sheet 1). Spring drainage is relatively slow, delaying warming of the soil and restricting root growth (Hagerty and Kingston 1992:52). As such, these soils benefit from tile drainage "to reach their capability for common field crops" (Hagerty and Kingston 1992:52; cf. Brock 1972:586). These soils, therefore, can be considered relatively unsuitable for pre-contact Aboriginal agriculture and do not contribute to the archaeological potential for pre-contact Aboriginal sites.

The study area falls within a climatic region which is slightly cooler, slightly wetter, and providing slightly fewer frost-free days than the surrounding areas of Middlesex County, nearer the shores of Lake Huron and Lake Erie (Hagerty and Kingston 1992:16). This may have presented risks for pre-contact Aboriginal gathering and agriculture.

The MTCS also views the presence of previously registered archaeological resources as a prime indicator of archaeological potential. As was noted above, 18 archaeological sites, 17 of which have pre-contact Aboriginal





components, have previously been registered within the study area, indicating that this portion of the province was intensively used by pre-contact Aboriginal peoples. Glacial till chert can be found in the moraines of the area (Chapman and Putnam 1984) and relatively high quality Kettle Point chert occurs to the west between Kettle Point and Ipperwash. Currently, Kettle Point chert occurs as submerged outcrops extending for approximately 1350 metres into Lake Huron. Secondary deposits of Kettle Point chert have also been reported in Essex County and in the Ausable Basin (Eley and von Bitter 1989; Fox 2009:362). Natural resources, such as game, fish, and wild berries, were also plentiful in this region during the pre-contact period (Brock 1972:586; North Middlesex Historical Society 2010a). When this information is considered in light of the proximity of the study area to the Ausable River and its tributaries, which functioned as potable water sources as well as transportation routes, the potential for pre-contact Aboriginal archaeological resources within the study area was judged to be moderate-to-high.

1.2.4 Existing Conditions

The Stage 2 field assessment for the Goshen Wind Energy Centre was conducted from May 5, 2011 to September 10, 2012 under PIF P218-038-2011 issued to Scott Martin, Ph.D. by the MTCS. During the Stage 2 field work, the weather ranged from sunny and warm to cloudy and cold (illustrated in Table 4). At no time were the field or weather conditions detrimental to the recovery of archaeological material and visibility was excellent. The study area encompasses approximately 2262.72 hectares and consists of ploughed, well-weathered agricultural fields, woodlots, and residential lawns.

Table 4: Weather Conditions During Stage 2 Assessment

Date	Locations Assessed	Weather Conditions
May 5, 2011	1, 2, 3, 4, 5	sunny and warm
May 6, 2011	6	sunny and warm
May 24, 2011	7	overcast and windy
May 25, 2011	8, 9	sunny and warm
May 25, 2011	10, 11	overcast and cool
June 10, 2011	13, 14, 15	overcast and warm
June 15, 2011	16	mix of sun and cloud, warm
June 27, 2011	17, 18, 19	sunny and warm
June 28, 2011	20, 21	sunny, warm and windy
June 30, 2011	22	sunny and warm
July 4, 2011	23	sunny and hot
July 5, 2011	24	sunny and hot
October 25, 2011	35	mix of sun and cloud, cool
October 31, 2011	25, 26	overcast and cool
November 3, 2011	27, 28	mix of sun and cloud, cool
November 15, 2011	29	overcast and mild
November 16, 2011	30	overcast and cool





Date	Locations Assessed	Weather Conditions
November 21, 2011	31	sunny and cool
November 24, 2011	32	overcast and cool
January 25, 2012	33	clear and cool
April 13, 2012	34	sunny and cool
April 16, 2012	36, 37	overcast and mild
April 18, 2012	38, 39, 40	sunny and cool
April 25, 2012	41	sunny and cool
April 26, 2012	43	overcast and mild with intermittent light rain
May 1, 2012	44, 45, 46	overcast and cool
May 2, 2012	47, 48	mix of sun and cloud, cool
May 9, 2012	49	mix of sun and cloud, mild
May 14, 2012	50, 51, 52, 53	sunny and warm
May 30, 2012	54	sunny and warm
June 6, 2012	55	overcast and warm
June 15, 2012	56	sunny and hot
June 18, 2012	57	sunny and humid
June 22, 2012	58	sunny and humid
August 7, 2012	59	sunny and humid
August 8, 2012	60	sunny and hot
August 16, 2012	61	sunny and warm
September 10, 2012	62	mix of sun and cloud, cool

1.3 Historical Context

1.3.1 Post-contact Aboriginal Archaeological Resources and Surveys

The post-contact Aboriginal occupation of Southern Ontario was heavily influenced by the dispersal of various lroquoian-speaking peoples by the New York State Iroquois and the subsequent arrival of Algonkian-speaking groups from northern Ontario at the end of the 17th century and beginning of the 18th century (Schmalz 1991). The nature of their settlement size, population distribution and material culture shifted as European settlers encroached upon their territory. However, Ferris (2009:114) notes, that 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." As such, First Nations groups have left behind archaeologically significant resources throughout Southern Ontario which shows continuity with past peoples, even if this information was not recorded by Euro-Canadians.

It has been presumed that before 1690 Huron County was solely occupied by Iroquoians. Both the archaeological and historic records suggest, however, that Algonquian speaking groups also had a presence in the area. Ferris (1999:119-120) pointed out the potential misuse of the term "Huron" to describe Late Woodland sites in both Huron and Bruce counties. Koenig (2005:61-61) more recently noted, however, that some





researchers insist that the ancestors of the Algonkian speaking First Nations that are now occupying the shores of Lake Huron and the Bruce Peninsula, only arrived in the mid-1800s. Their relocation to this area from the U.S. was historically documented and associated with the establishment of reserves (Surtees 1971:48). However, in southwestern Ontario, members of the Three Fires Confederacy (i.e. Chippewa, Ottawa and Potawatomi) began immigrating to this area from Ohio and Michigan in the late 1700s (Feest and Feest 1978:778-779). As was noted above, archaeological sites in Huron County point to much earlier settlement by ancestral Algonkians during the Middle and Late Woodland periods.

The study area first appears in the historic record when the Ojibwa and Chippewa First Nations entered into Treaty No. 27 ½. This:

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)

Treaty No. 27 ½ was subsequently confirmed on July 10, 1827 as Treaty No. 29 with only a minor change in the legal description of the boundaries of the land surrender (Morris 1943:27). While it is difficult to delineate treaty boundaries today, Figure 2 provides an approximate outline of the limits of Treaty Number 27 ½. Despite the noted historic presence of Aboriginal groups within this county, archaeological evidence of their occupation remains to be identified.

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 sources 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 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. Further, there are oral histories of two battles that had previously been fought between Aboriginal communities within the area (Mack 1992:244-245). Despite the presence of post-contact Aboriginal communities within the study area, archaeological sites remain to be identified and registered with the ASDB (Robert von Bitter, personal communication, August 26, 2011.).

Due to the proximity of the study area to the Ausable River watershed, which functioned as a potable water source and transportation route, the potential for post-contact Aboriginal archaeological resources was judged to be moderate to high.

1.3.2 Historic Euro-Canadian Archaeological Resources and Archaeological Potential

The criteria used by the MTCS 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 2011).

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.

1.3.2.1 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 1835a) surveyed the majority of Hay Township (Figure 3) 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 lot 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 in the 1830s returned with their families to settle (Scott 1966:58). This group was best known for its settlement at St. Josephs (Scott 1966:58). The third stage was the arrival of German immigrants in the 1850s. They mostly settled along the eastern and western borders of the township (HTBC 1996:30).

A good resource for identifying potential historic Euro-Canadian archaeological sites in Hay Township is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden 1879). The Hay Township map provides both the names of the landowners and the majority of structures on these properties during the last half of the 19th century (Figure 3). In addition to houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills and schools. Table 5 lists those lots that hold a structure other than a house, along with the name of the owner. Even though locations are only approximate on these maps, they do indicate the potential for the identification of 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.





Table 5: 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

1.3.2.2 Stephen Township

Stephen Township (Figure 4) 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 (McDonald 1835a). 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. It did, however, support numerous pine trees, which in turn attracted many French Canadian lumbermen to the area (Scott 1966:179). After the land was cleared, farming gained a foothold; it remains 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 established throughout the township over the years. Those that are within the study area will be discussed in greater detail below.

A good resource for identifying potential historic Euro-Canadian archaeological sites in Stephen Township is the 1879 *Illustrated Historical Atlas of the County of Huron* (Belden 1879). The Stephen Township map provides both the names of the landowners and the majority of structures on these properties during the last half of the 19th century (Figure 4). In addition to houses, the structures noted include brickyards, cemeteries, churches, hotels, manufactories, mills and schools. Table 6 lists those lots that hold a structure other than a house, along with the name of the owner. Even though locations are only approximate on these maps, they do indicate the





potential for the identification of 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.

Table 6: Historic Properties with Potentially Significant Structures According to the 1879 *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

1.3.2.3 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 5). 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). Prior to 1845, the township was very small and inhabited by less than 300 people. Wheat, turnips, oats, potatoes, peas and hay were the main crops and sheep, pigs and cows were the primary livestock kept (Ontario GenWeb 2012).





The first Euro-Canadian settlement in Usborne occurred south of Exeter along the London Road (Scott 1966:62). William May from England arrived in 1832 and was followed by Thomas Lamb, who settled approximately five kilometres north of Exeter (Belden and Co. 1979:xx). Other settlers began to occupy 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 cleared four acres of land along the London Road in 1831, approximately two kilometres south of Exeter, but did not settle; instead he returned to England to persuade his friends and relatives to join him (Scott 1966:62). The resulting influx into the hamlet of Devon occurred 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 was 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 in Usborne Township 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 19th 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 7 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 wind turbine placement, the location would need to be archaeologically assessed to see if there are any archaeological remains.

Table 7: 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





Structure	Lot	Concession	Status
School House	15	12	No longer standing
Church and Cemetery	5	Abutting South East Boundary	No longer standing

1.3.3 Summary

Euro-Canadian settlement extends back to the early 19th century within the study area. Each of the townships – Hay, Stephen and Usborne – retains evidence for the historic 19th 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 were established in the middle of the 19th century, but have become smaller over time as families relocated to other areas. Their abandoned structures must be carefully considered as they may be significant archaeological resources.

Due to the proximity of the study area to the Ausable River watershed, which functioned as a potable water source and as a transportation route, reference to the establishment of several homesteads, the proximity of the study area to several historic communities, including Dashwood, Grand Bend, Shipka, Khiva, Crediton, Greenway, Corbett, and Mount Carmel, and historic transportation routes, the potential for historic Euro-Canadian resources was judged to be moderate to high.

1.3.4 Recent Reports

Golder (2012a) recently conducted a Stage 1 archaeological assessment for the Goshen Wind Energy Centre. It was entitled 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 (Golder 2012a) produced by Golder on June 26, 2012 under PIF numbers P001-608-2010 and P218-278-2011.

Background research and archaeological assessments for four additional wind farms near the study area has also been in progress over the past three years. These projects include NextEra Energy Canada, ULC's: Bluewater Wind Energy Centre (north of the study area), Jericho Wind Energy Centre (southwest of the study area), Adelaide Wind Energy Centre (south of the study area), and Bornish Wind Energy Centre (south of the study area). Further, archaeological assessment has also been conducted on the Parkhill Point of Interconnect lands, south of the study area, which will connect the Bornish, Adelaide, and Jericho Wind Energy Centres' lands with the hydro grid. Table 8 summarizes the documents that have been produced for these projects to date.





Table 8: Summary of Other NextEra Energy Canada, ULC, Wind Energy Project near the Study Area Documents

Document	Date of Production	PIF Number	Reference
Stage 1 Archaeological Assessment: NextEra Energy Canada, ULC, Bluewater Wind Energy Centre, Huron County, Ontario	February 13, 2012	P001-609-2010	Golder 2012b
Stage 2 Archaeological Assessment: NextEra Energy Canada, ULC, Bluewater Wind Energy Centre, Huron County, Ontario	March 23, 2012	P218-040-2011 and P319-017-2012	Golder 2012c
Stage 1 Archaeological Assessment: NextEra Energy Canada, ULC, Jericho Wind Energy Centre, Lambton and Middlesex Counties, Ontario	In progress	P001-607-2010	Golder Forthcoming a
Stage 2 Archaeological Assessment: NextEra Energy Canada, ULC, Jericho Wind Energy Centre, Lambton and Middlesex Counties, Ontario	In progress	P218-039-2011	Golder Forthcoming b
Stage 1 Archaeological Assessment, Air Energy TCI Adelaide Wind Farm Various Lots, Concession 1 to 5 N.E.R. and 1 to 4 S.E.R., Geographic Township of Adelaide, Middlesex County, Ontario	April 2009	P001-422-2008	Golder 2009
Stage 2 Archaeological Assessment, NextEra Adelaide Wind Farm, Various Lots, Concession 1 to 5 N.E.R. and 1 to 4 S.E.R., Geo. Township of Adelaide, Middlesex County, Ontario	March 2010	P001-452-2008, P001-526-2009, and P084-197-2010	Golder 2010a
Stage 3 Archaeological Assessment, NextEra Adelaide Wind Farm, Various Lots, Concession 1 to 5 N.E.R. and 1 to 4 S.E.R., Geo. Township of Adelaide, Middlesex County, Ontario	April 2010	P084-220-2009, P084-221-2009 and P084-198-2010	Golder 2010b
Stage 2 Archaeological Assessment, NextEra Adelaide Wind Energy Centre, Various Lots, Concessions 1 to 5 N.E.R. and 1 to 4 S.E.R., Geographic Township of Adelaide, Middlesex County, Ontario	April 10, 2012	P218-096-2011 and P319-015-2012	Golder 2012d
Stage 2 Archaeological Assessment, NextEra Adelaide Wind Energy Centre, Additional Field Work, Various Lots, Concessions 1 to 5 N.E.R. and 1 to 4 S.E.R., Geographic Township of Adelaide and Concessions 9 to 13 W.C.R., Geographic Township of West Williams, Middlesex County, Ontario	July 26, 2012	P218-277-2012	Golder 2012g
Stage 1 Archaeological Assessment: Canadian Greenpower Wind Project, Counties of Huron, Middlesex and Lambton, Ontario	May 2009	P057-456-2008	ASI 2009a
Stage 2 Property Assessment (June 2009 Field Season): Bornish Wind Farm Project Environmental Assessment, East Williams, West Williams, and Adelaide Townships, Middlesex County, Ontario	October 2009	P057-534-2009	ASI 2009b





Document	Date of Production	PIF Number	Reference
Stage 2 Archaeological Assessment (Property Assessment): Bornish Wind Farm Project, East Williams, West Williams, and Adelaide Townships, Middlesex County, Ontario	March 2011	P057-534-2009	ASI 2011
Stage 2 Archaeological Assessment, NextEra Bornish Wind Energy Centre, Municipality of North Middlesex, Middlesex County, Ontario	April 18, 2012	P218-097-2011 and P319-013-2012	Golder 2012e
Stage 2 Archaeological Assessment, NextEra Bornish Wind Energy Centre, Additional Fieldwork, Various Lots and Concessions, Municipality of North Middlesex, Middlesex County, Ontario	June 27, 2012	P218-276-2012	Golder 2012h
Stages 1 and 2 Archaeological Assessment, Parkhill Point of Interconnect, Various Lots and Concessions, Geographic Townships of East Williams and West Williams now Municipality of North Middlesex, Middlesex County, Ontario	February 7, 2012	P319-018-2012	Golder 2012f
Stages 1 and 2 Archaeological Assessment, Parkhill Point of Interconnect – Additional Lands, Part of Lot 18, Concession 17 E.C.R., Geographic Township of East Williams, now Municipality of North Middlesex, Middlesex County, Ontario	July 11, 2012	P319-020-2012	Golder 2012i
Stage 3 Archaeological Assessment, Parkhill Point of Interconnect, Various Lots and Concessioins, Geographic Townships of East Williams and West Williams now Municipality of North Middlesex, Middlesex County, Ontario	In progress		Golder Forthcoming c

Finally, two other archaeological assessments have been conducted within 50 metres of the study area during the past decade (Robert von Bitter, personal communication, June 1, 2012 and May 18, 2012). The first is a Stage 1 and 2 archaeological assessment conducted by Archaeologix Inc. for the Exeter Sewer System Expansion. It was entitled *Archaeological Assessment (Stages 1-2), Exeter Sewer System Expansion Class EA, Town of Exeter, Municipality of South Huron, Huron County, Ontario,* and was produced by Archaeologix Inc. in 2003 (Wilson 2003). The second report is a Stage 2 archaeological assessment for the Lake Huron Transmission Main Twinning Project. It was entitled *REVISED: Stage 2 Archaeological Assessment (Partial) Class Environmental Assessment, Lake Huron Primary Water Supply System, Lake Huron Transmission Main Twinning Project and was produced by Timmins Martelle Heritage Consultants Inc. in 2012.*





2.0 FIELD METHODS

Approximately 64.92 % of the project area to be impacted by the wind farm development was subject to pedestrian survey, 0.27 % was subject to test pitting, while the remaining 34.81% was deemed disturbed by previous construction activities. During the Stage 2 field work, which was conducted from May 5, 2011 to September 10, 2012 under PIF P218-038-2011 issued to Scott Martin, Ph.D. by the MTCS, the weather ranged from hot and sunny to cloudy and cold. At no time were the field or weather conditions detrimental to the recovery of archaeological material and visibility was excellent.

The Goshen Wind Energy Centre study area is characterized as ploughed and well-weathered agricultural fields (Photos 1 to 4, 6, 8 to 26,28 to 57, 59 to 105), bushlots (Photo 58), and lawns (Photos 5, 7, and 27). As per the *Standards and Guidelines for Consultant Archaeologists* (Section 7.8.6, Standard 1a, Government of Ontario 2011), Photos 1 to 105 illustrate a representative sample of parts of the study area that confirm conditions met the requirements for Stage 2 archaeological assessment. Photo locations and photograph directions are provided in Figure 6 and Supplement A.

All areas to be impacted by this development under the REA were covered by the Stage 2 Archaeological Assessment. Based on mapping and instruction provided by the proponent, all linear features (i.e. collection and transmission lines) were assessed whether on private lands or within the right of way. Over the course of the project development several layout changes occurred resulting in some areas being assessed that where not included in the final development plan. As these areas were subject to Stage 2 archaeological survey as part of this project, the results of those surveyes have been included in this report.

The Stage 2 archaeological assessment was conducted using pedestrian survey at five-metre intervals in the agricultural fields (Photos 1 to 4, 6, 8 to 26,28 to 57, 59 to 105; see also Figure 6 and Supplement A) and test pit survey at five-metre intervals in the bushlots (Photo 58; see also Figure 6 and Supplement A) that were not steeply sloped or poorly drained (Photo 106, 108, 111; see also Figure 6 and Supplement A) and on lawns that were not disturbed by previous construction activities (Photos 107 to 122; see also Figure 6 and Supplement A). Each test pit was approximately 30 centimetres in diameter and excavated five centimetres into sterile subsoil (Photos 5 and 27), and was examined for stratigraphy, cultural features, or evidence of fill. All soil matrix was screened through six millimetre mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit.

Figure 6 and Supplement A clearly demarcate areas deemed as disturbed. These, for the most part, are municipal road right of ways where road construction has affected the surrounding properties.

Numerous areas existed within the study area where pedestrian survey was possible, despite conditions visible on aerial photography. These included seasonal watercourses of widths less than one metre and treed windbreaks of widths less than five metres (in ploughed agricultural fields). Their presence did not impact pedestrian survey transects since they were accommodated within the five metre transects.

When archaeological resources were identified, the pedestrian survey transect was decreased to a one metre interval and spanned a minimal 20 metre radius around the artifact. This approach established if the artifact was an isolated find or if it was part of a larger artifact scatter. If the artifact was part of a large scatter, the one metre interval was continued until the full extent of the scatter was defined. When test pits yielded archaeological material, eight additional test pits were excavated within a five metre radius of the original positive test pit and a





1 x 1 metre test unit was placed on top of this positive test pit in order to determine the extent of the site (Government of Ontario 2011).

More specifically, to address concerns about the impact of the wind turbine infrastructure, standalone collector cable corridors or transmission line corridors on private lands were surveyed as 20 metre wide corridors; transmission line corridors, limited to municipal right-of-ways, were surveyed from the road edge to the edge of the right-of-way; and all roads or roads with collector cables alongside were surveyed as 60 metre wide corridors. All turbine pads with associated vehicle and crane turnarounds and equipment laydown areas were assessed as a 70 metre radius centred on the turbine. Finally, all substation and laydown areas were assessed with 20 metre buffers.

All formal and diagnostic artifact types were collected and a UTM reading was taken using a Trimble Recon handheld GPS unit with a Holux GR-271 CF GPS Receiver, using the North American Datum (NAD) 83, with a minimal accuracy of two metres; or a Garmin eTrex Legend handheld GPS unit using the North American Datum (NAD) 83, with a minimal accuracy of five metres. UTM coordinates were recorded for a total of 61 archaeological sites. These are presented in Supplement B. Figure 6 illustrates the Stage 2 field assessment methods while Supplement A illustrates the Stage 2 field assessment methods and results for the study area.

Two First Nations monitors also participated in the Stage 2 archaeological assessment of the Goshen Wind Energy Centre; their roles are summarized in Supplement C.





3.0 STAGE 2 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 9 below and the Stage 2 archaeological assessment results are discussed here. Golder's Stage 2 survey of the proposed Goshen Wind Energy Centre properties identified a total of 61 locations: 36 pre-contact Aboriginal, 23 historic Euro-Canadian, and two multi-component. A summary of the artifacts collected from each of these sites, their spatial extent, and a description of the artifacts left in the field are provided below. Supplement A, which illustrates the Stage 2 survey methods and results, and Supplement B, which lists the UTM coordinates for each of these locations, are included as supplementary documents to this report.

Table 9: Inventory of Documentary Record

Document Type	Current Location of Document Type	Additional Comments	
Field Notes	Golder offices in London and Mississauga	In original field book and photocopied in project file	
Hand Drawn Maps	Golder offices in London and Mississauga	In original field book and photocopied in project file	
Maps Provided by Client	Golder offices in London and Mississauga	Hard and digital copies in project file	
Digital Photographs	Golder offices in Mississauga	Stored digitally in project file	

All of the material culture collected during the NEEC Goshen Wind Energy Centre Stage 2 survey is contained in two banker's boxes. These boxes will be temporarily housed at Golder's Mississauga office until formal arrangements can be made for their transfer to an MTCS collections facility.

The 38 sites with pre-contact Aboriginal components include artifacts relating to a lithic industry. The chert types identified in the discussion below include:

- **Dundee chert:** a moderate quality raw material that outcrops close to the mouth of the Grand River along the north shore of Lake Erie. It is distinguishable from Selkirk chert, also found in the Dundee formation, by its predominantly mottled or banded grey colour. Its distribution as a secondary source material is similar to Onondaga chert and it is frequently encountered as far west as the Chatham area.
- Flint Ridge: a high quality raw material occurring in the Vanport Limestone Member of the Allegheny Group of the Pennsylvanian System that outcrops in central to central-eastern Ohio. This material ranges in colour and is frequently banded or mottled with red, white, blue and/or grey. Flint Ridge is often referred to as 'chalcedony' and is a homogeneous, glossy and glass-like chert. It is often translucent and has been called "vitreous, smooth, and porcelaneous" (DeRegnaucourt and Georgiady 1998:53).
- Haldimand chert: a relatively high quality raw material that outcrops along the Bois Blanc formation between Kohler and Hagersville, as well as in Cayuga, Ontario.
- Kettle Point chert: a relatively high quality raw material that outcrops between Kettle Point and Ipperwash, on Lake Huron. Currently, Kettle Point occurs as submerged outcrops extending for approximately 1350 metres into Lake Huron. Secondary deposits of Kettle Point chert have been reported in Essex County and in the Ausable Basin.





Onondaga chert: a high quality raw material that outcrops along the north shore of Lake Erie east of the embouchure of the Grand River. This material can also be recovered from secondary glacial deposits across much of southwestern Ontario, east of Chatham. The structure of the chert is usually mottled and streaked, with veins filled with chalcedony or quartz crystals and a shiny lustre (Luedtke 1992).

Finally, a few unidentified chert types and till chert were recovered during the Stage 2 archaeological assessment and are mentioned below.

All chert type identifications were accomplished visually using reference materials located in Golder's Mississauga office. The flake assemblage was subject to morphological analysis following the classification scheme described by Lennox *et al.* (1986) and expanded upon by Fisher (1997), with the exception that no attempt was made to distinguish "primary" from "primary bipolar" flakes.

In addition, 25 archaeological sites have a historic Euro-Canadian component. Appendix A provides a more comprehensive discussion of temporally diagnostic Euro-Canadian material culture to supplement the results below.

3.1 Location 1

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1022 (east of Mollard Line and north of South Road; Supplement A: Figure 25), resulted in the identification of Location 1. This precontact Aboriginal site, identified on May 5, 2011, consists of a single piece of secondary Kettle Point chert chipping detritus (Plate 1:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

3.1.1 Artifact Catalogue

Table 10 presents the Stage 2 artifact catalogue for Location 1.

Table 10: Location 1 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake

3.2 Location 2

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1022 also identified Location 2 (Supplement A: Figure 25). This pre-contact Aboriginal site, identified on May 5, 2011, consists of a single piece of tertiary Kettle Point chert chipping detritus (Plate 1:2). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.





3.2.1 Artifact Catalogue

Table 11 presents the Stage 2 artifact catalogue for Location 2.

Table 11: Location 2 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert, tertiary flake

3.3 Location 3 (AhHk-146)

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1022 also identified Location 3 (AhHk-146) (Supplement A: Figure 25). This pre-contact Aboriginal site, identified on May 5, 2011, consists of two utilized flakes and three pieces of chipping detritus all manufactured from Kettle Point chert (Plate 1:3). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this scatter, but no additional artifacts were identified.

3.3.1 Chipped Lithic Tools

Two of the recovered Kettle Point flakes, one secondary and one tertiary, each display use along one edge.

3.3.2 Chipping Detritus

A total of three lithic flakes, all Kettle Point chert, were collected during the Stage 2 investigation of Location 3 (AhHk-146). Their morphology is presented in Table 12. The identified scatter, including the two utilized flakes, is composed of a combination of secondary and tertiary flakes.

Table 12: Location 3 (AhHk-146) Chipping Detritus

Chert	Secondary		Tertiary		Total	
	#	%	#	%	#	%
Kettle Point	1	33.33	2	66.67	3	100.00
Total	1	33.33	2	66.67	3	100.00

3.3.3 Artifact Catalogue

Table 13 presents the Stage 2 artifact catalogue for Location 3 (AhHk-146).

Table 13: Location 3 (AhHk-146) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1a	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake
1b	surface collection	0 cm	chipping detritus	2	Kettle Point chert, tertiary flakes
2	surface collection	0 cm	utilized flake	2	Kettle Point chert, 2 x 1 edge used, one secondary, 1 tertiary flake



3.4 Location 4

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1022 identified Location 4 (Supplement A: Figure 25). This pre-contact Aboriginal site, identified on May 5, 2011, consists of an isolated Kettle Point chert end scraper (Plate 1:4). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

The end scraper was manufactured from a large primary or secondary Kettle Point flake, and was retouched along the entire outside edge. It measures 16.58 millimetres long by 29.34 millimetres wide and is 5.06 millimetres thick.

3.4.1 Artifact Catalogue

Table 14 presents the Stage 2 artifact catalogue for Location 4.

Table 14: Location 4 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	scraper	1	Kettle Point chert, end scraper, entire outside edge displays retouch

3.5 Location 5 (AhHk-139)

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1022 also identified Location 5 (AhHk-139) (Supplement A: Figure 25). This pre-contact Aboriginal site, identified on May 5, 2011, is a large lithic scatter measuring 80 metres (along the north-south axis) by 100 metres (along the west-east axis). Several different tool types, including a projectile point, bifaces, scrapers, two utilized flakes, as well as debitage manufactured from Kettle Point chert, were identified (Plate 2). Table 15 summarizes the pre-contact Aboriginal artifacts collected from this site.

Table 15: Location 5 (AhHk-139) Pre-contact Aboriginal Artifacts

Artifact	Freq.	%
projectile point	1	3.13
biface	5	15.63
scraper	2	6.25
utilized flake	2	6.25
chipping detritus	22	68.75
Total	32	100.00

3.5.1 Chipped Lithic Tools

Table 16 provides the characteristics of, and metrics for, the recovered bifaces, scrapers, and projectile point. In addition, two utilized flakes manufactured from Kettle Point chert, were collected.





Table 16: Location 5 (AhHk-139) Tool Metrics

Cat. #	Tool	Material	Length (mm)	Width (mm)	Thick. (mm)	Basal Concav. Depth (mm)	Basal Width (mm)	Should. Width (mm)	Inter- notch Width (mm)	Comments
2	biface	Kettle Point	18.77*	19.92*	8.21*	-	-	-	-	incomplete, displays potlidding on one surface
3	biface	Kettle Point	27.53*	28.83*	6.32*	-	-	-	-	midsection
4	biface	Kettle Point	28.68*	17.77*	3.64*	-	-	-	-	incomplete, likely a projectile point tip
5	projectile point	Onondaga	40.38*	29.90*	6.93*	2.89	29.85	26.45	23.30	incomplete, midsection and base, tip resharpened, late Paleo-Indian Hi- Lo point
6	scraper	Kettle Point	29.86	23.48	6.05	-	-	-	-	end scraper, complete, retouch along end, manufactured from a secondary flake
8	scraper	Kettle Point	17.96	20.57	4.78	-	-	-	-	thumbnail scraper, retouched along 3 edges, manufactured from a secondary flake
9	biface	Kettle Point	35.58*	23.76*	6.33*	-	-	-	-	midsection
10	biface	Kettle Point	27.26*	23.42*	11.25*					fragment, 1 x 1 edge utilized, some cortex present

^{*}measurement on incomplete artifact

The projectile point recovered has been identified as a Hi-Lo point. In Ontario, this projectile point type dates to *circa* 10470-8560 B.C., during the Late Palaeo-Indian period (see Ellis 1981; Ellis et al. 2009:791; Timmins 1985).





3.5.2 Chipping Detritus

At total of 22 pieces of chipping detritus was collected during the Stage 2 assessment of this site. All of the recovered material is Kettle Point chert, and as is evidenced in Table 17, the entire collected sample, including the two utilized flakes, is composed of secondary and tertiary flakes.

Table 17: Location 5 (AhHk-139) Chipping Detritus

Chert	Secondary		Tertiary		Total	
	#	%	#	%	#	%
Kettle Point	12	54.55	10	45.45	22	100.00
Total	12	54.55	10	45.45	22	100.00

3.5.3 Artifact Catalogue

Table 18 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 18: Location 5 (AhHk-139) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1a	surface collection	0 cm	chipping detritus	12	Kettle Point chert, secondary flakes, 1 burned and 1 with potlidding
1b	surface collection	0 cm	chipping detritus	10	Kettle Point chert, tertiary flakes, 2 burned
2	surface collection	0 cm	biface	1	Kettle Point chert, incomplete, displays potlidding on one surface
3	surface collection	0 cm	biface	1	Kettle Point chert, incomplete, midsection
4	surface collection	0 cm	biface	1	Kettle Point chert, incomplete, likely a projectile point tip
5	surface collection	0 cm	projectile point	1	unknown chert (possibly burned Haldimand?), incomplete, midsection and base, tip re- sharpened, late Paleo-Indian Hi-Lo point
6	surface collection	0 cm	scraper	1	Kettle Point chert, end scraper, complete, retouch along end, manufactured from a secondary flake
7	surface collection	0 cm	utilized flake	2	Kettle Point chert, 1 secondary flake, 1 tertiary flake, 2 x 1 edge used
8	surface collection	0 cm	scraper	1	Kettle Point chert, thumbnail scraper, retouched along 3 edges, manufactured from a secondary flake
9	surface collection	0 cm	biface	1	Kettle Point chert, midsection
10	surface collection	0 cm	biface	1	Kettle Point chert, fragment, 1 x 1 edge utilized, some cortex present





3.6 Location 6

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1023 (east of Mollard Line and south of South Road; Supplement A: Figure 22) resulted in the identification of Location 6. This precontact Aboriginal site, identified on May 6, 2011, consists of a single utilized flake manufactured from a tertiary Kettle Point chert flake (Plate 4:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

3.6.1 Artifact Catalogue

Table 19 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 19: Location 6 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	utilized flake	1	Kettle Point chert, 1 x 1 utilized edge, tertiary flake

3.7 Location 7 (AhHk-140)

Location 7 (AhHk-140), a historic Euro-Canadian site, was identified on May 24, 2011 during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1498 (east of Shipka Line and south of Kirkton Road; Supplement A: Figure 15). Location 7 (AhHk-140) consists of an approximately 21 metre (along the north-south axis) by 50 metre (along the west-east axis) scatter of late-19th century Euro-Canadian domestic debris. Artifacts observed in the assemblage include glass, ironstone, porcelain and metal fragments. A total of 16 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 15 domestic and a single fragment of horse tack (Table 20). Each artifact class is discussed in greater detail below.

Table 20: Location 7 (AhHk-140) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	15	92.86
equestrian	1	7.14
Total	16	100.00

3.7.1 Domestic Artifacts

Fifteen domestic artifacts were collected during the Stage 2 assessment of Location 7 (AhHk-140). This collection includes nine fragments of domestic bottle glass and six ceramic fragments.

3.7.1.1 Ceramic Artifacts

Six fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 7 (AhHk-140). Included in this total are five fragments of ironstone and a single fragment of whiteware. Table 21





provides a breakdown of the ceramic assemblage by ware type, while Table 22 provides a detailed breakdown of the ceramic assemblage by decorative style.

Table 21: Summary of Ceramic Collection According to Ware Type, Location 7 (AhHk-140)

Artifact	Freq.	%
ironstone	5	83.33
whiteware	1	16.67
Total	6	100.00

Table 22: Summary of Ceramic Collection According to Decorative Style, Location 7 (AhHk-140)

Artifact	Freq.	%
ironstone, flow transfer printed	2	33.33
ironstone, plain	1	16.67
ironstone, moulded	1	16.67
ironstone, transfer printed	1	16.67
whiteware, stamped	1	16.67
Total	6	100.00

Ironstone

Five fragments of ironstone are part of the Location 7 (AhHk-140) ceramic assemblage. Ironstone or graniteware, is a variety of refined white earthenware introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). This collection includes two fragments of blue flow transfer printed ware, which was popular in the 1840s and 1850s, with a later revival in the 1890s (Collard 1967:118) (Plate 3:1), and a single fragment of plain or undecorated ware

(Plate 3:2), a moulded pitcher or jug handle fragment (Plate 3:3), and a fragment of black transfer printed ware bearing a leaf motif (Plate 3:4).

White Earthenware

One fragment of violet stamped whiteware teacup lip was also collected from Location 7 (AhHk-140) (Plate 3:5). Both stamped and spongewares were produced in hollowware form and were among the cheapest wares available. Although the technique was widely applied, it is considered Scottish. The principal overseas customer for these inexpensive cheerful wares was Canada, where it was distributed out of Quebec and other settlements along the St. Lawrence River (Cruikshank 1982:1-7; 52-53).





3.7.1.2 Glass Artifacts

Nine fragments of domestic bottle glass were recovered from Location 7 (AhHk-140). Colours present in this assemblage include: six sun-coloured amethyst, two fragments of aqua bottle glass, and one fragment of amber bottle glass. Sun-coloured amethyst glass generally dates from the 1880s to 1920 (Lindsey 2012). Diagnostic fragments in this assemblage include a sun-coloured amethyst basal fragment with remnants of a valve ejection mark, which indicates that it is post-1898. A sun-coloured patent finish is also present dating to post-1850, as well as two double-ring finishes (1850 to 1910) and one aqua externally threaded finish post-dating the twentieth century.

3.7.2 Equestrian Artifacts

One double-throated or "arctic" bell is also part of the Location 7 (AhHk-140) assemblage (Plate 3:6). This particular type of sleigh bell dates post-1880 (Weed and Kelly 2012).

3.7.3 Artifact Catalogue

Table 23 provides the Stage 2 artifact catalogue for Location 7 (AhHk-140).

Table 23: Location 7 (AgHk-140) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	ironstone, transfer printed	1	black leaf motif
2	surface collection	0 cm	ironstone, flow transfer printed	1	blue floral motif
3	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst basal fragment; valve ejection mark post-1898
4	surface collection	0 cm	Ironstone	1	teacup lip
5	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst patent finish post-1850
6	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
7	surface collection	0 cm	glass, bottle	1	aqua; double ring finish 1850-1910
8	surface collection	0 cm	whiteware, stamped	1	violet teacup lip
9	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
10	surface collection	0 cm	glass, bottle	2	1 amber; 1 sun-coloured amethyst
11	surface collection	0 cm	ironstone, moulded	1	moulded handle fragment
12	surface collection	0 cm	ironstone, flow transfer printed	1	blue; small fragment
13	surface collection	0 cm	glass, bottle	1	aqua; externally threaded finish, early 20 th century





Cat. #	Context Depth		Artifact	Freq.	Comments
14	surface collection	0 cm	bell	1	double throat bell or "arctic" bell post- 1880
15	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst; double ring finish 1850-1910

3.8 Location 8

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1006 (south of Pepper Road and west of Babylon Line; Supplement A: Figure 4) on May 25, 2011, resulted in the identification of a pre-contact Aboriginal site, designated Location 8. This site consists of a single secondary Kettle Point chert flake (Plate 4:2). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

3.8.1 Artifact Catalogue

Table 24 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 24: Location 8 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake

3.9 Location 9

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1006 (south of Pepper Road and west of Babylon Line; Supplement A: Figure 4) on May 25, 2011, resulted in the identification of a second pre-contact Aboriginal site, designated Location 9. The site consists of a large biface fashioned out of green banded slate (Plate 4:3). A piece of chipping detritus was also identified, but left in situ in the field. These two artifacts were spaced approximately 25 metres apart. As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding these finds, but no additional artifacts were identified.

This biface measures 105.46 millimetres long by 47.17 millimetres wide and is 15.45 millimetres thick. One end is thick and its edges appear to be rounded, likely from wear. The other end is thinned out, and may have been hafted for use.

3.9.1 Artifact Catalogue

Table 25 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.





Table 25: Location 9 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	biface	1	green banded slate, one end edge rounded (from use?)

3.10 Location 10

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH2108 (west of Babylon Line and south of Huron Street; Supplement A: Figure 13) resulted in the identification of Location 10. This pre-contact Aboriginal site, identified on May 25, 2011, consists of a single piece of secondary Kettle Point chert chipping detritus (Plate 4:4). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

3.10.1 Artifact Catalogue

Table 26 presents the Stage 2 artifact catalogue for Location 10.

Table 26: Location 10 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake

3.11 Location 11 (AhHj-4)

Location 11 (AhHj-4), a historic Euro-Canadian site, was also identified on May 25, 2011 during the Stage 2 pedestrian survey of property GSH2108 (west of Babylon Line and south of Huron Street; Supplement A: Figure 14). Location 11 (AhHj-4) consists of a 24 metre (along the north-south axis) by 60 metre (along the west-east axis) scatter of mid-19th century Euro-Canadian domestic debris. In total, seven domestic Euro-Canadian artifacts were collected during the Stage 2 assessment. Each artifact type is discussed in greater detail below.

3.11.1 Domestic Artifacts

Seven domestic artifacts, all ceramics, were collected during the Stage 2 assessment of Location 11 (AhHj-4).

3.11.1.1 Ceramic Artifacts

In total, seven fragments of whiteware ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 11 (AhHj-4). Table 27 provides a detailed breakdown of the ceramic assemblage by decorative style.





Table 27: Summary of Ceramic Collection According to Decorative Style, Location 11 (AhHj-4)

Artifact	Freq.	%
whiteware, sponged	3	42.86
whiteware, transfer printed	3	42.86
whiteware, edged	1	14.29
Total	7	100.00

White Earthenware

Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near-white ceramics, such as pearlware and creamware, by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century (Kenyon 1985). Three of the fragments are blue sponge decorated (Plate 5:1), three fragments are blue transfer print decorated (Plate 5:2), and a single fragment of blue edged ware decorated with a popular 19th century "chickenfoot" motif is also part of the assemblage (Plate 5:3).

3.11.2 Artifact Catalogue

Table 28 provides the Stage 2 artifact catalogue for Location 11 (AhHj-4).

Table 28: Location 11 (AhHj-4) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	whiteware, sponged	1	blue; hollowware lip fragment
2	surface collection	0 cm	whiteware, transfer printed	1	blue
3	surface collection	0 cm	whiteware, sponged	1	blue
4	surface collection	0 cm	whiteware, transfer printed	1	blue; hollowware lip fragment
5	surface collection	0 cm	whiteware, edged	1	blue - chickenfoot motif
6	surface collection	0 cm	whiteware, transfer printed	1	blue
7	surface collection	0 cm	whiteware, sponged	1	blue

3.12 **Location 12**

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1013 (west of Babylon Line and north of Huron Street; Supplement A: Figure 13) identified Location 12. This pre-contact Aboriginal site consists of two pieces of Kettle Point chert chipping detritus, one primary and one secondary flake (Plate 4:5), and was identified on May 25, 2011 under overcast conditions. As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding these finds, but no additional artifacts were identified.





3.12.1 Artifact Catalogue

Table 29 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 29: Location 12 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1a	surface collection	0 cm	chipping detritus	1	Kettle Point chert, primary flake
1b	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake

3.13 Location 13 (AiHj-10)

Location 13 (AiHj-10) is a pre-contact Aboriginal site that was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1056 (west of Bronson Line and north of Pepper Road; Supplement A: Figure 3). The site, identified on June 10, 2011, consists of a scatter of chipping detritus and fire-cracked rock spanning approximately 20 metres (along the north-south axis) by 60 metres (along the west-east axis). Six secondary lithic flakes, manufactured from Kettle Point chert, were collected during the survey (Plate 4:6).

3.13.1 Chipping Detritus

Six pieces of chipping detritus were collected during the Stage 2 assessment of this site. All are manufactured from Kettle Point chert and all are secondary flakes.

3.13.2 Artifact Catalogue

Table 30 presents the Stage 2 artifact catalogue for Location 13 (AiHj-10).

Table 30: Location 13 (AiHj-10) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	6	Kettle Point chert, secondary flakes

3.14 Location 14

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1056 on June 10, 2011 also led to the identification of Location 14 (Supplement A: Figure 3). This pre-contact Aboriginal site consists of a tertiary Kettle Point lithic flake (Plate 6:1) and a large biface manufactured from Onondaga chert (Plate 6:2). These artifacts are located within an area measuring three metres (along the northwest-southwest axis) by two metres (along the northwest-southeast axis).

The biface measures 66.58 millimetres long by 31.68 millimetres wide, and is 9.77 millimetres thick. It looks like it was in the process of being worked, or else, was abandoned.





3.14.1 Artifact Catalogue

Table 31 presents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 31: Location 14 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert, tertiary flake
2	surface collection	0 cm	biface	1	Onondaga chert, not finished being worked, base is still predominantly cortex, pressure flaking visible along one edge only, others not worked, maintains curvature of the flake from which it is being manufactured

3.15 Location 15 (AiHj-17)

Location 15 (AiHj-17) is a pre-contact Aboriginal site identified during the survey of the proposed wind energy components for a previous turbine layout, on property GSH1053 (west of Babylon Line and north of Rodgerville Road; Supplement A: Figure 1). Identified on June 10, 2011, it consists of an isolated incomplete projectile point manufactured from Kettle Point chert (Plate 7:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

This incomplete projectile point consists of a portion of the midsection and base. The tip and one side of the base have been broken, however the broken edge appears to have been reworked, likely for use as a scraper. The point base and shoulder shape most closely resemble that of an Early Archaic Kirk/Nettling corner-notched point. This partial point measures 28.39 millimetres long by 22.34 millimetres wide and is 5.18 millimetres thick. It also has an approximate basal width of 17.69 millimetres and an approximate inter-notch width of 15.08 millimetres. In Ontario, this projectile point type dates to *circa* 8600-8000 B.C., during the middle Early Archaic (see Ellis et al. 1990:73; Ellis et al. 2009:796-800).

3.15.1 Artifact Catalogue

Table 32 presents the Stage 2 artifact catalogue for Location 15 (AiHj-17).

Table 32: Location 15 (AiHj-17) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Kettle Point chert, corner notched, incomplete, one damaged reworked lateral edge, tip missing, part of base missing, likely Early Archaic Kirk/Nettling corner-notched point

3.16 Location 16 (AhHj-5)

Location 16 (AhHj-5), a historic Euro-Canadian site, was identified on June 15, 2011 during the Stage 2 pedestrian survey of the previous layout of wind farm components on property GSH1025 (east of Bronson Line



and north of South Road; Supplement A: Figure 21). Location 16 (AhHj-5) consists of a 40 metre (along the north-south axis) by 30 metre (along the west-east axis) scatter of mid-to-late 19th century Euro-Canadian domestic debris. In total, 54 Euro-Canadian artifacts were collected during the Stage 2 archaeological assessment. These include: 48 domestic, four personal items, one structural item, and one fragment of undetermined unidentified metal (Table 33). Each artifact class is discussed in greater detail below.

Table 33: Location 16 (AhHj-5) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	48	88.89
personal	4	7.41
structural	1	1.85
metal	1	1.85
Total	54	100.00

3.16.1 Domestic Artifacts

Forty-eight domestic artifacts were collected during the Stage 2 assessment of Location 16 (AhHj-5). This collection includes 42 ceramic artifacts and six fragments of glass.

3.16.1.1 Ceramic Artifacts

Forty-two fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 16 (AhHj-5). Included in this total are 23 ironstone, 13 whiteware, five fragments of utilitarian kitchenware and one fragment of yellowware. Table 34 provides a summary of the ceramic collection according to ware type, while Table 35 provides a more detailed breakdown of the ceramic assemblage by decorative style.

Table 34: Summary of Ceramic Collection According to Ware Type, Location 16 (AhHj-5)

Artifact	Freq.	%
ironstone	23	54.76
whiteware	13	30.95
utilitarian earthenware	5	11.90
yellowware	1	2.38
Total	42	100.00





Table 35: Summary of Ceramic Collection According to Decorative Style, Location 16 (AhHj-5)

Artifact	Freq.	%
ironstone, plain	16	38.10
ironstone, moulded	6	14.29
whiteware, edged	4	9.52
earthenware, yellow	3	7.14
whiteware, painted	3	7.14
whiteware, stamped	3	7.14
earthenware, buff	2	4.76
ironstone, painted	1	2.38
whiteware, plain	1	2.38
whiteware, banded	1	2.38
whiteware, sponged	1	2.38
yellowware, plain	1	2.38
Total	42	100.00

Ironstone

Ironstone is the most prevalent type of ceramic in the Location 16 (AhHj-5) assemblage (n=23 or 54.76%). Ironstone or graniteware is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). Present in the ceramic assemblage are: 16 plain or undecorated fragments (Plate 8:1), six moulded fragments, including a scalloped teacup fragment (Plate 8:2), and one fragment of polychrome hand painted hollowware likely dating post-1870 (Plate 8:3).

White Earthenware

Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near-white ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century (Kenyon 1985). Thirteen fragments of the Location 16 (AhHj-5) ceramic assemblage are identified as whiteware and this includes: four blue edged fragments (Plate 8:4), three green stamped fragments (Plate 8:5), three hand painted fragments in a variety of monochromatic and polychrome floral motifs (Plate 8:6), and one fragment of blue sponged ware (Plate 8:7), plain or undecorated whiteware (Plate 8:8) and brown and white slip banded hollowware, respectively (Plate 8:9).

The blue edged whiteware assemblage includes two fragments with the popular 19th century "chickenfoot" motif, a single fragment of plain edged ware without moulding or incised lines that stylistically dates from 1850 to 1897, and a fragment that is too damaged to be temporally diagnostic.





Utilitarian Earthenware

Five fragments of utilitarian earthenwares were collected from Location 16 (AhHj-5). This includes three fragments of lead glazed yellow earthenware and two buff paste earthenware fragments with a green lead glaze. Coarse earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).

Yellowware

Yellowware is a type of refined earthenware with a buff to dark yellow fabric and a clear lead glaze giving the vessel its characteristic yellow appearance. Manufactured in both England and North America, this ware debuted in 1840 and reached its peak popularity between 1870 and 1900 (Gallo 1985). One fragment of yellowware was collected during the Stage 2 assessment of Location 16 (AhHj-5) (Plate 8:10).

3.16.1.2 Glass Artifacts

Five fragments of domestic bottle glass were recovered from Location 16 (AhHj-5). This includes four fragments of aqua and a single fragment of clear or colourless glass, as well as a single fragment of clear pressed moulded glass dish. Aqua coloured glass fragments generally originate from medical and pharmaceutical products, including patent medicine bottles of the 19th and 20th centuries (Kendrick 1971). Colourless or "clear" glass was rare prior to the 1870s but became quite common after the widespread use of automatic bottle machines in the mid-to-late 1910s (Toulouse 1969; Kendrick 1971; Fike 1987). Non-leaded pressed glass in a variety of patterns is common on Canadian sites post-1860 (Jones and Sullivan 1989:35).

3.16.2 Personal Artifacts

Four fragments of white clay tobacco pipe, including three fragments of pipe stem (Plate 8:11) and a single fragment of decorated clay pipe bowl (Plate 8:12), were collected from Location 16 (AhHj-5). White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured in either Quebec or Scotland. Occasionally, examples from English, Dutch, French and American makers are also found. The maker's name may be impressed with the city of manufacture on the opposite side, although this did not become common practice until the 1840s. One fragment in the assemblage bears the name of Bannerman of Montreal. This company was operational from 1858 to 1907 (Adams 1994:95).

3.16.3 Structural Artifacts

A single machine-cut nail was collected from Location 16 (AhHj-5) (Plate 8:13). Machine-cut nails were machine-cut and have a flat head. They were produced as early as 1790, but did not become prevalent in Ontario until about 1830. They were replaced by wire drawn nails in the 1890s (Adams 1994:92).





3.16.4 Metal Artifacts

A single fragment of heavily corroded and unidentifiable metal was also collected during the Stage 2 assessment of Location 16 (AhHj-5).

3.16.5 Artifact Catalogue

Table 36 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

Table 36: Location 16 (AhHj-5) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	ironstone	2	hollowware
2	surface collection	0 cm	white clay pipe stem	1	Bannerman, Montreal
3	surface collection	0 cm	whiteware, banded	1	brown and white slip banded hollowware
4	surface collection	0 cm	ironstone, moulded	2	1 scalloped teacup fragment; 1 rim
5	surface collection	0 cm	glass, bottle	1	aqua
6	surface collection	0 cm	whiteware	1	basal fragment
7	surface collection	0 cm	white clay pipe stem	1	
8	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern; teacup
9	surface collection	0 cm	white clay pipe bowl	1	decorated
10	surface collection	0 cm	glass, bottle	2	aqua
11	surface collection	0 cm	nail, cut	1	
12	surface collection	0 cm	ironstone, painted	1	polychrome lip fragment
13	surface collection	0 cm	whiteware, stamped	1	green
14	surface collection	0 cm	glass, dish	1	clear; pressed moulded
15	surface collection	0 cm	whiteware, stamped	1	green
16	surface collection	0 cm	ironstone, moulded	2	indeterminate pattern
17	surface collection	0 cm	white clay pipe stem	1	
18	surface collection	0 cm	whiteware, edged	1	Blue, chickenfoot pattern
19	surface collection	0 cm	whiteware, stamped	1	green





Cat. #	Context	Depth	Artifact	Freq.	Comments	
20	surface collection	0 cm	whiteware, painted	1	red floral motif	
21	surface collection	0 cm	ironstone	2	hollowware	
22	surface collection	0 cm	whiteware, edged	1	blue, damaged, indeterminate type	
23	surface collection	0 cm	whiteware, sponged	1	blue	
24	surface collection	0 cm	whiteware, edged	1	blue, plain edge, not moulded or incised 1850-1897	
25	surface collection	0 cm	whiteware, painted	1	polychrome hollowware fragment	
26	surface collection	0 cm	whiteware, edged	1	blue, chickenfoot pattern	
27	surface collection	0 cm	ironstone, moulded	1	indeterminate pattern; hollowware	
28	surface collection	0 cm	yellowware	1		
29	surface collection	0 cm	whiteware, painted	1	green	
30	surface collection	0 cm	ironstone	2		
31	surface collection	0 cm	ironstone	2		
32	surface collection	0 cm	earthenware, yellow	3	lead glazed	
33	surface collection	0 cm	glass, bottle	2	1 aqua, 1 clear or colourless	
34	surface collection	0 cm	metal, undetermined unidentified	1	heavily corroded fragment	
35	surface collection	0 cm	ironstone	8		
36	surface collection	0 cm	earthenware, buff	2	green lead glazed; grey/buff bodied	

3.17 **Location 17**

The Stage 2 pedestrian survey of the proposed wind energy components on property GSH1041 (west of Bronson Line and north of MacDonald Road; Supplement A: Figure 6) occurred on June 27, 2011 and resulted in the identification of Location 17. This pre-contact Aboriginal site consists of an isolated biface manufactured from Dundee chert (Plate 7:2). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

The recovered biface is roughly ovate with a portion of the cortex still present along one edge. The remaining edges have all been worked (i.e. pressure flaked). This biface measures 66.57 millimetres long by 46.09 millimetres wide and is 10.82 millimetres thick.





3.17.1 Artifact Catalogue

Table 37 presents the Stage 2 artifact catalogue for Location 17.

Table 37: Location 17 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	biface	1	Dundee chert, ovate, all edges but one worked (pressure flaked), the unworked edge exhibits cortex

3.18 Location 18 (AiHj-11)

Location 18 (AiHj-11) is a pre-contact Aboriginal site that was also identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1041 (west of Bronson Line and north of MacDonald Road; Supplement A: Figure 6). An isolated Early Archaic Kirk/Nettling corner-notched projectile point manufactured from Onondaga chert (Plate 7:3) was identified and collected on June 27, 2011. As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this find, but no additional artifacts were identified.

A corner of the base of this projectile point is missing. It appears that there is some cortex or an inclusion along the basal portion of the point. The edges were worked (i.e. pressure flaked). This Early Archaic Kirk/Nettling corner-notched projectile point measures 80.26 millimetres long by 38.43 millimetres wide and is 10.40 millimetres thick. The point also has an approximate basal width of 22.12 millimetres (measurement taken on an incomplete artifact), a shoulder width of 38.43 millimetres, and an inter-notch width of 20.76 millimetres. In Ontario, this projectile point type dates to *circa* 8600-8000 B.C., during the middle Early Archaic (see Ellis et al. 1990:73; Ellis et al. 2009:796-800).

3.18.1 Artifact Catalogue

Table 38 presents the Stage 2 artifact catalogue for Location 18 (AiHj-11).

Table 38: Location 18 (AiHj-11) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Onondaga chert, corner of the base missing, cortex or inclusion along basal portion of the point, all edges were worked (pressure flaked), Early Archaic Kirk corner-notched

3.19 Location 19 (AiHj-12)

A third pre-contact Aboriginal site, designated Location 19 (AiHj-12), was identified during the pedestrian survey of the proposed wind energy components on property GSH1041 (west of Bronson Line and north of MacDonald Road; Supplement A: Figure 6). This site consists of three tertiary Kettle Point chert lithic flakes (Plate 9:1) and





a small corner-notched projectile point of indeterminate affiliation (Plate 9:2). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this cluster, but no additional artifacts were identified.

3.19.1 Chipped Lithic Tools

The small projectile point recovered is manufactured from Kettle Point chert and measures 22.09 millimetres long by 17.72 millimetres wide and is 4.48 millimetres thick. It has an approximate basal width of 12.00 millimetres (measurement taken on incomplete artifact), a shoulder width of 17.74 millimetres, and an inter-notch width of 8.96 millimetres. This point exhibits a broken base in one corner and was extensively re-sharpened along its edges (i.e. by pressure flaking and grinding). This point is of indeterminate affiliation, but likely dates between the Late Archaic and the early Late Woodland periods (i.e. *circa* 1500 B.C. to A.D. 900).

3.19.2 Chipping Detritus

Three tertiary Kettle Point chert lithic flakes were also recovered from this location. These artifacts and the finished, re-sharpened point, suggest that primary lithic reduction occurred elsewhere.

3.19.3 Artifact Catalogue

Table 39 presents the Stage 2 artifact catalogue for Location 19 (AiHi-12).

Table 39: Location 19 (AiHj-12) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	3	Kettle Point chert, tertiary flakes
2	surface collection	0 cm	projectile point	1	Kettle Point chert, complete, small corner- notched point, one corner of base broken, extensively re-sharpened (pressure flaked) and edges ground, could date from the Late Archaic to the Late Woodland period

3.20 Location 20 (AhHk-141)

Location 20 (AhHk-141), a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on GSH1068 (located north of Greenway Road and west of Mollard Line; Supplement A: Figure 32) on June 28, 2011. This site consists of an isolated Middle Archaic Brewerton cornernotched point (*circa* 6000 to 2500 B.C.) manufactured from Kettle Point chert (Plate 9:3). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this point, but no additional artifacts were identified.





This Middle Archaic Brewerton corner-notched projectile point measures 43.32* millimetres long by 31.50 millimetres wide and is 9.51 millimetres thick. The point also has a basal width of 18.52* millimetres, a shoulder width of 31.75* millimetres, and an inter-notch width of 19.80 millimetres (* indicates measurement taken on an incomplete artifact). The point is missing its tip and one shoulder is broken and appears to have been retouched. Its base might have been broken (as it is smooth and sharp) and there is a large hole near the centre of the point on one side, likely from the erosion of a softer sedimentary rock vein in the material.

3.20.1 Artifact Catalogue

Table 40 presents the Stage 2 artifact catalogue for Location 20 (AhHk-141).

Table 40: Location 20 (AhHk-141) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Kettle Point chert, broken tip, one shoulder broken and re-touched, base possibly broken, large hole (softer sedimentary material) near centre of point on one side, Middle Archaic Brewerton corner-notched

3.21 Location 21 (AhHk-142)

Location 21 (AhHk-142), a historic Euro-Canadian site, was identified on June 28, 2011 during the Stage 2 pedestrian survey of the proposed wind energy components on GSH1068 (Supplement A: Figure 32). Location 21 (AgHk-122) consists of a 25 metre (along the north-south axis) by 52 metre (along the west-east axis) scatter of approximately 50 fragments of late-19th century Euro-Canadian domestic debris. In total, 16 Euro-Canadian artifacts were collected during the Stage 2 assessment including 15 domestic items and a single fragment of recent material (Table 41). Each artifact class is discussed in greater detail below.

Table 41: Location 21 (AhHk-142) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	15	93.75
recent material	1	6.25
Total	16	100

3.21.1 Domestic Artifacts

Fifteen domestic artifacts were collected during the Stage 2 assessment of Location 21 (AhHk-142). This collection includes 11 ceramic artifacts and four fragments of bottle glass.





3.21.1.1 Ceramic Artifacts

Eleven fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 21 (AhHk-142). Included in this total are nine fragments of ironstone and one fragment each of low grade white porcelain and utilitarian earthenware. Table 42 provides a breakdown of the ceramic assemblage by ware type, while Table 43 provides a detailed breakdown of the ceramic assemblage by decorative style.

Table 42: Summary of Ceramic Collection According to Ware Type, Location 21 (AhHk-142)

Artifact	Freq.	%
ironstone	9	81.82
porcelain	1	9.09
utilitarian	1	9.09
Total	11	100.00

Table 43: Summary of Ceramic Collection According to Decorative Style, Location 21 (AhHk-142)

Artifact	Freq.	%
ironstone, plain	6	54.55
ironstone, transfer printed	2	18.18
ironstone, moulded	1	9.09
porcelain, plain	1	9.09
earthenware, red	1	9.09
Total	11	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=9 or 81.82%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 21 (AhHk-142) ceramic assemblage includes six plain or undecorated fragments (Plate 11:1), two fragments of rust toned transfer printed (likely from the same vessel; Plate 11:2), and one fragment of scalloped moulded teacup (Plate 11:3). Two fragments of plain ironstone bear partial maker's marks. One is too fragmentary to identify by manufacturer, but the other is easily identifiable as bearing the mark of Mellor, Taylor and Company of Burslem, Stoke-on-Trent, England, and is trademarked as "Warrented Stone China" (Plate 11:4). This mark can be dated from 1880 to 1904 (Birks 2012).

Porcelain

The Canadian pioneer generally preferred utilitarian earthenwares, but by the mid-19th century, English potteries such as Copeland and Minton, were producing porcelains for the Canadian marketplace. Porcelain was not





acquired as much as utilitarian ceramics, but it was always in steady demand (Collard 1967:163,175). One basal fragment of low grade white porcelain is part of the ceramic assemblage (Plate 11:5).

Utilitarian Earthenware

One fragment of lead glazed red earthenware was collected during the Stage 2 assessment of Location 21 (AhHk-142). Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).

3.21.1.2 Glass Artifacts

Four fragments of bottle glass were recovered from Location 21 (AhHk-142). They include two amber fragments and two aqua fragments. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th centuries (Kendrick 1971). One piece of aqua glass in the assemblage is a fragmentary lightning stopper (i.e. a glass lid closure for fruit or canning jars popular post-1880; Toulouse 1969).

3.21.2 Recent Material

One fragment of recent material was collected during the Stage 2 assessment of Location 21 (AhHk-142). It has been identified as plexiglass.

3.21.3 Artifact Catalogue

Table 44 presents the complete Stage 2 artifact catalogue for Location 21 (AhHk-142).

Table 44: Location 21 (AhHk-142) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	aqua
2	surface collection	0 cm	ironstone, moulded	1	scalloped teacup fragment
3	surface collection	0 cm	ironstone	1	partial maker's mark fragment; illegible
4	surface collection	0 cm	ironstone	1	Mellor, Taylor and Company, "Warrented Stone China" mark 1880 to 1904; Burslem, Stoke-on-Trent
5	surface collection	0 cm	ironstone, transfer printed	1	rust (likely fragment of same dish as #9)
6	surface collection	0 cm	porcelain	1	basal fragment
7	surface collection	0 cm	glass, bottle	1	aqua; lightning stopper; glass lid closure, post-1880





Cat. #	Context	Depth	Artifact	Freq.	Comments
8	surface collection	0 cm	ironstone	1	
9	surface collection	0 cm	ironstone, transfer printed	1	rust (likely fragment of same dish as #5)
10	surface collection	0 cm	earthenware, red	1	lead glazed
11	surface collection	0 cm	ironstone	3	
12	surface collection	0 cm	glass, bottle	2	amber
13	surface collection	0 cm	recent material	1	plexiglass plastic fragment

3.22 Location 22 (AhHj-6)

During the Stage 2 pedestrian survey of the proposed wind energy components on property GSH2108 (located south of Huron Street and west of Babylon Line; Supplement A: Figure 13), an isolated biface fragment (Plate 9:4), designated Location 22 (AhHj-6), was identified. This pre-contact Aboriginal site was identified on June 30, 2011. As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this fragment, but no additional artifacts were identified.

This biface fragment, manufactured from Kettle Point Chert, appears to be the tip of a projectile point that was broken mid-point. The lateral edges are pressure-flaked and one edge was re-touched as evidenced by the removal of larger flakes. This incomplete artifact measures 38.49 millimetres in length, 24.78 millimetres in width, and is 4.70 millimetres thick.

3.22.1 Artifact Catalogue

Table 45 presents the Stage 2 artifact catalogue for Location 22 (AhHj-6).

Table 45: Location 22 (AhHj-6) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	biface	1	Kettle Point chert, likely tip of a projectile point, broken mid-point, lateral edges pressure-flaked, one edge re-touched as evidenced by larger flakes

3.23 Location 23 (AiHj-13)

Location 23 (AiHj-13), a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1050 (located south of Zurich Main Street and west of Babylon Line; Supplement A: Figure 1). This site, identified on July 4, 2011, consists of an incomplete, isolated projectile point (Plate 9:5). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this partial point, but no additional artifacts were identified.





This partial projectile point is manufactured from Kettle Point chert. It is represented by a base and one complete shoulder. The other shoulder was previously broken and retouched. This point was broken at its approximate mid-point and is of indeterminate affiliation. It could date to any time between the Early Archaic and the Late Woodland periods (*circa* 8000 B.C. to 600 A.D.). This point has an incomplete length of 21.33 millimetres, an incomplete width of 24.62 millimetres, and an approximate thickness of 5.94 millimetres.

3.23.1 Artifact Catalogue

Table 46 presents the Stage 2 artifact catalogue for Location 23 (AiHj-13).

Table 46: Location 23 (AiHj-13) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Kettle Point chert, corner notched, base and one shoulder only, point broken along the middle, broken shoulder retouched, could date from the Early Archaic to the Late Woodland period

3.24 Location 24 (AhHj-7)

During the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1732 (located north of Crediton Road and West of Goshen Line; Supplement A: Figure 17) on July 5, 2011, a pre-contact Aboriginal site, designated Location 24 (AhHj-7) was identified. Two bifaces (Plate 10:1, 2) and one projectile point (Plate 10:3) manufactured from Onondaga chert were identified and collected. As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding these items, but no additional artifacts were identified.

3.24.1 Chipped Lithic Tools

The recovered projectile point is manufactured from Onondaga chert and measures 53.35 millimetres long and 9.07 millimetres thick. It has an approximate basal width of 16.87 millimetres (measurement taken on incomplete artefact), a shoulder width of 26.65 millimetres, and an inter-notch width of 18.58 millimetres. This point is identified as a Brewerton side-notch point type. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C., during the Middle Archaic (Ellis et al. 2009:807-811; Kenyon 1981b).

Both bifaces are manufactured from Onondaga chert. The first biface is likely the base section of a broken projectile point. It has an incomplete length of 20.63 millimetres, an incomplete width of 26.39 millimetres and a thickness of 6.06 millimetres. The second biface is complete and has a length of 72.95 millimetres, a width of 48.53 millimetres and a thickness of 7.69 millimetres.



3.24.2 Artifact Catalogue

Table 47 presents the Stage 2 artifact catalogue for Location 24 (AhHj-7).

Table 47: Location 24 (AhHj-7) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	biface	1	Onondaga chert, incomplete
2	surface collection	0 cm	biface	1	Onondaga chert
3	surface collection	0 cm	projectile point	1	Onondaga chert, side notched, incomplete, tip missing, part of base missing, likely Middle Archaic Brewerton side-notched

3.25 **Location 25**

Location 25, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1015 (located north of Huron Street and west of Babylon Line; Supplement A: Figure 13). This site, identified on October 31, 2011, consists of an incomplete, isolated biface fragment (Plate 9:6). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding this partial biface, but no additional artifacts were identified.

This biface fragment was manufactured from Onondaga chert and appears to be the tip of a projectile point that was broken mid-point. The lateral edges are pressure-flaked. This biface has an incomplete length of 29.79 millimetres, an incomplete width of 23.73 millimetres, and an incomplete thickness of 6.05 millimetres.

3.25.1 Artifact Catalogue

Table 48 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 48: Location 25 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	biface	1	Onondaga chert, tip only

3.26 Location 26 (AiHj-14)

Location 26 (AiHj-14), a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1008 (located north of Pepper Road and west of Babylon Line; Supplement A: Figure 3, 4). This site, identified on October 31, 2011, consists of 9 artifacts, including one scraper (Plate 9:7) and one retouched flake. Only the scraper and retouched flake were retained for laboratory analysis. As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the finds but no additional artifacts were identified.





This scraper was manufactured from Haldimand chert. The distal edge of the scraper demonstrates retouch while the proximal end has been broken. This scraper has an incomplete length of 33.19 millimetres, an incomplete width of 28.04 millimetres, and a thickness of 10.64 millimetres.

3.26.1 Artifact Catalogue

Table 49 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 49: Location 26 (AiHj-14) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	retouched flake	1	Haldimand chert, worked on two edges
2	surface collection	0 cm	scraper	1	Haldimand chert, one scraper edge

3.27 Location 27 (AhHj-8)

Location 27 (AhHj-8), a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1482 (located north of South Road and west of Parr Line) (Supplement A: Figure 23). This site, identified on November 3, 2011, consists of an isolated projectile point manufactured from Haldimand chert (Plate 13:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding this projectile point, but no additional artifacts were identified.

This projectile point is missing one shoulder. It has a length of 32.20 millimetres, an incomplete width of 16.50 millimetres, a thickness of 4.27 millimetres, a basal width of 1.14 millimetres, an incomplete shoulder width of 16.50 millimetres, and an inter-notch measurement of 8.85 millimetres. The projectile point is identified as a Bifurcate point type. In Ontario, this projectile point type dates to *circa* 8,900 to 8,000 B.P., during the late Early Archaic (Ellis et al. 1990:78; Ellis et al. 2009:801-803).

3.27.1 Artifact Catalogue

Table 50 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 50: Location 27 (AhHj:8) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Haldimand chert, shoulder broken, bifurcate

3.28 Location 28 (AhHk-143)

Location 28 (AhHk-143), a historic Euro-Canadian site, was identified on November 3, 2011. The location was discovered during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH1482





(west of the intersection of Mollard Line and Sideroad 5; Supplement A: Figure 25) and consists of a 23 metre (along the north-south axis) by 36 metre (along the west-east axis) scatter of approximately 60 fragments of mid-to-late 19th century Euro-Canadian domestic debris. In total, 10 Euro-Canadian domestic artifacts were collected during the Stage 2 assessment. Each artifact type is discussed in greater detail below.

3.28.1 Domestic Artifacts

A total of 10 domestic artifacts were collected during the Stage 2 assessment of Location 28 (AhHk-143). This collection includes nine ceramic artifacts and a single fragment of bottle glass.

3.28.1.1 Ceramic Artifacts

In total, nine fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 28 (AhHk-143). Included in this total are seven fragments of whitware and two fragments of ironstone. Table 51 provides a breakdown of the ceramic assemblage by ware type, while Table 52 provides a detailed breakdown of the ceramic assemblage by decorative style.

Table 51: Summary of Ceramic Collection According to Ware Type, Location 28 (AhHk-143)

Artifact	Freq.	%
whiteware, transfer printed	7	77.78
ironstone, plain	2	22.22
Total	9	100.00

Table 52: Summary of Ceramic Collection According to Decorative Style, Location 28 (AhHk-143)

Artifact	Freq.	%
whiteware, transfer printed	7	77.78
ironstone, plain	2	22.22
Total	9	100.00

White Earthenware

Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near-white ceramics such as pearlware and creamware by the early 1830s (Kenyon 1985). The whiteware assemblage consists exclusively of transfer print decorated fragments - four red and three blue fragments (Plate 12:1). Transfer printed whiteware, which involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay, became popular early in the 19th century. Before 1830, almost all transfer printed wares were blue. After 1830, however, colours such as light blue, black, brown, green, purple and red became more common (Adams 1994:101).





Ironstone

Two basal fragments of plain or undecorated ironstone were collected from Location 28 (AhHk-143) (Plate 12:2). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985).

3.28.1.2 Glass Artifacts

A single basal fragment of sun-coloured amethyst glass with a moulded "60" was collected from Location 28 (AhHk-143). Sun-coloured amethyst glass generally dates from the 1880s to 1920 (Lindsey 2012). This particular fragment is machine made and likely dates to the early 20th century.

3.28.2 Artifact Catalogue

Table 53 presents the Stage 2 artifact catalogue for Location 28 (AhHk-143).

Table 53: Location 28 (AhHk-143) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	whiteware, transfer printed	1	red
2	surface collection	0 cm	whiteware, transfer printed	1	red
3	surface collection	0 cm	whiteware, transfer printed	1	red
4	surface collection	0 cm	whiteware, transfer printed	1	blue floral motif
5	surface collection	0 cm	whiteware, transfer printed	1	blue floral motif; moulded decoration
6	surface collection	0 cm	whiteware, transfer printed	1	blue floral
7	surface collection	0 cm	whiteware, transfer printed	1	red
8	surface collection	0 cm	ironstone	1	hollowware base
9	surface collection	0 cm	ironstone	1	hollowware base
10	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst basal fragment; moulded "60"; machine made likely early 20th century

3.29 **Location 29**

Location 29, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH2099 (located south of Dashwood Road and west of Parr Line; Supplement A: Figure 10). This pre-contact Aboriginal site, identified on November 15, 2011, consists of a single piece of Kettle Point chert chipping detritus. As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding this find, but no additional artifacts were identified. Based on





professional judgement this non-diagnostic fragment of chipping detritus was not collected as per Section 2.1.1, Standard 9, in the *Standards and Guidelines for Consultant Archaeologists* (MTCS, 2011).

3.30 Location 30

Location 30, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1062 (located north of Mount Carmel Drive and west of Bronson Line; Supplement A: Figure 28). This pre-contact Aboriginal site, identified on November 16, 2011, consists of a single piece of Kettle Point chert chipping detritus. As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding this find, but no additional artifacts were identified. Based on professional judgement this non-diagnostic fragment of chipping detritus was not collected as per Section 2.1.1, Standard 9, in the *Standards and Guidelines for Consultant Archaeologists* (MTCS, 2011).

3.31 Location 31 (AhHk-144)

Location 31, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH2237 (located north of Kirkton Road and west of Blackbush Line; Supplement A: Figure 15). This site, identified on November 21, 2011, consists of an isolated projectile point manufactured from Onondaga chert (Plate 13:2). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding this projectile point, but no additional artifacts were identified.

This projectile point is broken at the tip, base and shoulder. It has an incomplete length of 38.14 millimetres, an incomplete width of 31.87 millimetres, a thickness of 7.52 millimetres, an incomplete basal width of 20.47 millimetres, an incomplete shoulder width of 31.95 millimetres, and an incomplete inter-notch measurement of 17.86 millimetres. The point has been identified as Brewerton corner-notched. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C., during the Middle Archaic (Ellis et al. 2009:807-811; Kenyon 1981b).

3.31.1 Artifact Catalogue

Table 54 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 54: Location 31 (AhHk-144) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Onondaga chert, Brewerton corner- notched, broken tip, base and shoulder

3.32 **Location 32**

Location 32, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH1498 (located south of Kirkton Road and west of Blackbush Line; Supplement A: Figure 15). This site, identified on November 24, 2011, consists of an isolated biface manufactured from burnt Kettle Point chert (Plate 13:3). As detailed in Section 2.0, survey intervals were





intensified to one metre for a twenty metre radius surrounding this partial biface, but no additional artifacts were identified.

This partial biface is broken at the mid-point and displays potlidding on both sides. It has an incomplete length of 22.48 millimetres, an incomplete width of 23.57 millimetres, and a thickness of 8.3 millimetres.

3.32.1 Artifact Catalogue

Table 55 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 55: Location 32 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	biface	1	Kettle Point chert, broken at mid-point, potlidding on both sides

3.33 Location 33 (AhHk-145)

Location 33 (AhHk-145), a historic Euro-Canadian site, was identified on January 25, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH2176 (on the west side of Mollard Line, north of Sideroad 5; Supplement A: Figure 25). This location consists of a 25 metre (along the north-south axis) by 50 metre (along the west-east axis) scatter of approximately 100 fragments Euro-Canadian domestic debris spanning the 19th century. In total, 23 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 21 domestic, one personal item and one fragment of recent material (Table 56). Each artifact class is discussed in greater detail below.

Table 56: Location 33 (AhHk-145) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	21	91.30
personal	1	4.35
recent material	1	4.35
Total	23	100.00

3.33.1 Domestic Artifacts

A total of 21 domestic artifacts were collected during the Stage 2 assessment of Location 33 (AhHk-145). This collection includes 13 ceramics, six fragments of glass and a single fragment each of white glass and pressed moulded glass dish.





3.33.1.1 Ceramic Artifacts

In total, 13 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 33 (AhHk-145). Included in this total are 10 fragments of ironstone and three utilitarian earthenwares. Table 57 provides a detailed breakdown of the ceramic assemblage by decorative style.





Table 57: Summary of Ceramic Collection According to Decorative Style, Location 33 (AhHk-145)

Artifact	Freq.	%
ironstone, plain	6	46.15
ironstone, painted	2	15.38
earthenware, yellow	2	15.38
earthenware, red	1	7.69
ironstone, flow transfer printed	1	7.69
ironstone, transfer printed	1	7.69
Total	13	100.00

Ironstone

Ten fragments of ironstone were identified in the Location 33 (AhHk-145) ceramic assemblage including six plain, undecorated fragments (Plate 14:1), two polychrome hand painted fragments (Plate 14:2), a single flow blue transfer printed fragment with a scalloped edge (Plate 14:3) and a single fragment of bright green transfer printed (Plate 14:4). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985).

As was mentioned above, one ironstone fragment in the assemblage is transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994).

Utilitarian Earthenware

A total of three fragments of utilitarian earthenwares were collected. This includes two fragments of lead glazed yellow earthenware and a single fragment of lead glazed red earthenware. The fragments of yellow earthenware originate from a crock and a jug. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).

3.33.1.2 Glass Artifacts

Eight fragments of glass were recovered from Location 33 (AhHk-145). This collection includes six fragments of bottle glass, a single fragment of white glass and a fragment of brilliant green glass dish decorated in a pressed moulded scalloped motif. Colours present in the bottle glass assemblage include: two amber, two aqua, one sun-coloured amethyst, and a single fragment of black glass.

Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Sun-coloured amethyst glass generally dates from the 1880s to 1920





(Lindsey 2012). "Black" glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). Pressed glass dishes and dishwares can also be temporally diagnostic - non-leaded pressed glass in a variety of patterns becomes common on Canadian sites post-1860 (Jones and Sullivan 1989:35).

3.33.2 Personal Artifacts

A single item classified as personal material was collected during Stage 2 assessment of Location 33 (AhHk-145) – a gun mechanism – specifically the lock mechanism from a percussion cap musket (Plate 14:5). The percussion lock began to replace the flintlock mechanism post-1838 (Noël Hume 1969:217). The percussion cap was more reliable as a weapon, easier to load and more weather resistant. Many flintlock muskets were simply converted by replacing hardware (Winant 1959). The percussion lock was rendered obsolete by technological advances such as breech-loading metallic cartridges by the late 1860s.

3.33.3 Recent Material

A single fragment of modern bottle glass was collected during the Stage 2 assessment of Location 33 (AhHk-145).

3.33.4 Artifact Catalogue

Table 58 presents the Stage 2 artifact catalogue for Location 33 (AhHk-145).

Table 58: Location 33 (AhHk-145) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	earthenware, yellow	1	large crock rim fragment; lead glazed
2	surface collection	0 cm	glass, dish	1	brilliant green scalloped dish; pressed moulded
3	surface collection	0 cm	ironstone	1	hollowware basal fragment
4	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
5	surface collection	0 cm	glass, bottle	1	aqua
6	surface collection	0 cm	glass, bottle	1	aqua
7	surface collection	0 cm	ironstone, painted	1	polychrome; fragment; heavily damaged
8	surface collection	0 cm	earthenware, red	1	lead glazed hollowware fragment
9	surface collection	0 cm	glass, bottle	1	black
10	surface collection	0 cm	ironstone, flow transfer printed	1	blue rim with scalloped edge
11	surface collection	0 cm	gun	1	percussion cap/lock mechanism; likely 1840 +





Cat.	Context	Depth	Artifact	Freq.	Comments
12	surface collection	0 cm	ironstone	1	rim fragment
13	surface collection	0 cm	ironstone, transfer printed	1	bright green motif
14	surface collection	0 cm	ironstone	1	hollowware
15	surface collection	0 cm	earthenware, yellow	1	jug rim fragment; lead glazed
16	surface collection	0 cm	ironstone	1	hollowware basal fragment
17	surface collection	0 cm	ironstone, painted	1	polychrome; fragment; heavily damaged
18	surface collection	0 cm	ironstone	1	teacup rim fragment
19	surface collection	0 cm	glass, bottle	2	amber
20	surface collection	0 cm	glass, white	1	white moulded glass fragment
21	surface collection	0 cm	ironstone	1	
22	surface collection	0 cm	recent material	1	7-Up bottle glass fragment

3.34 Location 34 (AhHj-10)

Location 34 (AhHj-10), a historic Euro-Canadian site, was identified on April 13, 2012 during the assessment of the proposed collector cable corridor on property GSH 1078 (located north of Crediton Road and west of Bronson Line; Supplement A: Figure 21). This location consists of a 40 metre (along the north-south axis) by 85 metre (along the west-east axis) scatter of approximately 70 fragments of historic Euro-Canadian domestic debris spanning the 19th century. In total, 45 historic Euro-Canadian artifacts were collected during the Stage 2 assessment, including 38 domestic, four personal and three fragments of structural material (Table 59). Each artifact class is discussed in greater detail below.

Table 59: Location 34 (AhHj-10) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	38	84.40
personal	4	8.89
structural	3	6.67
Total	45	100.00

3.34.1 Domestic Artifacts

A total of 38 domestic artifacts were collected during the Stage 2 assessment of Location 34 (AhHj-10). This collection includes 29 fragments of ceramic and nine fragments of glass.





3.34.1.1 Ceramic Artifacts

In total, 29 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 34 (AhHj-10). Included in this total are 11 fragments of ironstone, 10 fragments of whiteware, 6 fragments of utilitarian earthenware and stoneware, one fragment of porcelain and one fragment of yellowware. Table 60 provides a breakdown of the ceramic assemblage by ware type, while Table 61 provides a more detailed breakdown by decorative style.

Table 60: Summary of Ceramic Collection According to Ware type, Location 34 (AhHj-10)

Artifact	Freq.	%
ironstone	11	37.93
whiteware	10	34.48
utilitarian	6	20.69
porcelain	1	3.45
yellowware	1	3.45
Total	29	100.00

Table 61: Summary of Ceramic Collection According to Decorative Style, Location 34 (AhHj-10)

Artifact	Freq.	%
ironstone, plain	7	24.14
ironstone, transfer printed	3	10.34
whiteware, stamped	3	10.34
whiteware, edged	2	6.90
whiteware, transfer printed	2	6.90
whiteware, plain	2	6.90
earthenware, red	2	6.90
earthenware, yellow	2	6.90
yellowware, moulded	1	3.45
whiteware, painted	1	3.45
ironstone, moulded	1	3.45
porcelain, plain	1	3.45
stoneware, plain	1	3.45
stoneware, salt glazed	1	3.45
Total	29	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=11 or 37.93%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967;





Kenyon 1985). The Location 34 (AhHj-10) ceramic assemblage includes seven plain or undecorated fragments (Plate 15:1), three fragments that are transfer printed (Plate 15:2), and a single fragment of moulded ironstone (Plate 15:3).

Three ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). Two of the fragments in this assemblage are monochromatic black with indistinguishable designs, and one has a purple floral pattern.

One fragment in the ironstone assemblage is moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern. The paste is quite vitreous; fine vitreous paste tends to indicate a later date of manufacture (approximately post-1860s) (Kenyon 1980). The moulded design on the fragment is an example of the wheat motif.

White Earthenware

A total of ten whiteware fragments were collected during the Stage 2 assessment of Location 34 (AhHj-10). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Three fragments of whiteware in the assemblage are sponge-stamped (Plate 15:4), two fragments are edged (Plate 15:5), two fragments are transfer-printed (Plate 15:6), two fragments are plain (Plate 15:7) and one fragment is hand-painted (Plate 15:8).

Three fragments of whiteware in the assemblage are stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). Two fragments of the stamped whiteware in the assemblage display a blue geometric pattern, and the third is blue and green, also with a geometric pattern.

Two fragments of edged whiteware were also recovered from the assemblage. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). The fragment of edged ware recovered during the Stage 2 assessment is an unscalloped rim with blue, unimpressed "chickenfoot" style impressed lines. Its date of manufacture is approximately 1825-1891.

Two transfer printed sherds were recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the





designs. One of the fragments in the assemblage is blue with polychromatic hand tinting, and one is purple with a floral pattern.

One fragment of hand painted whiteware was recovered during the Stage 2 assessment. The sherd is polychromatic and the colours visible are bright green and red, and are part of a broad-stoke floral pattern. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen here are considered "Late Palette" colours.

Utilitarian Earthenware

A total of six fragments of utilitarian earthenwares were collected. This includes two fragments of lead glazed yellow earthenware, two fragments of lead glazed red earthenware, one fragment of plain stoneware and one fragment of salt glazed stoneware. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). Stoneware is harder, more vitreous and is often salt glazed. The piece recovered has a buff glazed exterior and a brown paste.

Porcelain

A total of one porcelain fragment was collected during the Stage 2 assessment of Location 34 (AhHj-10). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. The porcelain fragment in the assemblage is plain (Plate 15:9).

Yellowware

One fragment of moulded yellowware (Plate 15:10) was recovered from Location 34 (AhHj-10). Yellowware ceramics were first manufactured in the 1840s, and continue to be manufactured in limited quantities today (Adams 1994:100). By the mid-19th century, there were many forms and decorations used for yellowware. Cups, pitchers and bowls were slip-banded in different colours, mostly white or blue. Mocha designs over a white slip were also used for this ware. Another variation in design included a thick slip with an elaborate decoration. Over time, the yellow colour of this ware became paler and brighter. Other decorative methods included moulded relief, underglaze painted, finger trailing, and lustre. In general, this ware was used primarily for kitchenwares and storage vessels. The fragment in this assemblage has a white interior glaze and a clear exterior glaze over a decorative moulded relief. It is a deeper, more faded shade of yellow, which suggests a manufacture date in the mid-19th century.





3.34.1.2 Glass Artifacts

Nine fragments of glass were recovered from Location 34 (AhHj-10). This collection includes eight fragments of bottle glass and one fragment of melted glass.

The bottle glass assemblage includes three colourless fragments, three aqua fragments, one black broken base fragment and one sun-coloured amethyst square base fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Black glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971).

3.34.2 Personal Artifacts

Three items classified as personal material were collected during the Stage 2 assessment of Location 34 (AhHj-10). The personal artifact assemblage includes three fragments of white clay pipe stems (Plate 16:1) and one agate button (Plate 16:2).

White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93). One pipe stem has a damaged maker's mark that is unfortunately non-diagnostic. Another pipe stem has an impressed maker's mark of "BANNERMAN" on one side, and "MONTREAL" on the other. Bannerman is commonly considered the second-largest Montreal pipe-making business, and began making pipes in 1858. The business changed its name to Bannerman Brothers in 1888, at which point the maker's mark was also changed. This gives the Bannerman pipe stem in the assemblage an approximate manufacture date of 1858-1888 (Davey 1983).

The button in the assemblage is white, 4-holed and made of pressed ceramic. What were called "agate" buttons are similar in colour and size (usually about 10 millimetres) to modern shirt buttons. The "agate" was in fact a type of pressed ceramic powder made using the so-called "Prosser" process patented in 1840. Agate buttons became widely distributed in Canada by the late 1840s and are common on sites form this time on (Kenyon and Doroszenko 1995).

3.34.3 Structural Artifacts

There were three structural artifacts collected from Location 34 (AhHj-10). These artifacts consist of one heavily corroded machine-cut nail (Plate 16:3) and two fragments of window glass.

One nail was recovered from Location 34 (AhHj-10). Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not





become common in Ontario until 1830. They continued to be popular until the 1890s, when wire nails began to be manufactured and used widely. The nail in the assemblage is machine-cut, and heavily corroded.

A total of two fragments of window glass were recovered in the Stage 2 assessment. Ian Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 millimetres. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes. One of the fragments in this assemblage is less than 1.6 millimetres thick, and can be dated to pre-1850, while the other is greater than 1.7 millimetres, and can be dated to post-1850.

3.34.4 Artifact Catalogue

Table 62 presents the Stage 2 artifact catalogue for Location 34 (AhHj-10).

Table 62: Location 34 (AhHj-10) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	button, agate	1	4 holes
2	surface collection	0 cm	nail, cut	1	corroded
3	surface collection	0 cm	white clay pipe, stem	1	"Montreal Bannerman", impressed dots
4	surface collection	0 cm	white clay pipe, stem	1	
5	surface collection	0 cm	white clay pipe, stem	1	"D.B_", other side "EBEC"
6	surface collection	0 cm	glass, bottle	1	black base, wine bottle
7	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst, square base
8	surface collection	0 cm	glass, window	1	>1.7mm, clear
9	surface collection	0 cm	glass, bottle	1	aqua, rim
10	surface collection	0 cm	glass, bottle	1	aqua rim, patina
11	surface collection	0 cm	whiteware, edged	1	blue, unscalloped, imprinted rim, chickenfoot (1825-1891)
12	surface collection	0 cm	ironstone, transfer printed	1	mauve transfer print, floral
13	surface collection	0 cm	whiteware, painted	1	polychrome floral, rim
14	surface collection	0 cm	whiteware, stamped	1	blue stamped
15	surface collection	0 cm	ironstone	1	base
16	surface collection	0 cm	ironstone	1	
17	surface collection	0 cm	ironstone	1	
18	surface collection	0 cm	ironstone, moulded	1	moulded wheat motif
19	surface collection	0 cm	whiteware, transfer printed	1	blue with pink and green hand tint
20	surface collection	0 cm	ironstone, transfer printed	1	black mono





Cat.	Context	Depth	Artifact	Freq.	Comments
21	surface collection	0 cm	whiteware, edged	1	blue, damaged
22	surface collection	0 cm	stoneware, salt-glazed	1	salt glaze, buff exterior, brown interior
23	surface collection	0 cm	yellowware, moulded	1	embossed, repeated pattered
24	surface collection	0 cm	earthenware, yellow	1	rim, burnt
25	surface collection	0 cm	earthenware, yellow	1	rim
26	surface collection	0 cm	glass, undetermined	1	melted rim piece, patina
27	surface collection	0 cm	glass, window	1	>1.6 mm, clear
28	surface collection	0 cm	glass, bottle	1	aqua, body fragment
29	surface collection	0 cm	glass, bottle	1	clear, embossed, patina
30	surface collection	0 cm	glass, bottle	1	clear, squared bottle
31	surface collection	0 cm	glass, bottle	1	clear
32	surface collection	0 cm	stoneware	1	salt glaze, dark brown interior, grey exterior
33	surface collection	0 cm	earthenware, red	1	lead glaze, brown
34	surface collection	0 cm	earthenware, red	1	lead glaze, brown, rim
35	surface collection	0 cm	porcelain	1	white
36	surface collection	0 cm	whiteware, stamped	1	blue edge pattern, stamped pattern
37	surface collection	0 cm	whiteware, stamped	1	blue edge pattern, stamped, green polychrome
38	surface collection	0 cm	ironstone, transfer printed	1	black transfer, possible makers mark
39	surface collection	0 cm	ironstone	1	body fragment
40	surface collection	0 cm	ironstone	1	rim fragment
41	surface collection	0 cm	ironstone	1	rim fragment
42	surface collection	0 cm	ironstone	1	rim fragment
43	surface collection	0 cm	whiteware, transfer printed	1	purple floral
44	surface collection	0 cm	whiteware	1	rim fragment
45	surface collection	0 cm	whiteware	1	rim fragment

3.35 Location 35 (AhHj-9)

Location 35 (AhHj-9), a pre-contact Aboriginal site, was located outside of the study area and was identified as the crew crossed the field to reach the portion of the property that required surveying. The intended Stage 2 pedestrian survey was of the proposed wind energy components on property GSH2056 (located north of South Road and west of Parr Line; supplement A: Figure 23). This site, identified on October 25, 2011, consists of an isolated projectile point manufactured from Onondaga chert (Plate 17:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding this projectile point, but no





additional artifacts were identified. Although this isolated find spot was not situated within the study area it has been included given its cultural heritage value (i.e. Early Woodland diagnostic artifact).

This projectile point is broken at the shoulder and base. It has an incomplete length of 64.11 millimetres, an incomplete width of 21.40 millimetres, and a thickness of 6.64 millimetres. The projectile point is a Meadowood point. In Ontario, this projectile point type dates to *circa* 1000-500 B.C., during the Early Woodland period (Spence et al. 1990:128-137; Ritchie 1971:35,89).

3.35.1 Artifact Catalogue

Table 63 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 63: Location 35 (AhHj-9) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Onondaga chert, broken shoulder and base, Meadowood Point

3.36 Location 36 (AhHk-147)

Location 36 (AhHk-147), a historic Euro-Canadian site on property GSH 1617 (located north of Crediton Road and east of Corbett Line; Supplement A: Figure 19), was identified on April 16, 2012. Location 36 (AhHk-147) consists of a 90 metre (along the north-south axis) by 80 metre (along the west-east axis) scatter of over 200 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 56 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 50 domestic, five structural and one faunal specimen. Each artifact class is summarized in Table 64 and discussed in greater detail below.

Table 64: Location 36 (AhHk-147) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	50	89.28
structural	5	8.93
faunal	1	1.78
Total	56	100.00

3.36.1 Domestic Artifacts

A total of 50 domestic artifacts were collected during the Stage 2 assessment of Location 36 (AhHk-147). This collection includes 37 fragments of ceramics and 13 fragments of glass.



3.36.1.1 Ceramic Artifacts

In total, 37 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 36 (AhHk-147). Included in this total are 22 fragments of ironstone, seven fragments of whiteware, five fragments of utilitarian earthenware and stoneware, one fragment of Rockinghamware, one fragment of semi-porcelain and one fragment of creamware. Table 65 provides a breakdown of the ceramic assemblage by ware type, while Table 66 provides a more detailed breakdown by decorative style.

Table 65: Summary of Ceramic Collection According to Ware type, Location 36 (AhHk-147)

Artifact	Freq.	%
ironstone	22	59.46
whiteware	7	18.92
utilitarian	5	13.51
rockinghamware	1	2.70
semi-porcelain	1	2.70
creamware	1	2.70
Total	37	100.00

Table 66: Summary of Ceramic Collection According to Decorative Style, Location 36 (AhHk-147)

Artifact	Freq.	%
ironstone, transfer printed	12	32.43
ironstone, plain	4	10.81
ironstone, moulded	4	10.81
whiteware, plain	3	8.11
earthenware, yellow	3	8.11
ironstone, edged	1	2.70
whiteware, flow transfer printed	1	2.70
whiteware, transfer printed	1	2.70
whiteware, stamped	1	2.70
whiteware, hand painted	1	2.70
semi-porcelain, painted	1	2.70
creamware, plain	1	2.70
ironstone, stamped	1	2.70
rockinghamware	1	2.70
stoneware, plain	1	2.70
stoneware, salt glazed	1	2.70
Total	37	100.00





Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=22 or 59.46%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 36 (AhHk-147) ceramic assemblage includes 12 transfer printed fragments (Plate 18:1), four fragments that are plain or undecorated (Plate 18:2), four fragments that are moulded (Plate 18:3), one edged fragment (Plate 18:4), and one sponge-stamped fragment (Plate 18:5). One of the fragments in the assemblage is of particular note, as it displays an almost complete maker's mark (Plate 18:6). The mark identified the fragment as being manufactured by A.J. Wilkinson, a known Staffordshire pottery maker. The mark can be dated to post-1896 (Birks 2012).

Twelve ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). Five of the fragments in the assemblage are green with a dense floral pattern, including one rim sherd. Three of the fragments have a blue floral print, one fragment is green with a partial indistinguishable maker's mark, and one fragment has a brown print coupled with wheat moulding.

Four fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though grape vines and flowers were also popular. The fragment is a basal fragment from plate or servingware. The paste is quite vitreous; fine vitreous paste tends to indicate a later date of manufacture (approximately post-1860s) (Kenyon 1980). Two of the moulded fragments in the assemblage display plant motifs, likely sherds from a larger grape vine design. The third fragment is decorated with a seashell and coral motif, and is clearly the rim of a piece of flatware. The fourth fragment is an excellent example of the popular wheat motif.

One fragment of ironstone in the assemblage is edged. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). The popularity of edged wares continued even as ironstone became more commonly used. The edged fragment of ironstone in the assemblage is green, and is too damaged to determine the appearance of the overall design.

One fragment of ironstone in the assemblage is sponge-stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). The stamped ironstone fragment in the assemblage is blue with a floral pattern.

White Earthenware

A total of seven whiteware fragments were collected during the Stage 2 assessment of Location 36 (AhHk-147). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics





such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Three fragments of whiteware in the assemblage are plain (Plate 18:7), one fragment is flow transfer printed (Plate 18:8), one fragment is transfer printed (Plate 18:9), one fragment is sponge-stamped (Plate 18:10) and one fragment is hand-painted (Plate 18:11).

One fragment of flow transfer printed whiteware is included in the assemblage. Flow blue transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). The fragment in this assemblage is blue, with no discernable design.

One transfer printed whiteware fragment was recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. The fragment in the assemblage displays a blue floral pattern.

One fragment of whiteware in the assemblage is sponge-stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). The stamped whiteware fragment in the assemblage displays a blue geometric pattern.

One fragment of hand painted whiteware was recovered during the Stage 2 assessment. The sherd is polychromatic and the colours visible are bright green and dark green, with a hint of blue. The design that is visible is part of a broad-stoke floral pattern. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen here are considered "Late Palette" colours.

Utilitarian Earthenware

A total of five fragments of utilitarian earthenwares were collected. This includes three fragments of yellow earthenware (two with salt glaze and one with lead glaze), one fragment of plain stoneware and one fragment of salt glazed stoneware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). One of the fragments of yellow earthenware in the assemblage has a clear lead glaze, one has a clear salt glaze, and the other has a grey tinted salt glaze.

Stoneware is harder, more vitreous and is often salt glazed. One of the stoneware fragments in the assemblage displays this popular salt glaze. It is a rim sherd, and also has a moulded dot design along the edge. The other fragment of stoneware is plain and unglazed.





Rockinghamware

There is one fragment of Rockinghamware represented in the assemblage at Location 36 (AhHk-147). This ware type is very similar to yellowware, and became popular around 1850, with manufacture continuing into the 20th century (Gallo 1985). The main difference between the two is that Rockinghamware displays a unique glaze type. It involves splattering a brown manganese glaze onto a piece that has already been covered with a clear glaze. The result is a dripping, mottled glaze effect, as the two glazes are melted together during firing. Another technique sometimes used was to dip the ceramic piece directly into the already-mixed glaze, which results in a reddish-brown finish (Gallo 1985:39). The Rockingham fragment in the assemblage displays a typical brown and yellow mottled glaze (Plate 18:12).

Semi-Porcelain

One semi-porcelain fragment was collected during the Stage 2 assessment of Location 36 (AhHk-147). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961). The semi-porcelain fragment in the assemblage is painted with a delicate green floral pattern (Plate 18:13).

Creamware

One small fragment of creamware was recovered during the Stage 2 assessment of Location 36 (AhHk-147). Creamware, often referred to as "Queen's Ware" was first produced in the 1750s, and later perfected by Josiah Wedgwood in the 1760s. This type of tableware became very common in Upper Canada by 1770 and continued in popularity until about 1820 when it started to be replaced by later pearlware and whiteware types (Kenyon and Dorozsenko 1994). Creamware is refined, thin bodied earthenware with a clear lead-glaze that appears creamy yellow to yellowish-green in colour. It was most often manufactured plain or decorated with moulded designs, however transfer printed, hand painted and banded examples of creamware do exist. The fragment of creamware in the assemblage is plain (Plate 18:14).

3.36.1.2 Glass Artifacts

Thirteen fragments of glass were recovered from Location 36 (AhHk-147). This collection includes eight fragments of bottle glass, two fragments of white glass, one fragment of press-moulded dish glass and one fragment of unidentifiable damaged glass.

The bottle glass assemblage includes three aqua fragments, three olive green fragments, two dark amber "black" fragments and one purple fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Black glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). Though both black glass fragments are partial bottle bases, as well as one of the aqua fragments and the purple fragment,





none are complete enough to be diagnostic. One of the aqua fragments is part of a finish with threading, but is also too damaged to be diagnostic.

Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994). The press-moulded dish fragment in this assemblage is sun-coloured amethyst, with a geometric pattern. Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012).

Opaque white glass, commonly called milk glass, was typically produced by the addition of tin or zinc oxide, fluorides (fluorspar), and phosphates. In a sense, milk glass is like colorless glass in that it is defined by the absence of color, except in this case the bottle is truly not clear. A noteable feature of most milk glass is that very thin fragments display an orange-ish opalescence when held up to bright light. White glass used for dishes is often moulded or folded in a fanned pattern. It is not commonly found on historic sites that date prior to the 1870s (Lindsey 2012). The white glass fragments in the assemblage both display a popular 'fan' design and are rim sherds, likely from the same hollowware dish.

3.36.2 Structural Artifacts

There were five structural artifacts collected from Location 36 (AhHk-147). These artifacts consist of two unidentifiable heavily corroded headless nails, one fragment of window glass, one unidentifiable heavily corroded metal fragment, and one heavily corroded machine-cut nail with a corroded bolt fused to it.

A total of one fragment of window glass was recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). The window glass fragment in the assemblage is greater than 1.7 millimetres, and can be dated to post-1850.

3.36.3 Faunal Remains

One faunal remain was recovered during the Stage 2 assessment of Location 36 (AhHk-147). It is a pearlescent bivalve shell fragment. Because the shell fragment appears to have no cultural markings on it, nor has it been crafted into a tool or cultural object, it cannot be considered temporally diagnostic.

3.36.4 Artifact Catalogue

Table 67 presents the Stage 2 artifact catalogue for Location 36 (AhHk-147).

Table 67: Location 36 (AhHk-147) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	base, black
2	surface collection	0 cm	glass, drinking	1	sun-coloured amethyst handle seam





Cat.	Context	Depth	Artifact	Freq.	Comments
3	surface collection	0 cm	glass, bottle	1	shoulder, neck aqua, threaded
4	surface collection	0 cm	glass, bottle	1	olive, base fragment
5	surface collection	0 cm	glass, dish	1	geometric design, sun-coloured amethyst
6	surface collection	0 cm	glass, window	1	> 1.7 mm
7	surface collection	0 cm	glass, bottle	1	olive green fragment
8	surface collection	0 cm	glass, white	1	fanned pattern, rim
9	surface collection	0 cm	glass, undetermined	1	melted, blue opaque glass
10	surface collection	0 cm	nail, undetermined	1	heavily corroded
11	surface collection	0 cm	nail, undetermined	1	heavily corroded
12	surface collection	0 cm	metal, hardware	1	nail corroded with square nut
13	surface collection	0 cm	stoneware, salt glazed	1	dark brown glaze
14	surface collection	0 cm	rockinghamware	1	layered rockingham glaze
15	surface collection	0 cm	earthenware, yellow	1	lead glaze
16	surface collection	0 cm	stoneware	1	Derbyshire
17	surface collection	0 cm	earthenware, yellow	1	salt glaze
18	surface collection	0 cm	porcelain, semi	1	green floral pattern
19	surface collection	0 cm	whiteware, painted	1	floral polychromatic
20	surface collection	0 cm	ironstone, edged	1	green damaged
21	surface collection	0 cm	whiteware	1	
22	surface collection	0 cm	whiteware	1	
23	surface collection	0 cm	whiteware, stamped	1	blue geometric
24	surface collection	0 cm	creamware	1	
25	surface collection	0 cm	whiteware, transfer print	1	blue floral
26	surface collection	0 cm	ironstone, transfer print	1	blue floral
27	surface collection	0 cm	ironstone, transfer print	1	blue floral
28	surface collection	0 cm	whiteware, flow transfer	1	no discernable pattern
29	surface collection	0 cm	whiteware	1	
30	surface collection	0 cm	ironstone	1	base of vessel
31	surface collection	0 cm	ironstone	1	base of vessel
32	surface collection	0 cm	ironstone, moulded	1	plant motif, rim sherd
33	surface collection	0 cm	ironstone, moulded	1	wheat motif rim sherd
34	surface collection	0 cm	ironstone, transfer print	1	brown transfer print and wheat moulding





Cat.	Context	Depth	Artifact	Freq.	Comments
35	surface collection	0 cm	ironstone, transfer print	1	A.J. Wilkinson, England stamp, crest, not crown
36	surface collection	0 cm	ironstone, transfer print	1	green, "DURAB_" partial maker's mark
37	surface collection	0 cm	ironstone, transfer print	1	green floral
38	surface collection	0 cm	ironstone, stamped	1	floral blue
39	surface collection	0 cm	ironstone, transfer print	1	green, floral
40	surface collection	0 cm	ironstone, transfer print	1	blue, floral and clover
41	surface collection	0 cm	ironstone, transfer print	1	green floral, rim sherd
42	surface collection	0 cm	ironstone, transfer print	1	green floral
43	surface collection	0 cm	ironstone, transfer print	1	green floral
44	surface collection	0 cm	metal, undetermined	1	heavily corroded
45	surface collection	0 cm	earthenware, yellow	1	grey salt glaze
46	surface collection	0 cm	shell	1	pearlescent bivalve fragment
47	surface collection	0 cm	ironstone, transfer print	1	green, floral
48	surface collection	0 cm	ironstone, moulded	1	vine and plant motif
49	surface collection	0 cm	ironstone, moulded	1	seashell and coral motif
50	surface collection	0 cm	ironstone	1	base of vessel
51	surface collection	0 cm	ironstone	1	
52	surface collection	0 cm	glass, bottle	1	base, black
53	surface collection	0 cm	glass, white	1	fanned pattern, rim sherd
54	surface collection	0 cm	glass, bottle	1	purple, square base
55	surface collection	0 cm	glass, bottle	1	aqua, base
56	surface collection	0 cm	glass, bottle	1	olive body sherd

3.37 Location 37 (AhHj-11)

Location 37 (AhHj-11), a historic Euro-Canadian site on property GSH1013 (located north of Huron Street and west of Babylon Line; Supplement A: Figure 13), was identified on April 16, 2012 during the Stage 2 pedestrian survey of the proposed collector cable. Location 37 (AhHj-11) consists of a 60 metre (along the north-south axis) by 60 metre (along the west-east axis) scatter of approximately 300 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 66 Euro-Canadian artifacts were collected during the Stage 2



assessment, including 53 domestic, six structural, four personal, two pieces of recent material, and one piece of faunal remains (Table 68). Each artifact class is discussed in greater detail below.

Table 68: Location 37 (AhHj-11) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	53	80.3
structural	6	9.10
personal	4	6.06
recent	2	3.03
faunal	1	1.51
Total Artifacts	66	100.00

3.37.1 Domestic Artifacts

A total of 53 domestic artifacts were collected during the Stage 2 assessment of Location 37 (AhHj-11). This collection includes 40 fragments of ceramic and 13 fragments of glass.

3.37.1.1 Ceramic Artifacts

In total, 40 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 37 (AhHj-11). Included in this total are 23 fragments of ironstone, seven fragments of utilitarian earthenware and stoneware, six fragments of whiteware, two fragments of semi-porcelain, one fragment of porcelain and one fragment of redware. Table 69 provides a breakdown of the ceramic assemblage by ware type, while Table 70 provides a more detailed breakdown by decorative style.

Table 69: Summary of Ceramic Collection According to Ware type, Location 37 (AhHj-11)

Artifact	Freq.	%
ironstone	23	57.5
utilitarian	7	17.5
whiteware	6	15.00
semi-porcelain	2	5.00
porcelain	1	2.50
redware	1	2.50
Total	40	100.00

Table 70: Summary of Ceramic Collection According to Decorative Style, Location 37 (AhHj-11)





Artifact	Freq.	%
ironstone, transfer printed	8	20.00
ironstone, plain	6	15.00
ironstone, flow transfer printed	5	12.50
whiteware, transfer printed	4	10.00
stoneware, plain	2	5.00
stoneware, salt glazed	2	5.00
earthenware, red	2	5.00
semi-porcelain, plain	2	5.00
ironstone, stamped	2	5.00
ironstone, banded	1	2.50
ironstone, moulded	1	2.50
redware, banded	1	2.50
whiteware, stamped	1	2.50
whiteware, hand painted	1	2.50
porcelain	1	2.50
earthenware, yellow	1	2.50
Total	40	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=23 or 57.5%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 37 (AhHj-11) ceramic assemblage includes eight transfer printed fragments (Plate 19:1), six plain or undecorated fragments (Plate 19:2), five flow transfer printed fragments (Plate 19:3), two sponge-stamped fragments (Plate 19:4), one banded fragment (Plate 19:5), and one moulded fragment (Plate 19:6).

One fragment of ironstone in the assemblage is of particular note, as it displays an almost complete maker's mark (Plate 19:7). The mark indicates that the piece was manufactured by Wood & Sons, a known Staffordshire pottery maker. The design of the mark allows the piece to be dated to post-1910 (Birks 2012).

Eight ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). Three of the transfer printed ironstone fragments in the assemblage are blue, one with leaves and wheat, one with a floral pattern, and one with a light blue pattern accompanied by moulding. Two fragments are green transfer printed, one is dark green, one is blue willow and one is black with a partial indistinguishable maker's mark.

Five pieces of flow transfer printed ironstone were found during the Stage 2 assessment of Location 37 (AhHj-11). Flow blue transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around





1900 (Collard 1967; Miller 1991). Of the five flow blue ironstone fragments in the assemblage, two have indistinguishable designs, while one displays a floral pattern, one a tree pattern, and one a geometric pattern.

Two fragments of ironstone in the assemblage are sponge-stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). The stamped ironstone fragments in the assemblage are blue with an indistinguishable design.

One fragment of ironstone in the assemblage is banded. Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banded pieces may also include inlaid and cut away slip decoration and bands of lathe turned grooves or patterns. Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware (Sussman 1997). The fragment in the assemblage displays brown bands along the rim.

One fragment in the ironstone assemblage is moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). The moulded design on the fragment is an example of the grape vine motif.

Utilitarian Earthenware

A total of seven fragments of utilitarian earthenwares were collected during the Stage 2 assessment of Location 37 (AhHj-11). This includes two fragments of red earthenware, two fragments of plain stoneware, two fragments of salt-glazed stoneware, and one fragment of yellow earthenware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). One of the fragments of red earthenware has a mottled lead glaze and one has a brown salt glaze, and the fragment of yellowware has a buff lead glaze.

Stoneware is harder, more vitreous and is often salt glazed. Two of the stoneware fragments are salt glazed, one with a black exterior and one with brown. One of the non-salt glazed fragments has a black lead glaze, and the other has a mustard-coloured lead glaze.

White Earthenware

Six whiteware fragments were collected during the Stage 2 assessment of Location 37 (AhHj-11). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common





later in the 19th century. Four fragments of whiteware in the assemblage are transfer printed (Plate 19:8), one fragment is sponge-stamped (Plate 19:9) and one fragment is hand painted (Plate 19:10).

Four transfer printed fragments were recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. Two of the transfer printed fragments in the assemblage have a blue geometric design, one has a blue willow pattern, and one is a rim sherd with an indistinguishable blue design.

One fragment of whiteware in the assemblage is sponge-stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). The stamped whiteware fragment in the assemblage has a purple snowflake-like pattern.

One fragment of hand painted whiteware was recovered during the Stage 2 assessment. The sherd is polychromatic and the colours visible are bright green and yellow, and are part of an indistinguishable pattern. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen here are considered "Late Palette" colours.

Semi-Porcelain

A total of two semi-porcelain fragments were collected during the Stage 2 assessment of Location 37 (AhHj-11). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961). The first fragment in the assemblage is a body fragment, and the second is a rim fragment; both are undecorated (Plate 19:11).

Porcelain

A total of one porcelain fragment was collected during the Stage 2 assessment of Location 37 (AhHj-11). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. The porcelain fragment in the assemblage is undecorated (Plate 19:12).





Redware

Redware is a thin-bodied earthenware covered on both the interior and exterior by a dark reddish-brown, dark brown or black glaze. This type of redware was commonly used in the early 19th century for tea pots and mugs. Redware was commonly decorated with slip-banding (Adams 1994). The fragment of redware in the assemblage has brown and navy blue bands on its exterior, and a light green and brown glazed interior (Plate 19:13).

3.37.1.2 Glass Artifacts

Thirteen fragments of glass were recovered from Location 37 (AhHj-11). This collection includes 10 fragments of bottle glass, two fragments of dish glass and one fragment of drinking glass.

The bottle glass assemblage includes three colourless fragments, two sun-coloured amethyst fragments, two green fragments, two cobalt blue fragments, one black fragment and one olive green fragment. Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Black glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). One of the green fragments is a double ring finish, an extremely popular bottle finish used on a wide variety of bottle types and over a long period of time. Its peak popularity was between 1850 and 1920 (Lindsey 2012). One of the cobalt blue fragments is a small mouth external thread finish, with continuous threads, which was popular in the late 19th century and continues to be widely used today. One of the fragments in the assemblage is an almost complete bottle base. The colourless base fragment is an H.J. Heinz bottle without a mould seam, dating it to post-1870 (Lindsey 2012).

Two fragments of dish glass and one fragment of drinking glass are included in the assemblage. One of the dish fragments is colourless, with air bubble inclusions. The remaining fragment and the drinking glass fragment are both press-moulded. Pressed glass items of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994). The fragment of dish glass displays a press-moulded dots design, and is sun-coloured amethyst. The drinking glass fragment, which is the base of an octagonal tumbler, displays a horse shoe and star design (Plate 20:1). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012).

3.37.2 Personal Artifacts

Four items classified as personal material were collected during Stage 2 assessment of Location 37 (AhHj-11). The personal artifact assemblage includes two agate buttons (Plate 20:2), one fragment of a white clay pipe stem (Plate 20:3) and one fragment of a white clay pipe bowl (Plate 20:4).

The buttons in the assemblage are white, 4-holed and made of pressed ceramic. One is complete and the other is broken. What were called "agate" buttons are similar in colour and size (usually about 10 millimetres) to modern shirt buttons. The "agate" was in fact a type of pressed ceramic powder made using the so-called "Prosser" process patented in 1840. Agate buttons became widely distributed in Canada by the late 1840s and are common on sites form this time on (Kenyon and Doroszenko 1995).





White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93). Both stem and bowl in the assemblage display no legible maker's marks.

3.37.3 Structural Artifacts

There were six structural artifacts collected from Location 37 (AhHj-11). These artifacts consist of two machine-cut nails (Plate 20:5), one hand wrought nail (Plate 20:6), one wire drawn nail (Plate 20:7), one unidentifiable headless nail and one unidentifiable fragment of metal. All structural items in the assemblage are heavily corroded.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830. Wire drawn nails are identical to the type of nails currently used today, with a flat, round head and a wire shaft. Wire drawn nails became popular in the 1890s. Wrought nails were handmade and are identifiable by their irregular heads, hammered body texture, and all four sides coming to a taper. Wrought nails were the most commonly used nail in Upper Canada until about 1830 when machine-cut nails started to become more popular (Adams 1994).

3.37.4 Recent Material

Two fragments of recent material were collected during the Stage 2 assessment of Location 37 (AhHj-11). They have been identified as plastic and modern cement.

3.37.5 Faunal Material

A single fragment of faunal material is included in the assemblage. It is a piece of mammalian cortical bone. Though the fragment is too small to determine the species it came from, it does appear to have been cut, possibly for consumption.

3.37.6 Artifact Catalogue

Table 71 presents the Stage 2 artifact catalogue for Location 37 (AhHj-11).

Table 71: Location 37 (AhHj-11) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	button, agate	1	4 holes
2	surface collection	0 cm	nail, cut	1	hc





Cat.	Context	Depth	Artifact	Freq.	Comments
3	surface collection	0 cm	nail, cut	1	hc
4	surface collection	0 cm	nail, unidentifiable	1	hc, no head
5	surface collection	0 cm	white clay pipe, stem	1	
6	surface collection	0 cm	button, agate	1	half complete, 4 holes
7	surface collection	0 cm	glass, drinking	1	base of tumbler, sun-coloured amethyst, horseshoe and star moulded, octagonal
8	surface collection	0 cm	glass, bottle	1	light green, wine bottle top, partially melted
9	surface collection	0 cm	glass, bottle	1	cobalt blue, machine mould twist top
10	surface collection	0 cm	glass, bottle	1	colourless with faint green tint, neck
11	surface collection	0 cm	glass, bottle	1	olive green
12	surface collection	0 cm	glass, bottle	1	clear, base, 'HJ HEINZ PATD 162', greyish, milky patina
13	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst, flat fragment
14	surface collection	0 cm	plastic	1	blue, mostly opaque
15	surface collection	0 cm	recent material	1	cement fragment
16	surface collection	0 cm	redware, banded	1	brown and navy exterior, light green and brown interior
17	surface collection	0 cm	stoneware	1	mustard glaze exterior, light blue- grey interior
18	surface collection	0 cm	yellow earthenware	1	yellowish buff lead glaze
19	surface collection	0 cm	red earthenware	1	mottled lead glaze
20	surface collection	0 cm	stoneware	1	buff paste, black glaze
21	surface collection	0 cm	faunal remains	1	cut, mammal, cortical fragment
22	surface collection	0 cm	ironstone, moulded	1	rim, grape motif
23	surface collection	0 cm	ironstone, stamped	1	blue
24	surface collection	0 cm	ironstone, transfer printed	1	mono green, partial, "Wood+Sons Ltd. England" makers mark
25	surface collection	0 cm	ironstone	1	handle
26	surface collection	0 cm	ironstone	1	
27	surface collection	0 cm	ironstone	1	
28	surface collection	0 cm	ironstone	1	base
29	surface collection	0 cm	ironstone, transfer printed	1	mono dark green, partial M.M. Obscured
30	surface collection	0 cm	ironstone, transfer printed	1	mono black, partial M.M. "EETS"
31	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and fish scales





Cat. #	Context	Depth	Artifact	Freq.	Comments
32	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, tree design
33	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow
34	surface collection	0 cm	ironstone, transfer printed	1	mono light blue, moulded
35	surface collection	0 cm	ironstone, flow transfer printed	1	blue
36	surface collection	0 cm	ironstone, stamped	1	blue stamped
37	surface collection	0 cm	ironstone, flow transfer printed	1	blue mono, geometric designs
38	surface collection	0 cm	ironstone	1	sky blue glaze, too small for diagnostic
39	surface collection	0 cm	ironstone, banded	1	brown bands
40	surface collection	0 cm	whiteware, stamped	1	purple stamped motif
41	surface collection	0 cm	whiteware, transfer printed	1	mono blue, blue willow
42	surface collection	0 cm	whiteware, transfer printed	1	mono blue geometric
43	surface collection	0 cm	whiteware, painted	1	green and yellow
44	surface collection	0 cm	whiteware, transfer printed	1	mono blue, rim
45	surface collection	0 cm	nail, wire drawn	1	bend, HC
46	surface collection	0 cm	nail, wrought	1	HC
47	surface collection	0 cm	metal, undetermined	1	HC
48	surface collection	0 cm	white clay pipe, bowl	1	
49	surface collection	0 cm	glass, dish	1	clear, bubbles
50	surface collection	0 cm	glass, bottle	1	black, rim, wine bottle
51	surface collection	0 cm	glass, bottle	1	green, rim and neck
52	surface collection	0 cm	glass, dish	1	moulded sun-coloured amethyst
53	surface collection	0 cm	glass, bottle	1	deep purple, shoulder
54	surface collection	0 cm	glass, bottle	1	"CERAOF FI", medicine body frag, colourless with light green tint
55	surface collection	0 cm	earthenware, red	1	brown salt glaze
56	surface collection	0 cm	porcelain, semi	1	body fragment
57	surface collection	0 cm	porcelain	1	
58	surface collection	0 cm	ironstone, flow transfer printed	1	floral motif blue
59	surface collection	0 cm	stoneware, salt-glazed	1	black salt glaze
60	surface collection	0 cm	stoneware, salt-glazed	1	brown glaze exterior, grey buff





Cat. #	Context	Depth	Artifact	Freq.	Comments
					interior
61	surface collection	0 cm	ironstone	1	salt shaker hear, holes on top and sides
62	surface collection	0 cm	porcelain, semi	1	rim
63	surface collection	0 cm	ironstone, transfer printed	1	blue leaves and wheat motif
64	surface collection	0 cm	ironstone, transfer printed	1	floral dark blue
65	surface collection	0 cm	whiteware, transfer printed	1	blue, geometric motif

3.38 Location 38 (AhHk-148)

Location 38 (AhHk-148), a multi-component site representing both historic Euro-Canadian artifacts and Aboriginal pre-contact artifacts on property GSH2174 (located south of South Road and west of Mollard Line; Supplement A: Figure 25), was identified on April 18, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor. Location 38 (AhHk-148) consists of a 95 metre (along the north-south axis) by 85 metre (along the west-east axis) scatter of more than 300 fragments of Euro-Canadian domestic debris spanning the 19th century, and a small component of pre-contact Aboriginal artifacts. In total, 94 artifacts were collected during the Stage 2 assessment, including 53 domestic, six structural, four personal, two pieces of recent material, and one piece of pre-contact lithic material (Table 72). Each artifact class is discussed in greater detail below.

Table 72: Location 38 (AhHk-148) Artifact Summary

Artifact	Freq.	%
Euro Canadian Artifacts		
domestic	86	91.49
structural	6	6.38
recent	1	1.06
Total Euro Canadian Artifacts	93	98.94
Pre-Contact Aboriginal Artifacts		
scraper	1	1.06
Total Pre-Contact Aboriginal Artifacts	1	1.06
Total Artifacts	94	100.00



3.38.1 Domestic Artifacts

A total of 86 domestic artifacts were collected during the Stage 2 assessment of Location 38 (AhHk-148). This collection includes 58 fragments of ceramic and 28 fragments of glass.

3.38.1.1 Ceramic Artifacts

In total, 58 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 38 (AhHk-148). Included in this total are 36 fragments of ironstone, 8 fragments of whiteware, six fragments of porcelain, four fragments of utilitarian earthenware and stoneware, two fragments of Rockinghamware and two fragments of damaged undetermined ceramic. Table 73 provides a breakdown of the ceramic assemblage by ware type, while Table 74 provides a more detailed breakdown by decorative style.

Table 73: Summary of Ceramic Collection According to Ware type, Location 38 (AhHk-148)

Artifact	Freq.	%
ironstone	36	62.07
whiteware	8	13.79
porcelain	6	10.34
utilitarian	4	6.90
rockinghamware	2	3.45
undetermined	2	3.45
Total	58	100.00

Table 74: Summary of Ceramic Collection According to Decorative Style, Location 38 (AhHk-148)

Artifact	Freq.	%
ironstone, transfer printed	17	29.31
ironstone, plain	12	20.69
ironstone, moulded	5	8.62
whiteware, plain	5	8.62
whiteware, transfer printed	3	5.17
earthenware, red	3	5.17
porcelain, plain	3	5.17
porcelain, moulded	2	3.45
ironstone, flow transfer printed	2	3.45
rockinghamware	2	3.45
ceramic, undetermined	2	3.45
porcelain, figurine	1	1.72
stoneware, plain	1	1.72





Artifact	Freq.	%
Total	58	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=36 or 62.07%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 38 (AhHk-148) ceramic assemblage includes 17 transfer printed fragments (Plate 21:1), 12 plain or undecorated fragments (Plate 21:2), five moulded fragments (Plate 21:3), and two flow transfer printed fragments (Plate 21:4).

Seventeen ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). Eleven of the transfer printed ironstone fragments are green. Four display a uniform floral and vine design, and are likely from the same vessel. Two display a dot and crosshatch design and are also likely from the same vessel. One fragment has a green wreath design; two have an indeterminate design and are likely teacup handles; one displays a green floral pattern, and one has green leaves and has been de-glazed. Three fragments are blue, two with an indeterminate blue design, and one with a scalloped edge and moulded dots. Three fragments are black, all with partial obscured maker's marks.

Five fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). The moulded fragments in the assemblage are variable; one displays a tree branch design, one a grape vine design, and one (which is a rim sherd) a floral design. The remaining two moulded fragments are a rim and a handle with indeterminate designs.

Two pieces of flow transfer printed ironstone were found during the Stage 2 assessment of Location 38 (AhHk-148). Flow blue transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). Both flow transfer printed ironstone fragments in the assemblage are of an indeterminate design.

White Earthenware

A total of eight whiteware fragments were collected during the Stage 2 assessment of Location 38 (AhHk-148). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Five fragments of whiteware in the assemblage are plain (Plate 21:5), and three fragments are transfer printed (Plate 21:6).





Three transfer printed fragments were recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. Two of the fragments are blue with a stippled leaf design, and one has a partial obscured maker's mark.

Porcelain

A total of six porcelain fragment were collected during the Stage 2 assessment of Location 38 (AhHk-148). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. Three of the porcelain fragments in the assemblage are undecorated (Plate 21:7), two are moulded (Plate 21:8), and one is a part of a figurine, consisting of a woman's head and neck with a curled pinned up hairdo (Plate 21:9).

Utilitarian Earthenware

A total of four fragments of utilitarian earthenwares were collected during the Stage 2 assessment of Location 38 (AhHk-148). This includes three fragments of red earthenware, and one fragment of stoneware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). Both of the red earthenware fragments in the assemblage are rim fragments, and both have a yellow-beige lead glaze.

Stoneware is harder, more vitreous and is often salt glazed. Two of the stoneware fragments are salt glazed, one with a black exterior and one with brown. The stoneware fragment in the assemblage has a buff paste with dark brown lead glaze on the interior and exterior.

Rockinghamware

There are two fragments of Rockinghamware represented in the assemblage at Location 38 (AhHk-148). This ware type is very similar to yellowware, and became popular around 1850, with manufacture continuing into the 20th century (Gallo 1985). The main difference between the two is that Rockinghamware displays a unique glaze type. It involves splattering a brown manganese glaze onto a piece that has already been covered with a clear glaze. The result is a dripping, mottled glaze effect, as the two glazes are melted together during firing. Another technique sometimes used was to dip the ceramic piece directly into the already-mixed glaze, which results in a reddish-brown finish (Gallo 1985:39). The Rockingham fragments in the assemblage display a typical brown and yellow mottled glaze (Plate 21:10).





Undetermined Ceramics

Unfortunately, two of the ceramic pieces recovered from Location 38 (AhHk-148) could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.

3.38.1.2 Glass Artifacts

Twenty-eight fragments of glass were recovered from Location 38 (AhHk-148). This collection includes 23 fragments of bottle glass, three fragments of melted indeterminate glass, and two fragments of press-moulded dish glass.

The bottle glass assemblage includes ten sun-coloured amethyst fragments, six aqua fragments, two cobalt blue fragments, two colourless fragments, one amber fragment, one olive fragment, and one opaque purple fragment. Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). There are three incomplete base fragments in the assemblage, but unfortunately none are temporally diagnostic. One of the sun-coloured amethyst fragments is a patent finish, a bottle finish popular from 1850 to past the turn of the century (Lindsey 2012).

Two fragments of dish glass are included in the assemblage. One of the dish glass fragments is sun-coloured amethyst with a press-moulded scalloped rim, and the other is an aqua body fragment with moulded crosshatching and dots. Pressed glass item of various forms (e.g. plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994).

3.38.2 Structural Artifacts

There were six structural artifacts collected from Location 38 (AhHk-148). These artifacts consist of one headless unidentifiable nail, one machine-cut nail (Plate 21:11), one wire drawn nail (Plate 21:12), one large metal nut, one medium sized metal hook and one piece of window glass. All metal items in the assemblage are heavily corroded.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830. Wire drawn nails are identical to the type of nails currently used today, with a flat, round head and a wire shaft. Wire drawn nails became popular in the 1890s (Adams 1994).

A total of one fragment of window glass was recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes





(Kenyon 1980). The window glass fragment in the assemblage is greater than 1.7 millimetres, and can be dated to post-1850.

3.38.3 Recent Material

A total of one fragment of recent material was collected during the Stage 2 assessment of Location 38 (AhHk-148). It has been identified as modern fence wire, and is heavily corroded.

3.38.4 Pre-Contact Aboriginal Artifacts

One pre-contact Aboriginal lithic artifact was collected during the Stage 2 assessment of Location 38 (AhHk-148). This small assemblage includes one Kettle Point chert thumbnail scraper (Plate 21:13). It displays potlidding, which indicated that it has been heat treated. It has a length of 36.11 millemetres, a width of 20.93 millimetres and a thickness of 8.05 millimetres.

3.38.5 Artifact Catalogue

Table 75 presents the Stage 2 artifact catalogue for Location 38 (AhHk-148).

Table 75: Location 38 (AhHk-148) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	amethyst bottle top
2	surface collection	0 cm	glass, bottle	1	amethyst
3	surface collection	0 cm	glass, bottle	1	milky opaque purple
4	surface collection	0 cm	glass, bottle	1	amethyst
5	surface collection	0 cm	glass, bottle	1	amber
6	surface collection	0 cm	glass, bottle	1	olive green
7	surface collection	0 cm	glass, bottle	1	cobalt blue
8	surface collection	0 cm	glass, bottle	1	aqua, thick base, "83" impressed on bottom
9	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
10	surface collection	0 cm	ironstone, transfer printed	1	mono blue, scalloped edgeware, moulded dots
11	surface collection	0 cm	ironstone, transfer printed	1	mono blue
12	surface collection	0 cm	ironstone, transfer printed	1	mono green, wreath design
13	surface collection	0 cm	ironstone, transfer printed	1	mono green edge, dots and crosshatch
14	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and vine





Cat. #	Context	Depth	Artifact	Freq.	Comments
15	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and vine
16	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and vine
17	surface collection	0 cm	ironstone, transfer printed	1	mono blue
18	surface collection	0 cm	ironstone, flow transfer printed	1	flow blue mono
19	surface collection	0 cm	ironstone, flow transfer printed	1	flow blue mono
20	surface collection	0 cm	ironstone, transfer printed	1	black base print, partial number: "C8"
21	surface collection	0 cm	ironstone, transfer printed	1	mono black, part maker's mark: "RN,"
22	surface collection	0 cm	ironstone, transfer printed	1	mono green, cup handle
23	surface collection	0 cm	whiteware, transfer printed	1	mono blue, stippled leaves
24	surface collection	0 cm	whiteware, transfer printed	1	mono blue, stippled leaves
25	surface collection	0 cm	whiteware, transfer printed	1	mono blue, partial maker's mark: "RAYS."
26	surface collection	0 cm	glass, dish	1	amethyst, moulded, raised scalloped rim
27	surface collection	0 cm	glass, dish	1	aqua, crosshatch and dots
28	surface collection	0 cm	scraper	1	Kettle Point, thumbnail scraper
29	surface collection	0 cm	porcelain, moulded	1	handle
30	surface collection	0 cm	porcelain, moulded	1	piece of dish or figurine
31	surface collection	0 cm	ceramic, undetermined	1	damaged refined white earthenware, yellow glaze, late palette paint
32	surface collection	0 cm	rockinghamware	1	
33	surface collection	0 cm	rockinghamware	1	
34	surface collection	0 cm	ironstone, moulded	1	rim, floral
35	surface collection	0 cm	ironstone	1	
36	surface collection	0 cm	whiteware	1	
37	surface collection	0 cm	whiteware	1	
38	surface collection	0 cm	whiteware	1	
39	surface collection	0 cm	whiteware	1	
40	surface collection	0 cm	whiteware	1	
41	surface collection	0 cm	recent material	1	heavily corroded fence wire
	·				





Cat. #	Context	Depth	Artifact	Freq.	Comments
42	surface collection	0 cm	stoneware	1	buff paste, dark brown glaze on both sides
43	surface collection	0 cm	earthenware, red	1	tinted yellow-beige glaze
44	surface collection	0 cm	nail	1	heavily corroded, no head
45	surface collection	0 cm	nail, wire	1	heavily corroded
46	surface collection	0 cm	nail, machine-cut	1	heavily corroded
47	surface collection	0 cm	glass, bottle	1	clear, base, partial impression: "TERN"
48	surface collection	0 cm	glass, bottle	1	clear
49	surface collection	0 cm	glass, bottle	1	amethyst, base, impression: "84 A"
50	surface collection	0 cm	glass, bottle	1	amethyst, base fragment
51	surface collection	0 cm	glass, bottle	1	amethyst, moulded
52	surface collection	0 cm	glass, bottle	1	amethyst
53	surface collection	0 cm	glass, bottle	1	amethyst
54	surface collection	0 cm	glass, bottle	1	amethyst, thin
55	surface collection	0 cm	glass, bottle	1	amethyst, thin
56	surface collection	0 cm	glass, bottle	1	aqua, cloudy, bevelled
57	surface collection	0 cm	glass, bottle	1	aqua
58	surface collection	0 cm	glass, bottle	1	aqua
59	surface collection	0 cm	glass, bottle	1	aqua
60	surface collection	0 cm	glass, bottle	1	aqua
61	surface collection	0 cm	glass, bottle	1	cobalt blue
62	surface collection	0 cm	glass	1	aqua, melted
63	surface collection	0 cm	glass	1	light green tint, melted
64	surface collection	0 cm	glass	1	opaque milky blue, melted
65	surface collection	0 cm	ironstone	1	
66	surface collection	0 cm	ironstone	1	
67	surface collection	0 cm	ironstone	1	
68	surface collection	0 cm	ironstone	1	
69	surface collection	0 cm	ironstone	1	
70	surface collection	0 cm	ironstone	1	
71	surface collection	0 cm	ironstone	1	
72	surface collection	0 cm	ironstone	1	
73	surface collection	0 cm	ironstone	1	
74	surface collection	0 cm	ironstone	1	
75	surface collection	0 cm	ironstone	1	
76	surface collection	0 cm	ceramic,	1	damaged and de-glazed refined





Context	Depth	Artifact	Freq.	Comments
		undetermined		white earthenware
surface collection	0 cm	ironstone, moulded	1	rim
surface collection	0 cm	ironstone, moulded	1	handle
surface collection	0 cm	ironstone, moulded	1	vine design
surface collection	0 cm	ironstone, moulded	1	tree branch design
surface collection	0 cm	ironstone, transfer printed	1	mono green, handle, bordered band
surface collection	0 cm	ironstone, transfer printed	1	mono green, floral
surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and vine
surface collection	0 cm	ironstone, transfer printed	1	mono green, leaves, damaged and de-glazed
surface collection	0 cm	ironstone, transfer printed	1	mono green, rim, crosshatch and dot design
surface collection	0 cm	ironstone, transfer printed	1	mono black, partial maker's mark (obscured)
surface collection	0 cm	metal, nut	1	heavily corroded, large square nut
surface collection	0 cm	metal, undetermined	1	heavily corroded, possibly wall hook
surface collection	0 cm	porcelain, figurine	1	woman's head and neck with curled updo
surface collection	0 cm	porcelain	1	pink patina, damaged
surface collection	0 cm	porcelain	1	
surface collection	0 cm	porcelain	1	
surface collection	0 cm	earthenware, red	1	rim, yellow-beige lead glaze
surface collection	0 cm	earthenware, red	1	rim, yellow-beige lead glaze
	surface collection	surface collection 0 cm	surface collection 0 cm ironstone, moulded ironstone, moulded ironstone, transfer printed surface collection 0 cm metal, nut surface collection 0 cm metal, undetermined surface collection 0 cm porcelain, figurine surface collection 0 cm porcelain surface collection 0 cm earthenware, red	surface collection 0 cm ironstone, moulded 1 surface collection 0 cm ironstone, transfer printed 1 surface collection 0 cm metal, nut 1 surface collection 0 cm metal, nut 1 surface collection 0 cm porcelain, figurine 1 surface collection 0 cm porcelain 1

3.39 Location 39 (AhHj-12)

Location 39 (AhHj-12), a multi-component site representing both historic Euro-Canadian artifacts and Aboriginal pre-contact artifacts on property GSH2023 (located north of Mount Carmel Drive and east of Goshen Line; Supplement A: Figure 29), was identified on April 18, 2012 during the Stage 2 pedestrian survey of proposed wind energy components. Location 39 (AhHj-12) consists of a 90 metre (along the north-south axis) by 155 metre (along the west-east axis) scatter of more than 500 fragments of Euro-Canadian domestic debris spanning the 19th century, and a small component of pre-contact Aboriginal artifacts. In total, 138 artifacts were collected during the Stage 2 assessment, including 95 domestic, 16 structural, 14 personal, six pieces of pre-contact lithic material, four pieces of faunal material, two utensils and one piece of recent material (Table 76). Each artifact class is discussed in greater detail below.

Table 76: Location 39 (AhHj-12) Artifact Summary





Artifact	Freq.	%
Euro Canadian Artifacts		'
domestic	95	68.84
structural	16	11.59
personal	14	10.14
faunal	4	2.90
utensils	2	1.45
recent	1	0.72
Total Euro Canadian Artifacts	132	95.65
Pre-Contact Aboriginal Artifacts		
chipping detritus	6	4.35
Total Pre-Contact Aboriginal Artifacts	6	4.35
Total Artifacts	138	100.00

3.39.1 Domestic Artifacts

A total of 95 domestic artifacts were collected during the Stage 2 assessment of Location 39 (AhHj-12). This collection includes 70 fragments of ceramic, 24 fragments of glass and one domestic metal item.

3.39.1.1 Ceramic Artifacts

In total, 70 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 39 (AhHj-12). Included in this total are 36 fragments of ironstone, 14 fragments of utilitarian earthenware and stoneware, seven fragments of whiteware, five fragments of undetermined ceramic, four fragments of porcelain, two fragments of semi-porcelain and two fragments of creamware. Table 77 provides a breakdown of the ceramic assemblage by ware type, while Table 78 provides a more detailed breakdown by decorative style.

Table 77: Summary of Ceramic Collection According to Ware type, Location 39 (AhHj-12)

Artifact	Freq.	%
ironstone	36	51.43
utilitarian	14	20.00
whiteware	7	10.00
undetermined	5	7.14
porcelain	4	5.71
semi-porcelain	2	2.86
creamware	2	2.86
Total	70	100.00





Table 78: Summary of Ceramic Collection According to Decorative Style, Location 39 (AhHj-12)

Artifact	Freq.	%
ironstone, transfer print	13	18.57
ironstone, sponged	8	11.43
earthenware, red	7	10.00
undetermined	5	7.14
earthenware, yellow	4	5.71
ironstone, plain	4	5.71
ironstone, hand painted	3	4.28
ironstone, moulded	3	4.28
porcelain, plain	3	4.28
whiteware, plain	3	4.28
whiteware, sponged	2	2.86
whiteware, stamped	2	2.86
ironstone, stamped	2	2.86
stoneware	2	2.86
creamware	2	2.86
semi-porcelain, plain	2	2.86
porcelain, transfer printed	1	1.43
stoneware, salt-glazed	1	1.43
ironstone, banded	1	1.43
ironstone, edged	1	1.43
ironstone, flow transfer print	1	1.43
Total	70	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=36 or 51.43%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 39 (AhHj-12) ceramic assemblage includes 13 transfer printed fragments (Plate 22:1), eight sponged fragments (Plate 22:2), four plain or undecorated fragments (Plate 22:3), three moulded fragments (Plate 22:4), three hand painted fragments (Plate 22:5), two sponge-stamped fragments (Plate 22:6), one banded fragment (Plate 22:7), one edged fragment (Plate 22:8) and one flow transfer printed fragment (Plate 22:9).

Thirteen ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). Five of the transfer printed ironstone fragments are green, four of which display the same fine





floral pattern and are likely from the same vessel. Five of the fragments in the assemblage are blue, one of which displays the popular blue willow design. There are two brown transfer printed fragments in the assemblage, one of which displays a fine floral pattern similar to that observed on four of the green fragments. One fragment in the assemblage has polychromatic hand-tinting applied.

Eight ironstone fragments in the assemblage are sponged. Sponged ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s. All eight of the sponged fragments are blue, seven with a border, and six of these are rim sherds from a hollowware vessel.

Three fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often, as well as a pattern involving corn cobs (Kenyon 1980). Two of the moulded fragments in the assemblage are of indeterminate design, while the third displays the aforementioned corn pattern.

Three ironstone fragments in the assemblage are hand painted. All are striped rim sherd, two with a brown stripe and one with a blue stripe. They may have been part of a larger design, but due to their fragmentary nature it is impossible to determine what type of hand painting was applied to the larger vessels.

Two fragments of ironstone in the assemblage are sponge-stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). The stamped ironstone fragments in the assemblage include one blue stamped piece and one red stamped piece, both of indeterminate design.

One fragment of ironstone in the assemblage is banded. Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banded pieces may also include inlaid and cut away slip decoration and bands of lathe turned grooves or patterns. Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware (Sussman 1997). The fragment in the assemblage displays a polychromatic marbled design.

One fragment of ironstone in the assemblage is edged. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). The popularity of edged wares continued even as ironstone became more commonly used. The edged fragment of ironstone in the assemblage is blue, unscalloped and unmoulded, displaying a chickenfoot pattern. Designs of this type were manufactured approximately between 1850 and 1897.

One fragment of flow transfer printed ironstone was found during the Stage 2 assessment of Location 39 (AhHj-12). Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). Though blue was the most popular colour for flow transfer printing, other





colours were also sometimes used. The fragment of this ware in the assemblage is an example of flow black, with an indeterminate design.

Utilitarian Earthenware

A total of 14 fragments of utilitarian earthenwares were collected during the Stage 2 assessment of Location 39 (AhHj-12). This includes seven fragments of red earthenware, four fragments of yellow earthenware, and three fragments of stoneware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). The red earthenware fragments display a variety of glazes, including dark brown, green, mustard, clear lead glaze and mottled lead glaze. The yellow earthenware fragments include three clear lead glazed pieces and one piece with a salt glaze.

Stoneware is harder, more vitreous and is often salt glazed. One of the stoneware fragments in the assemblage is salt-glazed, and the other displays a dark brown lead glaze.

White Earthenware

A total of seven whiteware fragments were collected during the Stage 2 assessment of Location 39 (AhHj-12). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Three fragments of whiteware in the assemblage are plain (Plate 22:10), two fragments are sponge-stamped (Plate 22:11), and two fragments are sponged (Plate 22:12).

Two fragments of whiteware in the assemblage are sponge-stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). The stamped whiteware fragments in the assemblage are both blue, one with a floral and leaf design.

Two fragments in the whiteware assemblage are sponged. Sponged whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s. The two sponged whiteware fragments recovered are blue.

Undetermined Ceramics

Unfortunately, five of the ceramic pieces recovered from Location 39 (AhHj-12) could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.





Porcelain

A total of four porcelain fragments were collected during the Stage 2 assessment of Location 39 (AhHj-12). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. Three of the porcelain fragments in the assemblage are undecorated (Plate 23:1), and one is transfer printed with a blue design (Plate 23:2).

Semi-Porcelain

A total of two semi-porcelain fragments were collected during the Stage 2 assessment of Location 39 (AhHj-12). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961). The semi-porcelain fragments in the assemblage are undecorated, and one is a handle, likely from a teacup (Plate 23:3).

Creamware

Two fragments of creamware were recovered during the Stage 2 assessment of Location 39 (AhHj-12). Creamware, often referred to as "Queen's Ware" was first produced in the 1750s, and later perfected by Josiah Wedgwood in the 1760s. This type of tableware became very common in Upper Canada by 1770 and continued in popularity until about 1820 when it started to be replaced by later pearlware and whiteware types (Kenyon and Dorozsenko 1994). Creamware is a refined, thin bodied earthenware with a clear lead-glaze that appears creamy yellow to yellowish-green in colour. It was most often manufactured plain or decorated with moulded designs, however transfer printed, hand painted and banded examples of creamware do exist. The fragments of creamware in the assemblage are plain and undecorated (Plate 23:4).

3.39.1.2 Glass Artifacts

Twenty-four fragments of glass were recovered from Location 39 (AhHj-12). This collection includes 22 fragments of bottle glass, one fragment of drinking glass, and one fragment of melted indeterminate glass.

The bottle glass assemblage includes six fragments of aqua glass, three fragments of sun-coloured amethyst glass, three fragments of light green glass, two fragments of emerald green glass, two fragments of olive glass, one fragment of dark olive glass, one fragment of black glass, two fragments of amber glass, one fragment of colourless glass and one fragment of cobalt blue glass. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Sun-





coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). "Black" glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). One of the aqua glass fragments is a mineral or double oil finish. This finish style originated in 1820 with its most frequent use occurring between 1840 and 1880 (Lindsey 2012). The dark olive glass fragment in the assemblage is a complete bottle base, with an ejection/valve mark suggesting a press-and-blow machine manufacturing process. This suggests a date of manufacture after 1910 (Lindsey 2012). The assemblage also contains an almost complete aqua pharmacy bottle. The moulding on the bottle indicates that it contained 'Eclectric Oil', a healing salve distributed by Northrop & Lyman Co., a Canadian company. This bottle style and the squaring off of the moulded panel suggest a manufacture date between approximately 1880 and 1820 (Sullivan 1983).

One fragment of press-moulded drinking glass is included in the assemblage. Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994).

3.39.1.3 Metal Artifacts

The lid of a corroded metal tin was recovered during the Stage 2 assessment of Location 39 (AhHj-12). No maker's mark or label is present, and thus the artifact is not temporally diagnostic.

3.39.2 Structural Artifacts

There were sixteen structural artifacts collected from Location 39 (AhHj-12). These artifacts consist of four headless unidentifiable nails, three machine-cut nails (Plate 23:5), two wire drawn nails (Plate 23:6), two bolts, two fused screw-and-washer sets, one large nut, one piece of window glass and one pressed ceramic doorknob. All metal structural artifacts in the assemblage are heavily corroded.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830. Wire drawn nails are identical to the type of nails currently used today, with a flat, round head and a wire shaft. Wire drawn nails became popular in the 1890s (Adams 1994).

A total of one fragment of window glass was recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). The window glass fragment in the assemblage is greater than 1.7 millimetres, and can be dated to post-1850.

3.39.3 Personal Artifacts

Fourteen items classified as personal material were collected during Stage 2 assessment of Location 39 (AhHj-12). The personal artifact assemblage five fragments of white clay pipe stems (Plate 24:1), four fragments of





white clay pipe bowls (Plate 24:2), two shell buttons (Plate 24:3), two fragmentary white clay pipe elbows (Plate 24:4) and one corroded metal belt buckle (Plate 24:5).

Pipes

White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93). One pipe stem in the assemblage has an impressed maker's mark of "BANNERMAN" on one side, and "MONTREAL" on the other. Bannerman is commonly considered the second-largest Montreal pipe-making business, and began making pipes in 1858. The business changed its name to Bannerman Brothers in 1888, at which point the maker's mark was also changed. This gives the Bannerman pipe stem in the assemblage an approximate manufacture date of 1858 – 1888 (Davey 1983). Two of the pipe bowls display incised decorations, and one is a Glasgow "TD" pipe, an extremely popular pipe style used through the 18th and 19th centuries (Kenyon 1982).

Buttons

Shell or "pearl" buttons, fashioned from discs of fresh-water or sometimes even exotic tropical shells, were often used as shirt buttons, especially before the development of the much less expensive "agate" button in the 1840s (Adams 1994). There are two shell buttons in the assemblage, one small 2-holed button and one larger four-holed button. The presence of these buttons suggests that the site may have been occupied prior to 1840.

3.39.4 Pre-Contact Aboriginal Artifacts

Six pre-contact Aboriginal lithic artifacts were collected during the Stage 2 assessment of Location 39 (AhHj-12). This small assemblage includes five flakes manufactured from Kettle Point chert (Plate 25:1), and one flake manufactured from Flint Ridge Chalcedony (Plate 25:2). Table 79 presents flake morphology.

Table 79: Location 39 (AhHj-12) Chipping Detritus

Chert	Seco	ndary	Tertia	ıry	Broke	en	Shatte	er	Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Kettle Point	0	0.00	1	16.67	1	16.67	1	16.67	3	50.00
Burnt Kettle Point	0	0.00	0	0.00	1	16.67	1	16.67	2	33.33
Flint Ridge	1	16.67	0	0.00	0	0.00	0	0.00	1	16.67
Total	1	16.67	1	16.67	2	33.33	2	33.33	6	100.00





3.39.5 Faunal Material

Four fragments of faunal material are included in the assemblage. Two of the fragments are teeth, one from a large mammal, likely a bovid. The other is from a smaller mammal, likely a raccoon or a cat. Also included in the faunal assemblage is a piece of cortical bone from a medium sized mammal, and a small calcined cortical mammalian bone fragment.

3.39.6 Utensils

The assemblage includes two fragmentary copper spoons (Plate 24:6).

3.39.7 Recent Material

One fragment of recent material was collected during the Stage 2 assessment of Location 39 (AhHj-12). It has been identified as a modern gas valve.

3.39.8 Artifact Catalogue

Table 80 presents the Stage 2 artifact catalogue for Location 39 (AhHj-12).

Table 80: Location 39 (AhHj-12) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst, stem and body fragment
2	surface collection	0 cm	glass, bottle	1	olive green, base
3	surface collection	0 cm	glass, bottle	1	dark olive wine bottle, base, machine made w/ ejection mark, press-and-blow, post-1910
4	surface collection	0 cm	glass, bottle	1	aqua, almost complete, "NORTHROP & LYMAN CO. LIMITED TORONTO ONTARIO", 'eclectric oil', double ring finish
5	surface collection	0 cm	glass, drinking	1	clear moulded, flower design
6	surface collection	0 cm	glass, bottle	1	green jug handle
7	surface collection	0 cm	glass, bottle	1	aqua, base, patina
8	surface collection	0 cm	stoneware	1	buff paste, brown glaze exterior, plain interior, jug top and lip
9	surface collection	0 cm	valve	1	corroded, probably for gas
10	surface collection	0 cm	lid	1	lid of small tin, corroded, 59 cm diameter
11	surface collection	0 cm	door knob	1	semi-porcelain door knob
12	surface collection	0 cm	metal, buckle	1	corroded
13	surface collection	0 cm	utensil	1	copper, small spoon





Cat.	Context	Depth	Artifact	Freq.	Comments
14	surface collection	0 cm	faunal remains	1	large mammal tooth, cow or horse
15	surface collection	0 cm	faunal remains	1	mammal cortial bone fragment, medium size
16	surface collection	0 cm	faunal remains	1	small mammal, calcined cortial fragment
17	surface collection	0 cm	faunal remains	1	small mammal tooth, feline or racoon
18	surface collection	0 cm	button, shell	1	small white, 2 holes, pearlescent
19	surface collection	0 cm	button, shell	1	large white, 4 holes, pearlescent
20	surface collection	0 cm	earthenware, yellow	1	salt glazed, yellow glaze
21	surface collection	0 cm	earthenware, red	1	dark brown glaze, both sides
22	surface collection	0 cm	stoneware	1	buff paste, dark brown glaze, one side ridged
23	surface collection	0 cm	earthenware, yellow	1	yellowish paste, lead glaze, rim
24	surface collection	0 cm	earthenware, red	1	lead glaze
25	surface collection	0 cm	earthenware, red	1	2 lines of lead glaze
26	surface collection	0 cm	ironstone, banded	1	marbled polychrome
27	surface collection	0 cm	ironstone, sponged	1	mono blue
28	surface collection	0 cm	ironstone, sponged	1	mono blue with border, rim
29	surface collection	0 cm	ironstone, sponged	1	mono blue with border
30	surface collection	0 cm	ironstone, sponged	1	mono blue with border, rim
31	surface collection	0 cm	ironstone, sponged	1	mono blue with border, rim
32	surface collection	0 cm	ironstone, sponged	1	mono blue with border, rim
33	surface collection	0 cm	ironstone, sponged	1	mono blue with border, rim
34	surface collection	0 cm	ironstone, sponged	1	mono blue with border, rim
35	surface collection	0 cm	ironstone, edged	1	blue, unscalloped, unimp., chickenfoot (1850-1897)
36	surface collection	0 cm	ironstone, stamped	1	blue sponge stamped
37	surface collection	0 cm	ironstone, stamped	1	pink stamped
38	surface collection	0 cm	whiteware, stamped	1	blue stamped, floral and leaves
39	surface collection	0 cm	whiteware, stamped	1	blue stamped
40	surface collection	0 cm	ironstone, transfer printed	1	mono blue
41	surface collection	0 cm	ironstone, transfer printed	1	mono blue, rim
42	surface collection	0 cm	ironstone, transfer printed	1	floral blue
43	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and leaves
44	surface collection	0 cm	ironstone, transfer	1	mono green, fine floral, gently





Cat.	Context	Depth	Artifact	Freq.	Comments
			printed		scalloped rim
45	surface collection	0 cm	ironstone, transfer printed	1	mono, blue willow
46	surface collection	0 cm	ironstone, transfer printed	1	mono blue
47	surface collection	0 cm	ironstone, transfer printed	1	mono brown
48	surface collection	0 cm	ironstone, flow transfer printed	1	mono black flow
49	surface collection	0 cm	whiteware	1	
50	surface collection	0 cm	porcelain	1	base, likely salt/pepper shaker
51	surface collection	0 cm	porcelain	1	rim, gold stripe
52	surface collection	0 cm	porcelain	1	rim, gold stripe
53	surface collection	0 cm	ironstone, moulded	1	rim
54	surface collection	0 cm	ironstone, moulded	1	moulded corn pattern
55	surface collection	0 cm	ironstone	1	
56	surface collection	0 cm	porcelain, semi	1	handle
57	surface collection	0 cm	creamware	1	
58	surface collection	0 cm	creamware	1	
59	surface collection	0 cm	ironstone	1	damaged, red
60	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
61	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
62	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
63	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
64	surface collection	0 cm	white clay pipe, bowl	1	"T". TD pipe, Glasgow
65	surface collection	0 cm	white clay pipe, bowl	1	lined bowl, loops and straight lines, alternating
66	surface collection	0 cm	white clay pipe, bowl	1	thick line topped with nested half circles
67	surface collection	0 cm	white clay pipe, bowl	1	
68	surface collection	0 cm	white clay pipe, elbow	1	elbow with part of bowl
69	surface collection	0 cm	white clay pipe, elbow	1	stem, elbow and part of bowl
70	surface collection	0 cm	white clay pipe, stem	1	
71	surface collection	0 cm	white clay pipe, stem	1	
72	surface collection	0 cm	white clay pipe, stem	1	





Cat. #	Context	Depth	Artifact	Freq.	Comments
73	surface collection	0 cm	white clay pipe, stem	1	yellow staining on end
74	surface collection	0 cm	ironstone, painted	1	brown stipe, rim
75	surface collection	0 cm	ironstone, painted	1	brown stipe, rim
76	surface collection	0 cm	ironstone, painted	1	blue stripe, rim
77	surface collection	0 cm	ironstone, transfer printed	1	polychrome (hand tinted)
78	surface collection	0 cm	glass, bottle	1	green base, diamond raised design
79	surface collection	0 cm	glass, bottle	1	black base fragment
80	surface collection	0 cm	glass, bottle	1	light green fragment
81	surface collection	0 cm	glass, bottle	1	light green fragment
82	surface collection	0 cm	glass, bottle	1	light aqua, side of bottle
83	surface collection	0 cm	glass, stopper	1	aqua bottle stopper
84	surface collection	0 cm	glass, bottle	1	clear, small base
85	surface collection	0 cm	glass, bottle	1	bright blue
86	surface collection	0 cm	glass, bottle	1	amber partial finish, small mouth external thread
87	surface collection	0 cm	glass, bottle	1	amber
88	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst rim
89	surface collection	0 cm	glass, window	1	>1.7mm
90	surface collection	0 cm	nail	1	heavily corroded, no head
91	surface collection	0 cm	nail	1	heavily corroded, no head
92	surface collection	0 cm	utensil	1	copper spoon head, partial handle
93	surface collection	0 cm	bolt	1	heavily corroded metal bolt
94	surface collection	0 cm	chipping detritus	1	Kettle Point chert, broken
95	surface collection	0 cm	chipping detritus	1	Kettle Point chert, tertiary
96	surface collection	0 cm	chipping detritus	1	Kettle Point chert, shatter
97	surface collection	0 cm	chipping detritus	1	burnt Kettle Point chert, shatter
98	surface collection	0 cm	chipping detritus	1	burnt Kettle Point chert, broken
99	surface collection	0 cm	chipping detritus	1	flint ridge chalcedony, secondary
100	surface collection	0 cm	white clay pipe, stem	1	"MONTREAL" 1 side, "BANNERMAN" other side
101	surface collection	0 cm	ironstone	1	base of handle
102	surface collection	0 cm	ironstone	1	
103	surface collection	0 cm	porcelain, semi	1	semi-porcelain
104	surface collection	0 cm	porcelain, transfer print	1	mono blue
105	surface collection	0 cm	ironstone, moulded	1	





Cat. #	Context	Depth	Artifact	Freq.	Comments
106	surface collection	0 cm	ironstone, transfer printed	1	mono green, fine floral
107	surface collection	0 cm	ironstone, transfer printed	1	mono green, fine floral
108	surface collection	0 cm	ironstone, transfer printed	1	mono green, fine floral
109	surface collection	0 cm	ironstone, transfer printed	1	mono brown, fine floral
110	surface collection	0 cm	whiteware	1	
111	surface collection	0 cm	whiteware	1	
112	surface collection	0 cm	whiteware, sponged	1	blue
113	surface collection	0 cm	whiteware, sponged	1	blue
114	surface collection	0 cm	ceramic, undetermined	1	burnt, likely ironstone
115	surface collection	0 cm	earthenware, red	1	mottled glaze
116	surface collection	0 cm	earthenware, red	1	lead glaze
117	surface collection	0 cm	earthenware, red	1	green glaze
118	surface collection	0 cm	earthenware, red	1	mustard glaze
119	surface collection	0 cm	earthenware, yellow	1	lead glaze
120	surface collection	0 cm	earthenware, yellow	1	lead glaze
121	surface collection	0 cm	stoneware, salt-glazed	1	brown and buff
122	surface collection	0 cm	metal, nut	1	large square metal nut
123	surface collection	0 cm	metal, undetermined hardware	1	HC screw and washer fused
124	surface collection	0 cm	metal, undetermined hardware	1	HC screw and washer fused
125	surface collection	0 cm	nail, cut	1	HC
126	surface collection	0 cm	nail, cut	1	HC
127	surface collection	0 cm	nail, cut	1	HC
128	surface collection	0 cm	nail	1	HC damaged
129	surface collection	0 cm	nail	1	HC damaged
130	surface collection	0 cm	nail, wire drawn	1	HC
131	surface collection	0 cm	nail, wire drawn	1	HC
132	surface collection	0 cm	bolt	1	HC headless metal bolt
133	surface collection	0 cm	glass, bottle	1	aqua, mineral/double oil finish
134	surface collection	0 cm	glass, bottle	1	aqua
135	surface collection	0 cm	glass, bottle	1	threading and lip, sc amethyst
136	surface collection	0 cm	glass, bottle	1	olive





Cat. #	Context	Depth	Artifact	Freq.	Comments
137	surface collection	0 cm	glass, bottle	1	light green tint
138	surface collection	0 cm	glass, undetermined	1	melted aqua glass

3.40 Location 40

Location 40, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH2023 (located north of Mount Carmel Drive and east of Goshen Line; Supplement A: Figure 29). This site, identified on April 18, 2012, consists of an isolated retouched flake (Plate 26:1). This retouched flake, manufactured from Kettle Point chert, has two worked edges and was possibly used as a perforator. As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified.

3.40.1 Artifact Catalogue

Table 81 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 81: Location 40 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	retouched flake	1	Kettle Point chert, 2 edges worked, possible perforator

3.41 Location 41

Location 41, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH1040 (located north of Macdonald Road and east of Bronson Line; Supplement A: Figure 6). This site, identified on April 25, 2012, consists of a 35 metre (along the north-south axis) by 25 metre (along the west-east axis) scatter of approximately 5 prehistoric artifacts, manufactured from Flint Ridge chalcedony (Plate 27:1), burnt Onondaga, and Kettle Point (Plate 27:2) cherts. One of the artifacts was identified as a retouched flake which has been worked near the proximal end. As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the finds but no additional artifacts were identified.

3.41.1 Chipping Detritus

Four pieces of chipping detritus were collected during the Stage 2 assessment of this site. Two of the flakes recovered are manufactured from Flint Ridge chalcedony, one flake is manufactured from Kettle Point chert, and one is manufactured from Onondaga chert, but has been burnt badly. Table 82 provides information on flake morphology.





Table 82: Location 41 Chipping Detritus

Chert	Secondary		Tertiary		Shatter		Total	
	No.	%	No.	%	No.	%	No.	%
Flint Ridge	1	25.00	1	25.00	0	0.00	2	50.00
Burnt Onondaga	0	0.00	0	0.00	1	25.00	1	25.00
Kettle Point	1	25.00	0	0.00	0	0.00	1	25.00
Total	2	50.00	1	25.00	1	25.00	4	100.00

3.41.2 Artifact Catalogue

Table 83 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 83: Location 41 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Flint Ridge chalcedony, secondary flake
2	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake
3	surface collection	0 cm	chipping detritus	1	burnt Onondaga chert, shatter
4	surface collection	0 cm	chipping detritus	1	Flint Ridge chalcedony, tertiary flake
5	surface collection	0 cm	retouched flake	1	Kettle Point chert, worked near proximal end

3.42 Location 42

Location 42, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed substation on property GSH1493 (located north of Victoria Avenue West and west of Parr Line; Supplement A: Figure 18). This site, identified on April 18, 2012, consists of an isolated partial groundstone celt (Plate 56). It has a length of 164.04 millimetres, a basal width of 45.56 millimetres and a thickness of 27.48 millimetres.

As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding the find but no additional artifacts were identified.

3.42.1 Artifact Catalogue

Table 84 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 84: Location 40 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	celt	1	groundstone





3.43 Location 43 (AhHj-13)

Location 43 (AhHj-13), a historic Euro-Canadian site with a small pre-contact Aboriginal component on property GSH1493 (located north of Victoria Avenue West and west of Parr Line; Supplement A: Figure 18) was identified on April 26, 2012 during the Stage 2 pedestrian survey of proposed wind energy components. This location consists of a 60 metre (along the north-south axis) by 140 metre (along the west-east axis) scatter of more than 500 fragments of Euro-Canadian domestic debris spanning the 19th century, and a small component of precontact Aboriginal artifacts. In total, 25 artifacts were collected during the Stage 2 assessment, including 22 domestic, one structural, one piece of recent material and one pre-contact groundstone tool (Table 85). Each artifact class is discussed in greater detail below.

Table 85: Location 43 (AhHj-13) Artifact Summary

Artifact	Freq.	%
Euro Canadian Artifacts	•	•
domestic	22	88.00
structural	1	4.00
recent	1	4.00
Total Euro Canadian Artifacts	24	96.00
Pre-Contact Aboriginal Artifacts		
abrader	1	4.00
Total Pre-Contact Aboriginal Artifacts	1	4.00
Total Artifacts	25	100.00

3.43.1 Domestic Artifacts

A total of 22 domestic artifacts were collected during the Stage 2 assessment of Location 43 (AhHj-13). This collection includes 18 fragments of ceramic and 4 fragments of glass.

3.43.1.1 Ceramic Artifacts

In total, 18 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 43 (AhHj-13). Included in this total are 11 fragments of ironstone, three fragments of whiteware, two fragments of semi-porcelain, one fragment of utilitarian earthenware and one fragment of undetermined ceramic. Table 86 provides a breakdown of the ceramic assemblage by ware type, while Table 87 provides a more detailed breakdown by decorative style.

Table 86: Summary of Ceramic Collection According to Ware type, Location 43 (AhHj-13)

Artifact	Freq.	%
ironstone	11	61.11





whiteware	3	16.67
semi-porcelain	2	11.11
utilitarian	1	5.55
undetermined	1	5.55
Total	18	100.00





Table 87: Summary of Ceramic Collection According to Decorative Style, Location 43 (AhHj-13)

Artifact	Freq.	%
ironstone, transfer printed	3	16.67
ironstone, moulded	3	16.67
ironstone, plain	2	11.11
semi-porcelain, plain	2	11.11
ironstone, banded	1	5.55
ironstone, sponged	1	5.55
ironstone, hand painted	1	5.55
whiteware, hand painted	1	5.55
whiteware, plain	1	5.55
whiteware, sponged	1	5.55
earthenware, red	1	5.55
ceramic, undetermined	1	5.55
Total	18	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=11 or 61.11%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 43 (AhHj-13) ceramic assemblage includes three transfer printed fragments (Plate 28:1), three moulded fragments (Plate 28:2), two plain undecorated fragments (Plate 28:3), one banded fragment (Plate 28:4), one sponged fragment (Plate 28:5) and one hand painted fragment (Plate 28:6).

Three ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). Two of the transfer printed fragments display the popular blue willow design, and one has a red floral pattern.

Three fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). All of the moulded fragments of are an indeterminate design, and one also displays a maker's mark, indicating that it was manufactured by T&R Boote between 1890 and 1906 (Birks 2012).

One ironstone fragment with light blue bands is included in the assemblage. Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banded pieces may also include inlaid and cut away slip decoration and bands of lathe turned grooves or patterns. Banding occurred both as a primary





decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware (Sussman 1997).

One blue sponged ironstone fragment is also included in the assemblage. Sponged ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s.

The single fragment of hand-painted ironstone in the assemblage has visible green paint, but is too fragmentary to determine the larger design.

White Earthenware

A total of three whiteware fragments were collected during the Stage 2 assessment of Location 43 (AhHj-13). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. One fragments of whiteware in the assemblage is plain (Plate 28:7), one is hand painted (Plate 28:8) and one is sponged (Plate 28:9).

The hand painted whiteware fragment in the assemblage has visible purple paint, but is too fragmentary to determine the larger design.

There is one blue sponged whiteware fragment included in the assemblage. Sponged whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s.

Semi-Porcelain

Two plain semi-porcelain fragments are included in the assemblage (Plate 28:10). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

Utilitarian Earthenware

A total of one fragment of utilitarian red earthenware with a buff lead glaze was collected during the Stage 2 assessment of Location 43 (AhHj-13). Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99).





Undetermined Ceramics

Unfortunately, one of the ceramic pieces recovered from Location 43 (AhHj-13) could not be catalogued into a specific ceramic-ware classification. This piece is so heavily damaged and fragmentary that it is impossible to accurately identify it by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged piece was simply classified as undetermined ceramic.

3.43.1.2 Glass Artifacts

Four fragments of glass were recovered from Location 43 (AhHj-13). This collection includes two fragments of bottle glass and two fragments of white or milk glass.

The bottle glass assemblage includes one aqua fragment and one colourless fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971).

There are two fragments of white milk glass in the assemblage, one of which is a jar rim. The other fragment displays a moulded corn pattern. Opaque white glass - commonly called milk glass - was typically produced by the addition of tin or zinc oxide, fluorides (fluorspar), and phosphates. In a sense, milk glass is like colorless glass in that it is defined by the absence of color, except in this case the bottle is truly not clear. An interesting feature of most milk glass is that very thin glass (i.e., fragment edge) has an orange-ish opalescence when held up to bright light. White glass was often used to make jars and small pots for cosmetics. It is not commonly found on historic sites that date totally prior to the 1870s (Lindsey 2012).

3.43.2 Structural Artifacts

There was one structural artifact collected from Location 43 (AhHj-13). The structural assemblage consists of one fragment of buff hand-struck brick with a rough temper. Hand struck bricks were available in the first quarter of the 19th century but were only used for smaller structural projects such as for building fireplaces or lining cisterns (Stelle 2001:20).

3.43.3 Recent Material

A total of one fragment of recent material was collected during the Stage 2 assessment of Location 43 (AhHj-13). It has been identified as plastic.

3.43.4 Pre-Contact Aboriginal Artifacts

One pre-contact Aboriginal worked tool was collected during the Stage 2 assessment of Location 43 (AhHj-13). This small assemblage includes one groundstone abrader (Plate 29:1). It has a length of 83.98 millimetres, a basal width of 49.87 millimetres and a thickness of 30.43 millimetres.





3.43.5 Artifact Catalogue

Table 88 presents the Stage 2 artifact catalogue for Location 43 (AhHj-13).

Table 88: Location 43 (AhHj-13) Artifact Catalogue

Cat.	Context	Depth	Artifact	Fre q.	Comments
1	surface collection	0 cm	whiteware	1	
2	surface collection	0 cm	whiteware, sponged	1	blue
3	surface collection	0 cm	porcelain, semi	1	
4	surface collection	0 cm	glass, white	1	moulded milk glass, corn pattern
5	surface collection	0 cm	ironstone, transfer printed	1	red floral pattern, rim fragment
6	surface collection	0 cm	glass, bottle	1	jar lid
7	surface collection	0 cm	ironstone	1	plate base
8	surface collection	0 cm	recent material	1	plastic
9	surface collection	0 cm	ironstone	1	
10	surface collection	0 cm	brick	1	buff porous, rough temper
11	surface collection	0 cm	glass, bottle	1	aqua, damaged finish
12	surface collection	0 cm	whiteware, painted	1	purple
13	surface collection	0 cm	glass, white	1	rim
14	surface collection	0 cm	ironstone, banded	1	light blue bands
15	surface collection	0 cm	porcelain, semi	1	
16	surface collection	0 cm	ironstone, sponged	1	blue sponge
17	surface collection	0 cm	ironstone, moulded	1	base of plate, black transfer, T. & R. Boote (Ltd.) mark
18	surface collection	0 cm	ironstone, transfer printed	1	blue willow
19	surface collection	0 cm	ironstone, moulded	1	base of plate
20	surface collection	0 cm	ironstone, hand painted	1	green
21	surface collection	0 cm	ironstone, moulded	1	
22	surface collection	0 cm	earthenware, red	1	buff lead glaze
23	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware, damage blue transfer print
24	surface collection	0 cm	ironstone, transfer printed	1	blue willow
25	surface collection	0 cm	abrader	1	groundstone

3.44 Location 44 (AhHj-14)

Location 44 (AhHj-14), a historic Euro-Canadian site on property GSH1766 (located south of Crediton Road and east of Blackbush Line; Supplement A: Figure 21), was identified on May 1, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor. This location consists of a 60 metre (along the north-south axis)



by 22 metre (along the west-east axis) scatter of approximately 80 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 29 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 27 domestic and two personal (Table 89). Each artifact class is discussed in greater detail below.

Table 89: Location 44 (AhHj-14) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	27	93.10
personal	2	6.89
Total	29	100.00

3.44.1 Domestic Artifacts

A total of 27 domestic artifacts were collected during the Stage 2 assessment of Location 44 (AhHj-14). This collection includes 22 fragments of ceramic and five fragments of glass.

3.44.1.1 Ceramic Artifacts

In total, 22 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 44 (AhHj-14). Included in this total are four fragments of ironstone, three fragments of utilitarian earthenware and stoneware, two fragments of semi-porcelain and one fragment of whiteware. Table 90 provides a breakdown of the ceramic assemblage by ware type, while Table 91 provides a more detailed breakdown by decorative style.

Table 90: Summary of Ceramic Collection According to Ware type, Location 44 (AhHj-14)

Artifact	Freq.	%
ironstone	16	72.72
whiteware	4	18.18
utilitarian	2	9.09
Total	22	100.00

Table 91: Summary of Ceramic Collection According to Decorative Style, Location 44 (AhHj-14)

Artifact	Freq.	%
ironstone, plain	12	54.54
whiteware, stamped	3	13.64
ironstone, transfer print	2	9.09
ironstone, moulded	2	9.09





Artifact	Freq.	%
whiteware, hand painted	1	4.54
stoneware, salt-glazed	1	4.54
stoneware	1	4.54
Total	22	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=16 or 72.72%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 44 (AhHj-14) ceramic assemblage contains twelve fragments of plain undecorated ironstone (Plate 30:1) two fragments of transfer printed ironstone (Plate 30:2) and two fragments of moulded ironstone (Plate 30:3).

Two ironstone fragments in the assemblage are black transfer printed, both with obscured maker's marks. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994).

Two ironstone fragments in the assemblage are moulded, one with a floral pattern and one displaying the popular what motif. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern (Kenyon 1980).

White Earthenware

A total of four whiteware fragments were collected during the Stage 2 assessment of Location 44 (AhHj-14). Three fragments are stamped (Plate 30:4) and one is hand painted (Plate 30:5). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century.

Three whiteware fragments in the assemblage are sponge stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). Two of the fragments in the assemblage display a brown geometric design, and the third displays an indeterminate blue design.

The painted whiteware fragment in the assemblage is polychromatic and the colours visible are bright green and red, and are part of a broad-stoke floral pattern. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen here are considered "Late Palette" colours.





Utilitarian Earthenware

A total of two fragments of utilitarian earthenwares were collected. This includes two fragments of stoneware, one with a grey and brown salt glaze and one with a beige lead glaze. Utilitarian earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). Stoneware is harder, more vitreous and is often salt glazed, and implies a late 19th century manufacture date.

3.44.1.2 Glass Artifacts

Five fragments of domestic bottle glass were recovered from Location 44 (AhHj-14). The bottle glass assemblage includes seven four aqua fragments and one sun-coloured amethyst fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). The assemblage includes two mid-to-late 19th century bottle finishes: one aqua brandy finish, and one aqua bead finish.

3.44.2 Personal Artifacts

Two items classified as personal material were collected during Stage 2 assessment of Location 44 (AhHj-14). The personal artifact assemblage includes one fragmentary white clay pipe stem (Plate 30:6) and one agate button (Plate 30:7).

White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93). The stem in the assemblage is fragmentary and has no visible maker's mark.

The assemblage also contains one 4-holed agate button. What were called "agate" buttons are similar in colour and size (usually about 10 millimetres) to modern shirt buttons. The "agate" was in fact a type of pressed ceramic powder made using the so-called "Prosser" process patented in 1840. Agate buttons became widely distributed in Canada by the late 1840s and are common on sites form this time on (Kenyon and Doroszenko 1995).

3.44.3 Artifact Catalogue

Table 92 presents the Stage 2 artifact catalogue for Location 44 (AhHj-14).





Table 92: Location 44 (AhHj-14) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	ironstone, transfer printed	1	mono black, maker's mark (obscured)
2	surface collection	0 cm	ironstone, transfer printed	1	mono black, maker's mark (obscured)
3	surface collection	0 cm	pipe stem, white	1	
4	surface collection	0 cm	whiteware, stamped	1	mono blue, stamped
5	surface collection	0 cm	button, agate	1	4 holes
6	surface collection	0 cm	ironstone	1	
7	surface collection	0 cm	ironstone	1	
8	surface collection	0 cm	ironstone	1	
9	surface collection	0 cm	ironstone	1	
10	surface collection	0 cm	ironstone	1	handle
11	surface collection	0 cm	ironstone, moulded	1	wheat pattern
12	surface collection	0 cm	ironstone, moulded	1	floral
13	surface collection	0 cm	ironstone	1	
14	surface collection	0 cm	ironstone	1	
15	surface collection	0 cm	ironstone	1	
16	surface collection	0 cm	ironstone	1	
17	surface collection	0 cm	ironstone	1	
18	surface collection	0 cm	ironstone	1	
19	surface collection	0 cm	ironstone	1	
20	surface collection	0 cm	whiteware, painted	1	polychrome
21	surface collection	0 cm	whiteware, stamped	1	brown geometric
22	surface collection	0 cm	whiteware, stamped	1	brown geometric
23	surface collection	0 cm	stoneware, salt glazed	1	grey and brown glaze
24	surface collection	0 cm	stoneware	1	buff glaze (lead) and paste
25	surface collection	0 cm	glass, bottle	1	aqua, bead finish
26	surface collection	0 cm	glass, bottle	1	aqua, damaged finish
27	surface collection	0 cm	glass, bottle	1	aqua, brandy finish
28	surface collection	0 cm	glass, bottle	1	aqua, base
29	surface collection	0 cm	glass, bottle	1	sc amethyst

3.45 Location 45 (AhHj-15)

Location 45 (AhHj-15), a historic Euro-Canadian site on property GSH1767 (on the west side of Blackbush Line, south of Crediton Road; Supplement A: Figure 21), was identified on May 1, 2012. This location consists of a 70



metre (along the north-south axis) by 20 metre (along the west-east axis) scatter of approximately 80 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 38 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 36 domestic, one structural and one recent (Table 93). Each artifact class is discussed in greater detail below.

Table 93: Location 45 (AhHj-15) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	36	94.74
structural	1	2.63
recent	1	2.63
Total	38	100.00

3.45.1 Domestic Artifacts

A total of 36 domestic artifacts were collected during the Stage 2 assessment of Location 45 (AhHj-15). This collection includes 24 fragments of ceramic and 12 fragments of glass.

3.45.1.1 Ceramic Artifacts

In total, 24 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 45 (AhHj-15). Included in this total are seven fragments of ironstone, five fragments of whiteware, four fragments of semi-porcelain, two fragments of undetermined ceramic, one fragment of porcelain and one fragment of utilitarian stoneware. Table 94 provides a breakdown of the ceramic assemblage by ware type, while Table 95 provides a more detailed breakdown by decorative style.

Table 94: Summary of Ceramic Collection According to Ware type, Location 45 (AhHj-15)

Artifact	Freq.	%
ironstone	11	45.83
whiteware	5	20.83
semi-porcelain	4	16.67
undetermined	2	8.33
porcelain	1	4.17
utilitarian	1	4.17
Total	24	100.00





Table 95: Summary of Ceramic Collection According to Decorative Style, Location 45 (AhHj-15)

Artifact	Freq.	%
ironstone, plain	7	29.17
whiteware, plain	4	16.67
semi-porcelain, plain	3	12.50
ironstone, transfer printed	3	12.50
ceramic, undetermined	2	8.33
semi-porcelain, hand painted	1	4.17
ironstone, flow transfer printed	1	4.17
whiteware, transfer printed	1	4.17
stoneware	1	4.17
porcelain, moulded	1	4.17
Total	24	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=11 or 45.83%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 45 (AhHj-15) ceramic assemblage contains seven fragments of plain undecorated ironstone (Plate 31:1), three fragments of transfer printed ironstone (Plate 31:2) and one fragment of flow transfer printed ironstone (Plate 31:3).

Three ironstone fragments in the assemblage are transfer printed with a dark green floral pattern. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). One is green with a floral and vine pattern, one is a blue flatware base fragment, and one displays a blue floral pattern with moulded dots.

One flow blue transfer printed ironstone fragment is included in the assemblage, displaying a Chinoiserie floral pattern. Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). Though blue was the most popular colour for flow transfer printing, other colours were also sometimes used.

White Earthenware

A total four plain whiteware fragments (Plate 31:4) and one transfer printed whiteware fragment (Plate 31:5) were collected during the Stage 2 assessment of Location 45 (AhHj-15). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century.





The single fragment of transfer printed whiteware in the assemblage displays a dark blue floral pattern. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs.

Semi-Porcelain

A total of four fragments of semi-porcelain are included in the assemblage, three that are plain (Plate 31:6) and one with a polychromatic floral design (Plate 31:7). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

Undetermined Ceramics

Unfortunately, two of the ceramic pieces recovered from this location could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.

Porcelain

There is a single fragment of porcelain with indistinguishable moulding included in the assemblage (Plate 31:8). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century.

Utilitarian Earthenware

A total of one fragment of utilitarian stoneware was collected during the Stage 2 assessment. The fragment has a brown and grey lead glaze and buff paste. Utilitarian earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). Stoneware is harder, more vitreous and is often salt glazed.





3.45.1.2 Glass Artifacts

Twelve fragments of glass were recovered from Location 45 (AhHj-15). This collection includes 10 fragments of bottle glass, one fragment of press-moulded dish glass and one fragment of white or milk glass.

The bottle glass assemblage includes three sun-coloured amethyst fragments, three aqua fragments, one purple fragment, one amber fragment, one blue fragment and one black fragment. Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century. Black glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). The assemblage includes two mid-to-late 19th century bottle finishes: one amber brandy finish, and one large blue prescription finish with a hand-applied top.

The assemblage also includes one press-moulded piece of dish glass, which is a sun-coloured amethyst moulded scalloped rim. Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870's to the 1920s (Adams 1994). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012).

The assemblage contains one milk glass cosmetic jar fragment. Opaque white glass - commonly called milk glass - was typically produced by the addition of tin or zinc oxide, fluorides (fluorspar), and phosphates. In a sense, milk glass is like colorless glass in that it is defined by the absence of color, except in this case the bottle is truly not clear. An interesting feature of most milk glass is that very thin glass (i.e. fragment edge) has an orange-ish opalescence when held up to bright light. White glass was often used to make jars and small pots for cosmetics. It is not commonly found on historic sites that date totally prior to the 1870s (Lindsey 2012).

3.45.2 Structural Artifacts

There was one structural artifact collected from Location 45 (AhHj-15). The artifact is a single piece of window glass. Ian Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 mm. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes. The fragment in the assemblage is greater than 1.7 millimetres thick, and can be dated to post-1850.

3.45.3 Recent Material

A total of one fragment of recent material was collected during the Stage 2 assessment of Location 45 (AhHj-15). It has been identified as a plastic electrical insulator.

3.45.4 Artifact Catalogue

Table 96 presents the Stage 2 artifact catalogue for Location 45 (AhHj-15).





Table 96: Location 45 (AhHj-15) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	aqua, thick base
2	surface collection	0 cm	stoneware	1	brown and grey lead glaze, buff paste
3	surface collection	0 cm	glass, bottle	1	aqua, damaged finish
4	surface collection	0 cm	porcelain, semi	1	polychrome painted
5	surface collection	0 cm	glass, bottle	1	amber, brandy finish
6	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and vines
7	surface collection	0 cm	ironstone, transfer printed	1	mono blue, plate base fragment
8	surface collection	0 cm	glass, dish	1	sc amethyst, scalloped moulded dish lip
9	surface collection	0 cm	whiteware, transfer printed	1	mono dark blue, floral
10	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, Asian style floral
11	surface collection	0 cm	glass, bottle	1	blue prescription finish, top applied separately, large
12	surface collection	0 cm	ironstone, transfer printed	1	mono blue, floral and dot moulding
13	surface collection	0 cm	recent material	1	plastic black electric insulator
14	surface collection	0 cm	glass, bottle	1	black
15	surface collection	0 cm	glass, bottle	1	aqua
16	surface collection	0 cm	glass, bottle	1	purple, rectangular base
17	surface collection	0 cm	glass, bottle	1	sc amethyst, base
18	surface collection	0 cm	glass, bottle	1	sc amethyst
19	surface collection	0 cm	glass, bottle	1	sc amethyst
20	surface collection	0 cm	glass, white	1	thick white container fragment
21	surface collection	0 cm	porcelain, semi	1	
22	surface collection	0 cm	porcelain, semi	1	
23	surface collection	0 cm	porcelain, semi	1	
24	surface collection	0 cm	porcelain, moulded	1	indistinguishable moulding
25	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
26	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
27	surface collection	0 cm	ironstone	1	
28	surface collection	0 cm	ironstone	1	





Cat.	Context	Depth	Artifact	Freq.	Comments
29	surface collection	0 cm	ironstone	1	
30	surface collection	0 cm	ironstone	1	
31	surface collection	0 cm	ironstone	1	
32	surface collection	0 cm	ironstone	1	
33	surface collection	0 cm	ironstone	1	
34	surface collection	0 cm	whiteware	1	
35	surface collection	0 cm	whiteware	1	
36	surface collection	0 cm	whiteware	1	
37	surface collection	0 cm	whiteware	1	
38	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
39	surface collection	0 cm	glass, bottle	1	aqua, thick base

3.46 Location 46 (AhHj-16)

Location 46 (AhHj-16), a historic Euro-Canadian site on property GSH1780 (located north of South Road and west of Bronson Line; Supplement A: Figure 28), was identified on May 1, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor. Location 46 (AhHj-16) consists of a 20 metre (along the north-south axis) by 140 metre (along the west-east axis) scatter of approximately 80 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 29 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 27 domestic and two structural (Table 97). Each artifact class is discussed in greater detail below.

Table 97: Location 46 (AhHj-16) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	27	93.10
structural	2	6.89
Total	29	100.00

3.46.1 Domestic Artifacts

A total of 27 domestic artifacts were collected during the Stage 2 assessment of Location 46 (AhHj-16). This collection includes 10 fragments of ceramic and 17 fragments of glass.

3.46.1.1 Ceramic Artifacts

In total, 10 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 46 (AhHj-16). Included in this total are four fragments of ironstone, three fragments of utilitarian





earthenware and stoneware, two fragments of semi-porcelain and one fragment of whiteware. Table 98 provides a breakdown of the ceramic assemblage by ware type, while Table 99 provides a more detailed breakdown by decorative style.

Table 98: Summary of Ceramic Collection According to Ware type, Location 46 (AhHj-16)

Artifact	Freq.	%
ironstone	4	40.00
utilitarian	3	30.00
semi-porcelain	2	20.00
whiteware	1	10.00
Total	10	100.00

Table 99: Summary of Ceramic Collection According to Decorative Style, Location 46 (AhHj-16)

Artifact	Freq.	%
ironstone, plain	3	30.00
stoneware	2	20.00
semi-porcelain, moulded	1	10.00
semi-porcelain, hand painted	1	10.00
earthenware, red	1	10.00
ironstone, transfer printed	1	10.00
whiteware, plain	1	10.00
Total	10	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=4 or 40%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 46 (AhHj-16) ceramic assemblage contains three fragments of plain undecorated ironstone (Plate 32:1) and one fragment of transfer printed ironstone (Plate 32:2).

One ironstone fragment in the assemblage is transfer printed with a dark green floral pattern. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994).

Utilitarian Earthenware

A total of three fragments of utilitarian earthenwares were collected. This includes two fragments of beige lead glazed stoneware with reddish crazing, and one fragment of plain red earthenware. Red and yellow





earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). Stoneware is harder, more vitreous and is often salt glazed.

Semi-Porcelain

A total of two fragments of semi-porcelain are included in the assemblage, one with indistinguishable moulding (Plate 32:3) and one with a polychromatic floral design (Plate 32:4). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

White Earthenware

A total one plain whiteware fragment (Plate 32:5) was collected during the Stage 2 assessment of Location 46 (AhHj-16). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century.

3.46.1.2 Glass Artifacts

Seventeen fragments of glass were recovered from Location 46 (AhHj-16). This collection includes 15 fragments of bottle glass and two fragments of press-moulded dish glass.

The bottle glass assemblage includes seven colourless fragments, two amber fragments, two cobalt blue fragments, two aqua fragments, one blue fragment and one dark green fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). The assemblage includes two mid-to-late 19th century bottle finishes: one cobalt blue small mouth external thread finish, and one colourless crown finish.

The assemblage also includes two press-moulded pieces of dish glass, one which is colourless and one which is sun-coloured amethyst. Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012).

3.46.2 Structural Artifacts

There were two structural artifacts collected from Location 46 (AhHj-16). These artifacts consist of two pieces of window glass.





A total of two fragments of window glass were recovered in the Stage 2 assessment, one with a faint greenish tint. Ian Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 millimetres. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes. Both fragments are greater than 1.7 millimetres thick, and can be dated to post-1850.

3.46.3 Artifact Catalogue

Table 100 presents the Stage 2 artifact catalogue for Location 46 (AhHj-16).

Table 100: Location 46 (AhHj-16) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	dark green damaged finish
2	surface collection	0 cm	glass, bottle	1	colourless, impression: "TRADE-"
3	surface collection	0 cm	glass, dish	1	amethyst, moulded bowl fragment
4	surface collection	0 cm	glass, bottle	1	colourless, crown finish
5	surface collection	0 cm	glass, dish	1	colourless, moulded dish fragment
6	surface collection	0 cm	glass, window	1	> 1.7 mm, greenish tint
7	surface collection	0 cm	glass, bottle	1	amber
8	surface collection	0 cm	ironstone, transfer printed	1	mono dark green, floral
9	surface collection	0 cm	glass, bottle	1	cobalt blue, small mouth external thread finish
10	surface collection	0 cm	glass, bottle	1	cobalt blue, fragmentary damaged finish
11	surface collection	0 cm	glass, bottle	1	blue
12	surface collection	0 cm	glass, bottle	1	colourless
13	surface collection	0 cm	glass, bottle	1	colourless
14	surface collection	0 cm	glass, bottle	1	clear, thick
15	surface collection	0 cm	glass, bottle	1	colourless, mouth threading
16	surface collection	0 cm	glass, bottle	1	colourless
17	surface collection	0 cm	glass, bottle	1	amber
18	surface collection	0 cm	glass, bottle	1	aqua
19	surface collection	0 cm	glass, bottle	1	light aqua
20	surface collection	0 cm	porcelain, semi	1	moulded
21	surface collection	0 cm	porcelain, semi	1	painted polychrome
22	surface collection	0 cm	ironstone	1	
23	surface collection	0 cm	ironstone	1	
24	surface collection	0 cm	ironstone	1	





Cat. #	Context	Depth	Artifact	Freq.	Comments
25	surface collection	0 cm	stoneware	1	buff glaze with reddish crazing
26	surface collection	0 cm	stoneware	1	buff glaze with reddish crazing
27	surface collection	0 cm	earthenware, red	1	plain
28	surface collection	0 cm	whiteware	1	
29	surface collection	0 cm	glass, window	1	> 1.7 mm, greenish tint

3.47 Location 47 (AhHj-17)

Location 47 (AhHj-17), a Historic Euro-Canadian site on property GSH1494 (located north of Victoria Avenue West and west of Parr Line; Supplement A: Figure 18), was identified on May 2, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor. This location consists of a 30 metre (along the north-south axis) by 60 metre (along the west-east axis) scatter of over 100 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 49 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 45 domestic, two structural and two pieces of recent material (Table 101). Each artifact class is discussed in greater detail below.

Table 101: Location 47 (AhHj-17) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	45	91.84
structural	2	4.08
recent	2	4.08
Total Artifacts	49	100.00

3.47.1 Domestic Artifacts

A total of 45 domestic artifacts were collected during the Stage 2 assessment of Location 47 (AhHj-17). This collection includes 18 fragments of ceramics and 27 fragments of glass.

3.47.1.1 Ceramic Artifacts

In total, 18 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 47 (AhHj-17). Included in this total are eight fragments of ironstone, four fragments of utilitarian earthenware and stoneware, two fragments of creamware, two fragments of undetermined ceramic, one fragment of whiteware and one fragment of semi-porcelain. Table 102 provides a breakdown of the ceramic assemblage by ware type, while Table 103 provides a more detailed breakdown by decorative style.





Table 102: Summary of Ceramic Collection According to Ware type, Location 47 (AhHj-17)

Artifact	Freq.	%
ironstone	8	44.44
utilitarian	4	22.22
creamware	2	11.11
undetermined	2	11.11
whiteware	1	5.55
semi-porcelain	1	5.55
Total	18	100.00

Table 103: Summary of Ceramic Collection According to Decorative Style, Location 47 (AhHj-17)

Artifact	Freq.	%
ironstone, plain	5	27.78
creamware	2	11.11
stoneware	2	11.11
earthenware, red	2	11.11
undetermined	2	11.11
semi-porcelain, plain	1	5.55
ironstone, transfer print	1	5.55
ironstone, moulded	1	5.55
ironstone, flow transfer printed	1	5.55
whiteware, plain	1	5.55
Total	18	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=8 or 44.44%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 47 (AhHj-17) ceramic assemblage includes five plain undecorated fragments (Plate 33:1), one transfer printed fragment (Plate 33:2), one moulded fragment (Plate 33:3), and one flow transfer printed fragment (Plate 33:4).

One fragment of ironstone in the assemblage is transfer printed, with a green floral pattern. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994).





One fragment in the ironstone assemblage is moulded, with a dot and line pattern. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980).

One fragment of blue-black flow transfer printed ironstone was found during the Stage 2 assessment of Location 47 (AhHj-17). Flow blue transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991).

Utilitarian Earthenware

A total of four fragments of utilitarian earthenwares were collected during the Stage 2 assessment of Location 47 (AhHj-17). This includes two fragments of red earthenware and two fragments of stoneware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). One of the fragments of red earthenware has a beige lead glaze, and one is unglazed.

Stoneware is harder, more vitreous and is often salt glazed. Two of the stoneware fragments are salt glazed, one with a black exterior and one with brown. One of the fragments has a clear lead glaze, and the other fragment has a brown veined lead glaze.

Creamware

Two fragments of creamware are included in the assemblage (Plate 33:5). Creamware, often referred to as "Queen's Ware" was first produced in the 1750s, and later perfected by Josiah Wedgwood in the 1760s. This type of tableware became very common in Upper Canada by 1770 and continued in popularity until about 1820 when it started to be replaced by later pearlware and whiteware types (Kenyon and Dorozsenko 1994). Creamware is refined, thin bodied earthenware with a clear lead-glaze that appears creamy yellow to yellowish-green in colour. It was most often manufactured plain or decorated with moulded designs, however transfer printed, hand painted and banded examples of creamware do exist.

Undetermined Ceramics

Unfortunately, two of the ceramic pieces recovered from Location 47 (AhHj-17) could not be catalogued into a specific ceramic-ware classification. One of the pieces is so heavily damaged and fragmentary that it is impossible to accurately identify it by ceramic type, and the other is a lenticular ceramic fragment of unknown purpose. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.





White Earthenware

A total of one plain whiteware fragment (Plate 33:6) was collected during the Stage 2 assessment of Location 47 (AhHj-17). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century.

Semi-Porcelain

A total of one plain semi-porcelain fragment was collected during the Stage 2 assessment (Plate 33:7). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

3.47.1.2 Glass Artifacts

20-seven fragments of glass were recovered from Location 47 (AhHj-17). This collection includes 24 fragments of bottle glass and three fragment of white or milk glass.

The bottle glass assemblage includes nine colourless fragments, five amber fragments, three sun-coloured amethyst fragments, two emerald green fragments, two olive green fragments, one cobalt blue fragment and one pink fragment. Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Several mid-to-late 19th century bottle finishes were found in the assemblage, including an amber wide mouth external thread finish, an emerald green blob finish and a colourless collared ring finish. One of the bottle base fragments included in the assemblage is colourless and displays an open pontil mark, which suggests a manufacture date prior to 1855 (Lindsey 2012).

Three fragments of white glass are included in the assemblage, one which is likely part of the base of a cosmetic jar or pot. Opaque white glass - commonly called milk glass - was typically produced by the addition of tin or zinc oxide, fluorides (fluorspar), and phosphates. In a sense, milk glass is like colorless glass in that it is defined by the absence of color, except in this case the bottle is truly not clear. An interesting feature of most milk glass is that very thin glass (i.e. fragment edge) has an orange-ish opalescence when held up to bright light. White glass was often used to make jars and small pots for cosmetics. It is not commonly found on historic sites that date totally prior to the 1870s (Lindsey 2012).

3.47.2 Structural Artifacts

There were two structural artifacts collected from Location 47 (AhHj-17). These artifacts consist of one corroded wire-drawn nail (Plate 33:8) and one heavily corroded hinge. Wire drawn nails are identical to the type of nails currently used today, with a flat, round head and a wire shaft. They became popular in the 1890s and continue to be used today.





3.47.3 Recent Material

A total of two fragments of recent material were collected during the Stage 2 assessment of Location 47 (AhHj-17). They have been identified as electrical insulators.

3.47.4 Artifact Catalogue

Table 104 presents the Stage 2 artifact catalogue for Location 47 (AhHj-17).

Table 104: Location 47 (AhHj-17) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	colourless, base, open pontil mark
2	surface collection	0 cm	glass, bottle	1	colourless, rectangular base
3	surface collection	0 cm	glass, bottle	1	colourless
4	surface collection	0 cm	glass, bottle	1	colourless, rectangular base
5	surface collection	0 cm	glass, bottle	1	colourless
6	surface collection	0 cm	glass, bottle	1	emerald green
7	surface collection	0 cm	glass, bottle	1	olive green
8	surface collection	0 cm	glass, bottle	1	sc amethyst
9	surface collection	0 cm	glass, bottle	1	sc amethyst
10	surface collection	0 cm	glass, bottle	1	colourless, light green tint
11	surface collection	0 cm	glass, bottle	1	amber
12	surface collection	0 cm	glass, bottle	1	amber
13	surface collection	0 cm	glass, bottle	1	amber
14	surface collection	0 cm	glass, white	1	base, likely of a cosmetic pot
15	surface collection	0 cm	glass, white	1	rim
16	surface collection	0 cm	creamware	1	
17	surface collection	0 cm	stoneware	1	buff paste, clear lead glaze
18	surface collection	0 cm	glass, bottle	1	amber, wide mouth external thread finish
19	surface collection	0 cm	ironstone	1	
20	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral
21	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
22	surface collection	0 cm	recent material	1	electrical insulator
23	surface collection	0 cm	glass, bottle	1	colourless, narrow base
24	surface collection	0 cm	glass, bottle	1	colourless, collared ring finish
25	surface collection	0 cm	glass, bottle	1	light pink





Cat. #	Context	Depth	Artifact	Freq.	Comments
26	surface collection	0 cm	glass, bottle	1	emerald green, blob finish
27	surface collection	0 cm	glass, bottle	1	olive green
28	surface collection	0 cm	glass, bottle	1	cobalt blue, base
29	surface collection	0 cm	glass, bottle	1	purple, impression: "9"
30	surface collection	0 cm	glass, bottle	1	sc amethyst, lip
31	surface collection	0 cm	glass, bottle	1	amber, square base
32	surface collection	0 cm	glass, bottle	1	amber, fragment of rectangular base
33	surface collection	0 cm	glass, white	1	thick fragment
34	surface collection	0 cm	whiteware	1	
35	surface collection	0 cm	porcelain, semi	1	base fragment
36	surface collection	0 cm	ironstone, moulded	1	dots and lines
37	surface collection	0 cm	ironstone	1	
38	surface collection	0 cm	ironstone, transfer printed	1	mono green, floral and leaves
39	surface collection	0 cm	ironstone, transfer printed	1	mono green, vines and stippling
40	surface collection	0 cm	ironstone, transfer printed	1	dark green, floral and stippling
41	surface collection	0 cm	ironstone, flow transfer printed	1	blue-black
42	surface collection	0 cm	creamware	1	
43	surface collection	0 cm	earthenware, red	1	plain
44	surface collection	0 cm	earthenware, red	1	beige lead glaze
45	surface collection	0 cm	stoneware	1	veined brown lead glaze
46	surface collection	0 cm	metal, hinge	1	heavily corroded hinge
47	surface collection	0 cm	nail, wire	1	heavily corroded
48	surface collection	0 cm	ceramic, undetermined	1	unknown lenticular disc, diameter: 32 mm
49	surface collection	0 cm	recent material	1	electrical insulator

3.48 Location 48 (AhHj-18)

Location 48 (AhHj-18), a historic Euro-Canadian artifacts with a small pre-contact Aboriginal component, was identified on May 2, 2012 during the Stage 2 pedestrian survey of proposed wind energy components. Location 48 (AhHj-18) was identified on property GSH2028 (located north of Mount Carmel Drive and west of Babylon Line; Supplement A: Figure 30), and is comprised of a 60 metre (along the north-south axis) by 80 metre (along the west-east axis) scatter of more than 150 fragments of Euro-Canadian domestic debris spanning the 19th century, with an isolated pre-contact Aboriginal artifact. In total, 59 multi-component artifacts were collected





during the Stage 2 assessment, including 51 domestic, five structural, one personal, one metal and one piece of pre-contact lithic material (Table 105). Each artifact class is discussed in greater detail below.

Table 105: Location 48 (AhHj-18) Artifact Summary

Artifact	Freq.	%
Euro Canadian Artifacts		
domestic	51	86.44
structural	5	8.47
personal	1	1.69
metal	1	1.69
Total Euro Canadian Artifacts	58	98.30
Pre-Contact Aboriginal Artifacts		
chipping detritus	1	1.69
Total Pre-Contact Aboriginal Artifacts	1	1.69
Total Artifacts	59	100.00

3.48.1 Domestic Artifacts

A total of 51 domestic artifacts were collected during the Stage 2 assessment of Location 48 (AhHj-18). This collection includes 41 fragments of ceramic and 10 fragments of glass.

3.48.1.1 Ceramic Artifacts

In total, 41 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 48 (AhHj-18). Included in this total are 26 fragments of ironstone, 14 fragments of whiteware and one fragment of utilitarian earthenware. Table 106 provides a breakdown of the ceramic assemblage by ware type, while Table 107 provides a more detailed breakdown by decorative style.

Table 106: Summary of Ceramic Collection According to Ware type, Location 48 (AhHj-18)

Artifact	Freq.	%
ironstone	26	63.41
whiteware	14	34.14
utilitarian	1	2.44
Total	41	100.00





Table 107: Summary of Ceramic Collection According to Decorative Style, Location 48 (AhHj-18)

Artifact	Freq.	%
ironstone, flow transfer print	11	26.83
ironstone, plain	6	14.63
whiteware, transfer print	6	14.63
whiteware, hand painted	5	12.19
ironstone, transfer print	3	7.32
ironstone, sponged	2	4.88
ironstone, hand painted	2	4.88
ironstone, edged	1	2.44
ironstone, moulded	1	2.44
whiteware, stamped	1	2.44
whiteware, flow transfer print	1	2.44
whiteware, plain	1	2.44
earthenware, red	1	2.44
Total	41	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=26 or 63.41%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 48 (AhHj-18) ceramic assemblage includes 11 flow transfer printed fragments (Plate 34:1), six plain or undecorated fragments (Plate 34:2), three transfer printed fragments (Plate 34:3), two sponged fragments (Plate 34:4), two hand painted fragments (Plate 34:5), one edged fragment (Plate 34:6) and one moulded fragment (Plate 34:7).

Eleven pieces of flow transfer printed ironstone were found during the Stage 2 assessment of Location 48 (AhHj-18). Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). The most popular colour for this transfer printing technique was blue, but other colours such as green and black were sometimes employed. All fragments in the assemblage are flow blue, some displaying a vine and leaf pattern, and some of indeterminate design.

Three ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). All three fragments in the assemblage are blue, one displaying a Chinoiserie design with a partial obscured maker's mark.

Two fragments in the assemblage are sponged. Sponged ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s. Both sponged fragments recovered during the Stage 2 assessment are blue.





Two fragments in the assemblage are hand-painted. One is a light green floral pattern, and the other is blue with an indeterminate design.

One fragment of ironstone in the assemblage is edged. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). The popularity of edged wares continued even as ironstone became more commonly used. The fragment in the assemblage is blue and unscalloped, with impressed curved lines.

One fragment in the ironstone assemblage is moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). The fragment in the assemblage displays a shallow crosshatched pattern.

White Earthenware

A total of 14 whiteware fragments were collected during the Stage 2 assessment of Location 48 (AhHj-18). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Six fragments of in the assemblage are transfer printed (Plate 35:1), five fragments are hand painted (Plate 35:2), one fragment is sponge-stamped (Plate 35:3), one fragment is flow transfer printed (Plate 35:4) and one fragment is undecorated (Plate 35:5).

Six transfer printed fragments were recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. Two of the fragments are blue with a stippled leaf design, and one has a partial obscured maker's mark. Five of the fragments in the assemblage are blue with various designs, and one is black.

Five hand painted whiteware fragments are also included in the assemblage. Three of the fragments are blue, one has a red stripe, and one is polychromatic floral. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen on this fragment are considered "Late Palette" colours.

There is one red sponge-stamped whiteware fragment in the assemblage. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994).





One flow blue transfer printed whiteware fragment was recovered during the Stage 2 assessment, and is of an indeterminate design. Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991).

Utilitarian Earthenware

A total of one fragment of utilitarian red earthenware was collected during the Stage 2 assessment of Location 48 (AhHj-18). Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). The red earthenware fragment in the assemblage has a yellowy-beige lead glaze.

3.48.1.2 Glass Artifacts

Ten fragments of glass were recovered from Location 48 (AhHj-18). This collection consists of 10 fragments of bottle glass.

The bottle glass assemblage includes five aqua fragments, three black fragments, one olive green fragment and one light blue fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Black glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). Two of the aqua fragments are examples of the patent or extract finish, a bottle finish popular from 1850 to past the turn of the century (Lindsey 2012).

3.48.2 Structural Artifacts

There were five structural artifacts collected from Location 48 (AhHj-18). These artifacts consist of three pieces of window glass, one headless unidentifiable nail and one machine-cut nail (Plate 35:6). Both nails are heavily corroded.

A total of three fragments of window glass were recovered in the Stage 2 assessment. One of the fragments is moulded and frosted, and is likely a relatively modern fragment from a bathroom window. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). The two non-moulded window glass fragments in the assemblage are both greater than 1.7 mm, and can be dated to post-1850.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830 (Adams 1994).





3.48.3 Personal Artifacts

There is one personal artifact in the assemblage at Location 48 (AhHj-18): a 4-holed agate button (Plate 35:7). What were called "agate" buttons are similar in colour and size (usually about 10mm) to modern shirt buttons. The "agate" was in fact a type of pressed ceramic powder made using the so-called "Prosser" process patented in 1840. Agate buttons became widely distributed in Canada by the late 1840s and are common on sites form this time on (Kenyon and Doroszenko 1995).

3.48.4 Metal Artifacts

There is one metal artifact in the assemblage. It is an oxidized copper cap with a bulbous top. It is bell-shaped, but did not function as a bell.

3.48.5 Pre-Contact Aboriginal Artifacts

One pre-contact Aboriginal lithic artifact was collected during the Stage 2 assessment of Location 48 (AhHj-18). This small assemblage includes one piece of broken secondary chipping detritus manufactured from Kettle Point chert (Plate 35:8).

3.48.6 Artifact Catalogue

Table 108 presents the Stage 2 artifact catalogue for Location 48 (AhHj-18).

Table 108: Location 48 (AhHj-18) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	aqua, patent/extract finish
2	surface collection	0 cm	copper, undetermined	1	copper cap, bell-shaped with bulbous top
3	surface collection	0 cm	ironstone	1	
4	surface collection	0 cm	ironstone, edged ware	1	blue, unscalloped, impressed curved lines
5	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow
6	surface collection	0 cm	ironstone, moulded	1	shallow crosshatch
7	surface collection	0 cm	earthenware, red	1	beige-yellow lead glaze
8	surface collection	0 cm	ironstone, painted	1	light green floral
9	surface collection	0 cm	ironstone	1	
10	surface collection	0 cm	ironstone, transfer printed	1	mono blue, Asian style, partial maker's mark (obscured)
11	surface collection	0 cm	ironstone, transfer printed	1	mono blue
12	surface collection	0 cm	ironstone, painted	1	blue





Cat.	Context	Depth	Artifact	Freq.	Comments
13	surface collection	0 cm	nail, machine-cut	1	corroded
14	surface collection	0 cm	ironstone	1	
15	surface collection	0 cm	whiteware, painted	1	polychrome, floral
16	surface collection	0 cm	glass, moulded	1	stuccoed, likely bathroom window fragment
17	surface collection	0 cm	glass, bottle	1	olive green
18	surface collection	0 cm	ironstone, transfer printed	1	mono blue
19	surface collection	0 cm	ironstone, sponged	1	mono blue
20	surface collection	0 cm	whiteware, painted	1	dark blue
21	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow
22	surface collection	0 cm	whiteware, painted	1	blue
23	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
24	surface collection	0 cm	whiteware, transfer printed	1	mono blue, crosshatch
25	surface collection	0 cm	whiteware, transfer printed	1	mono blue
26	surface collection	0 cm	whiteware, painted	1	red stripe, likely hotelware
27	surface collection	0 cm	whiteware, flow transfer printed	1	blue, back of vessel with flow dye leakage
28	surface collection	0 cm	ironstone, sponged	1	mono blue
29	surface collection	0 cm	ironstone	1	
30	surface collection	0 cm	glass, bottle	1	light blue, thin
31	surface collection	0 cm	whiteware, stamped	1	red stamped
32	surface collection	0 cm	whiteware, painted	1	blue thin lines
33	surface collection	0 cm	nail	1	heavily corroded, headless machine- cut
34	surface collection	0 cm	button, agate	1	4 holes
35	surface collection	0 cm	whiteware, transfer printed	1	mono blue, floral
36	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, floral
37	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow
38	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, grape cluster
39	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, leaves





Cat.	Context	Depth	Artifact	Freq.	Comments
40	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, vines
41	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow
42	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, handle
43	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow
44	surface collection	0 cm	ironstone, flow transfer printed	1	blue flow, vines and dots
45	surface collection	0 cm	whiteware	1	
46	surface collection	0 cm	whiteware, transfer printed	1	mono blue
47	surface collection	0 cm	whiteware, transfer printed	1	mono black
48	surface collection	0 cm	ironstone, transfer printed	1	mono blue
49	surface collection	0 cm	ironstone	1	
50	surface collection	0 cm	ironstone	1	
51	surface collection	0 cm	glass, bottle	1	black
52	surface collection	0 cm	glass, bottle	1	black
53	surface collection	0 cm	glass, bottle	1	black
54	surface collection	0 cm	glass, bottle	1	aqua, patent/extract finish
55	surface collection	0 cm	glass, bottle	1	light aqua
56	surface collection	0 cm	glass, bottle	1	light aqua, thin
57	surface collection	0 cm	glass, bottle	1	light aqua, patina
58	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
59	surface collection	0 cm	chipping detritus	1	Kettle Point, broken, secondary

3.49 Location 49 (AhHj-19)

Location 49 (AhHj-19), a historic Euro-Canadian site on property GSH1035 (located north of South Road and east of Shipka Line, Supplement A: Figure 27), was identified on May 9, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor. This location consists of a 55 metre (along the north-south axis) by 50 metre (along the west-east axis) scatter of approximately 250 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 88 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 79 domestic, six structural, two personal and one fragment of faunal material. Each artifact class is discussed in greater detail below in Table 109.





Table 109: Location 49 (AhHj-19) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	79	89.77
structural	6	6.82
personal	2	2.27
faunal	1	1.14
Total	88	100.00

3.49.1 Domestic Artifacts

A total of 79 domestic artifacts were collected during the Stage 2 assessment of Location 49 (AhHj-19). This collection includes 59 fragments of ceramic and 20 fragments of glass.

3.49.1.1 Ceramic Artifacts

In total, 59 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 49 (AhHj-19). Included in this total are 28 fragments of ironstone, 18 fragments of whiteware, seven fragments of utilitarian earthenware and stoneware, three fragments of semi-porcelain, one fragment of redware, one fragment of porcelain and one fragment of undetermined ceramic. Table 110 provides a breakdown of the ceramic assemblage by ware type, while Table 111 provides a more detailed breakdown by decorative style.

Table 110: Summary of Ceramic Collection According to Ware type, Location 49 (AhHj-19)

Artifact	Freq.	%
ironstone	28	47.46
whiteware	18	30.51
utilitarian	7	11.86
semi-porcelain	3	5.08
redware	1	1.69
porcelain	1	1.69
undetermined	1	1.69
Total	59	100.00





Table 111: Summary of Ceramic Collection According to Decorative Style, Location 49 (AhHj-19)

Artifact	Freq.	%
ironstone, plain	17	28.81
ironstone, transfer printed	8	13.56
whiteware, plain	6	10.17
earthenware, yellow	4	6.78
whiteware, stamped	3	5.08
whiteware, hand painted	3	5.08
semi-porcelain, plain	3	5.08
whiteware, moulded	3	5.08
ironstone, moulded	2	3.39
earthenware, red	2	3.39
whiteware, banded	1	1.69
whiteware, edged	1	1.69
whiteware, transfer print	1	1.69
stoneware	1	1.69
ironstone, edged	1	1.69
redware	1	1.69
porcelain	1	1.69
ceramic, undetermined	1	1.69
Total	59	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=28 or 47.46%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 49 (AhHj-19) ceramic assemblage includes 17 plain or undecorated fragments (Plate 36:1), eight fragments that are transfer printed (Plate 36:2), two fragments of moulded ironstone (Plate 36:3), and one fragment of edged ironstone (Plate 36:4).

Of the ironstone fragments in the assemblage, one is of particular note (Plate 36:5). Its black transfer printed partial maker's mark is complete enough to be diagnostic, and indicates that the piece of flatware it once adorned was manufactured by the Clemenston brothers, a ceramics maker in Staffordshire, England. Their brand of ironstone was called Royal Patent Stoneware. This particular maker's mark of the Clemenston Brothers' was used after 1870 and onwards past the turn of the century (Birks 2012).

Eight ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994).





Four of the fragments in the assemblage are black, two are brown floral, and two are orange with a fine floral pattern. The orange fragments are likely from the same vessel.

Two fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern. The paste is quite vitreous; fine vitreous paste tends to indicate a later date of manufacture (approximately post-1860s) (Kenyon 1980). The moulded design on both fragments is an example of the wheat motif.

One fragment of ironstone in the assemblage is edged. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). The popularity of edged wares continued even as ironstone became more commonly used. The edged fragment of ironstone in the assemblage is blue with an unscalloped rim and impressed curved lines, giving it a date range between the 1840s (when ironstone began to be seen in Canada) and 1891 (Birks 2012).

White Earthenware

A total of 18 whiteware fragments were collected during the Stage 2 assessment of Location 49 (AhHj-19). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Six fragments of whiteware are plain and undecorated (Plate 36:6), three fragments are stamped (Plate 36:7), three fragments are hand painted (Plate 36:8), three fragments are moulded (Plate 36:9), one fragment is banded (Plate 36:10), one fragment is edged (Plate 36:11), and one fragment is transfer printed (Plate 36:12).

Three fragments of whiteware in the assemblage are stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). Two fragments of the stamped whiteware in the assemblage display a blue geometric pattern, and the third is blue and green, also with a geometric pattern.

One fragment of hand painted whiteware was recovered during the Stage 2 assessment. The sherd is polychromatic and the colours visible are bright green and red, and are part of a broad-stoke floral pattern. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen here are considered "Late Palette" colours.

One fragment of banded whiteware is included in the assemblage. Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware. Banded designs are most frequently found on whiteware, and became popular after the 1830s (Sussman 1997). The banded fragment in the assemblage is blue-grey and part of a marbled design.





One fragment of edged whiteware was also recovered from the assemblage. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). The fragment of edged ware recovered during the Stage 2 assessment is a blue unscalloped rim with impressed curved lines. Its date of manufacture can be placed approximately between 1825 and 1891.

One transfer printed green whiteware fragment was recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs.

Utilitarian Earthenware

A total of seven fragments of utilitarian earthenwares were collected. This includes four fragments of lead glazed yellow earthenware, two fragments of lead glazed red earthenware, and one brown lead glazed fragment of stoneware. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). Stoneware is harder, more vitreous and is often salt glazed, though sometimes lead glaze is also used.

Semi-Porcelain

A total of three semi-porcelain fragments were collected during the Stage 2 assessment of Location 49 (AhHj-19), one of which is a moulded vessel base (Plate 37:1). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

Redware

Redware is a thin-bodied earthenware covered on both the interior and exterior by a dark reddish-brown, dark brown or black glaze. This type of redware was commonly used in the early 19th century for tea pots and mugs. Redware was commonly decorated with slip-banding (Adams 1994). The fragment of redware in the assemblage is curved and has a dark lead glaze (Plate 37:2).





Porcelain

A total of one porcelain fragment was collected during the Stage 2 assessment of Location 49 (AhHj-19). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. The porcelain fragment in the assemblage is plain (Plate 37:3).

Undetermined Ceramic

Unfortunately, one of the ceramic pieces recovered from Location 49 (AhHj-19) could not be catalogued into a specific ceramic-ware classification. This piece is so heavily damaged and fragmentary that it is impossible to accurately identify it by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged piece was simply classified as undetermined ceramic.

3.49.1.2 Glass Artifacts

20 fragments of glass were recovered from Location 49 (AhHj-19). This collection includes 18 fragments of bottle glass, one fragment of press-moulded dish glass, and one fragment of a drinking glass.

The bottle glass assemblage includes eight aqua fragments, three green fragments, two black fragments, two sun-coloured amethyst fragments, one amber fragment and one colourless fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Black glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). The assemblage includes three aqua double bead finishes that give a rough date for manufacture from the end of the 19th century to the start of the 20th century (Lindsey 2012).

One fragment of aqua press-moulded dish glass is included in the assemblage. Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994).

3.49.2 Structural Artifacts

There were six structural artifacts collected from Location 49 (AhHj-19). These artifacts consist of one heavily corroded bolt and five pieces of window glass.

A total of five fragments of window glass were recovered in the Stage 2 assessment. Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 millimetres. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building





homes. One of the fragments in this assemblage is less than 1.6 mm thick, and can be dated to pre-1850, while the other four are greater than 1.7 millimetres, and can be dated to post-1850.

3.49.3 Personal Artifacts

Two items classified as personal material were collected during Stage 2 assessment of Location 49 (AhHj-19). The personal artifact assemblage includes one agate button (Plate 37:4) and one glass button (Plate 37:5).

One of the buttons in the assemblage is white, 4-holed and made of pressed ceramic. What were called "agate" buttons are similar in colour and size (usually about 10mm) to modern shirt buttons. The "agate" was in fact a type of pressed ceramic powder made using the so-called "Prosser" process patented in 1840. Agate buttons became widely distributed in Canada by the late 1840s and are common on sites form this time on (Kenyon and Doroszenko 1995). The second button is made of press-moulded glass, is bevelled on top and has a broken shank.

3.49.4 Faunal Material

A single fragment of faunal material is included in the assemblage. It is a piece of medium-sized mammalian cortical bone, which is too fragmentary to be diagnostic.

3.49.5 Artifact Catalogue

Table 112 presents the Stage 2 artifact catalogue for Location 49 (AhHj-19).

Table 112: Location 49 (AfHh-19) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	stoneware	1	brown lead glaze, both sides
2	surface collection	0 cm	earthenware, red	1	brown lead glaze
3	surface collection	0 cm	earthenware, yellow	1	yellow lead glaze
4	surface collection	0 cm	faunal remains	1	mammalian, cortical, medium size
5	surface collection	0 cm	porcelain	1	
6	surface collection	0 cm	porcelain, semi	1	semi-porcelain
7	surface collection	0 cm	porcelain, semi	1	semi-porcelain
8	surface collection	0 cm	ironstone, moulded	1	wheat motif
9	surface collection	0 cm	ironstone, moulded	1	wheat motif
10	surface collection	0 cm	ironstone	1	
11	surface collection	0 cm	ironstone	1	
12	surface collection	0 cm	whiteware, banded	1	blue-grey, marbled banded (band missing)





Cat.	Context	Depth	Artifact	Freq.	Comments
13	surface collection	0 cm	whiteware, moulded	1	floral moulded blue, painted lace edge
14	surface collection	0 cm	whiteware, edged	1	unscalloped blue imp., curved lines (1825-1891)
15	surface collection	0 cm	ironstone, edged	1	unscalloped blue imp., curved lines (1825-1891)
16	surface collection	0 cm	whiteware, stamped	1	light blue stamped
17	surface collection	0 cm	whiteware, stamped	1	blue abstract
18	surface collection	0 cm	whiteware, stamped	1	blue abstract
19	surface collection	0 cm	whiteware, painted	1	brown stripe, rim
20	surface collection	0 cm	whiteware, moulded	1	thick vessel base
21	surface collection	0 cm	whiteware	1	
22	surface collection	0 cm	ironstone	1	
23	surface collection	0 cm	ironstone, transfer print	1	black, clemenston Bros. Royal Patents stoneware (1870+)
24	surface collection	0 cm	ironstone, transfer print	1	black, partial MM
25	surface collection	0 cm	ironstone, transfer print	1	black
26	surface collection	0 cm	ironstone, transfer print	1	burnt orange fine floral
27	surface collection	0 cm	ironstone, transfer print	1	burnt orange fine floral
28	surface collection	0 cm	whiteware, transfer print	1	mono green
29	surface collection	0 cm	button, agate	1	4 holes
30	surface collection	0 cm	glass, bottle	1	green rectangular base, possibly worked
31	surface collection	0 cm	glass, bottle	1	purple base
32	surface collection	0 cm	glass, bottle	1	aqua, double bead finish
33	surface collection	0 cm	glass, bottle	1	aqua, double bead finish
34	surface collection	0 cm	glass, bottle	1	aqua, patent/extract finish
35	surface collection	0 cm	glass, bottle	1	light aqua body fragment, mould: "RR"
36	surface collection	0 cm	glass, bottle	1	aqua, double bead finish
37	surface collection	0 cm	glass, bottle	1	moulded aqua ribbing
38	surface collection	0 cm	button, glass	1	black, bevelled on top, broken shank
39	surface collection	0 cm	ironstone	1	
40	surface collection	0 cm	ironstone	1	
41	surface collection	0 cm	ironstone	1	





Cat.	Context	Depth	Artifact	Freq.	Comments
42	surface collection	0 cm	ironstone	1	dish base
43	surface collection	0 cm	ironstone	1	cup handle
44	surface collection	0 cm	ironstone	1	
45	surface collection	0 cm	ironstone	1	
46	surface collection	0 cm	ironstone	1	
47	surface collection	0 cm	ironstone	1	
48	surface collection	0 cm	ironstone	1	
49	surface collection	0 cm	ironstone, transfer print	1	black mono, partial MM
50	surface collection	0 cm	ironstone, transfer print	1	brown floral
51	surface collection	0 cm	ironstone, transfer print	1	brown floral
52	surface collection	0 cm	ironstone	1	
53	surface collection	0 cm	ironstone	1	
54	surface collection	0 cm	ironstone	1	
55	surface collection	0 cm	ironstone	1	
56	surface collection	0 cm	porcelain, semi	1	vessel base, moulded
57	surface collection	0 cm	whiteware	1	
58	surface collection	0 cm	whiteware	1	
59	surface collection	0 cm	whiteware	1	
60	surface collection	0 cm	whiteware	1	
61	surface collection	0 cm	whiteware	1	
62	surface collection	0 cm	whiteware, painted	1	polychrome
63	surface collection	0 cm	whiteware, painted	1	blue
64	surface collection	0 cm	whiteware, moulded	1	blue border
65	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
66	surface collection	0 cm	bolt	1	large HC metal bolt
67	surface collection	0 cm	earthenware, yellow	1	lead glaze
68	surface collection	0 cm	earthenware, yellow	1	lead glaze
69	surface collection	0 cm	earthenware, yellow	1	lead glaze
70	surface collection	0 cm	earthenware, red	1	lead glaze
71	surface collection	0 cm	redware	1	shiny dark glaze, curved fragment
72	surface collection	0 cm	glass, bottle	1	dark green
73	surface collection	0 cm	glass, bottle	1	pine green neck fragment
74	surface collection	0 cm	glass, bottle	1	black





Cat.	Context	Depth	Artifact	Freq.	Comments
75	surface collection	0 cm	glass, bottle	1	black
76	surface collection	0 cm	glass, bottle	1	light green tint
77	surface collection	0 cm	glass, bottle	1	aqua
78	surface collection	0 cm	glass, bottle	1	aqua
79	surface collection	0 cm	glass, dish	1	aqua moulded, part translucent, with opaque elements
80	surface collection	0 cm	glass, drinking	1	colourless rim
81	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
82	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
83	surface collection	0 cm	glass, bottle	1	amber base fragment
84	surface collection	0 cm	glass, window	1	≤ 1.6 mm
85	surface collection	0 cm	glass, window	1	> 1.7 mm
86	surface collection	0 cm	glass, window	1	> 1.7 mm
87	surface collection	0 cm	glass, window	1	> 1.7 mm
88	surface collection	0 cm	glass, window	1	> 1.7 mm

3.50 Location 50 (AhHj-20)

Location 50 (AhHj-20), a historic Euro-Canadian site on property GSH1787 (located north of Crediton Road and west of Bronson Line; Supplement A: Figure 21), was identified on May 14, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor. Location 50 (AhHj-20) consists of a 55 metre (along the north-south axis) by 45 metre (along the west-east axis) scatter of approximately 225 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 115 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 103 domestic, six personal, five structural and one piece of recent material. A summary of artifacts recovered is listed below in Table 113. Each artifact category is discussed in detail below.

Table 113: Location 50 (AhHj-20) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	103	89.56
personal	6	5.22
structural	5	4.35
recent	1	0.87
Total Artifacts	115	100.00

3.50.1 Domestic Artifacts

A total of 103 domestic artifacts were collected during the Stage 2 assessment of Location 50 (AhHj-20). This collection includes 63 fragments of ceramic and 40 fragments of glass.



3.50.1.1 Ceramic Artifacts

In total, 63 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 50 (AhHj-20). Included in this total are 24 fragments of ironstone, 22 fragments of whiteware, seven fragments of utilitarian earthenware, five fragments of undetermined ceramic, three fragments of yellowware, one fragment of porcelain and one fragment of victorian majolica. Table 114 provides a breakdown of the ceramic assemblage by ware type, while Table 115 provides a more detailed breakdown by decorative style.

Table 114: Summary of Ceramic Collection According to Ware type, Location 50 (AhHj-20)

Artifact	Freq.	%
ironstone	24	38.09
whiteware	22	34.92
utilitarian	7	11.11
undetermined	5	7.94
yellowware	3	4.76
porcelain	1	1.59
victorian majolica	1	1.59
Total	63	100.00

Table 115: Summary of Ceramic Collection According to Decorative Style, Location 50 (AhHj-20)

Artifact	Freq.	%	
whiteware, painted	14	22.22	
ironstone, plain	11	17.46	
earthenware, yellow	6	9.52	
ceramic, undetermined	5	7.94	
ironstone, moulded	4	6.35	
ironstone, transfer print	4	6.35	
ironstone, flow transfer print	3	4.76	
whiteware, plain	3	4.76	
ironstone, sponged	2	3.17	
whiteware, edged	2	3.17	
whiteware, stamped	2	3.17	
yellowware, plain	2	3.17	
yellowware, banded	1	1.59	
earthenware, red	1	1.59	
whiteware, transfer print	1	1.59	
majolica, victorian	1	1.59	
porcelain, plain	1	1.59	
Total	63	100.00	





Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=24 or 38.09%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 50 (AhHj-20) ceramic assemblage includes 11 plain or undecorated fragments (Plate 38:1), four moulded fragments (Plate 38:2), four transfer printed fragments (Plate 38:3), three flow transfer printed fragments (Plate 38:4), and two sponged fragments (Plate 38:5).

Four fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). Of the two fragments with identifiable moulded patterns, one displays the wheat motif, and the other displays the grape vine motif.

Four ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). All of the transfer printed ironstone fragments in the assemblage are brown, three displaying a floral, leaf and vine pattern. One fragment is a handle from a teacup.

Three pieces of flow transfer printed ironstone were found during the Stage 2 assessment of Location 50 (AhHj-20). Flow blue transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). All three pieces in the assemblage are blue, two with a vine pattern (likely from the same vessel) and one with a floral design and moulding.

Two ironstone fragments in the assemblage are sponged, and both are blue. Sponged ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s.

White Earthenware

A total of 22 whiteware fragments were collected during the Stage 2 assessment of Location 50 (AhHj-20). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Fourteen fragments in the assemblage are hand painted (Plate 38:6), three fragments are plain and undecorated (Plate 38:7), two fragments are sponge-stamped (Plate 38:8), two fragments are edged (Plagte 38:9) and one fragment is transfer printed (Plate 38:10).

Fourteen fragments of hand painted whiteware were recovered during the Stage 2 assessment. Eight of these fragments are part of a broad-stroke polychrome floral pattern. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen here are considered "Late Palette" colours. Other fragments in the assemblage display painted bands, one of which is red and may be considered 'hotel ware', a popular whiteware design.





Two fragments of whiteware in the assemblage are sponge-stamped. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). Both fragments in the assemblage are blue with a geometric design.

Two fragments of edged whiteware were also recovered from the assemblage. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). The fragments of edged ware recovered during the Stage 2 assessment are unscalloped rims with blue, unimpressed "chickenfoot" style impressed lines. Their date of manufacture can be dated to approximately 1825-1891.

One blue transfer printed fragment was recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs.

Utilitarian Earthenware

A total of seven fragments of utilitarian earthenwares were collected during the Stage 2 assessment of Location 50 (AhHj-20). This includes six fragments of yellow earthenware and one fragment of red earthenware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). All of the earthenware in the assemblage is lead glazed.

Undetermined Ceramics

Unfortunately, five of the ceramic pieces recovered from Location 50 (AhHj-20) could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.

Yellowware

Three fragments of moulded yellowware were recovered from Location 50 (AhHj-20). Yellowware ceramics were first manufactured in the 1840s, and continue to be manufactured in limited quantities today (Adams 1994:100). By the mid-19th century, there were many forms and decorations used for yellowware. Cups,





pitchers and bowls were slip-banded in different colours, mostly white or blue. Mocha designs over a white slip were also used for this ware. Another variation in design included a thick slip with an elaborate decoration. Over time, the yellow colour of this ware became paler and brighter. Other decorative methods included moulded relief, underglaze painted, finger trailing, and lustre. In general, this ware was used primarily for kitchenwares and storage vessels. Two of the fragments in the assemblage are plain (Plate 39:1) and one has brown and white slip bands (Plate 39:2)

Porcelain

A total of one porcelain fragment was collected during the Stage 2 assessment of Location 50 (AhHj-20). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. The porcelain fragment in the assemblage is undecorated (Plate 39:3)

Victorian Majolica

One fragment of moulded, teal glazed Victorian majolica is included in the assemblage (Plate 39:4). Majolica generally refers to the Spanish version of French faience ware, a tin-glazed ceramic popular in the 16th and 17th centuries. It is characterized by its extensive moulding and bright colours. Victorian majolica, however, is a 19th century imitation of the style that began gaining popularity in 1850 and continued to the turn of the century. Victorian majolica retains the all-over moulding and brightly coloured designs of its namesake, but employs lead glaze as opposed to tin glaze (Kovel 1973).

3.50.1.2 Glass Artifacts

Forty fragments of glass were recovered from Location 50 (AhHj-20). This collection includes 34 fragments of domestic bottle glass, two fragments of press-moulded glass dishware, two fragments of melted unidentifiable glass, one fragment of white or milk glass and one complete glass jar.

The bottle glass assemblage includes nine fragments of colourless glass, eight fragments of aqua glass, eight fragments of amber glass, three fragments of cobalt blue glass, two fragments of emerald green glass, two fragments of light green glass, two fragments of sun-coloured amethyst glass, and one fragment of purple glass. Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). The assemblage includes one complete bottle, which is a small cobalt blue bottle that contained Emerson's Bromaseltzer. This product was bottled by a New Jersey pharmaceutical manufacturer, and its date of manufacture falls sometime between 1888 and 1981. The assemblage also includes several mid-to-late 19th century bottle finishes, including three patent/extract finishes (in aqua, purple and colourless), two blob finishes (one in aqua and one in emerald green), one amber wide





mouth external broken-threaded finish and one colourless small mouth threaded lug-style finish manufactured after 1906 (Lindsey 2012).

Two fragments of dish glass are included in the assemblage. Both fragments are ridged rim sherds, and are sun-coloured amethyst. Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012).

Opaque white glass - commonly called milk glass - was typically produced by the addition of tin or zinc oxide, fluorides (fluorspar), and phosphates. In a sense, milk glass is like colorless glass in that it is defined by the absence of color, except in this case the bottle is truly not clear. An interesting feature of most milk glass is that very thin glass (i.e., fragment edge) has an orange-ish opalescence when held up to bright light. White glass was often used to make jars and small pots for cosmetics. It is not commonly found on historic sites that date totally prior to the 1870s (Lindsey 2012). The white glass fragment in the assemblage is a piece of a cosmetic jar.

3.50.2 Personal Artifacts

Six items classified as personal material were collected during Stage 2 assessment of Location 50 (AhHj-20). The personal artifact assemblage includes six fragments of white clay pipe stems (Plate 39:5).and one fragment of a white clay pipe bowl (Plate 39:6).

White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93). Four of the pipe stems in the assemblage have incomplete, non-diagnostic maker's marks. The fifth has a legible maker's mark, and was manufactured by Thomas Davidson of Glasgow, sometime between *circa* 1861 and 1891 (Davey 1983). The pipe bowl displays raised ovals and lines, but has no maker's mark.

3.50.3 Structural Artifacts

There were five structural artifacts collected from Location 50 (AhHj-20). These artifacts consist of three machine-cut nails (Plate 39:7) and one fragment of window glass.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830.

A total of one fragment of window glass was recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). The window glass fragment in the assemblage is greater than 1.7 millimetres, and can be dated to post-1850.





3.50.4 Recent Material

One fragment of recent material was collected during the Stage 2 assessment of Location 50 (AhHj-20). It has been identified as a piece of modern window glass embedded with a wire mesh reinforcing layer.

3.50.5 Artifact Catalogue

Table 116 presents the Stage 2 artifact catalogue for Location 50 (AhHj-20).

Table 116: Location 50 (AhHj-20) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, jar	1	amber, small glass jar, "10" on bottom, wide mouth external thread finish
2	surface collection	0 cm	glass, bottle complete	1	cobalt blue, small, Emerson's Bromaseltzer (1888-1981)
3	surface collection	0 cm	glass, bottle	1	cobalt blue, obscured words on base "ANADA"
4	surface collection	0 cm	glass, bottle	1	emerald green, blob finish with extra ring at the top
5	surface collection	0 cm	glass, bottle	1	amber, grooved ring finish
6	surface collection	0 cm	glass, bottle	1	colourless, square
7	surface collection	0 cm	glass, bottle	1	colourless, small mouth lug type external thread finish (1906 +)
8	surface collection	0 cm	glass, bottle	1	colourless, patent/extract finish with smaller extra ring near neck base
9	surface collection	0 cm	glass, bottle	1	colourless, coca cola fragment
10	surface collection	0 cm	glass, bottle	1	colourless body fragment
11	surface collection	0 cm	glass, bottle	1	purple, patent/extract finish
12	surface collection	0 cm	glass, bottle	1	aqua, mineral finish
13	surface collection	0 cm	glass, bottle	1	aqua, blob finish
14	surface collection	0 cm	glass, bottle	1	aqua , patent finish with extra ring on neck base
15	surface collection	0 cm	glass, bottle	1	aqua fragmentary finish
16	surface collection	0 cm	glass, bottle	1	aqua fragmentary finish
17	surface collection	0 cm	glass, bottle	1	amber, base
18	surface collection	0 cm	glass, bottle	1	amber, base
19	surface collection	0 cm	porcelain	1	
20	surface collection	0 cm	ironstone	1	
21	surface collection	0 cm	ironstone	1	
22	surface collection	0 cm	ironstone, moulded	1	floral, grape and leaf border design





Cat. #	Context	Depth	Artifact	Freq.	Comments
23	surface collection	0 cm	ironstone	1	PMM, "IR" and lion's tail
24	surface collection	0 cm	ironstone	1	de-glazed on one side, very thick
25	surface collection	0 cm	ironstone, sponged	1	mono blue
26	surface collection	0 cm	yellowware	1	cracked off design on exterior
27	surface collection	0 cm	yellowware	1	
28	surface collection	0 cm	whiteware, transfer printed	1	mono blue
29	surface collection	0 cm	whiteware, stamped	1	mono blue stamped geometric
30	surface collection	0 cm	ironstone, flow transfer printed	1	mono blue vines and stippling
31	surface collection	0 cm	ironstone, flow transfer printed	1	mono blue vines, lines and stippling
32	surface collection	0 cm	ironstone, flow transfer printed	1	mono blue floral over vine moulding
33	surface collection	0 cm	ironstone, transfer printed	1	mono brown floral
34	surface collection	0 cm	ironstone, transfer printed	1	mono brown, pillar and lines
35	surface collection	0 cm	ironstone, transfer printed	1	mono brown, floral and vine, tea cup handle
36	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
37	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
38	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
39	surface collection	0 cm	majolica, victorian	1	moulded teal glaze, victorian majolica, 19th C.
40	surface collection	0 cm	whiteware, edged	1	blue, unscalloped chickenfoot
41	surface collection	0 cm	whiteware, edged	1	blue, unscalloped chickenfoot
42	surface collection	0 cm	whiteware, painted	1	red band, rim (hotel ware?)
43	surface collection	0 cm	whiteware, painted	1	polychrome bands
44	surface collection	0 cm	whiteware, painted	1	polychrome bands
45	surface collection	0 cm	whiteware, painted	1	red band, rim
46	surface collection	0 cm	whiteware, painted	1	polychrome floral
47	surface collection	0 cm	whiteware, painted	1	blue band
48	surface collection	0 cm	whiteware, painted	1	brown, polychrome floral
49	surface collection	0 cm	whiteware, painted	1	polychrome floral
50	surface collection	0 cm	whiteware, painted	1	polychrome floral
51	surface collection	0 cm	whiteware, painted	1	polychrome floral





Cat. #	Context	Depth	Artifact	Freq.	Comments
52	surface collection	0 cm	earthenware, red	1	lead glaze, rim
53	surface collection	0 cm	nail, cut	1	corroded
54	surface collection	0 cm	nail, cut	1	corroded
55	surface collection	0 cm	white clay pipe, bowl	1	white raised ovals, lines
56	surface collection	0 cm	white clay pipe, stem	1	
57	surface collection	0 cm	white clay pipe, stem	1	partial imprint "WHITE"
58	surface collection	0 cm	white clay pipe, stem	1	impressed "MONTREAL"
59	surface collection	0 cm	white clay pipe, stem	1	impressed "N" outlined in dots
60	surface collection	0 cm	glass, bottle	1	colourless, base, "NE PAS RÉUTILISER"
61	surface collection	0 cm	glass, bottle	1	colourless base, "Made in Canada"
62	surface collection	0 cm	glass, bottle	1	colourless base
63	surface collection	0 cm	glass, bottle	1	colourless base, rectangular
64	surface collection	0 cm	glass, dish	1	sun-coloured amethyst, ridged rim
65	surface collection	0 cm	glass, dish	1	sun-coloured amethyst, ridged rim with base ridges
66	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
67	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
68	surface collection	0 cm	glass, bottle	1	aqua, detached top ring
69	surface collection	0 cm	glass, bottle	1	aqua
70	surface collection	0 cm	glass, bottle	1	aqua
71	surface collection	0 cm	glass, bottle	1	emerald green
72	surface collection	0 cm	glass, white	1	milk (white) glass, cosmetic jar fragment, discontinuous external threading
73	surface collection	0 cm	glass, bottle	1	light green
74	surface collection	0 cm	glass, bottle	1	light green
75	surface collection	0 cm	glass, bottle	1	amber, oval base fragment, numbered, modern machine-made
76	surface collection	0 cm	glass, bottle	1	amber
77	surface collection	0 cm	glass, bottle	1	amber, wide mouth exterior thread finish, fragmentary
78	surface collection	0 cm	glass, bottle	1	amber
79	surface collection	0 cm	glass, bottle	1	cobalt blue
80	surface collection	0 cm	glass, window	1	> 1.7 mm
81	surface collection	0 cm	glass, undetermined	1	melted aqua glass
82	surface collection	0 cm	glass, undetermined	1	melted/damaged milky blue glass
83	surface collection	0 cm	recent material	1	wire-reinforced rough window glass





Cat. #	Context	Depth	Artifact	Freq.	Comments
84	surface collection	0 cm	screw	1	HC screw
85	surface collection	0 cm	nail, cut	1	HC
86	surface collection	0 cm	whiteware, painted	1	brown
87	surface collection	0 cm	whiteware, stamped	1	blue stamped
88	surface collection	0 cm	whiteware, painted	1	blue
89	surface collection	0 cm	whiteware, painted	1	polychrome
90	surface collection	0 cm	whiteware, painted	1	polychrome
91	surface collection	0 cm	yellowware, banded	1	brown and white banded
92	surface collection	0 cm	ironstone, transfer printed	1	brown floral and vine
93	surface collection	0 cm	ironstone, sponged	1	mono blue
94	surface collection	0 cm	white clay pipe, stem	1	partial imprint: "DAVIDS", other side partial imprint: "GLASGOW"
95	surface collection	0 cm	ironstone	1	
96	surface collection	0 cm	ironstone	1	
97	surface collection	0 cm	ironstone	1	
98	surface collection	0 cm	ironstone	1	
99	surface collection	0 cm	ironstone	1	
100	surface collection	0 cm	ironstone	1	
101	surface collection	0 cm	whiteware	1	damaged, stained crazing
102	surface collection	0 cm	whiteware	1	
103	surface collection	0 cm	whiteware	1	
104	surface collection	0 cm	ironstone, moulded	1	moulded border on rim
105	surface collection	0 cm	ironstone, moulded	1	wheat pattern rim
106	surface collection	0 cm	ironstone, moulded	1	rim
107	surface collection	0 cm	ironstone	1	rim
108	surface collection	0 cm	ceramic, undetermined	1	burnt
109	surface collection	0 cm	ceramic, undetermined	1	burnt
110	surface collection	0 cm	earthenware, yellow	1	lead glaze
111	surface collection	0 cm	earthenware, yellow	1	lead glaze
112	surface collection	0 cm	earthenware, yellow	1	lead glaze
113	surface collection	0 cm	earthenware, yellow	1	lead glaze
114	surface collection	0 cm	earthenware, yellow	1	lead glaze
115	surface collection	0 cm	earthenware, yellow	1	lead glaze





3.51 Location 51 (AhHj-21)

Location 51 (AhHj-21), a pre-contact Aboriginal site, was identified on May 14, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH1787 (located north of Crediton Road and west of Bronson Line; Supplement A: Figure 21). This location consists of a 30 metre (along the north-south axis) by 50 metre (along the west-east axis) scatter of seven artifacts, including five pieces of chipping detritus (Plate 40:1, 2), one retouched flake (Plate 40:3) and one projectile point (Plate 40:4). The projectile point is manufactured from Flint Ridge chalcedony, and the chipping detritus and retouched flake are all manufactured from Kettle Point chert. As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding the finds but no additional artifacts were identified.

Chipped Lithic Tools

The retouched flake is worked along one edge but is broken, and was possibly used as a perforator. The projectile point has been identified as a Brewerton side-notched, is heavily worked on both sides and one shoulder is broken. It has a length of 33.84 millimetres, a width of 25.63 millimetres, a thickness of 8.28 millimetres, a basal concavity length of 1.19 millimetres, a basal width of 25.54 millimetres, an incomplete shoulder width of 22.32 millimetres, and an incomplete inter-notch measurement of 20.48 millimetres. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C., during the Middle Archaic (Ellis et al. 2009:807-811; Kenyon 1981b).

Chipping Detritus

At total of five pieces of chipping detritus were collected during the Stage 2 assessment of this site. The recovered material consists of four flakes manufactured from Kettle Point chert and one flake manufactured from Flint Ridge Chalcedony. Table 117 presents the morphology of these flakes.

Table 117: Location 51 (AhHj-21) Chipping Detritus

Chert	Secondary		Broken		Shatter		Total	
	No.	%	No.	%	No.	%	No.	%
Kettle Point	2	40.00	1	20.00	1	20.00	4	100.00
Flint Ridge	1	20.00	0	0.00	0	0.00	1	20.00
Total	3	60.00	1	20.00	1	20.00	5	100.00





3.51.1 Artifact Catalogue

Table 118 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 118: Location 51 (AhHj-21) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Flint Ridge chalcedony, Middle-Late Archaic, one shoulder broken, heavy retouch
2	surface collection	0 cm	chipping detritus	1	Kettle Point chert, shatter
3	surface collection	0 cm	chipping detritus	1	Kettle Point, secondary flake
4	surface collection	0 cm	retouched flake	1	Kettle Point, broken, possible perforator
5	surface collection	0 cm	chipping detritus	1	Kettle Point chert, broken
6	surface collection	0 cm	chipping detritus	1	Flint Ridge chalcedony, secondary flake
7	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake

3.52 Location 52 (AhHj-22)

Location 52 (AhHj-22), a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH1787 (located north of Crediton Road and west of Bronson Line; Supplement A: Figure 21). This site, identified on May 14, 2012 consists of four artifacts, including one projectile point (Plate 41:1) and three lithic flakes (Plate 41:2). All of the recovered material is Kettle Point chert. As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding the finds but no additional artifacts were identified.

The projectile point is heavily worked on both sides and the base is broken. It has a length of 37.97 millimetres, a width of 22.52 millimetres, a thickness of 10.03 millimetres, an incomplete basal width of 22.23 millimetres, a shoulder width of 21.12 millimetres, and an inter-notch measurement of 14.74 millimetres. The projectile point is likely a Brewerton side-notched, though it is heavily worked. In Ontario, this projectile point type dates to *circa* 3780-3200 B.C., during the Early-Middle Archaic (Ellis et al. 2009:807-811; Kenyon 1981b).

Chipping Detritus

At total of 3 pieces of chipping detritus was collected during the Stage 2 assessment of this site. The recovered material consists of flakes manufactured from Kettle Point chert: one fragmentary flake, one piece of shatter, and one secondary flake.



3.52.1 Artifact Catalogue

Table 119 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 119: Location 52 (AhHj-22) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Kettlepoint chert, base broken, likely Middle-Late Archaic Brewerton side- notched
2	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary flake
3	surface collection	0 cm	chipping detritus	1	Kettle Point, fragmentary flake
4	surface collection	0 cm	chipping detritus	1	Kettle Point, shatter

3.53 **Location 53**

Location 53, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH1787 (located north of Crediton Road and west of Bronson Line; Supplement A: Figure 21). This site, identified on May 14, 2012, consists of an incomplete, isolated blank (Plate 42:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a twenty metre radius surrounding this partial biface, but no additional artifacts were identified.

This blank fragment is manufactured from Kettle Point chert, and has been broken mid-point. The blank fragment is very crude but has evidence of heavy wear on the proximal end. This blank has an incomplete length of 36.62 millimetres, a width of 32.21 millimetres, and a thickness of 13.14 millimetres.

3.53.1 Artifact Catalogue

Table 120 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 120: Location 53 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	blank	1	Kettle Point chert, fragment

3.54 Location 54 (AhHj-23)

Location 54 (AhHj-23), a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH2237 (located north of Kirkton Road and west of Blackbush Line; Supplement A: Figure 15). This site, identified on May 30, 2012, consists of an isolated projectile point manufactured from Kettle Point chert (Plate 43:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this projectile point, but no additional artifacts were identified.





This projectile point is broken at the shoulder and base. It has an incomplete length of 44.15 millimetres, an incomplete width of 22.72 millimetres, a thickness of 5.35 millimetres, an incomplete shoulder width of 22.72 millimetres, and an incomplete inter-notch measurement of 10.40 millimetres. The projectile point is a Nettling corner-notched. In Ontario, this projectile point type dates to *circa* 8600-8000 B.C., during the Early Archaic (Ellis et al. 2009:807-811; Kenyon 1981b).

3.54.1 Artifact Catalogue

Table 121 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 121: Location 54 (AhHj-23) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Kettle Point chert, broken shoulder and base, Early Archaic Kirk corner- notched

3.55 Location 55 (AiHj-18)

Location 55 (AiHj-18), a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed collector cable corridor on property GSH1039 (located north of Pepper Road and west of Bronson Line; Supplement A: Figure 3). This site, identified on June 6, 2012, consists of an isolated projectile point manufactured from Kettle Point chert (Plate 44:1). As detailed in Section 2.0, survey intervals were intensified to one metre for a 20 metre radius surrounding this projectile point, but no additional artifacts were identified.

This projectile point is broken at the tip and base. It has an incomplete length of 33.47 millimetres, an incomplete width of 22.05 millimetres, a thickness of 5.50 millimetres, and an incomplete inter-notch measurement of 11.67 millimetres. The projectile point is likely an Innes point. In Ontario, this projectile point type dates to *circa* 1500-1100 B.C., during the Small Point Late Archaic (Bursey 1994:57; Lennox 1982; cf. Ellis et al. 2009:819-820).

3.55.1 Artifact Catalogue

Table 122 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 122: Location 55 (AiHj-18) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	projectile point	1	Kettle Point chert, broken base and tip, probably an Innes point



3.56 Location 56 (AhHj-24)

Location 56 (AhHj-24), a historic Euro-Canadian site on property GSH1505 (located south of Kirkton Road and west of Blackbush Line; Supplement A: Figure 15), was identified on June 15, 2012 during the Stage 2 pedestrian survey of the proposed collector cable corridor. Location 56 (AhHj-24) consists of a 60 metre (along the north-south axis) by 40 metre (along the west-east axis) scatter of approximately 150 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 105 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 100 domestic, four structural and one faunal remain. A summary of artifacts recovered is listed below in Table 123. Each artifact category is described in detail below.

Table 123: Location 56 (AhHj-24) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	100	95.24
structural	4	3.81
faunal	1	0.95
Total Artifacts	105	100.00

3.56.1 Domestic Artifacts

A total of 100 domestic artifacts were collected during the Stage 2 assessment of Location 56 (AhHj-24). This collection includes 63 fragments of ceramic and 37 fragments of glass.

3.56.1.1 Ceramic Artifacts

In total, 63 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 56 (AhHj-24). Included in this total are 23 fragments of whiteware, 21 fragments of ironstone, eight fragments of utilitarian earthenware and stoneware, five fragments of porcelain, two fragments of semi-porcelain, two fragments of Rockinghamware and two fragments of undetermined ceramic. Table 124 provides a breakdown of the ceramic assemblage by ware type, while Table 125 provides a more detailed breakdown by decorative style.

Table 124: Summary of Ceramic Collection According to Ware type, Location 56 (AhHj-24)

Artifact	Freq.	%
whiteware	23	36.51
ironstone	21	33.33
utilitarian	8	12.70
porcelain	5	7.94
semi-porcelain	2	3.17
Rockinghamware	2	3.17
undetermined	2	3.17
Total	63	100.00





Table 125: Summary of Ceramic Collection According to Decorative Style, Location 56 (AhHj-24)

Artifact	Freq.	%
ironstone, plain	14	22.22
whiteware, transfer print	11	17.46
whiteware, plain	9	14.28
stoneware, salt-glazed	5	7.94
ironstone, transfer print	4	6.35
porcelain, plain	4	6.35
whiteware, stamped	2	3.17
semi-porcelain	2	3.17
Rockinghamware	2	3.17
stoneware	2	3.17
ceramic, undetermined	2	3.17
ironstone, moulded	2	3.17
ironstone, flow transfer print	1	1.59
whiteware, flow transfer print	1	1.59
porcelain, painted	1	1.59
earthenware, yellow	1	1.59
Total	63	100.00

White Earthenware

The most common ceramic type collected during the Stage 2 assessment of this location is whiteware (n=23 or 36.51%). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Eleven fragments in the assemblage are transfer printed (Plate 45:1), nine fragments are plain and undecorated (Plate 45:2), two fragments are sponge-stamped (Plate 45:3) and one fragment is flow transfer printed (Plate 45:4).

Eleven fragments of whiteware in the assemblage are transfer printed. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. The assemblage contains transfer printed whiteware in both blue and green, displaying floral and/or vine designs.

Two fragments of whiteware in the assemblage are sponge-stamped, both displaying a red floral pattern. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly





dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994).

One fragment of blue flow transfer printed whiteware was recovered during the Stage 2 assessment. Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). Though blue was the most popular colour for flow transfer printing, other colours were also sometimes used.

Ironstone

A total of 21 fragments of ironstone were recovered during the Stage 2 assessment. Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 56 (AhHj-24) ceramic assemblage includes 14 plain or undecorated fragments (Plate 45:5), four transfer printed fragments (Plate 45:6), two moulded fragments (Plate 45:7) and one flow transfer printed fragment (Plate 45:8).

One fragment of ironstone in the assemblage is of particular note, as it displays an almost complete maker's mark (Plate 45:9). This mark indicates that the piece was manufactured by T. Furnival and Sons, a known Staffordshire pottery maker. The design of the mark allows the date range of the artifact to be narrowed down to between 1878 and 1890 (Birks 2012).

Four ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). All of the transfer printed ironstone fragments in the assemblage are dark green, displaying a floral pattern.

Two fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). Both fragments in the assemblage display the aforementioned wheat motif.

One piece of flow blue transfer printed ironstone was found during the Stage 2 assessment of Location 56 (AhHj-24). Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). The fragment in this assemblage displays a floral and vine pattern, and appears to be a piece of a saucer.

Utilitarian Earthenware

A total of eight fragments of utilitarian earthenwares were collected during the Stage 2 assessment of Location 56 (AhHj-24). This includes seven fragments of stoneware and one fragment of yellow earthenware.

Stoneware is harder than utilitarian earthenware, more vitreous and is often salt glazed. Five of the fragments in the assemblage display a grey exterior salt glaze with a brown interior lead glaze, one fragment has a buff lead glaze, and one fragment is a Derbyshire glazed jug mouth.





Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). The fragment of yellow eathenware in the assemblage displays a yellow lead glaze.

Porcelain

A total of five porcelain fragments were collected during the Stage 2 assessment of Location 56 (AhHj-24). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. Four of the porcelain fragments in the assemblage are undecorated (Plate 46:1) and one fragment is hand painted (Plate 46:2).

Semi-Porcelain

Two fragments of semi-porcelain were recovered during the stage 2 assessment (Plate 46:3). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

Rockinghamware

Two fragments of Rockinghamware are included in the assemblage (Plate 46:4). This ware type is very similar to yellowware, and became popular around 1850, with manufacture continuing into the 20th century (Gallo 1985). The main difference between the two is that Rockinghamware displays a unique glaze type. It involves splattering a brown manganese glaze onto a piece that has already been covered with a clear glaze. The result is a dripping, mottled glaze effect, as the two glazes are melted together during firing. Another technique sometimes used was to dip the ceramic piece directly into the already-mixed glaze, which results in a reddish-brown finish (Gallo 1985:39).

Undetermined Ceramics

Unfortunately, two of the ceramic pieces recovered from Location 56 (AhHj-24) could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.





3.56.1.2 Glass Artifacts

Thirty-seven fragments of glass were recovered from Location 56 (AhHj-24). This collection includes 32 fragments of domestic bottle glass, two fragments of press-moulded glass dishware, two fragments of white or milk glass and one fragment of undetermined melted glass.

The bottle glass assemblage includes 14 fragments of aqua glass, seven fragments of sun-coloured amethyst glass, seven fragments of purple glass, one fragment of light green glass, one fragment of black glass, one fragment of olive glass and one fragment of amber glass. Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Black glass dates from the early-to-mid 19th century. The addition of iron when making glass was common practice up until 1860 and produced dark olive or dark amber glass that became known as "black glass" (Kendrick 1971). The assemblage also includes one mid-to-late 19th century brandy bottle finish (Lindsey 2012).

Two fragments of dish glass are included in the assemblage. Both fragments are sun-coloured amethyst. Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012).

Opaque white glass - commonly called milk glass - was typically produced by the addition of tin or zinc oxide, fluorides (fluorspar), and phosphates. In a sense, milk glass is like colorless glass in that it is defined by the absence of color, except in this case the bottle is truly not clear. An interesting feature of most milk glass is that very thin glass (i.e., fragment edge) has an orange-ish opalescence when held up to bright light. White glass was often used to make jars and small pots for cosmetics. It is not commonly found on historic sites that date totally prior to the 1870s (Lindsey 2012). The white glass fragments in the assemblage are both moulded and are likely fragments of cosmetic jars.

3.56.2 Structural Artifacts

There were four structural artifacts collected from Location 56 (AhHj-24). These artifacts consist of three fragments of window glass and one heavily corroded machine-cut nail (Plate 46:5).

A total of three fragments of window glass were recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). The window glass fragments in the assemblage are all greater than 1.7 millimetres, and can be dated to post-1850.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830.

3.56.3 Faunal Remains

There was one faunal remain collected from Location 56 (AhHj-24). This consists of one large, thick bivalve fragment with a white pearlescent interior. Because the shell fragment appears to have no cultural markings on it, nor has it been crafted into a tool or cultural object, it cannot be considered temporally diagnostic.





3.56.4 Artifact Catalogue

Table 126 presents the Stage 2 artifact catalogue for Location 56 (AhHj-24).

Table 126: Location 56 (AhHj-24) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	aqua, small bottle base
2	surface collection	0 cm	stoneware, salt glazed	1	grey and brown glaze
3	surface collection	0 cm	glass, bottle	1	aqua, thick body fragment
4	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
5	surface collection	0 cm	ironstone, transfer printed	1	dark green floral
6	surface collection	0 cm	rockinghamware	1	
7	surface collection	0 cm	glass, bottle	1	aqua
8	surface collection	0 cm	glass, bottle	1	aqua
9	surface collection	0 cm	glass, bottle	1	light green
10	surface collection	0 cm	porcelain, plain	1	thin dish fragment
11	surface collection	0 cm	stoneware	1	Derbyshire glaze, jug mouth fragment
12	surface collection	0 cm	whiteware, transfer printed	1	blue vine with moulding
13	surface collection	0 cm	whiteware, flow transfer printed	1	blue, indeterminate design
14	surface collection	0 cm	stoneware, salt glazed	1	grey and brown glaze
15	surface collection	0 cm	glass, bottle	1	aqua base fragment
16	surface collection	0 cm	stoneware	1	buff lead glaze
17	surface collection	0 cm	ironstone, moulded	1	wheat motif, saucer fragment
18	surface collection	0 cm	ironstone, moulded	1	wheat motif
19	surface collection	0 cm	ironstone, transfer printed	1	dark green floral, handle fragment
20	surface collection	0 cm	ironstone, transfer printed	1	dark green floral, handle fragment
21	surface collection	0 cm	glass, dish	1	sun-coloured amethyst, press- moulded sunburst
22	surface collection	0 cm	whiteware, transfer printed	1	dark green floral and leaf pattern
23	surface collection	0 cm	glass, bottle	1	aqua, damaged finish
24	surface collection	0 cm	semi-porcelain	1	base fragment
25	surface collection	0 cm	semi-porcelain	1	body fragment
26	surface collection	0 cm	glass, bottle	1	aqua, brandy finish
27	surface collection	0 cm	whiteware, transfer printed	1	dark green leaves
28	surface collection	0 cm	glass, bottle	1	aqua, royal crest moulding





Cat. #	Context	Depth	Artifact	Freq.	Comments
29	surface collection	0 cm	whiteware, transfer printed	1	blue vines with moulding
30	surface collection	0 cm	whiteware, transfer printed	1	dark green floral and leaves, rim
31	surface collection	0 cm	whiteware, transfer printed	1	dark green floral and leaves, rim
32	surface collection	0 cm	whiteware, transfer printed	1	blue floral
33	surface collection	0 cm	porcelain, plain	1	
34	surface collection	0 cm	whiteware, transfer printed	1	red, indeterminate design
35	surface collection	0 cm	ironstone, plain	1	black transfer maker's mark, damaged
36	surface collection	0 cm	whiteware, stamped	1	red floral
37	surface collection	0 cm	ironstone, plain	1	black transfer maker's mark, T. Furnival and sons (1878-1890)
38	surface collection	0 cm	rockinghamware	1	
39	surface collection	0 cm	glass, bottle	1	aqua, thick base
40	surface collection	0 cm	ironstone, transfer printed	1	dark green floral
41	surface collection	0 cm	ironstone, flow transfer printed	1	blue floral and vine, saucer fragment
42	surface collection	0 cm	whiteware, transfer printed	1	dark blue floral, stippled
43	surface collection	0 cm	whiteware, stamped	1	red floral
44	surface collection	0 cm	glass, dish	1	sun-coloured amethyst, press- moulded chevrons
45	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
46	surface collection	0 cm	whiteware, transfer printed	1	green geometric
47	surface collection	0 cm	whiteware, transfer printed	1	dark green vines, rim with moulding
48	surface collection	0 cm	ceramic, undetermined	1	burnt stoneware base
49	surface collection	0 cm	glass, bottle	1	purple
50	surface collection	0 cm	porcelain, painted	1	dark blue
51	surface collection	0 cm	ironstone, plain	1	black transfer, partial maker's mark, damaged
52	surface collection	0 cm	nail, machine-cut	1	heavily corroded, large
53	surface collection	0 cm	ironstone, plain	1	thick base fragment
54	surface collection	0 cm	ironstone, plain	1	
55	surface collection	0 cm	ironstone, plain	1	
56	surface collection	0 cm	ironstone, plain	1	
57	surface collection	0 cm	ironstone, plain	1	
58	surface collection	0 cm	ironstone, plain	1	





Cat. #	Context	Depth	Artifact	Freq.	Comments
59	surface collection	0 cm	ironstone, plain	1	
60	surface collection	0 cm	ironstone, plain	1	
61	surface collection	0 cm	ironstone, plain	1	
62	surface collection	0 cm	ironstone, plain	1	
63	surface collection	0 cm	whiteware, plain	1	
64	surface collection	0 cm	whiteware, plain	1	
65	surface collection	0 cm	whiteware, plain	1	
66	surface collection	0 cm	whiteware, plain	1	
67	surface collection	0 cm	whiteware, plain	1	
68	surface collection	0 cm	whiteware, plain	1	
69	surface collection	0 cm	whiteware, plain	1	
70	surface collection	0 cm	whiteware, plain	1	
71	surface collection	0 cm	whiteware, plain	1	
72	surface collection	0 cm	shell	1	large thick bivalve fragment, pearlescent
73	surface collection	0 cm	porcelain, plain	1	dish fragment
74	surface collection	0 cm	porcelain, plain	1	dish fragment
75	surface collection	0 cm	ironstone, plain	1	
76	surface collection	0 cm	earthenware, yellow	1	yellow lead glaze
77	surface collection	0 cm	stoneware, salt glazed	1	grey and brown glaze
78	surface collection	0 cm	stoneware, salt glazed	1	grey and brown glaze
79	surface collection	0 cm	stoneware, salt glazed	1	grey and brown glaze
80	surface collection	0 cm	glass, white	1	milk glass, moulded
81	surface collection	0 cm	glass, white	1	milk glass, square beveled fragment
82	surface collection	0 cm	glass, undetermined	1	melted aqua glass
83	surface collection	0 cm	glass, bottle	1	purple
84	surface collection	0 cm	glass, bottle	1	purple
85	surface collection	0 cm	glass, bottle	1	purple
86	surface collection	0 cm	glass, bottle	1	purple
87	surface collection	0 cm	glass, bottle	1	purple
88	surface collection	0 cm	glass, bottle	1	purple
89	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
90	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
91	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
92	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
93	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst





Cat. #	Context	Depth	Artifact	Freq.	Comments
94	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst
95	surface collection	0 cm	glass, bottle	1	aqua
96	surface collection	0 cm	glass, bottle	1	aqua
97	surface collection	0 cm	glass, bottle	1	aqua
98	surface collection	0 cm	glass, bottle	1	aqua
99	surface collection	0 cm	glass, bottle	1	aqua
100	surface collection	0 cm	glass, bottle	1	black
101	surface collection	0 cm	glass, bottle	1	olive
102	surface collection	0 cm	glass, bottle	1	amber
103	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
104	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
105	surface collection	0 cm	glass, window	1	> 1.7 mm, clear

3.57 Location 57 (AhHj-25)

Location 57 (AhHj-25), a historic Euro-Canadian site on property GSH2056 (located north of South Road and east of Babylon Line; Supplement A: Figure 23), was identified on June 18, 2012 during the Stage 2 pedestrian survey of proposed wind energy components. Location 57 (AhHj-25) consists of a 60 metre (along the north-south axis) by 60 metre (along the west-east axis) scatter of approximately 125 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 95 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 87 domestic, four structural, two personal, one equestrian and one piece of faunal remains. A summary of artifacts recovered is listed below in Table 127. Each artifact category is discussed in detail below.

Table 127: Location 57 (AhHj-25) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	87	91.58
structural	4	4.21
personal	2	2.10
equestrian	1	1.05
faunal	1	1.05
Total Artifacts	95	100.00

3.57.1 Domestic Artifacts

A total of 87 domestic artifacts were collected during the Stage 2 assessment of Location 57 (AhHj-25). This collection includes 70 fragments of ceramic and 17 fragments of glass.



3.57.1.1 Ceramic Artifacts

In total, 70 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 57 (AhHj-25). Included in this total are 38 fragments of whiteware, 22 fragments of ironstone, eight fragments of utilitarian earthenware, one fragment of porcelain and one fragment of yellowware. Table 128 provides a breakdown of the ceramic assemblage by ware type, while Table 129 provides a more detailed breakdown by decorative style.

Table 128: Summary of Ceramic Collection According to Ware type, Location 57 (AhHj-25)

Artifact	Freq.	%
whiteware	38	54.29
ironstone	22	31.43
utilitarian	8	11.43
porcelain	1	1.43
yellowware	1	1.43
Total	70	100.00

Table 129: Summary of Ceramic Collection According to Decorative Style, Location 57 (AhHj-25)

Artifact	Freq.	%
whiteware, plain	24	34.28
ironstone, plain	14	20.00
whiteware, transfer printed	9	12.86
ironstone, moulded	5	7.14
earthenware, yellow	4	5.71
stoneware, salt glazed	3	4.28
whiteware, banded	2	2.86
whiteware, painted	1	1.43
whiteware, stamped	1	1.43
whiteware, sponged	1	1.43
ironstone, transfer printed	1	1.43
ironstone, stamped	1	1.43
ironstone, flow transfer printed	1	1.43
stoneware	1	1.43
porcelain	1	1.43
yellowware, banded	1	1.43
Total	70	100.00





White Earthenware

The most common ceramic type collected during the Stage 2 assessment of this location is whiteware (n=38 or 54.29%). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Twenty-four fragments in the assemblage are undecorated (Plate 47:1), nine fragments are transfer printed (Plate 47:2), two fragments are banded (Plate 47:3), one fragment is hand painted (Plate 47:4), one fragment is sponge stamped (Plate 47:5) and one fragment is sponged (Plate 47:6).

Nine transfer printed whiteware fragments were recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. The fragments recovered display blue, brown and orange printed designs, with two of the fragments displaying the popular 'blue willow' pattern.

Two fragments of whiteware recovered during the stage 2 assessment are banded. Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue. Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware. One of the fragments recovered has blue bands near the rim, and the other fragment is blue and grey and is likely part of a vessel decorated in the 'mocha' pattern.

One fragment of hand painted whiteware was recovered during the Stage 2 assessment. This fragment displays painted bands of red and green around the rim, and may be considered 'hotel ware', a popular whiteware design used widely in hospitality services and ubiquitous throughout the late 19th century (Collard 1967).

One fragment of whiteware in the assemblage is sponge-stamped. This fragment is blue and purple, with an indeterminate design. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994).

One fragment of whiteware in the assemblage is blue sponged. Sponged whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s.

Ironstone

Twenty-two ironstone fragments were recovered during the stage 2 assessment. Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 57 (AhHj-25) ceramic assemblage includes 14 plain or undecorated fragments (Plate 47:7), five moulded fragments (Plate





47:8), one transfer printed fragment (Plate 47:9), one flow transfer printed fragment (Plate 47:10) and one stamped fragment (Plate 47:11).

Five fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). Of the two fragments with identifiable moulded patterns, one displays a seashell pattern, and the other displays the grape vine motif.

One ironstone fragment in the assemblage is transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). The fragment found in the assemblage displays a blue floral pattern.

One piece of flow transfer printed ironstone was found during the Stage 2 assessment of Location 57 (AhHj-25). Flow blue transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). The fragment included in the assemblage is flow blue, displaying a partially obscured building (possibly a church).

Also included in the assemblage is one piece of sponge-stamped ironstone, displaying a polychromatic floral pattern. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994).

Utilitarian Earthenware

A total of eight fragments of utilitarian earthenwares and stonewares were collected during the Stage 2 assessment of Location 57 (AhHj-25). This includes four fragments of yellow earthenware and four fragments of stoneware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). The yellow earthenware fragments in the assemblage display a variety of lead glazes, ranging from greenish-yellow to buff.

Stoneware is harder than utilitarian earthenware, more vitreous and is often salt glazed. Three of the fragments in the assemblage display a grey exterior salt glaze with a brown interior lead glaze, and one displays a buff lead glaze.

Porcelain

A total of one porcelain fragment was collected during the Stage 2 assessment of Location 57 (AhHj-25). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently





the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century. The porcelain fragment in the assemblage appears to consist of the base of a small vessel, likely an egg cup (Plate 48:1).

Yellowware

One fragment of banded yellowware was recovered from Location 57 (AhHj-25). Yellowware ceramics were first manufactured in the 1840s, and continue to be manufactured in limited quantities today (Adams 1994:100). By the mid-19th century, there were many forms and decorations used for yellowware. Cups, pitchers and bowls were slip-banded in different colours, mostly white or blue. Over time, the yellow colour of this ware became paler and brighter. In general, this ware was used primarily for kitchenwares and storage vessels. The yellowware fragment in the assemblage is slip banded with white and brown bands (Plate 48:2).

3.57.1.2 Glass Artifacts

Seventeen fragments of domestic bottle glass were recovered from Location 57 (AhHj-25). The bottle glass assemblage includes seven fragments of colourless glass, six fragments of aqua glass, two fragments of suncoloured amethyst glass, one fragment of purple glass and one fragment of olive glass. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). The assemblage also includes several mid-to-late 19th century bottle finishes, including two patent/extract finishes (in aqua and sun-coloured amethyst), two small mouth external thread finishes (in purple and sun-coloured amethyst) and one wide-mouth external thread finish in aqua (Lindsey 2012).

3.57.2 Structural Artifacts

There were four structural artifacts collected from Location 57 (AhHj-25). These artifacts consist of three fragments of window glass and one heavily corroded machine-cut nail (Plate 48:3).

A total of one fragment of window glass was recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). One of the fragments in this assemblage is less than 1.6 mm thick, and can be dated to pre-1850, while the other two are greater than 1.7 millimetres, and can be dated to post-1850.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830.





3.57.3 Personal Artifacts

Two items classified as personal material were collected during Stage 2 assessment of Location 57 (AhHj-25). The personal artifact assemblage includes one four-holed white agate button (Plate 48:4) and one four-holed undecorated non-diagnostic bone button (Plate 48:5).

What were called "agate" buttons are similar in colour and size (usually about 10mm) to modern shirt buttons. The "agate" was in fact a type of pressed ceramic powder made using the so-called "Prosser" process patented in 1840. Agate buttons became widely distributed in Canada by the late 1840s and are common on sites form this time on (Kenyon and Doroszenko 1995).

3.57.4 Equestrian Artifacts

One fragment of equestrian material (or horse tack) was collected during the Stage 2 assessment of Location 57 (AhHj-25). The artifact is a complete sleigh bell (Plate 48:6). The fine petal pattern and the maker's mark of 'R W' on the bell indicate that it was produced by R. Wells and Sons, a famed sleigh bell manufacturer in England. The date range possible for the bell's manufacture is 1760-1826, during which time the Wells foundry was producing bells of this type.

3.57.5 Faunal Artifacts

One fragment of animal bone was collected during the Stage 2 assessment of Location 57 (AhHj-25). The artifact is a fragment of cortical bone from a large mammal. It has been cut, and the cut surface is smooth and polished in appearance.

3.57.6 Artifact Catalogue

Table 130 presents the Stage 2 artifact catalogue for Location 57 (AhHj-25).

Table 130: Location 57 (AhHj-25) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, bottle	1	aqua, patent/extract finish
2	surface collection	0 cm	yellowware, banded	1	slip banded, white and brown bands
3	surface collection	0 cm	glass, bottle	1	aqua base, moulded, "HAMILTO_"
4	surface collection	0 cm	glass, bottle	1	aqua, wide-mouth external thread finish
5	surface collection	0 cm	whiteware, hand painted	1	red and green striped rim (hotelware?)
6	surface collection	0 cm	whiteware, banded	1	slip-banded, blue bands
7	surface collection	0 cm	whiteware, transfer	1	blue willow, rim





Cat. #	Context	Depth	Artifact	Freq.	Comments
			printed		
8	surface collection	0 cm	whiteware, transfer printed	1	blue geometric
9	surface collection	0 cm	ironstone, stamped	1	polychromatic floral, base fragment
10	surface collection	0 cm	bell	1	copper sleigh bell, R. Wells and sons (1760-1826)
11	surface collection	0 cm	whiteware, transfer printed	1	brown border, stippled
12	surface collection	0 cm	porcelain, plain	1	moulded base, egg cup?
13	surface collection	0 cm	glass, bottle	1	colourless, moulded, with possible treble clef design
14	surface collection	0 cm	whiteware, transfer printed	1	blue willow, rim
15	surface collection	0 cm	nail, machine-cut	1	heavily corroded
16	surface collection	0 cm	ironstone, flow transfer printed	1	blue, building (church?)
17	surface collection	0 cm	whiteware, stamped	1	purple and blue, indistinguishable
18	surface collection	0 cm	stoneware, salt-glazed	1	grey and brown glaze, jug mouth fragment
19	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst, large patent/extract finish
20	surface collection	0 cm	ironstone, transfer printed	1	blue floral
21	surface collection	0 cm	whiteware, plain	1	
22	surface collection	0 cm	whiteware, banded	1	blue and grey, mocha?
23	surface collection	0 cm	button, agate	1	large, white, 4 holes
24	surface collection	0 cm	whiteware, transfer printed	1	blue, indeterminate
25	surface collection	0 cm	whiteware, transfer printed	1	orange floral
26	surface collection	0 cm	stoneware, salt-glazed	1	brown and grey glaze
27	surface collection	0 cm	whiteware, transfer printed	1	blue geometric
28	surface collection	0 cm	glass, bottle	1	purple, small mouth external thread finish
29	surface collection	0 cm	whiteware, plain	1	
30	surface collection	0 cm	whiteware, plain	1	
31	surface collection	0 cm	whiteware, plain	1	
32	surface collection	0 cm	whiteware, plain	1	
33	surface collection	0 cm	whiteware, plain	1	





Cat.	Context	Depth	Artifact	Freq.	Comments
34	surface collection	0 cm	whiteware, plain	1	
35	surface collection	0 cm	whiteware, plain	1	
36	surface collection	0 cm	whiteware, plain	1	
37	surface collection	0 cm	whiteware, plain	1	
38	surface collection	0 cm	whiteware, plain	1	
39	surface collection	0 cm	whiteware, plain	1	
40	surface collection	0 cm	whiteware, plain	1	
41	surface collection	0 cm	whiteware, plain	1	
42	surface collection	0 cm	whiteware, plain	1	
43	surface collection	0 cm	whiteware, plain	1	
44	surface collection	0 cm	whiteware, plain	1	
45	surface collection	0 cm	whiteware, plain	1	
46	surface collection	0 cm	whiteware, plain	1	
47	surface collection	0 cm	whiteware, plain	1	
48	surface collection	0 cm	whiteware, plain	1	
49	surface collection	0 cm	whiteware, plain	1	
50	surface collection	0 cm	whiteware, plain	1	
51	surface collection	0 cm	whiteware, plain	1	
52	surface collection	0 cm	ironstone, plain	1	
53	surface collection	0 cm	ironstone, plain	1	
54	surface collection	0 cm	ironstone, plain	1	
55	surface collection	0 cm	ironstone, plain	1	
56	surface collection	0 cm	ironstone, plain	1	
57	surface collection	0 cm	ironstone, plain	1	
58	surface collection	0 cm	ironstone, plain	1	
59	surface collection	0 cm	ironstone, plain	1	
60	surface collection	0 cm	ironstone, plain	1	
61	surface collection	0 cm	ironstone, plain	1	
62	surface collection	0 cm	ironstone, plain	1	
63	surface collection	0 cm	ironstone, plain	1	
64	surface collection	0 cm	ironstone, plain	1	
65	surface collection	0 cm	whiteware, transfer printed	1	orange floral
66	surface collection	0 cm	whiteware, transfer printed	1	blue waves
67	surface collection	0 cm	whiteware, sponged	1	blue
68	surface collection	0 cm	ironstone, moulded	1	grapes and vine motif





Cat.	Context	Depth	Artifact	Freq.	Comments
69	surface collection	0 cm	ironstone, moulded	1	indistinguishable
70	surface collection	0 cm	ironstone, moulded	1	scalloped
71	surface collection	0 cm	ironstone, moulded	1	seashell motif
72	surface collection	0 cm	ironstone, moulded	1	indistinguishable
73	surface collection	0 cm	ironstone, plain	1	base fragment
74	surface collection	0 cm	stoneware, salt-glazed	1	grey and brown glaze
75	surface collection	0 cm	stoneware	1	buff glaze
76	surface collection	0 cm	earthenware, yellow	1	yellow lead glaze
77	surface collection	0 cm	earthenware, yellow	1	yellow lead glaze
78	surface collection	0 cm	earthenware, yellow	1	buff lead glaze
79	surface collection	0 cm	earthenware, yellow	1	greenish-yellow lead glaze
80	surface collection	0 cm	faunal remains	1	large mammal, cortical fragment, has been cut and one edge looks polished
81	surface collection	0 cm	button, bone	1	4 holes, incised line around center
82	surface collection	0 cm	glass, bottle	1	aqua
83	surface collection	0 cm	glass, bottle	1	aqua
84	surface collection	0 cm	glass, bottle	1	aqua, moulded base fragment
85	surface collection	0 cm	glass, bottle	1	colourless
86	surface collection	0 cm	glass, bottle	1	colourless
87	surface collection	0 cm	glass, bottle	1	colourless
88	surface collection	0 cm	glass, bottle	1	colourless
89	surface collection	0 cm	glass, bottle	1	colourless, thick chunk
90	surface collection	0 cm	glass, bottle	1	colourless
91	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst, external thread finish
92	surface collection	0 cm	glass, bottle	1	olive
93	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
94	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
95	surface collection	0 cm	glass, window	1	< 1.6 mm, clear

3.58 **Location 58**

Location 58, a pre-contact Aboriginal site, was identified during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH2934 (located north of Crediton Road and east of Au Sable Line; Supplement A: Figure 33). This site, identified on June 22, 2012, consists of an isolated piece of secondary chipping detritus manufactured from Kettle Point chert (Plate 49:1). As detailed in Section 2.0, survey intervals





were intensified to one metre for a 20 metre radius surrounding the piece of chipping detritus, but no additional artifacts were identified.

3.58.1 Artifact Catalogue

Table 131 represents the Stage 2 artifact catalogue for this pre-contact Aboriginal site.

Table 131: Location 58 (Borden #) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	chipping detritus	1	Kettle Point chert, secondary

3.59 Location 59

Location 59, a historic Euro-Canadian site, was identified on August 7, 2012 during the Stage 2 pedestrian survey of the proposed wind energy components on property GSH1049 (north of MacDonald Road and east of Bronson Line; Supplement A: Figure 6). Location 59 consists of a 15 metre (along the north-south axis) by 15 metre (along the west-east axis) scatter of late 19th century Euro-Canadian domestic debris containing 16 artifacts, all of which were collected during the Stage 2 archaeological assessment. These include 11 domestic and five structural artifacts. Each artifact class is discussed in greater detail below.

3.59.1 Domestic Artifacts

Eleven domestic artifacts were collected during the Stage 2 assessment of Location 59. This collection includes nine glass artifacts and two fragments of ceramic.

3.59.1.1 Glass Artifacts

Nine fragments of domestic bottle glass were recovered from Location 59. This includes three colourless fragments, two aqua fragments, one sun-coloured amethyst fragment, one amber fragment, one cobalt fragment and one colourless complete glass bottle. Colourless or "clear" glass was rare prior to the 1870s but became quite common after the widespread use of automatic bottle machines in the mid-to-late 1910s (Toulouse 1969; Kendrick 1971; Fike 1987). Aqua coloured glass fragments generally originate from medical and pharmaceutical products, including patent medicine bottles of the 19th and 20th centuries (Kendrick 1971). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). The complete bottle included in the assemblage is a Le Page's glue bottle manufactured during the 20th century (Plate 50:1).

3.59.1.2 Ceramic Artifacts

Two fragments of undecorated white earthenware were collected during the Stage 2 assessment of Location 59 (Plate 50:2). Whiteware is a variety of earthenware with a near colorless glaze that replaced earlier near-white





ceramics such as pearlware and creamware by the early 1830s. Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century (Kenyon 1985).

3.59.2 Structural Artifacts

Five fragments of window glass were collected from Location 59. A total of three fragments of window glass were recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). Four of the window glass fragments in the assemblage have a thickness greater than 1.7 millimetres, and can be dated to post-1850. One of the fragments has a thickness of less than 1.6 millimetres, and can be dated to pre-1850.

3.59.3 Artifact Catalogue

Table 132 provides the Stage 2 artifact catalogue for this historic Euro-Canadian site.

Table 132: Location 59 Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
2	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
3	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst, rectangular base fragment
4	surface collection	0 cm	glass, bottle	1	colourless body fragment
5	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
6	surface collection	0 cm	glass, bottle	1	colourless body fragment
7	surface collection	0 cm	glass, window	1	< 1.6 mm, clear
8	surface collection	0 cm	glass, bottle	1	thick aqua body fragment
9	surface collection	0 cm	glass, window	1	> 1.7 mm, clear
10	surface collection	0 cm	glass, bottle	1	aqua body fragment
11	surface collection	0 cm	glass, bottle	1	colourless round small base
12	surface collection	0 cm	glass, bottle	1	amber body fragment
13	surface collection	0 cm	complete glass bottle	1	Le Page's small glue bottle, 20th century
14	surface collection	0 cm	glass, bottle	1	cobalt base fragment
15	surface collection	0 cm	whiteware, plain	1	
16	surface collection	0 cm	whiteware, plain	1	



3.60 Location 60 (AhHi-5)

Location 60 (AhHi-5), a historic Euro-Canadian site on property GSH3019 (located north of Crediton Road and west of Hern Line; Supplement A: Figure 37), was identified on August 8, 2012 during the Stage 2 pedestrian survey of proposed wind energy components were sunny. Location 60 (AhHi-5) consists of a 25 metre (along the north-south axis) by 35 metre (along the west-east axis) scatter of over 100 fragments of Euro-Canadian domestic debris spanning the 19th century. In total, 103 Euro-Canadian artifacts were collected during the Stage 2 assessment, including 97 domestic, three faunal remains, two personal and one structural artifact. A summary of artifacts recovered is listed below in Table 133. Each artifact class is described in detail below.

Table 133: Location 60 (AhHi-5) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	97	94.17
faunal	3	2.91
personal	2	1.94
structural	1	0.97
Total Artifacts	103	100.00

3.60.1 Domestic Artifacts

A total of 97 domestic artifacts were collected during the Stage 2 assessment of Location 60 (AhHi-5). This collection includes 92 fragments of ceramic and 5 fragments of glass.

3.60.1.1 Ceramic Artifacts

In total, 92 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 60 (AhHi-5). Included in this total are 51 fragments of ironstone, 28 fragments of whiteware, four fragments of semi-porcelain, three fragments of porcelain, and one fragment each of redware, Rockinghamware and yellowware, respectively. Table 134 provides a breakdown of the ceramic assemblage by ware type, while Table 135 provides a more detailed breakdown by decorative style.

Table 134: Summary of Ceramic Collection According to Ware type, Location 60 (AhHi-5)

Artifact	Freq.	%
ironstone	51	55.43
whiteware	28	30.43
semi-porcelain	4	4.35
porcelain	3	3.26
undetermined ceramic	3	3.26





Artifact	Freq.	%
redware	1	1.09
Rockinghamware	1	1.09
yellowware	1	1.09
Total	92	100.00

Table 135: Summary of Ceramic Collection According to Decorative Style, Location 60 (AhHi-5)

Artifact	Freq.	%
ironstone, plain	27	29.35
ironstone, moulded	20	21.74
whiteware, plain	12	13.04
whiteware, transfer printed	4	4.35
whiteware, flow transfer printed	4	4.35
whiteware, stamped	4	4.35
whiteware, hand painted	3	3.26
ceramic, undetermined	3	3.26
ironstone, transfer printed	2	2.17
ironstone, flow transfer printed	2	2.17
semi-porcelain, moulded	2	2.17
semi-porcelain, plain	1	1.09
semi-porcelain, transfer printed	1	1.09
whiteware, sponged	1	1.09
porcelain, painted	1	1.09
porcelain, moulded	1	1.09
porcelain, figurine	1	1.09
redware, plain	1	1.09
Rockinghamware	1	1.09
yellowware, banded	1	1.09
Total	92	100.00

Ironstone

The most common ceramic type collected during the Stage 2 assessment of this location is ironstone (n=51 or 55.43%). Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 60 (AhHi-5) ceramic assemblage includes 27 plain or undecorated fragments





(Plate 51:1), 20 moulded fragments (Plate 51:2), two transfer printed fragments (Plate 51:3) and two flow transfer printed fragments (Plate 51:4).

Two fragments of plain ironstone in the assemblage are of particular note. These fragments display the royal coat of arms, both of which can be dated to post-1837 (Plate 51:5).

Twenty fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). Represented in the assemblage are examples of both the grape vine motif and a seashell design.

Two ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). One of the fragments displays a green floral design, while the other is an example of the popular blue willow pattern.

Two piece of flow blue transfer printed ironstone were found during the Stage 2 assessment of Location 60 (AhHi-5). Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). One fragment in the assemblage displays a floral and vine pattern, and the other a geometric pattern.

White Earthenware

A total of 28 fragments of whiteware were recovered during the Stage 2 assessment. Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Twelve fragments of whiteware in the assemblage are plain (Plate 51:6), four are transfer printed (Plate 51:7), four are flow transfer printed (Plate 51:8), four are stamped (Plate 51:9), three are hand painted (Plate 51:10) and one is sponged (Plate 51:11).

Four fragments of whiteware in the assemblage are transfer printed. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. The assemblage contains three fragments with a blue geometric pattern, and one with the popular blue willow pattern.

Four fragments of flow transfer printed whiteware were recovered during the Stage 2 assessment. Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). Though blue was the most popular colour for flow transfer printing, other colours were also





sometimes used. Two of the fragments are black, one with a vine pattern, and two are blue, one with a floral and grape vine pattern.

Four fragments of whiteware in the assemblage are sponge-stamped, both displaying a red floral pattern. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994). Stamped fragments in this assemblage are all blue, and include both floral and geometric patterns.

Three fragments of hand painted whiteware were recovered during the Stage 2 assessment. The sherds all exhibit a polychromatic broad-stoke floral pattern. Chrome painted designs of this type were popular between approximately 1830 and 1860 (Collard 1967). The colours seen here are considered "Late Palette" colours.

One fragment in the whiteware assemblage is blue and red sponged. Sponged whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s.

Semi-Porcelain

Four fragments of semi-porcelain were recovered during the stage 2 assessment, including two moulded fragments with floral and vine designs (Plate 52:1), one transfer printed fragment with floral overlay (Plate 52:2) and one plain fragment (Plate 52:3). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

Porcelain

A total of three porcelain fragments were collected during the Stage 2 assessment of Location 60 (AhHi-5), including one fragment with moulded dots (Plate 52:4), one painted fragment with a polychromatic floral design (Plate 52:5) and a leg from a porcelain figurine (Plate 52:6). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century.

Undetermined Ceramics

Unfortunately, three of the ceramic pieces recovered from Location 60 (AhHi-5) could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible





to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.

Redware

A single fragment of redware was recovered during the Stage 2 assessment. Redware is a thin-bodied earthenware covered on both the interior and exterior by a dark reddish-brown, dark brown or black glaze. This type of redware was commonly used in the early 19th century for tea pots and mugs. Redware was commonly decorated with slip-banding (Adams 1994). The fragment of redware in the assemblage has a greenish interior glaze (Plate 52:7).

Rockinghamware

One fragment of Rockinghamware is included in the assemblage (Plate 52:8). This ware type is very similar to yellowware, and became popular around 1850, with manufacture continuing into the 20th century (Gallo 1985). The main difference between the two is that Rockinghamware displays a unique glaze type. It involves splattering a brown manganese glaze onto a piece that has already been covered with a clear glaze. The result is a dripping, mottled glaze effect, as the two glazes are melted together during firing. Another technique sometimes used was to dip the ceramic piece directly into the already-mixed glaze, which results in a reddish-brown finish (Gallo 1985:39).

Yellowware

One fragment of banded yellowware was recovered from Location 60 (AhHi-5). Yellowware ceramics were first manufactured in the 1840s, and continue to be manufactured in limited quantities today (Adams 1994:100). By the mid-19th century, there were many forms and decorations used for yellowware. Cups, pitchers and bowls were slip-banded in different colours, mostly white or blue. Over time, the yellow colour of this ware became paler and brighter. In general, this ware was used primarily for kitchenwares and storage vessels. The yellowware fragment in the assemblage is slip banded with green, buff and brown bands (Plate 52:9).

3.60.1.2 Glass Artifacts

Five fragments of bottle and jar glass were recovered from Location 60 (AhHi-5). The bottle glass assemblage includes two fragments of aqua glass, one light green fragment, one sun-coloured amethyst bottle finish and one aqua jar closure fragment. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012). The finish is a prescription finish, manufactured between 1870 and 1920 (Lindsey 2012). The jar fragment is a Mason jar lightening closure, and can be dated to post-1880.



3.60.2 Faunal Remains

Three faunal remains are included in the assemblage. This includes one large horse tooth, one cortical bone fragment from a small to medium sized mammal and one small white bivalve shell fragment.

3.60.3 Personal Artifacts

The two personal artifacts recovered during the Stage 2 assessment include one undecorated white clay pipe stem (Plate 53:1) and one white clay pipe elbow with a partial attached stem (Plate 53:2). White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93).

3.60.4 Structural Artifacts

There was one structural artifact collected from Location 60 (AhHi-5). This consists of one large, heavily corroded machine-cut nail (Plate 53:3). Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830.

3.60.5 Artifact Catalogue

Table 136 presents the Stage 2 artifact catalogue for Location 60 (AhHi-5).

Table 136: Location 60 (AhHi-5) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	ironstone, moulded	1	curved scalloping
2	surface collection	0 cm	ironstone, moulded	1	indeterminate
3	surface collection	0 cm	ironstone, moulded	1	lines
4	surface collection	0 cm	whiteware, plain	1	
5	surface collection	0 cm	whiteware, painted	1	polychromatic broad-stroke floral
6	surface collection	0 cm	ironstone, plain	2	
7	surface collection	0 cm	whiteware, stamped	1	blue geometric
8	surface collection	0 cm	ironstone, plain	1	foot ring fragment
9	surface collection	0 cm	ironstone, moulded	1	curved scalloping
10	surface collection	0 cm	whiteware, plain	1	





Cat. #	Context	Depth	Artifact	Freq.	Comments
11	surface collection	0 cm	ironstone, plain	1	partial maker's mark, indeterminate
12	surface collection	0 cm	semi-porcelain, moulded	1	leaf design
13	surface collection	0 cm	ironstone, plain	1	coat of arms, post-1837
14	surface collection	0 cm	ironstone, plain	1	burnt
15	surface collection	0 cm	ironstone, moulded	1	curved scalloping
16	surface collection	0 cm	redware	1	greenish interior lead glaze
17	surface collection	0 cm	ironstone, flow transfer print	1	blue geometric
18	surface collection	0 cm	semi-porcelain, moulded	1	floral and vine
19	surface collection	0 cm	faunal remains	1	horse tooth
20	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
21	surface collection	0 cm	ironstone, plain	1	coat of arms, post-1837
22	surface collection	0 cm	ironstone, plain	1	cup handle fragment
23	surface collection	0 cm	ironstone, plain	1	dish base with partial indeterminate maker's mark
24	surface collection	0 cm	ironstone, moulded	1	scalloped interior
25	surface collection	0 cm	ironstone, moulded	1	scalloped interior
26	surface collection	0 cm	whiteware, plain	1	
27	surface collection	0 cm	ironstone, plain	1	partial indeterminate maker's mark
28	surface collection	0 cm	whiteware, stamped	1	blue
29	surface collection	0 cm	whiteware, stamped	1	blue floral with painted bands, rim sherd
30	surface collection	0 cm	whiteware, transfer print	1	blue geometric
31	surface collection	0 cm	ironstone, plain	1	
32	surface collection	0 cm	whiteware, plain	1	
33	surface collection	0 cm	ironstone, moulded	1	seashell motif
34	surface collection	0 cm	ironstone, moulded	1	curved scalloping
35	surface collection	0 cm	porcelain figurine	1	figurine leg with stocking
36	surface collection	0 cm	ironstone, plain	1	
37	surface collection	0 cm	ironstone, plain	1	cup handle
38	surface collection	0 cm	ironstone, transfer print	1	green floral, plate base
39	surface collection	0 cm	whiteware, plain	1	
40	surface collection	0 cm	semi-porcelain, plain	1	partial maker's mark, indeterminate
41	surface collection	0 cm	ironstone, moulded	1	grape and vine motif
42	surface collection	0 cm	ironstone, moulded	1	indeterminate





Cat. #	Context	Depth	Artifact	Freq.	Comments
43	surface collection	0 cm	ironstone, moulded	1	indeterminate
44	surface collection	0 cm	whiteware, flow transfer print	1	blue floral and grape vine
45	surface collection	0 cm	ironstone, moulded	1	curved scalloping
46	surface collection	0 cm	ironstone, moulded	1	indeterminate
47	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
48	surface collection	0 cm	whiteware, plain	1	partial maker's mark, indeterminate
49	surface collection	0 cm	whiteware, painted	1	polychromatic broad-stroke floral
50	surface collection	0 cm	whiteware, transfer print	1	blue geometric
51	surface collection	0 cm	ironstone, plain	1	
52	surface collection	0 cm	whiteware, stamped	1	blue floral with painted lines
53	surface collection	0 cm	ironstone, plain	1	teacup base
54	surface collection	0 cm	yellowware, banded	1	brown, buff and green bands
55	surface collection	0 cm	ironstone, plain	1	burnt
56	surface collection	0 cm	ironstone, plain	1	burnt
57	surface collection	0 cm	ironstone, moulded	1	indeterminate
58	surface collection	0 cm	whiteware, flow transfer print	1	black vines, rim sherd
59	surface collection	0 cm	ironstone, plain	1	
60	surface collection	0 cm	whiteware, sponged	1	blue and red
61	surface collection	0 cm	ironstone, plain	1	burnt
62	surface collection	0 cm	whiteware, transfer print	1	blue willow
63	surface collection	0 cm	ironstone, flow transfer print	1	blue vine and plant design
64	surface collection	0 cm	ironstone, moulded	1	curved scalloping
65	surface collection	0 cm	whiteware, painted	1	polychromatic broad-stroke floral
66	surface collection	0 cm	white clay pipe elbow	1	partial stem and elbow, undecorated
67	surface collection	0 cm	ironstone, plain	1	
68	surface collection	0 cm	whiteware, plain	1	
69	surface collection	0 cm	ironstone, moulded	1	indeterminate
70	surface collection	0 cm	whiteware, plain	1	
71	surface collection	0 cm	whiteware, flow transfer print	1	black, indeterminate
72	surface collection	0 cm	ironstone, moulded	1	indeterminate
73	surface collection	0 cm	ironstone, moulded	1	grape and vine motif





Cat. #	Context	Depth	Artifact	Freq.	Comments
74	surface collection	0 cm	whiteware, flow transfer print	1	blue, indeterminate
75	surface collection	0 cm	porcelain, painted	1	polychromatic floral
76	surface collection	0 cm	ironstone, plain	1	rim sherd
77	surface collection	0 cm	whiteware, plain	1	
78	surface collection	0 cm	ironstone, transfer print	1	blue willow
79	surface collection	0 cm	ironstone, plain	1	
80	surface collection	0 cm	whiteware, plain	1	
81	surface collection	0 cm	whiteware, plain	1	
82	surface collection	0 cm	porcelain, moulded	1	dots
83	surface collection	0 cm	semi-porcelain, transfer print	1	floral overlay, possibly damaged gilt
84	surface collection	0 cm	ironstone, plain	1	burnt, foot ring
85	surface collection	0 cm	ironstone, plain	1	cup handle fragment
86	surface collection	0 cm	whiteware, transfer print	1	blue geometric
87	surface collection	0 cm	ironstone, moulded	1	indeterminate
88	surface collection	0 cm	ironstone, plain	1	
89	surface collection	0 cm	glass, bottle	1	sun-coloured amethyst prescription finish (1870-1920)
90	surface collection	0 cm	rockinghamware	1	hollowware fragment
91	surface collection	0 cm	nail, machine-cut	1	large, heavily corroded
92	surface collection	0 cm	ironstone, plain	1	hollowware fragment
93	surface collection	0 cm	ironstone, plain	1	burnt
94	surface collection	0 cm	glass, jar	1	mason jar lightening closure, aqua, 1880+
95	surface collection	0 cm	white clay pipe stem	1	undecorated
96	surface collection	0 cm	glass, bottle	1	aqua rectangular base fragment
97	surface collection	0 cm	ceramic, undetermined	1	burnt refined white earthenware
98	surface collection	0 cm	shell	1	white bivalve fragment
99	surface collection	0 cm	glass, bottle	1	light green
100	surface collection	0 cm	glass, bottle	1	aqua
101	surface collection	0 cm	whiteware, plain	1	
102	surface collection	0 cm	faunal remains	1	small-medium mammalian cortical fragment



3.61 Location 61 (AhHi-6)

Location 61 (AhHi-6), a Historic Euro-Canadian site on property GSH3019 (located north of Crediton Road and west of Hern Line; Supplement A: Figure 37), was identified on August 16, 2012 during the Stage 2 test pit survey of proposed wind energy components. In total, 108 artifacts were collected during the Stage 2 assessment through test pitting and the excavation of a one-by-one metre test units. Of the artifacts recovered, 56 are domestic, 35 are structural, nine are metal, five are faunal remains and three are personal. A summary of artifacts recovered is listed below in Table 137. Each artifact class is described in detail below.

Table 137: Location 61 (AhHi-6) Historic Euro-Canadian Artifacts

Artifact	Freq.	%
domestic	56	51.85
structural	35	32.41
metal	9	8.33
faunal	5	4.63
personal	3	2.78
Total Artifacts	108	100.00

3.61.1 Domestic Artifacts

A total of 56 domestic artifacts were collected during the Stage 2 assessment of Location 61 (AhHi-6). This collection includes 41 fragments of ceramic and 15 fragments of glass.

3.61.1.1 Ceramic Artifacts

In total, 41 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 61 (AhHi-6). Included in this total are 13 fragments of utilitarian earthenware and stoneware, 12 fragments of ironstone, 10 fragments of whiteware, two fragments of undetermined ceramics, one fragment of semi-porcelain, one fragment of porcelain, one fragment of redware and one fragment of Rockinghamware. Table 138 provides a breakdown of the ceramic assemblage by ware type, while Table 139 provides a more detailed breakdown by decorative style.

Table 138: Summary of Ceramic Collection According to Ware type, Location 61 (AhHi-6)

Artifact	Freq.	%
utilitarian	13	31.71
ironstone	12	29.27
whiteware	10	24.39
undetermined	2	4.88
semi-porcelain	1	2.44
porcelain	1	2.44





Artifact	Freq.	%
redware	1	2.44
Rockinghamware	1	2.44
Total	41	100.00

Table 139: Summary of Ceramic Collection According to Decorative Style, Location 61 (AhHi-6)

Artifact	Freq.	%
ironstone, plain	10	24.39
earthenware, red	8	19.51
whiteware, plain	7	17.07
earthenware, yellow	4	9.76
whiteware, sponged	2	4.88
ceramic, undetermined	2	2.44
ironstone, moulded	1	2.44
ironstone, transfer printed	1	2.44
whiteware, painted	1	2.44
stoneware, lead glazed	1	2.44
porcelain, plain	1	2.44
semi-porcelain, plain	1	2.44
redware, plain	1	2.44
Rockinghamware	1	2.44
Total	41	100.00

Utilitarian Earthenware

The most common ceramic type collected during the Stage 2 assessment of this location is utilitarian earthenware and stoneware (n=13 or 31.71%). This includes eight fragments of red earthenware, four fragments of yellow earthenware and one fragment of stoneware.

Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). All fragments of earthenware in the assemblage are lead glazed, with the exception of two fragments of red earthenware which display a salt glaze. Stoneware is harder than utilitarian earthenware, more vitreous and is often salt glazed. The fragment of stoneware in the assemblage is lead glazed.





Ironstone

A total of 12 fragments of ironstone were recovered during the Stage 2 assessment. Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 61 (AhHi-6) ceramic assemblage includes 10 plain or undecorated fragments (Plate 54:1), one moulded fragment (Plate 54:2) and one transfer printed fragment (Plate 54:3).

One fragment of ironstone in the assemblage is of particular note, as it displays an almost complete maker's mark (Plate 54:4). This mark indicates that the piece was manufactured by the Johnson Brothers, a known Staffordshire pottery manufacturer. The maker's mark in question is the earliest known for this manufacturer, and was used *circa* 1883 (Birks 2012).

One fragment in the ironstone assemblage is moulded, and displays the popular wheat motif. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980).

One ironstone fragment in the assemblage is transfer printed, with a blue floral pattern. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994).

White Earthenware

A total of 10 whiteware fragments were recovered during the Stage 2 assessment. Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Seven whiteware fragments in the assemblage are plain and undecorated (Plate 54:5), two fragments are sponged (Plate 54:6) and one fragment is hand painted (Plate 54:7).

One fragment in the whiteware assemblage is blue sponged. Sponged whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. All-over sponging became popular by the 1840s and remained common until the 1870s.

A single fragment of hand painted whiteware was recovered during the Stage 2 assessment. The sherd exhibits a pink flower and a pink painted band. The colours seen here are considered "Late Palette" colours.

Undetermined Ceramics

Unfortunately, two of the ceramic pieces recovered from Location 61 (AhHi-6) could not be catalogued into a specific ceramic-ware classification. These pieces are so heavily damaged and fragmentary that it is impossible to accurately identify them by ceramic type. In order to avoid altering the separate ceramic totals, percentages





and ultimately the temporal data for the site the damaged pieces were simply classified as undetermined ceramics.

Semi-Porcelain

A single fragment of plain semi-porcelain was recovered during the stage 2 assessment (Plate 54:8). During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

Porcelain

A single fragment of plain porcelain was collected during the Stage 2 assessment of Location 61 (AhHi-6) (Plate 54:9). Porcelain is a type of earthenware fired at such a high temperature that the clay begins to vitrify; consequently the ceramic is translucent when held up to a light. Because of its high cost, porcelain is extremely rare on 19th century sites in Ontario. However, by the turn of the century it became relatively common as production techniques were developed in Europe, which helped to greatly reduce costs. Thus, most porcelain found on Historic Euro-Canadian sites in Ontario was likely manufactured in the early 20th century.

Redware

A single plain fragment of plain redware was discovered during the Stage 2 assessment (Plate 54:10). Redware is a thin-bodied earthenware covered on both the interior and exterior by a dark reddish-brown, dark brown or black glaze. This type of redware was commonly used in the early 19th century for tea pots and mugs. Redware was commonly decorated with slip-banding (Adams 1994).

Rockinghamware

One fragment of Rockinghamware is included in the assemblage (Plate 54:11). This ware type is very similar to yellowware, and became popular around 1850, with manufacture continuing into the 20th century (Gallo 1985). The main difference between the two is that Rockinghamware displays a unique glaze type. It involves splattering a brown manganese glaze onto a piece that has already been covered with a clear glaze. The result is a dripping, mottled glaze effect, as the two glazes are melted together during firing. Another technique sometimes used was to dip the ceramic piece directly into the already-mixed glaze, which results in a reddish-brown finish (Gallo 1985:39).

3.61.1.2 Glass Artifacts

Fifteen fragments of glass were recovered from Location 61 (AhHi-6). This collection includes 10 fragments of domestic bottle glass, four fragments of stemware and one fragment of press-moulded glass dishware.





The bottle glass assemblage includes four fragments of colourless glass, four fragments of aqua glass, one fragment of olive glass and one fragment of amber glass. Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971).

One fragment of sun-coloured amethyst dish glass is included in the assemblage. Pressed glass item of various forms (plates, compotes, goblets), often with intricate decoration, were very popular in Canada from the 1870s to the 1920s (Adams 1994). Sun-coloured amethyst glass generally suggests a date range starting in the 1880s and continuing to 1920 (Lindsey 2012).

3.61.2 Structural Artifacts

There were 35 structural artifacts collected from Location 61 (AhHi-6). These artifacts consist of 23 fragments of window glass, six heavily corroded machine-cut nails (Plate 55:1), three headless corroded unidentifiable nails, two pieces of mortar and one fragment of red brick.

A total of 23 fragments of window glass were recovered in the Stage 2 assessment. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes (Kenyon 1980). Thirteen of the window glass fragments in the assemblage are greater than 1.7 millimetres, and can be dated to post-1850. Ten of the window glass fragments in the assemblage are less than 1.6 millimetres, and can be dated to pre-1850.

Cut nails are temporally later than wrought nails, the result of a machinated process for cutting metal. They are square and often have a square or rectangular head, though early varieties can exhibit hand-hammered heads. They were invented as early as 1790, but did not become common in Ontario until 1830.

3.61.3 Metal Artifacts

Nine metal artifacts were collected from Location 61 (AhHi-6). The metal assemblage includes four pieces of heavily corroded unidentifiable metal, three pieces of metal wire, one washer and one thin copper strip.

3.61.4 Faunal Remains

There were five faunal remains collected from Location 61 (AhHi-6). The faunal assemblage consists of two avian bone fragments (including one carpometacarpus and one long bone), two large mammalian cortical bone fragments (one with a small cut on the exterior) and one medium to large mammalian indeterminate bone fragment.

3.61.5 Personal Artifacts

The three personal artifacts recovered during the Stage 2 assessment include one bone button (Plate 55:2), one shoe or boot eyelet (Plate 55:3) and one white clay pipe stem displaying a maker's mark (Plate 55:4). White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also





found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93). The pipe stem in the assemblage was manufactured by Davidson of Glasgow, and its manufacture can be dated between 1861 and 1910.

3.61.6 Artifact Catalogue

Table 140 presents the Stage 2 artifact catalogue for Location 61 (AhHi-6).

Table 140: Location 61 (AhHi-6) Artifact Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	Test Pit # 1		faunal remains	1	large mammalian cortical fragment with a small cut on exterior
2	Test Pit # 1		mortar	1	
3	Test Pit # 1		earthenware, red	1	salt glazed
4	Test Pit # 1		glass, window	2	1 > 1.7 mm, 1 < 1.6 mm
5	Test Pit # 1		ironstone, plain	1	
6	Test Pit # 1		glass, stemware	1	damaged
7	Test Pit # 1		ironstone, transfer print	1	blue floral
8	Test Pit # 1		whiteware, sponged	2	blue
9	Test Pit # 2		whiteware, plain	1	burnt
10	Test Pit # 3		earthenware, yellow	2	yellow lead glazed
11	Test Pit # 4		stoneware	1	buff paste, yellowish lead glazed
12	Test Pit # 4		glass, bottle	1	aqua body fragment
13	Test Pit # 5		earthenware, red	1	orange salt glazed
14	Test Pit # 6		whiteware, plain	1	
15	Test Pit # 6		glass, window	1	> 1.7 mm
16	Test Pit # 7		whiteware, plain	1	
17	Test Pit # 8		nail, undetermined	1	heavily corroded, headless
18	Test Pit # 8		nail, machine cut	2	heavily corroded
19	Test Pit # 8		metal, undetermined	1	heavily corroded metal strap fragment
20	Test Pit # 8		glass, window	1	> 1.7 mm
21	Test Pit # 8		glass, bottle	1	amber body fragment
22	Test Pit # 8		brick	1	red
23	Test Pit # 9		ironstone, plain	1	
24	Test Pit # 10		glass, window	1	< 1.6 mm
25	Test Unit # 1	27 cm	faunal remains	4	2 avian (including 1 carpal metacarpus), I mammalian





Cat.#	Context	Depth	Artifact	Freq.	Comments
					cortical fragment, 1 medium-large mammalian indeterminate bone fragment
26	Test Unit # 1	27 cm	redware	1	
27	Test Unit # 1	27 cm	rockinghamware	1	
28	Test Unit # 1	27 cm	mortar	1	
29	Test Unit # 1	27 cm	metal, washer	1	
30	Test Unit # 1	27 cm	button, bone	1	4-holed
31	Test Unit # 1	27 cm	earthenware, yellow	2	1 lead glazed, 1 plain
32	Test Unit # 1	27 cm	earthenware, red	6	lead glazed
33	Test Unit # 1	27 cm	copper, undetermined	1	thin strip
34	Test Unit # 1	27 cm	metal, undetermined	3	heavily corroded strap fragments and rod
35	Test Unit # 1	27 cm	nail, undetermined	2	heavily corroded, headless
36	Test Unit # 1	27 cm	metal, wire	3	heavily corroded
37	Test Unit # 1	27 cm	nail, machine cut	4	heavily corroded
38	Test Unit # 1	27 cm	semi-porcelain, plain	1	
39	Test Unit # 1	27 cm	porcelain, plain	1	
40	Test Unit # 1	27 cm	eyelet	1	shoe/boot eyelet
41	Test Unit # 1	27 cm	whiteware, painted	1	pink flower and painted band
42	Test Unit # 1	27 cm	ceramic, undetermined	2	burnt refined white earthenware
43	Test Unit # 1	27 cm	whiteware, plain	4	
44	Test Unit # 1	27 cm	glass, stemware	3	
45	Test Unit # 1	27 cm	ironstone, plain	8	1 maker's mark, Johnson Bros, c. 1883
46	Test Unit # 1	27 cm	white clay pipe stem	1	Davidson, Glasgow, 1861-1910
47	Test Unit # 1	27 cm	ironstone, moulded	1	wheat motif
48	Test Unit # 1	27 cm	glass, window	18	10 > 1.7 mm, 8 < 1.6 mm
49	Test Unit # 1	27 cm	glass, bottle	8	4 colourless, 3 aqua, 1 olive (all body fragments)
50	Test Unit # 1	27 cm	glass, dish	1	sun coloured amethyst press- moulded dish base





3.62 Location 62 (AhHi-7)

Location 62 (AhHi-7), a historic Euro-Canadian site with a small pre-contact Aboriginal component, was identified on September 10, 2012 on GSH2485 (located north of Crediton Road and east of London Road; Supplement A: Figure 34) during the Stage 2 pedestrian survey of proposed wind energy components. Location 62 (AhHi-7) consists of a 40 metre (along the north-south axis) by 40 metre (along the west-east axis) scatter of approximately 200 fragments of Euro-Canadian domestic debris spanning the 19th century, plus the aforementioned small pre-contact Aboriginal component. In total, 32 multi component artifacts were collected during the Stage 2 assessment, including 29 domestic, two personal and one piece of pre-contact lithic material (Table 141). Each artifact class is discussed in greater detail below.

Table 141: Location 62 (AhHi-7) Artifact Summary

Artifact	Frequency	%			
Euro Canadian Artifacts					
domestic	29	90.62			
personal	2	6.25			
Total Euro Canadian Artifacts	31	96.87			
Pre-Contact Aboriginal Artifacts					
scraper	1	3.13			
Total Pre-Contact Aboriginal Artifacts	1	3.13			
Total Artifacts	32	100.00			

3.62.1 Domestic Artifacts

A total of 29 domestic artifacts were collected during the Stage 2 assessment of Location 62 (AhHi-7). This collection includes 26 fragments of ceramic and 3 fragments of glass.

3.62.1.1 Ceramic Artifacts

In total, 26 fragments of ceramic hollowwares and flatwares were collected during the Stage 2 assessment of Location 62 (AhHi-7). Included in this total are 12 fragments of whiteware, eight fragments of ironstone, three fragments of semi-porcelain, two fragments of utilitarian stoneware and one fragment of undetermined ceramic. Table 142 provides a breakdown of the ceramic assemblage by ware type, while Table 143 provides a more detailed breakdown by decorative style.





Table 142: Summary of Ceramic Collection According to Ware type, Location 62 (AhHi-7)

Artifact	Frequency	%
whiteware	12	46.15
ironstone	8	30.77
semi-porcelain	3	11.54
utilitarian	2	7.69
undetermined	1	3.85
Total	26	100.00

Table 143: Summary of Ceramic Collection According to Decorative Style, Location 62 (AhHi-7)

Artifact	Frequency	%
whiteware, transfer print	6	23.08
whiteware, flow transfer print	3	11.54
ironstone, flow transfer print	2	7.69
ironstone, moulded	2	7.69
ironstone, transfer print	2	7.69
semi-porcelain, plain	2	7.69
whiteware, edged	2	7.69
whiteware, sponged	1	3.85
stoneware, salt glazed	1	3.85
stoneware, Derbyshire glazed	1	3.85
semi-porcelain, transfer print	1	3.85
ironstone, stamped	1	3.85
ironstone, plain	1	3.85
ceramic, undetermined	1	3.85
Total	26	100.00

White Earthenware

The most common ceramic type collected during the Stage 2 assessment of this location is whiteware (n=12 or 46.15%). Whiteware is a variety of earthenware with a near-colourless glaze that replaced earlier near-white ceramics such as pearlware and creamware. This shift in ware types began to occur by the early 1830s (Miller 1991). Early whiteware tends to have a porous paste, with more vitrified, harder ceramics becoming increasingly common later in the 19th century. Six fragments in the assemblage are transfer printed (Plate 56:1), three fragments are flow transfer printed (Plate 56:2), two fragments are edged (Plate 56:3) and one fragment is sponged (Plate 56:4).





Six transfer printed fragments were recovered during the Stage 2 assessment. Transfer printed whiteware involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common (Collard 1967). Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. All are blue geometric and floral, aside from one fragment which displays a brown floral design.

Two fragments of edged whiteware were also recovered from the assemblage. Edged wares have enjoyed popularity through the late 18th and 19th centuries, and the moulding on the edge has changed through time. Before about 1840 most edged ceramics had a scalloped or undulating edge. After 1840 the edges did not normally have any scallops. Green and blue are the most common colours for edged plateware (Adams 1994). Both fragments recovered are blue, though one is too damaged to be diagnostic. The other displays an unscalloped rim with painted straight lines and no impressions, allowing it to be assigned a date range of 1850-1897.

One red and green sponged whiteware fragment is also included in the assemblage. Sponged whiteware ceramics were a form of inexpensive tableware in which a sponge was used to apply an underglaze pigment. Allover sponging became popular by the 1840s and remained common until the 1870s.

Ironstone

A total of eight ironstone fragments were recovered during the Stage 2 assessment. Ironstone, or graniteware, is a variety of refined white earthenware, introduced to Canada by the 1820s, widely available in the 1840s, and extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). The Location 62 (AhHi-7) ceramic assemblage includes two flow transfer printed fragments (Plate 56:5), two moulded fragments (Plate 56:6), two transfer printed fragment (Plate 56:7), one sponge-stamped fragments (Plate 56:8) and one plain undecorated fragment (Plate 56:9).

Two pieces of flow transfer printed ironstone were found during the Stage 2 assessment. Flow transfer ware enjoyed a long period of popularity, beginning around 1844 and tapering off around 1900 (Collard 1967; Miller 1991). The most popular colour for this transfer printing technique was blue, but other colours such as green and black were sometimes employed. Both fragments in the assemblage are blue, one with a geometric pattern.

Two fragments in the ironstone assemblage are moulded. During the 1870s to 1880s it was the most popular type of tableware ceramic in Ontario, and its white varieties rarely had coloured decoration. Instead, it often had raised moulded designs. The most popular and enduring of these was the "wheat" pattern, though a grape vine motif was also favoured quite often (Kenyon 1980). One of the moulded fragments in the assemblage has an indeterminate design, and one displays the popular wheat motif.

Two ironstone fragments in the assemblage are transfer printed. In the 1830s and 1840s, the blue shade used in transfer printing became lighter in hue and the designs more open, and colours other than blue increased in popularity. From about 1850 to 1890 only the colours blue, black, and brown were common (Adams 1994). Both fragments in the assemblage are blue, one with a floral and one with a geometric pattern.





There is one blue indeterminate sponge-stamped whiteware fragment in the assemblage. Stamping is a variation of the sponging decorative method. With this technique, a sponge was cut into simple designs (e.g. geometric shapes, leaves, flowers). These stamps were then loaded with pigment and repeatedly dabbed around the ceramic to form a coarse design. This technique was used from the 1850s to the early 20th century (Adams 1994).

Semi-Porcelain

Two fragments of plain semi-porcelain (Plate 56:10) and one fragment of black floral transfer printed semi-porcelain (Plate 56:11) were recovered during the stage 2 assessment. During the first half of the 19th century, the English improved pottery techniques resulting in the production of durable and decorative wares with trade names such as semi-porcelain. This hard earthenware sought to emulate imported porcelains but lacked true translucency. In 1850, semi-porcelains were reintroduced and this vitreous, hard-glazed white earthenware resembling bone china soon dominated the marketplace (Hughes 1961).

Utilitarian Earthenware

A total of two fragments of stoneware were collected during the Stage 2 assessment of Location 62 (AhHi-7). Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels (Adams 1994:99). One of the fragments displays a clear exterior salt glaze with an Albany slip interior. The other is a Derbyshire glazed inkwell fragment, with part of the lip, neck and body observable (Plate 57:1).

Undetermined Ceramics

Unfortunately, one of the ceramic pieces recovered from Location 62 (AhHi-7) could not be catalogued into a specific ceramic-ware classification. This piece is so heavily damaged and fragmentary that it is impossible to accurately identify it by ceramic type. In order to avoid altering the separate ceramic totals, percentages and ultimately the temporal data for the site the damaged piece was simply classified as undetermined ceramic.

3.62.1.2 Glass Artifacts

Three fragments of aqua bottle glass were recovered from Location 62 (AhHi-7). Aqua glass generally originates from medical and pharmaceutical products including patent medicine bottles of the 19th and 20th century (Kendrick 1971. Two of the aqua fragments are bottle finishes: one is an oil finish dating between 1850 and 1920, and the other is a patent finish popular consistently post-1850 (Lindsey 2012).





3.62.2 Personal Artifacts

Two personal items are included in the assemblage, consisting of two white clay pipe stems, one with a Glasgow mark (Plate 57:2). White clay pipes were very popular throughout the 19th century, with a decline in use by 1880 when they were replaced by briar pipes and cigarettes (Adams 1994:93). Most white clay pipes found in Upper Canada were manufactured either in Quebec or Scotland; occasionally examples from English, Dutch, French and American makers are also found. Sometimes the maker's name and/or city of manufacture were impressed on one side of the pipe stem, a practise which did not become popular until the 1840s (Adams 1994:93).

3.62.3 Pre-Contact Aboriginal Artifacts

One pre-contact Aboriginal lithic artifact was collected during the Stage 2 assessment of Location 62 (AhHi-7). This small assemblage includes one heat-treated, heavily utilized broken scraper manufactured from Kettle Point chert (Plate 57:3). It has an incomplete length of 34.11 millimetres, an incomplete width of 21.76 millemetres and a thickness of 11.79 millimetres.

3.62.4 Artifact Catalogue

Table 144 presents the Stage 2 artifact catalogue for Location 62 (AhHi-7).

Table 144: Location 62 (AhHi-7) Artifact Catalogue

Cat.	Context	Depth	Artifact	Freq.	Comments
1	surface collection	0 cm	whiteware, edged	1	blue, unscalloped, unimpressed straight lines (1850-1897)
2	surface collection	0 cm	whiteware, transfer print	1	blue geometric
3	surface collection	0 cm	white clay pipe stem	1	Glasgow
4	surface collection	0 cm	whiteware, flow transfer print	1	blue
5	surface collection	0 cm	whiteware, flow transfer print	1	blue
6	surface collection	0 cm	stoneware	1	Derbyshire glaze inkwell fragment
7	surface collection	0 cm	whiteware, flow transfer print	1	vine pattern
8	surface collection	0 cm	ironstone, flow transfer print	1	blue geometric
9	surface collection	0 cm	stoneware, salt-glazed	1	brown and buff glaze
10	surface collection	0 cm	ironstone, transfer print	1	blue floral
11	surface collection	0 cm	whiteware, sponged	1	green and red
12	surface collection	0 cm	white clay pipe stem	1	
13	surface collection	0 cm	glass, bottle	1	aqua oil finish (1850-1920)





Cat. #	Context	Depth	Artifact	Freq.	Comments
14	surface collection	0 cm	ironstone, transfer print	1	blue geometric
15	surface collection	0 cm	ironstone, moulded	1	indeterminate
16	surface collection	0 cm	glass, bottle	1	aqua base fragment
17	surface collection	0 cm	glass, bottle	1	aqua patent finish (1850+)
18	surface collection	0 cm	whiteware, transfer print	1	brown leaves
19	surface collection	0 cm	semi-porcelain, transfer print	1	black floral pattern
20	surface collection	0 cm	ironstone, moulded	1	wheat motif
21	surface collection	0 cm	semi-porcelain, plain	1	hollowware base
22	surface collection	0 cm	whiteware, transfer print	1	blue
23	surface collection	0 cm	whiteware, edged	1	blue damaged
24	surface collection	0 cm	ceramic, undetermined	1	
25	surface collection	0 cm	whiteware, transfer print	1	blue floral
26	surface collection	0 cm	ironstone, plain	1	
27	surface collection	0 cm	whiteware, transfer print	1	blue geometric and floral
28	surface collection	0 cm	semi-porcelain, plain	1	cup handle
29	surface collection	0 cm	ironstone, stamped	1	blue
30	surface collection	0 cm	ironstone, flow transfer print	1	blue
31	surface collection	0 cm	whiteware, transfer print	1	blue fruit tree
32	surface collection	0 cm	scraper	1	Kettle Point chert, broken base, heavy usewear





4.0 ANALYSIS AND CONCLUSIONS

The Stage 2 archaeological assessment of the Goshen Wind Energy Centre resulted in the identification of 61 archaeological sites, including 36 pre-contact Aboriginal, 20 historic Euro-Canadian and five multi-component. Analyses of each location are provided below, indicating whether further assessment is recommended for each site. At the end of this section, a preliminary indication is provided as to whether any of these sites may require Stage 4 archaeological assessment.

4.1 Location 1

Location 1 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This secondary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.2 Location 2

Location 2 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This tertiary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.3 Location 3 (AhHk-146)

Location 3 consists of a small pre-contact Aboriginal lithic scatter of five artifacts. Three pieces of chipping detritus and two utilized flakes were collected, all of which are manufactured from Kettle Point chert. These artifacts are temporally non-diagnostic except for the fact that they were produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AhHk-146.

4.4 Location 4

Location 4 consists of a single pre-contact Aboriginal end scraper. This scraper is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-





contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.5 Location 5 (AhHk-139)

Location 5 (AhHk-139) consists of a large pre-contact Aboriginal lithic scatter, from which 32 artifacts were collected. The collected assemblage includes 22 fragments of chipping detritus, five bifaces, two scrapers and two utilized flakes manufactured from Kettle Point chert, and one projectile point manufactured from Onondaga chert.

Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. However, the projectile point recovered is temporally diagnostic, and has been identified as a late Paleo-Indian Hi-Lo point dating to *circa* 10470-8560 B.C.

The archaeological survey documented a discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by Paleo-Indian peoples in Ontario. This Paleo-Indian find, in addition to the accompanying lithics scatter of over 10 artifacts, lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(3) of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AhHk-139.

4.6 Location 6

Location 6 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This utilized tertiary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.7 Location 7 (AhHk-140)

The artifacts collected during the Stage 2 assessment of Location 7 (AhHk-140) represent a scatter of approximately 50 fragments of predominantly late-19th century Euro-Canadian domestic debris – artifacts such as ironstone, bottle glass and porcelain fragments. Sixteen artifacts were collected from the surface including 15 domestic items and a single equestrian artifact – a double throat sleigh bell dated to post-1880. The most common types of ceramic artifacts recovered from Location 7 were mid-to-late 19th century ironstone and the assemblage also includes three diagnostic glass finishes that date to post-1850.





Spatially, Location 7 (AhHk-140) is located on Lot 14, Concession 16, in the Geographic Township of Stephen, Huron County, Ontario. John McCormick is listed as owning this portion of the lot on the 1879 map of the Township of Stephen. The location is situated in the southeastern tip of this lot where a house is indicated. The 1879 mapping also shows that the lot has been subdivided and there is another house indicated to the north of Location 7 (AhHk-140). The presence of over 20 artifacts dating the period of use to the late 19th century as well as the presence of two homesteads within the vicinity on the historic mapping, lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-140.

4.8 Location 8

Location 8 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This secondary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.9 Location 9

Location 2 consists of a single pre-contact Aboriginal biface manufactured from Kettle Point chert. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.10 Location 10

Location 10 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This secondary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.





4.11 Location 11 (AhHj-4)

The artifacts collected during the Stage 2 assessment of Location 11 (AhHj-4) represent a scatter of approximately 30 fragments of predominantly mid-19th century Euro-Canadian domestic debris. Seven fragments of whiteware ceramic were collected for analysis.

Spatially, Location 11 (AhHj-4) is located on Lot 19, Concession 9, in the Geographic Township of Stephen, Huron County, Ontario. Moses Amy is listed as owning this portion of the lot on the 1879 map of the Township of Stephen. The location is situated in the southeastern tip of this lot and a house is indicated to the north of the location. The presence of over 20 artifacts dating the period of use to the mid-19th century as well as the presence of a homestead within the vicinity lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-4.

4.12 Location 12

Location 12 consists of two pieces of pre-contact Aboriginal lithic chipping detritus. The small assemblage consists of one primary and one secondary flake, both manufactured from Kettle Point chert. These artifacts are temporally non-diagnostic except for the fact that they were produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.13 Location 13 (AiHj-10)

Location 13 (AiHj-10) consists of a small scatter of pre-contact Aboriginal chipping detritus and fire-cracked rock. Six pieces of secondary chipping detritus manufactured from Kettle Point chert were collected during the Stage 2 assessment. These artifacts are temporally non-diagnostic except for the fact that they were produced by pre-contact Aboriginal people.

The archaeological survey documented a discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by Aboriginal peoples in Ontario. The presence of fire-cracked rock, in addition to the accompanying lithic scatter, lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(3) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AiHj-10.





4.14 Location 14

Location 14 consists of one piece of pre-contact Aboriginal lithic chipping detritus and one biface. The chipping detritus is a tertiary flake manufactured from Kettle Point chert, and the biface is manufactured from Onondaga chert. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.15 Location 15 (AiHj-17)

Location 15 (AiHj-17) consists of an isolated projectile point. This incomplete projectile point is manufactured from Kettle Point chert. It is temporally diagnostic and has been identified as an Early Archaic Kirk/Nettling corner-notched point, a point type which dates to *circa* 8600-8000 B.C. (Ellis et al. 1990:73). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1b(iii) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AiHj-17.

4.16 Location 16 (AhHj-5)

The artifacts collected during the Stage 2 assessment of Location 16 (AhHj-5) represent a scatter of approximately 60 fragments of predominantly mid-to-late19th century Euro-Canadian domestic debris. Fifty-four artifacts were collected from the surface including 48 domestic, four personal items, and one fragment of structural remains and metal respectively. Ceramics present in the domestic assemblage include ironstone and whitewares. There is also a white clay pipe stem with the marking of Bannerman of Montreal, operational from 1858 to 1907, in the artifact assemblage.

Spatially, Location 16 (AhHj-5) is located on Lot 7, Concession 12, in the Geographic Township of Stephen, Huron County, Ontario. J. Gannon is listed as owning this portion of the lot on the 1879 map of the Township of Stephen. The location is situated in the southwestern portion of this subdivided lot where houses are indicated to the north and south of the location. The presence of over 20 artifacts dating the period of use to the mid-to-late 19th century as well as the presence of two homesteads within the vicinity on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-5.





4.17 **Location 17**

Location 17 consists of a single pre-contact Aboriginal bifacially worked lithic tool. The biface is manufactured from Dundee chert. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.18 Location 18 (AiHj-11)

Location 18 (AiHj-11) consists of an isolated projectile point. This incomplete projectile point is manufactured from Onondaga chert. It is temporally diagnostic and has been identified as an Early Archaic Kirk/Nettling corner-notched point, a point type which dates to *circa* 8600-8000 B.C. (Ellis et al. 1990:73). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1b(iii) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AiHj-11.

4.19 Location 19 (AiHj-12)

Location 19 (AiHj-12) consists of three pieces of pre-contact Aboriginal lithic chipping detritus and a single projectile point. The three lithic flakes are all tertiary and are manufactured from Kettle Point chert. The projectile point is broken and has been utilized and repurposed. It is manufactured from Kettle Point chert, and due to its damaged state, is not temporally diagnostic.

The archaeological survey documented a discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by Aboriginal peoples in Ontario. The presence of a formal tool, in addition to the accompanying lithic scatter within a 10 metre radius, lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(3) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AiHj-12.

4.20 Location 20 (AhHk-141)

Location 20 (AhHk-141) consists of an isolated projectile point. This broken, retouched projectile point is manufactured from Kettle Point chert. It is temporally diagnostic and has been identified as a Middle Archaic Brewerton corner-notched point, a point type which dates to *circa* 6000-2500 B.C. (Ellis et al. 2009:807-811). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact





Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-141.

4.21 Location 21 (AhHk-142)

The artifacts collected during the Stage 2 assessment of Location 21 (AhHk-142) represent a scatter of approximately 50 fragments of predominantly late-19th century Euro-Canadian domestic debris. Sixteen artifacts were collected from the surface including 15 domestic and a single fragment of recent material. Ceramics present in the domestic assemblage include ironstone and porcelain. There is also a fragment of ironstone bearing a makers mark of Mellor, Taylor and Company that dates from 1880 to 1904. Diagnostic glass in the assemblage also includes a fragmentary lightning stopper from a canning jar – likely post-1880.

Spatially, Location 21 (AhHk-142) is located on Lot 16 in the Concession Abutting on River aux Sables, in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning this lot on the 1879 map of the Township of Stephen. The Canada Company was a large British land development company, incorporated in 1825 to colonize Upper Canada. The Company assisted emigrants by providing safe transportation with affordable fares, affordable land and provided implements and tools to new emigrants. Upper Canada sold the company 10,000 km² of land for £341 000 pounds. Slightly less than half of the land that was purchased comprised what would become the Huron Tract, located on the eastern shore of Lake Huron, the remainder, located in other areas of Upper Canada, becoming Clergy reserves. The company surveyed, subdivided and improved this area for settlement with roads, mills and schools. The company was finally dissolved in 1953 (Lee 2004).

The location is situated in the eastern portion of this lot and there are no structures indicated. The presence of over 20 artifacts dating the period of use to the late- 19th century as well as the lots historic association with the Canada Company lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-142.

4.22 Location 22

Location 22 consists of a single pre-contact Aboriginal bifacially worked lithic tool. The biface is fragmentary and is manufactured from Kettle Point chert, and appears to be the broken tip of a projectile point that was retouched. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-





contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.23 Location 23 (AiHj-13)

Location 23 (AiHj-13) consists of an isolated projectile point. This incomplete and retouched projectile point is manufactured from Kettle Point chert. The point is extremely fragmentary, and as a result is not temporally diagnostic. The archaeological survey conducted has resulted in the documentation of a spatially discrete precontact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AiHj-13.

4.24 Location 24 (AhHj-7)

Location 24 (AhHj-7) consists of a small pre-contact Aboriginal lithic scatter, from which three artifacts were collected. The collected assemblage includes two bifaces and one projectile point, all manufactured from Onondaga chert.

Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. However, the projectile point recovered is temporally diagnostic, and has been identified as a Middle Archaic Brewerton side-notched point, *circa* 3780-3200 B.C. (Ellis et al. 2009:807-811).

The archaeological survey documented a discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by Aboriginal peoples in Ontario. The presence of one diagnostic artifact, in addition to two formal tools in a discrete area lends cultural heritage value or interest to the site. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i)(1) of the Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport and has been assigned Borden number AhHi-7.

4.25 **Location 25**

Location 25 consists of a single pre-contact Aboriginal bifacially worked lithic tool. The biface is fragmentary and is manufactured from Onondaga chert, and appears to be the broken tip of a projectile point. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.





4.26 Location 26 (AiHj-14)

Location 26 (AiHj-14) consists of a small scatter of nine pieces of pre-contact Aboriginal lithic material, from which a retouched flake and a scraper were collected. The retouched flake is manufactured from Haldimand chert and is worked on two edges. The scraper is manufactured from Haldimand chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AiHj-14.

4.27 Location 27 (AhHj-8)

Location 27 (AhHj-8) consists of an isolated projectile point. This broken projectile point is manufactured from Haldimand chert. It is temporally diagnostic and has been identified as a late Early Archaic Bifurcate point, a point type which dates to *circa* 8900-8000 B.P. (Ellis et al. 2009:801-803). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1b(iii) of the *Standards* and *Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest.. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-8.

4.28 Location 28 (AhHk-143)

The artifacts collected during the Stage 2 assessment of Location 28 (AhHk-143) represent a scatter of approximately 60 fragments of predominantly mid-to-late 19th century Euro-Canadian domestic debris. Ten artifacts were collected from the surface including nine fragments of ceramic and a single fragment of bottle glass. Ceramics present in the domestic assemblage include ironstone and whiteware.

Spatially, Location 28 (AhHk-143) is located on Lot 13 in the Concession Abutting on River aux Sables, in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the eastern portion of this lot and there are no structures indicated. The presence of over 20 artifacts dating the period of use to the mid-to-late 19th century as well as the lots historic association with the Canada Company lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-143.





4.29 Location 29

Location 29 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This secondary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.30 **Location 30**

Location 30 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This secondary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.31 Location 31 (AhHk-144)

Location 31 (AhHk-144) consists of an isolated projectile point. This broken projectile point is manufactured from Onondaga chert. It is temporally diagnostic and has been identified as a Middle Archaic Brewerton side-notched point, *circa* 3780-3200 B.C. (Ellis et al. 2009:807-811). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-144.

4.32 **Location 32**

Location 32 consists of a single pre-contact Aboriginal bifacially worked lithic tool. The biface is fragmentary and is manufactured from Kettle Point chert, is broken and displays potlidding from fire damage. Bifacially worked lithic tools were common tool kit accessories in southwestern Ontario from the first post-glacial occupations until they were eventually phased out by European manufactured items. For this reason, tools such as these cannot help place the archaeological site within a specific time period or be assigned to a specific cultural group. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.





4.33 Location 33 (AhHk-145)

The artifacts collected during the Stage 2 assessment of Location 33 (AhHk-145) represent a scatter of approximately 100 artifacts spanning the 19th century. Twenty-three artifacts were collected from the surface including 21 domestic items, as well as one personal item and one fragment of recent material. Ceramics present in the domestic assemblage are largely ironstone, and there is a fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site. Also collected was a percussion cap firearm mechanism with a manufacturing date range of 1838 to 1870.

Spatially, Location 33 (AhHk-145) is located on Lot 12 in the Concession Abutting on River aux Sables, in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the eastern portion of this lot and there are no structures indicated. The presence of over 20 artifacts spanning the 19th century as well as the lot's historic association with the Canada Company lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-145.

4.34 Location 34 (AhHj-10)

The artifacts collected during the Stage 2 assessment of Location 34 (AhHj-10) represent a scatter of approximately 70 artifacts spanning the 19th century. Forty-five artifacts were collected from the surface including 38 domestic items, as well as four personal items and three fragments of structural material. Ceramics present in the domestic assemblage are largely ironstone and whiteware, and there is a fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site. There is also a white clay pipe stem with the marking of Bannerman of Montreal, operational from 1858 to 1907, in the artifact assemblage.

Spatially, Location 34 (AhHj-10) is located on Lot 11, Concession 14, in the Geographic Township of Stephen, Huron County, Ontario. D. Collins is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the southeastern tip of this lot where a house is indicated. The 1879 mapping also shows another house indicated to the west of Location 34 (AhHj-10). The presence of over 20 artifacts dating the period of use to the late 19th century as well as the presence of two homesteads within the vicinity on the historic mapping, lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-10.

4.35 Location 35 (AhHj-9)

Location 35 (AhHj-9) consists of an isolated projectile point. This incomplete projectile point is manufactured from Onondaga chert. It is temporally diagnostic and has been identified as an Early Woodland Meadowood point, a point type which dates to *circa* 1000-500 B.C. (Spence et al. 1990:128-137; Ritchie 1971:35, 89). The





archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-9.

4.36 Location 36 (AhHk-147)

The artifacts collected during the Stage 2 assessment of Location 36 (AhHk-147) represent a scatter of approximately 200 artifacts spanning the 19th century. Fifty-six artifacts were collected from the surface including 50 domestic items, as well as five structural items and one faunal specimen. Ceramics present in the domestic assemblage are largely ironstone, with an isolated fragment of creamware dating to the early 19th century. Additionally, there are two fragments of black glass in the assemblage that may indicate pre-1860 occupation of the site.

Spatially, Location 36 (AhHk-147) is located on Lot 11, Concession 18, in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning a portion of this lot on the 1879 map of the Township of Stephen. The location is situated in the southeastern corner of the lot and there are no structures indicated. The lot lies to the northwest of the town of Shipka. The presence of over 20 artifacts spanning the 19th century as well as the lot's historic association with the Canada Company lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-147.

4.37 Location 37 (AhHj-11)

The artifacts collected during the Stage 2 assessment of Location 37 (AhHj-11) represent a scatter of approximately 300 artifacts spanning the 19th century. Sixty-six artifacts were collected from the surface including 53 domestic items, as well as six structural items, four personal items, two pieces of recent material and one faunal specimen. Ceramics present in the domestic assemblage are largely ironstone and utilitarian earthenware, and there is a fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site.

Spatially, Location 37 (AhHj-11) is located on Lot 21, Concession 9, in the Geographic Township of Stephen, Huron County, Ontario. S. Brockenshire is listed as owning a portion of this lot on the 1879 map of the Township of Stephen. The location is situated in the southeastern corner of this lot where a house is indicated. The 1879 mapping also shows two more houses indicated to the northeast and southeast of Location 34, respectively. In addition, a church and a schoolhouse are indicated to the southeast of this location. The presence of over 20 artifacts dating the period of use to the late 19th century as well as the presence of two homesteads and other infrastructure within the vicinity on the historic mapping, lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of





Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-11.

4.38 Location 38 (AhHk-148)

The artifacts collected during the Stage 2 assessment of Location 38 (AhHk-148) represent a scatter of approximately 300 artifacts spanning the 19th century, with some instances of pre-contact Aboriginal material. Ninety-four artifacts were collected from the surface including 86 domestic items, as well as six structural items, one fragment of recent material and one formal pre-contact Aboriginal lithic tool. Ceramics present in the domestic assemblage are largely ironstone.

Spatially, Location 38 (AhHk-148) is located on Lot 15 in the Concession Abutting on River aux Sables, in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the northeastern corner of this lot, and there are two houses indicated to the southeast. The presence of over 20 artifacts spanning the 19th century, the presence of pre-contact Aboriginal lithic material, the lot's historic association with the Canada Company and its proximity to two homesteads, lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHk-148.

4.39 Location 39 (AhHj-12)

The artifacts collected during the Stage 2 assessment of Location 39 (AhHj-12) represent a scatter of approximately 500 artifacts spanning the 19th century, with some instances of pre-contact Aboriginal material. One hundred and thirty-eight artifacts were collected from the surface including 95 domestic items, as well as 16 structural items, 16 personal items, six fragments of pre-contact Aboriginal lithic chipping detritus, four pieces of faunal remains and one fragment of recent material. Ceramics present in the domestic assemblage are largely ironstone and utilitarian earthenware, with an isolated fragment of creamware dating to the early 19th century. In addition, there is a fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site, and two shell buttons that may indicate a pre-1840 occupation.

Spatially, Location 39 (AhHj-12) is located on Lot 4, Concession 10, in the Geographic Township of Stephen, Huron County, Ontario. N. Clark is listed as owning a portion of this lot on the 1879 map of the Township of Stephen. The location is situated in the southwestern corner of this lot where a house is indicated. The presence of over 20 artifacts dating the period of use to the late 19th century as well as the presence of a homestead within the vicinity on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-12.





4.40 Location 40

Location 40 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This retouched flake is manufactured from Kettle Point chert, may have been used as a perforator, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.41 Location 41

Location 41 consists of a small scatter of five pieces of pre-contact Aboriginal lithic material, all of which were retained for laboratory analysis. This assemblage includes four pieces of chipping detritus (two manufactured from Flint Ridge chalcedony, one from Kettle Point, and one from Onondaga chert) and one retouched flake worked near its proximal end manufactured from Kettle Point chert. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.42 Location 42

Location 42 consists of an isolated pre-contact Aboriginal celt. This celt is manufactured from groundstone technology. Celts are similar to axes but lack the groove and were hafted with the bit perpendicular to the axis of the handle, rather than paralleling it, as with an axe. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.43 Location 43 (AhHj-13)

The artifacts collected during the Stage 2 archaeological assessment of Location 43 (AhHj-13) represent a scatter of approximately 500 artifacts spanning the 19th century, with some instances of pre-contact Aboriginal material. Twenty-five artifacts were collected from the surface including 22 domestic items, as well as one structural item, one fragment of recent material and one pre-contact Aboriginal groundstone tool. Ceramics present in the domestic assemblage are largely ironstone. Additionally, a fragment of rough-tempered hand struck brick was recovered, which may suggest early 19th century occupation of this location.

Spatially, Location 43 (AhHj-13) is located on Lot 13, Concession 7, in the Geographic Township of Stephen, Huron County, Ontario. George Brown is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the northeastern corner of this lot, with a house indicated just to the south. This location is situated north of the town of Crediton. The presence of over 20 artifacts dating the period of use to





the late 19th century and the presence of pre-contact Aboriginal material, as well as the presence of a homestead within the vicinity on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHi-13.

4.44 Location 44 (AhHj-14)

The artifacts collected during the Stage 2 archaeological assessment of Location 44 (AhHj-14) represent a scatter of approximately 80 artifacts spanning the 19th century. Twenty-nine artifacts were collected from the surface including 27 domestic items, as well as two personal items. Ceramics present in the domestic assemblage are largely ironstone.

Spatially, Location 44 (AhHj-14) is located on Lot 10, Concession 14, in the Geographic Township of Stephen, Huron County, Ontario. V.J. and J Ratz are listed as owning this lot on the 1879 map of the Township of Stephen. J. Ratz was known to have owned a saw mill on this lot, and the mill itself is indicated to the southwest of Location 44 (AhHj-14) on the historic map. The location is situated in the northwestern corner of the lot where a house is indicated, and is southwest of the town of Khiva. Additionally, there are three houses indicated just to the east of this location. The presence of over 20 artifacts dating the period of use to the late 19th century, as well as the presence of several homesteads and a mill within the vicinity on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-14.

4.45 Location 45 (AhHj-15)

The artifacts collected during the Stage 2 archaeological assessment of Location 45 (AhHj-15) represent a scatter of approximately 80 artifacts spanning the 19th century. Thirty-eight artifacts were collected from the surface including 36 domestic items, as well as one structural item and one fragment of recent material. Ceramics present in the domestic assemblage are largely ironstone. In addition, there is a fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site.

Spatially, Location 45 is located on Lot 9, Concession 14 (AhHj-15) in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the western section of this lot, and there is a house indicated to the north. Location 45 (AhHj-15) is also located southwest of the town of Khiva. The presence of over 20 artifacts spanning the 19th century, the lot's historic association with the Canada Company and its proximity to a homestead on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario





2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-15.

4.46 Location 46 (AhHj-16)

The artifacts collected during the Stage 2 assessment of Location 46 (AhHj-16) represent a scatter of approximately 80 artifacts spanning the 19th century. Twenty-nine artifacts were collected from the surface including 27 domestic items, as well as two structural items. Ceramics present in the domestic assemblage include ironstone, utilitarian earthenware and semi-porcelain. In addition, the assemblage includes two mid-to-late 19th century bottle finishes (i.e. one small mouth external thread finish and one crown finish).

Spatially, Location 46 (AhHj-16) is located on Lot 6, Concession 14 in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the southeastern section of this lot, and is northwest of the town of Mount Carmel. The presence of over 20 artifacts spanning the 19th century and the lot's historic association with the Canada Company lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-16.

4.47 Location 47 (AhHj-17)

The artifacts collected during the Stage 2 archaeological assessment of Location 47 (AhHj-17) represent a scatter of approximately 100 artifacts spanning the 19th century. Forty-nine artifacts were collected from the surface including 45 domestic items, as well as two structural items and two fragments of recent material. Ceramics present in the domestic assemblage are largely ironstone and utilitarian earthenware. In addition, the assemblage includes several mid-to-late 19th century bottle finishes (including a wide mouth external thread finish, a blob finish and a collared ring finish).

Spatially, Location 47 (AhHj-17) is located on Lot 14, Concession 7, in the Geographic Township of Stephen, Huron County, Ontario. T. Fahner is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated in the western end of the lot, and is northwest of the town of Crediton. The presence of over 20 artifacts dating the period of use to the mid-to- late 19th century lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-17.

4.48 Location 48 (AhHj-18)

The artifacts collected during the Stage 2 archaeological assessment of Location 48 (AhHj-18) represent a scatter of approximately 150 artifacts spanning the 19th century, with some instances of pre-contact Aboriginal





material. Fifty-nine artifacts were collected from the surface including 51 domestic items, as well as five structural items, one personal item, one metal item and one fragment of pre-contact Aboriginal lithic chipping detritus. Ceramics present in the domestic assemblage are largely ironstone and whiteware. In addition, the assemblage includes two mid-to-late 19th century patent/extract bottle finishes.

Spatially, Location 48 (AhHj-18) is located on Lot 4, Concession 9, in the Geographic Township of Stephen, Huron County, Ontario. N. Clark is listed as owning a portion of this lot on the 1879 map of the Township of Stephen. The location is situated in the eastern end of this lot, south of where a house is indicated. The presence of over 20 artifacts dating the period of use to the late 19th century as well as the presence of a homestead within the vicinity on the historic mapping and the presence of Pre-Contact Aboriginal lithic material lend cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-18.

4.49 Location 49 (AhHj-19)

The artifacts collected during the Stage 2 assessment of Location 49 (AhHj-19) represent a scatter of approximately 250 artifacts spanning the 19th century. Eighty-eight artifacts were collected from the surface including 79 domestic items, as well as six structural items, two personal items and one faunal specimen. Ceramics present in the domestic assemblage are largely ironstone and whiteware. In addition, there are two fragments of black glass in the assemblage that may indicate pre-1860 occupation of the site.

Spatially, Location 49 (AhHj-19) is located on Lot 6, Concession 16, in the Geographic Township of Stephen, Huron County, Ontario. The private chartered Canada Company is listed as owning a portion of this lot on the 1879 map of the Township of Stephen. The location is situated in the southeastern section of this lot with a house located to the north, and is southeast of the town of Shipka. The presence of over 20 artifacts spanning the 19th century, the lot's historic association with the Canada Company and its proximity to a homestead on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned AhHj-19.

4.50 Location 50 (AhHj-20)

The artifacts collected during the Stage 2 assessment of Location 50 (AhHj-20) represent a scatter of approximately 225 artifacts spanning the 19th century. One hundred and fifteen artifacts were collected from the surface including 103 domestic items, as well as six personal items, five structural items and one fragment of recent material. Ceramics present in the domestic assemblage are largely ironstone and whiteware. In addition, a fragment of Victorian Majolica ware is also included in the assemblage, suggesting an occupation date from the mid-to-late 19th century. The assemblage also includes several mid-to-late 19th century bottle finishes,





including several patent/extract finishes, blob finishes, and a small mouth threaded lug-style finish dating to post-1906.

Spatially, Location 50 (AhHj-20) is located on Lot 11, Concession 13, in the Geographic Township of Stephen, Huron County, Ontario. George Weaver is listed as owning a portion of this lot on the 1879 map of the Township of Stephen. The location is situated in the northeastern corner of the lot where a house is indicated, and is just northeast of the Khiva town center. Additionally, the historic mapping indicates three houses southeast of Location 50 (AhHj-20), with another two houses to the north. The presence of over 20 artifacts dating the period of use to the mid-to- late 19th century as well as this location's proximity to several homesteads as indicated on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned AhHj-20.

4.51 Location 51 (AhHj-21)

Location 51 (AhHj-21) consists of six pieces of pre-contact Aboriginal lithic chipping detritus, one retouched lithic flake and a single projectile point. The flakes are all manufactured from Kettle Point chert, and five are secondary, one is shatter and one is broken. The projectile point is manufactured from Flint Ridge chalcedony. It is temporally diagnostic and has been identified as a Middle Archaic Brewerton side-notched point, *circa* 3780-3200 B.C. (Ellis et al. 2009:807-811). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1a(i) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-21.

4.52 Location 52 (AhHj-22)

Location 52 (AhHj-22) consists of three pieces of pre-contact Aboriginal lithic chipping detritus and a single projectile point. The three lithic are all manufactured from Kettle Point chert. The projectile point is broken and has been utilized and repurposed, and is also manufactured from Kettle Point chert. It is temporally diagnostic and has been identified as a Middle Archaic Brewerton side-notched point, *circa* 3780-3200 B.C. (Ellis et al. 2009:807-811). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AiHj-12.





4.53 **Location 53**

Location 53 consists of a single pre-contact Aboriginal blank. This blank is incomplete, is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.54 Location 54 (AhHj-23)

Location 54 (AhHj-23) consists of an isolated projectile point. This incomplete projectile point is manufactured from Kettle Point chert. It is temporally diagnostic and has been identified as an Early Archaic Kirk/Nettling corner-notched point, a point type which dates to *circa* 8600-8000 B.C. (Ellis et al. 1990:73). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. The identified site fulfills the criteria for a Stage 3 archaeological investigation, as per Section 2.2 Standard 1b(iii) of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHj-23.

4.55 Location 55 (AiHj-18)

Location 55 (AiHj-18) consists of an isolated projectile point. This incomplete projectile point is manufactured from Kettle Point chert. It is temporally diagnostic and has been identified as a Small Point Late Archaic Innes point, a point type which dates to *circa* 1500-1400 B.C. (Ellis et al. 1990:819-820). The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned AiHj-18.

4.56 Location 56 (AhHj-24)

The artifacts collected during the Stage 2 assessment of Location 56 (AhHj-24) represent a scatter of approximately 150 artifacts spanning the 19th century. One hundred and five artifacts were collected from the surface including 100 domestic items, as well as six personal items, four structural items and one faunal specimen. Ceramics present in the domestic assemblage are largely whiteware and ironstone. In addition, one of the ironstone fragments recovered displays an almost complete T. Furnival and Sons maker's mark, which can be dated between 1878 and 1890. Additionally, there is one fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site.





Spatially, Location 56 (AhHj-24) is located on Lot 15, Concession 15, in the Geographic Township of Stephen, Huron County, Ontario. Thomas Lamport is listed as owning a portion of this lot on the 1879 map of the Township of Stephen. The location is situated on the northwestern side of the lot where a house is indicated. The presence of over 20 artifacts dating the period of use to the mid-to- late 19th century as well as this location's proximity to a homestead as indicated on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned AhHj-24.

4.57 Location 57 (AhHj-25)

The artifacts collected during the Stage 2 archaeological assessment of Location 57 (AhHj-25) represent a scatter of approximately 125 artifacts spanning the 19th century. Ninety-five artifacts were collected from the surface including 87 domestic items, as well as four structural items, two personal items, one equestrian item and one faunal specimen. Ceramics present in the domestic assemblage are largely whiteware and ironstone. The single equestrian artifact in the assemblage, a sleigh bell manufactured by R. Wells and Sons, can be dated to pre-1826.

Spatially, Location 57 (AhHj-25) is located on Lot 9, Concession 8, in the Geographic Township of Stephen, Huron County, Ontario. J. Marshall is listed as owning this lot on the 1879 map of the Township of Stephen. The location is situated on the western end of the lot where a house is indicated, and is southwest of the town of Crediton. Additionally, two more houses are indicated to the west of this. The presence of over 20 artifacts dating the period of use to the mid-to-late 19th century as well as this location's proximity to several homesteads as indicated on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned AhHj-25.

4.58 Location 58

Location 58 consists of a single piece of pre-contact Aboriginal lithic chipping detritus. This secondary flake is manufactured from Kettle Point chert, and is temporally non-diagnostic except for the fact that it was produced by pre-contact Aboriginal people. The archaeological survey conducted has resulted in the documentation of a spatially discrete pre-contact Aboriginal location and adds to the body of knowledge concerning land use by pre-contact Aboriginal peoples in Ontario. However, given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.





4.59 **Location 59**

The artifacts collected during the Stage 2 assessment of Location 59 represent a small scatter of 16 fragments of predominantly late-19th century Euro-Canadian domestic. All sixteen artifacts were collected from the surface including 11 domestic and five structural artifacts. The location yielded a small assemblage of plain whiteware, with the rest of the scatter composed of mostly post-1850 window glass and 20th century bottle glass.

Spatially, Location 59 is located on Lot 6, Concession 13, in the Geographic Township of Hay, Huron County, Ontario. J. Thon is listed as owning this portion of the lot on the 1879 map of the Township of Hay. Although the location is situated where a house is indicated in the historic mapping, the size and composition of the scatter suggests that it is the remnants of a site that is no longer there, perhaps relocated by road widening. Given the limited size of the artifact collection, the cultural heritage value or interest of the site is considered to be sufficiently documented.

4.60 Location 60 (AhHi-5)

The artifacts collected during the Stage 2 archaeological assessment of Location 60 (AhHi-5) represent a scatter of over 100 artifacts spanning the 19th century. One hundred and three artifacts were collected from the surface including 97 domestic items, as well as three faunal remains, two personal items and one structural item. Ceramics present in the domestic assemblage are largely ironstone and whiteware. In addition, two of the ironstone fragments in the assemblage display royal coats of arms that date to post-1837.

Spatially, Location 60 (AhHi-5) is located on Lot 6, Concession 8, in the Geographic Township of Usborne, Huron County, Ontario. T. Kyle Sr. is listed as owning a portion of this lot on the 1879 map of the Township of Usborne. The location is situated on the southeastern end of the lot where a house is indicated. The presence of over 20 artifacts dating the period of use to the mid-to-late 19th century as well as this location's proximity to a homestead as indicated on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHi-5.

4.61 Location 61 (AhHi-6)

The artifacts collected during the Stage 2 assessment of Location 61 (AhHi-6) represent an assemblage of artifacts spanning the 19th century. One hundred and eight artifacts were collected during the excavation of test pits and a 1 x 1 metre test unit, including 56 domestic items, as well as 35 structural items, nine metal items, five faunal remains and three personal items. Ceramics present in the domestic assemblage are largely ironstone and utilitarian ceramics. In addition, one of the ironstone fragments recovered displays an almost complete Johnson Brothers maker's mark, which can be dated to *circa* 1883.

Spatially, Location 61 is located on Lot 6 (AhHi-6), Concession 8, in the Geographic Township of Usborne, Huron County, Ontario. T. Kyle Sr. is listed as owning a portion of this lot on the 1879 map of the Township of Usborne. The location is situated on the southeastern side of the lot, just west of where a house is indicated. The





presence of over 20 artifacts dating the period of use to the mid-to- late 19th century as well as this location's proximity to a homestead as indicated on the historic mapping lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned Borden number AhHi-6.

4.62 Location 62 (AhHi-7)

The artifacts collected during the Stage 2 assessment of Location 62 (AhHi-7) represent a scatter of approximately 200 artifacts spanning the 19th century, with a small pre-contact Aboriginal component. Thirty-two artifacts were collected from the surface including 29 domestic items, as well as two personal items and one pre-contact Aboriginal scraper. Ceramics present in the domestic assemblage are largely whiteware and ironstone. In addition, the assemblage includes two mid-to-late 19th century bottle finishes.

Spatially, Location 62 (AhHi-7) is located on Lot 7, Concession 1, in the Geographic Township of Usborne, Huron County, Ontario. Richard Atkinson is listed as owning this lot on the 1879 map of the Township of Usborne. The location is situated in the northwestern corner of this lot, where a house is indicated. The presence of over 20 artifacts dating the period of use to the late 19th century as well as the presence of a homestead within the vicinity on the historic mapping and the presence of pre-contact Aboriginal lithic material lends cultural heritage value or interest to the site. Based on these considerations, the artifacts identified fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), to further evaluate its cultural heritage value or interest. The site has been registered with the Ministry of Tourism, Culture and Sport, and has been assigned AhHi-7.

4.63 Preliminary Indication of Sites Possibly Requiring Stage 4 Archaeological Assessment

This preliminary indication of whether any site could eventually be recommended for Stage 4 archaeological assessment is required under the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) Section 7.8.3 Standard 2c. No firm recommendation for, or against, Stage 4 archaeological assessment will be made until the forthcoming Stage 3 archaeological assessment has been conducted. In addition, any sites recommended for Stage 3 archaeological assessment but not listed here could still require Stage 4 archaeological assessment pending the outcome of the Stage 3 field work. The following sites could be recommended for Stage 4 archaeological mitigation should the Stage 3 assessment produce such a determination (Table 141):





Table 141: Preliminary Indication of Sites Possibly Requiring Stage 4 Archaeological Assessment

Location	Borden Number	Affiliation	Probable Reason
7	AhHk-140	Historic Euro-Canadian	Portion of occupation could date prior to 1870
11	AhHj-4	Historic Euro-Canadian	Portion of occupation could date prior to 1870
16	AhHj-5	Historic Euro-Canadian	Portion of occupation could date prior to 1870
21	AhHk-142	Historic Euro-Canadian	Portion of occupation could date prior to 1870
28	AgHh-143	Historic Euro-Canadian	Portion of occupation could date prior to 1870
33	AgHk-145	Historic Euro-Canadian	Portion of occupation could date prior to 1870
34	AhHj-10	Historic Euro-Canadian	Portion of occupation could date prior to 1870
36	AhHk-147	Historic Euro-Canadian	Portion of occupation could date prior to 1870
37	AhHj-11	Historic Euro-Canadian	Portion of occupation could date prior to 1870
38	AhHk-148	Historic Euro-Canadian	Portion of occupation could date prior to 1870
39	AhHj-12	Historic Euro-Canadian	Portion of occupation could date prior to 1870
43	AhHj-13	Historic Euro-Canadian	Portion of occupation could date prior to 1870
44	AhHj-14	Historic Euro-Canadian	Portion of occupation could date prior to 1870
45	AhHj-15	Historic Euro-Canadian	Portion of occupation could date prior to 1870
46	AhHj-16	Historic Euro-Canadian	Portion of occupation could date prior to 1870
47	AhHj-17	Historic Euro-Canadian	Portion of occupation could date prior to 1870
48	AhHj-18	Historic Euro-Canadian	Portion of occupation could date prior to 1870
49	AhHj-19	Historic Euro-Canadian	Portion of occupation could date prior to 1870
50	AhHj-20	Historic Euro-Canadian	Portion of occupation could date prior to 1870
56	AhHj-24	Historic Euro-Canadian	Portion of occupation could date prior to 1870
57	AhHj-25	Historic Euro-Canadian	Portion of occupation could date prior to 1870
60	AhHi-5	Historic Euro-Canadian	Portion of occupation could date prior to 1870
61	AhHi-6	Historic Euro-Canadian	Portion of occupation could date prior to 1870
62	AhHi-7	Historic Euro-Canadian	Portion of occupation could date prior to 1870





5.0 RECOMMENDATIONS

The Stage 2 archaeological assessment of the NEEC Goshen Wind Energy Centre resulted in the identification of 62 archaeological sites, including 37 pre-contact Aboriginal, 20 historic Euro-Canadian and five multi-component. Recommendations for each location are found below.

5.1 Location 1

The Stage 2 assessment of Location 1 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 1**.

5.2 Location 2

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 2**.

5.3 Location 3

The Stage 2 assessment of Location 3 resulted in the recovery of five pre-contact Aboriginal artifacts consisting of three pieces of chipping detritus and two utilized flakes. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 3**.

5.4 Location 4

The Stage 2 assessment of Location 4 resulted in the recovery of pre-contact Aboriginal end scraper. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 4**.

5.5 Location 5 (AhHk-139)

The Stage 2 assessment of Location 5 (AhHk-139) revealed a spatially discrete cluster of pre-contact Aboriginal artifacts, 32 of which were collected for further analysis, including 22 fragments of chipping detritus, five bifaces, two scraper, two utilized flakes and one Paleo-Indian projectile point. Given the presence of over 10 pre-contact Aboriginal artifacts, including a Paleo-Indian projectile point, it is recommended that Location 7 be subject to





a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.6 Location 6

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 6**.

5.7 Location 7 (AhHk-140)

The Stage 2 assessment of Location 7 (AhHk-140) revealed a spatially discrete cluster of mid-to-late-19th century historic Euro-Canadian artifacts, 16 of which were collected for further analysis. This assemblage includes mid-to-late 19th century ironstone and three diagnostic bottle glass finishes that date to post-1850. As well, a single fragment of horse tack (a double throat sleigh bell dated to post-1880) was also collected. Given the presence of late-19th century material and the presence of a house indicated on the historic mapping, it is recommended that Location 7 (AhHk-140) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 7 (AhHk-140) should also be conducted as part of the Stage 3 assessment.

5.8 Location 8

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the





cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological** assessment is recommended for Location 8.

5.9 Location 9

The Stage 2 assessment of Location 2 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 9.**

5.10 Location 10

The Stage 2 assessment of Location 2 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 10**.

5.11 Location 11 (AhHj-4)

The Stage 2 assessment of Location 11 (AhHj-4) revealed a spatially discrete cluster of mid-to-late-19th century historic Euro-Canadian artifacts, seven of which were collected for further analysis. This assemblage includes a variety of whiteware ceramic decorative types. Given the presence of mid-19th century material and the presence of a house indicated on the historic mapping, it is recommended that Location 11 (AhHj-4) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 11 (AhHj-4) should also be conducted as part of the Stage 3 assessment.

5.12 Location 12

The Stage 2 assessment of Location 2 resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 12**.





5.13 Location 13 (AiHj-10)

The Stage 2 assessment of Location 13 (AiHj-10) identified a small scatter of pre-contact Aboriginal chipping detritus and fire-cracked rock. The survey resulted in the recovery of six pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of fire-cracked rock in addition to a lithics scatter, it is recommended that Location 13 (AiHj-10) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.14 Location 14

The Stage 2 assessment of Location 14 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 14.

5.15 Location 15 (AiHj-17)

The Stage 2 assessment of Location 15 (AiHj-17) resulted in the recovery of an isolated pre-contact Aboriginal Early Archaic Nettling/Kirk corner-notched projectile point. Given the presence of this isolated Early Archaic projectile point, it is recommended that Location 15 (AiHj-17) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.





5.16 Location 16 (AhHj-5)

The Stage 2 assessment of Location 16 (AhHj-5) revealed a spatially discrete cluster of approximately 60 mid-to-late-19th century historic Euro-Canadian artifacts, 54 of which were collected for further analysis. This assemblage includes 48 domestic, four personal items, and one fragment of structural remains and metal respectively. Ceramics present in the domestic assemblage include ironstone and whitewares. There is also a Bannerman of Montreal clay pipe stem dating from 1858 to 1907 in the artifact assemblage. Given the presence of mid-to-late19th century material and the presence of two houses in the vicinity of Location 16 indicated on the historic mapping, it is recommended that Location 16 (AhHj-5) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 16 (AhHj-5) should also be conducted as part of the Stage 3 assessment.

5.17 **Location 17**

The Stage 2 assessment of Location 17 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 17**.

5.18 Location 18 (AiHj-11)

The Stage 2 assessment of Location 18 (AiHj-11) resulted in the recovery of an isolated pre-contact Aboriginal recovery of an isolated pre-contact Aboriginal Early Archaic Nettling/Kirk corner-notched projectile point. Given the presence of this isolated Early Archaic projectile point, it is recommended that Location 18 (AiHj-11) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.





5.19 Location 19 (AiHj-12)

The Stage 2 assessment of Location 19 (AiHj-12) resulted in the recovery three pieces of pre-contact Aboriginal chipping detritus and a single projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of a miniature projectile point and a small lithics scatter within a discrete area, it is recommended that Location 19 (AiHj-12) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.20 Location 20 (AhHk-141)

The Stage 2 assessment of Location 20 (AhHk-141) resulted in the recovery of an isolated pre-contact Aboriginal Middle Archaic Brewerton corner-notched projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 20 (AhHk-141).

5.21 Location 21 (AhHk-142)

The Stage 2 assessment of Location 21 (AhHk-142) revealed a spatially discrete cluster of approximately 50 fragments of predominantly late-19th century historic Euro-Canadian artifacts, 16 of which were collected for further analysis. This assemblage includes 15 domestic artifacts and a single fragment of recent material. Ceramics present in the domestic assemblage include ironstone and porcelain. There is also a fragment of marked ironstone dating from 1880 to 1904 and a fragmentary glass lightning stopper likely post-1880. Given the presence of late-19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 21 (AhHk-142) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 21 (AhHk-142) should also be conducted as part of the Stage 3 assessment.





5.22 Location 22

The Stage 2 assessment of Location 22 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological** assessment is recommended for Location 22.

5.23 Location 23 (AiHj-13)

The Stage 2 assessment of Location 23 (AiHj-13) resulted in the recovery of an isolated pre-contact Aboriginal projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 23 (AiHj-13).**

5.24 Location 24 (AhHj-7)

The Stage 2 assessment of Location 24 (AhHj-7) identified a small pre-contact Aboriginal lithics scatter, from which two bifaces and one projectile point were recovered. The survey resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of a projectile point and two bifaces in a discrete area, it is recommended that Location 24 (AhHj-7) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.25 **Location 25**

The Stage 2 assessment of Location 25 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 25.**





5.26 Location 26 (AiHj-14)

The Stage 2 assessment of Location 26 (AiHj-14) identified a small pre-contact Aboriginal lithics scatter of nine artifacts, from which a retouched flake and a scraper were collected. The survey resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 26 (AiHj-14).

5.27 Location 27 (AhHj-8)

The Stage 2 assessment of Location 27 (AhHj-8) resulted in the recovery of an isolated pre-contact Aboriginal Early Archaic Bifurcate Base projectile point. recovery of an isolated pre-contact Aboriginal Early Archaic Nettling/Kirk corner-notched projectile point. Given the presence of this isolated Early Archaic projectile point, it is recommended that Location 27 (AhHj-8) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.28 Location 28 (AhHk-143)

The Stage 2 assessment of Location 28 (AhHk-143) revealed a spatially discrete cluster of approximately 60 fragments of predominantly mid-to-late 19th century historic Euro-Canadian artifacts, 10 of which were collected for further analysis. This assemblage includes nine fragments of ironstone and whiteware ceramic and a single fragment of bottle glass. Given the presence of mid-to-late 19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 28 (AhHk-143) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 28 (AhHk-143) should also be conducted as part of the Stage 3 assessment.





5.29 Location 29

The Stage 2 assessment of Location 29 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 29.

5.30 Location 30

The Stage 2 assessment of Location 30 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 30.

5.31 Location 31 (AhHk-144)

The Stage 2 assessment of Location 31 (AhHk-144) resulted in the recovery of an isolated pre-contact Aboriginal Middle Archaic Brewerton side-notched projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 31 (AhHk-144).

5.32 Location 32

The Stage 2 assessment of Location 32 resulted in the recovery of one pre-contact Aboriginal bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological** assessment is recommended for Location 32.

5.33 Location 33 (AhHk-145)

The Stage 2 assessment of Location 33 (AhHk-145) revealed a spatially discrete cluster of approximately 100 artifacts spanning the 19th century, 23 of which were collected for further analysis. This assemblage includes 21 domestic items, as well as one personal item and one fragment of recent material. Ceramics present in the domestic assemblage are ironstone, but there is a fragment of black glass in the assemblage that may indicate pre-1860 occupation of the site. Also collected was a percussion cap firearm mechanism with a manufacturing date range of 1838 to 1870. Given the presence of 19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 33 (AhHk-145) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism,





Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 33 (AhHk-145) should also be conducted as part of the Stage 3 assessment.

5.34 Location 34 (AhHj-10)

The Stage 2 assessment of Location 34 (AhHj-10) revealed a spatially discrete cluster of approximately 70 artifacts spanning the 19th century, 45 of which were collected for further analysis. This assemblage includes 38 domestic items, four personal items and three structural items. Ceramics present in the domestic assemblage include ironstone, whiteware, yellowware, stoneware and utilitarian earthenware. The assemblage also includes a fragment of black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material century as well as the presence of two homesteads within the vicinity on the historic mapping, it is recommended that Location 34 (AhHj-10) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 34 (AhHj-10) should also be conducted as part of the Stage 3 assessment.

5.35 Location 35 (AhHj-9)

The Stage 2 assessment of Location 35 (AhHj-9) resulted in the recovery of a single pre-contact Aboriginal Early Woodland Meadowood projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 35 (AhHj-9)**.

5.36 Location 36 (AhHk-147)

The Stage 2 assessment of Location 36 (AhHk-147) revealed a spatially discrete cluster of approximately 200+ artifacts spanning the 19th century, 56 of which were collected for further analysis. This assemblage includes 50 domestic items, one structural item and one organic item. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, Rockinghamware, semi-porcelain and creamware. The assemblage also includes two fragments of black bottle glass that may indicate pre-1860 occupation of the site. In addition, the assemblage includes one fragment of creamware, which also could indicate early 19th century





occupation. Given the presence of 19th century material and the historic association of the lot with the Canada Company, it is recommended that Location 36 (AhHk-147) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 36 (AhHk-147) should also be conducted as part of the Stage 3 assessment.

5.37 Location 37 (AhHj-11)

The Stage 2 assessment of Location 37 (AhHj-11) revealed a spatially discrete cluster of approximately 300+ artifacts spanning the 19th century, 66 of which were collected for further analysis. This assemblage includes 53 domestic items, six structural items, four personal items and one recent item. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, semi-porcelain and porcelain. The assemblage also includes one fragment of black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material as well as the presence of two homesteads and other infrastructure within the vicinity on the historic mapping, it is recommended that Location 37 (AhHj-11) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 37 (AhHj-11) should also be conducted as part of the Stage 3 assessment.

5.38 Location 38 (AhHk-148)

The Stage 2 assessment of Location 38 (AhHk-148) revealed a spatially discrete cluster of approximately 300+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 94 of which were collected for further analysis. This assemblage includes 93 Historic Euro-Canadian artifacts, including 86 domestic items, six structural items and one recent item. It also includes one pre-contact Aboriginal lithic item. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, porcelain and Rockinghamware. Given the presence of 19th century material and Aboriginal pre-contact material, along with the lot's historical associated with the Canada Company, **it is recommended that Location**





38 (AhHk-148) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 38 (AhHk-148) should also be conducted as part of the Stage 3 assessment.

5.39 Location 39 (AhHj-12)

The Stage 2 assessment of Location 39 (AhHj-12) revealed a spatially discrete cluster of approximately 600+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 138 of which were collected for further analysis. This assemblage includes 132 Historic Euro-Canadian artifacts, including 95 domestic items, 16 structural items, 16 personal items and one faunal item. It also includes six pre-contact Aboriginal lithic items. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, porcelain, semi-porcelain and creamware. The assemblage also includes one fragment black bottle glass that may indicate pre-1860 occupation of the site. In addition, the assemblage includes one fragment of creamware, which also could indicate early 19th century occupation. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location 39 (AhHj-12) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 39 (AhHj-12) should also be conducted as part of the Stage 3 assessment.

5.40 Location 40

The Stage 2 assessment of Location 40 resulted in the recovery of one piece of pre-contact Aboriginal chipping detritus and one bifacially worked lithic tool. Despite the intensification of survey intervals no additional artifacts





were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, no further archaeological assessment is recommended for Location 40.

5.41 Location 41

The Stage 2 assessment of Location 41 resulted in the recovery of four pieces of pre-contact Aboriginal chipping detritus and one retouched flake. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 41**.

5.42 **Location 42**

The Stage 2 assessment of Location 42 resulted in the recovery of an isolated pre-contact Aboriginal chipping celt. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 42**.

5.43 Location 43 (AhHj-13)

The Stage 2 assessment of Location 43 (AhHj-13) revealed a spatially discrete cluster of approximately 500+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 25 of which were collected for further analysis. This assemblage includes 24 Historic Euro-Canadian artifacts, including 22 domestic items, one structural item and one recent item. It also includes one pre-contact Aboriginal groundstone item. Ceramics present in the domestic assemblage include ironstone, whiteware, utilitarian earthenware and semi-porcelain. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location 43 (AhHj-13) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 43 (AhHj-13) should also be conducted as part of the Stage 3 assessment.





5.44 Location 44 (AhHj-14)

The Stage 2 assessment of Location 44 (AhHj-14) revealed a spatially discrete cluster of approximately 80 artifacts spanning the 19th century, 29 of which were collected for further analysis. This assemblage includes 27 domestic items and two personal items. Ceramics present in the domestic assemblage include ironstone, whiteware and stoneware. Given the presence of 19th century material as well as the presence of several homesteads and a mill within the vicinity on the historic mapping, it is recommended that Location 44 (AhHj-14) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 44 (AhHj-14) should also be conducted as part of the Stage 3 assessment.

5.45 Location 45 (AhHj-15)

The Stage 2 assessment of Location 45 (AhHj-15) revealed a spatially discrete cluster of approximately 80 artifacts spanning the 19th century, 38 of which were collected for further analysis. This assemblage includes 36 domestic items, one structural item and one recent item. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, semi-porcelain and porcelain. The assemblage also includes one fragment black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material and the lot's historic association with the Canada Company, **it is recommended that Location 45 (AhHj-15) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.**

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 45 (AhHj-15) should also be conducted as part of the Stage 3 assessment.

5.46 Location 46 (AhHj-16)

The Stage 2 assessment of Location 46 (AhHj-16) revealed a spatially discrete cluster of approximately 80 artifacts spanning the 19th century, 29 of which were collected for further analysis. This assemblage includes 27 domestic items and two structural items. Ceramics present in the domestic assemblage include ironstone,





whiteware, stoneware, utilitarian earthenware and semi-porcelain. Given the presence of 19th century material and the lot's historic association with the Canada Company, it is recommended that Location 46 (AhHj-16) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 46 (AhHj-16) should also be conducted as part of the Stage 3 assessment.

5.47 Location 47 (AhHj-17)

The Stage 2 assessment of Location 47 (AhHj-17) revealed a spatially discrete cluster of approximately 100+ artifacts spanning the 19th century, 49 of which were collected for further analysis. This assemblage includes 45 domestic items, two structural items and two recent items. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, semi-porcelain and creamware. The presence of creamware in the assemblage may indicate an early-19th century occupation of the site. The assemblage also includes a colourless glass bottle base with an open pontil mark, which may suggest an occupation date prior to 1855. Given the presence of 19th century material, it is recommended that Location 47 (AhHj-17) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 47 (AhHj-17) should also be conducted as part of the Stage 3 assessment.

5.48 Location 48 (AhHj-18)

The Stage 2 assessment of Location 48 (AhHj-18) revealed a spatially discrete cluster of approximately 150+ artifacts spanning the 19th century and including a small scatter of pre-contact Aboriginal artifacts, 59 of which were collected for further analysis. This assemblage includes 58 Historic Euro-Canadian artifacts, including 51 domestic items, five structural items and one personal item. It also includes one pre-contact Aboriginal lithic item. Ceramics present in the domestic assemblage include ironstone, whiteware and utilitarian earthenware. The assemblage also includes three fragments of black bottle glass that may indicate pre-1860 occupation of the





site. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location 48 (AhHj-18) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 48 (AhHj-18) should also be conducted as part of the Stage 3 assessment.

5.49 Location 49 (AhHj-19)

The Stage 2 assessment of Location 49 (AhHj-19) revealed a spatially discrete cluster of approximately 250 artifacts spanning the 19th century, 88 of which were collected for further analysis. This assemblage includes 79 domestic items, six structural items, two personal items and one faunal remain. Ceramics present in the domestic assemblage include ironstone, whiteware, stoneware, utilitarian earthenware, semi-porcelain, porcelain, redware and pearlware. The presence of pearlware in the assemblage may indicate an early-19th century occupation of the site. The assemblage also includes two fragments of black bottle glass that may indicate pre-1860 occupation of the site. Given the presence of 19th century material and the lot's historic association with the Canada Company, it is recommended that Location 49 (AhHj-19) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 49 (AhHj-19) should also be conducted as part of the Stage 3 assessment.

5.50 Location 50 (AhHj-20)

The Stage 2 assessment of Location 50 (AhHj-20) revealed a spatially discrete cluster of approximately 225 artifacts spanning the 19th century, 115 of which were collected for further analysis. This assemblage includes 103 domestic items, six personal items, five structural items and one recent item. Ceramics present in the domestic assemblage include ironstone, whiteware, utilitarian earthenware, yellowware, porcelain and Victorian





majolica. Given the presence of 19th century material as well as this location's proximity to several homesteads as indicated on the historic mapping, it is recommended that Location 50 (AhHj-20) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 50 (AhHj-20) should also be conducted as part of the Stage 3 assessment.

5.51 Location 51 (AhHj-21)

The Stage 2 assessment of Location 51 (AhHj-21) identified a sparse pre-contact Aboriginal scatter, from which five pieces of chipping detritus, a retouched flake and one Middle Archaic Brewerton projectile point were recovered. Despite the intensification of survey intervals no additional artifacts were recovered. Given the presence of one diagnostic artifact with more than one non-diagnostic artifact, it is recommended that Location 51 (AhHj-21) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil.

5.52 Location 52 (AhHj-22)

The Stage 2 assessment of Location 52 (AhHj-22) resulted in the recovery of two pieces of pre-contact Aboriginal chipping detritus and a single projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Due to the sparseness of the scatter, and given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 52 (AhHj-22)**.

5.53 Location 53

The Stage 2 assessment of Location 53 resulted in the recovery of a single pre-contact Aboriginal lithic blank. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 53**.





5.54 Location 54 (AhHj-23)

The Stage 2 assessment of Location 54 (AhHj-23) resulted in the recovery of a single pre-contact Aboriginal Early Archaic Nettling/Kirk corner-notched projectile point. Given the presence of this isolated Early Archaic projectile point, it is recommended that Location 54 (AhHj-23) be subject to a Stage 3 archaeological assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. A sample of units will be screen through three millimetre mesh. The Stage 3 assessment will also include engagement with First Nations groups expressing interest in the archaeological resources of the area.

5.55 Location 55 (AiHj-18)

The Stage 2 assessment of Location 55 (AiHj-18) resulted in the recovery of a single pre-contact Aboriginal Late Archaic Innes projectile point. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 55 (AiHj-18)**.

5.56 Location 56 (AhHj-24)

The Stage 2 assessment of Location 56 (AhHj-24) revealed a spatially discrete cluster of approximately 150 artifacts spanning the 19th century, 105 of which were collected for further analysis. This assemblage includes 100 domestic items, four structural items and one organic item. Ceramics present in the domestic assemblage include whiteware, ironstone, utilitarian earthenware, porcelain, semi-porcelain and Rockinghamware. Given the presence of 19th century material as well as this location's proximity to a homestead as indicated on the historic mapping, it is recommended that Location 56 (AhHj-24) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 56 (AhHj-24) should also be conducted as part of the Stage 3 assessment.





5.57 Location 57 (AhHj-25)

The Stage 2 assessment of Location 57 (AhHj-25) revealed a spatially discrete cluster of approximately 125 artifacts spanning the 19th century, 95 of which were collected for further analysis. This assemblage includes 87 domestic items, four structural items, two personal items, one equestrian item and one piece of faunal remains. Ceramics present in the domestic assemblage include whiteware, ironstone, utilitarian earthenware, porcelain and yellowware. Given the presence of 19th century material as well as this location's proximity to several homesteads as indicated on the historic mapping, it is recommended that Location 57 (AhHj-25) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 57 (AhHj-25) should also be conducted as part of the Stage 3 assessment.

5.58 **Location 58**

The Stage 2 assessment of Location 58 resulted in the recovery a single piece of pre-contact Aboriginal chipping detritus. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 58**.

5.59 **Location 59**

The Stage 2 assessment of Location 59 resulted in the recovery of 16 pieces of historic Euro-Canadian domestic debris. Despite the intensification of survey intervals no additional artifacts were recovered. Given that the cultural heritage value or interest of the site has been sufficiently documented, **no further archaeological assessment is recommended for Location 59**.

5.60 Location 60 (AhHi-5)

The Stage 2 assessment of Location 60 (AhHi-5) revealed a spatially discrete cluster of over 100 artifacts spanning the 19th century, 103 of which were collected for further analysis. This assemblage includes 97 domestic items, three faunal remains, two personal items and one structural item. Ceramics present in the domestic assemblage include whiteware, ironstone, redware, stoneware and Rockinghamware. Given the presence of 19th century material and this location's proximity to a homestead as indicated on the historic mapping, it is recommended that Location 60 (AhHi-5) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.





The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 60 (AhHi-5) should also be conducted as part of the Stage 3 assessment.

5.61 Location 61 (AhHi-6)

The Stage 2 assessment of Location 61 (AhHi-6) revealed a spatially discrete cluster of over 100 artifacts spanning the 19th century, 108 of which were collected for further analysis from ten test pits and one test unit. This assemblage includes 56 domestic items, 35 structural items, nine metal items, five faunal remains and three personal items. Ceramics present in the domestic assemblage include whiteware, ironstone, semi-porcelain, redware and Rockinghamware. In addition, the assemblage includes an ironstone maker's mark that can be dated to *circa* 1883. Given the presence of 19th century material and this location's proximity to a homestead as indicated on the historic mapping, it is recommended that Location 61 (AhHi-6) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism, Culture and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 61 (AhHi-6) should also be conducted as part of the Stage 3 assessment.

5.62 Location 62 (AhHi-7)

The Stage 2 assessment of Location 62 (AhHi-7) revealed a spatially discrete cluster of approximately 200 artifacts spanning the 19th century and including a small pre-contact Aboriginal component, 31 of which were collected for further analysis. This assemblage includes 31 Historic Euro-Canadian artifacts, including 29 domestic items and two personal items. It also includes one pre-contact Aboriginal scraper. Ceramics present in the domestic assemblage include ironstone, whiteware and semi-porcelain. The assemblage also includes two mid-to-late 19th century bottle finishes. Given the presence of 19th century material and Aboriginal pre-contact material, as well as the presence of a homestead within the vicinity on the historic mapping, it is recommended that Location 62 (AhHi-7) be subject to a Stage 3 assessment prior to any ground disturbance activities to further test the nature and density of the site.

The Stage 3 archaeological assessment should employ both the controlled surface pick-up and hand excavated test unit methodology as outlined in Sections 3.2 and 3.3, as well as Table 3.1, of the Ministry of Tourism,





Culture and Sport's Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Prior to conducting the field work, the area should be re-ploughed and allowed to weather for the controlled surface pick-up. The test unit excavation should consist of one metre by one metre square test units laid out in a five metre grid and should be excavated by hand to a depth of five centimetres within the subsoil. There should also be engagement with First Nations groups expressing interest in the archaeological resources of the area. Site specific land registry research to supplement the previous background study concerning the land use and occupation history specific to Location 62 (AhHi-7) should also be conducted as part of the Stage 3 assessment.

5.63 Summary

The above recommendations determine that 33 of the identified sites require further Stage 3 assessment. As such, 28 sites are not recommended for further archaeological work. Table 145 provides a breakdown of Golder's recommendations for the NEEC Goshen Wind Energy Centre:

Table 145: Recommendations for Further Stage 3 Assessment

Location	Borden Number	Affiliation	Stage 3 Recommended?
1		pre-contact Aboriginal	NO
2		pre-contact Aboriginal	NO
3		pre-contact Aboriginal	NO
4		pre-contact Aboriginal	NO
5	AhHk-139	pre-contact Aboriginal	YES
6		pre-contact Aboriginal	NO
7	AhHk-140	historic Euro-Canadian	YES
8		pre-contact Aboriginal	NO
9		pre-contact Aboriginal	NO
10		pre-contact Aboriginal	NO
11	AhHj-4	historic Euro-Canadian	YES
12		pre-contact Aboriginal	NO
13	AiHj-10	pre-contact Aboriginal	YES
14		pre-contact Aboriginal	NO
15	AiHj-7	pre-contact Aboriginal	YES
16	AhHj-5	historic Euro-Canadian	YES
17		pre-contact Aboriginal	NO
18	AiHj-11	pre-contact Aboriginal	YES
19	AiHj-12	Pre-Contact Aboriginal	YES
20	AhHk-141	pre-contact Aboriginal	NO
21	AhHk-142	historic Euro-Canadian	YES
22		pre-contact Aboriginal	NO
23	AiHj-13	pre-contact Aboriginal	NO





Location	Borden Number	Affiliation	Stage 3 Recommended?
24	AhHj-7	pre-contact Aboriginal	YES
25		pre-contact Aboriginal	NO
26	AiHj-14	pre-contact Aboriginal	NO
27	AhHj-8	pre-contact Aboriginal	YES
28	AhHk-143	historic Euro-Canadian	YES
29		pre-contact Aboriginal	NO
30		pre-contact Aboriginal	NO
31	AhHk-144	pre-contact Aboriginal	NO
32		pre-contact Aboriginal	NO
33	AhHk-145	historic Euro-Canadian	YES
34	AhHj-10	historic Euro-Canadian	YES
35	AhHj-9	pre-contact Aboriginal	NO
36	AhHk-147	historic Euro-Canadian	YES
37	AhHj-11	historic Euro-Canadian	YES
38	AhHk-148	multi-component	YES
39	AhHj-12	multi-component	YES
40		pre-contact Aboriginal	NO
41		pre-contact Aboriginal	NO
42		pre-contact Aboriginal	NO
43	AhHj-13	historic Euro-Canadian	YES
44	AhHj-14	historic Euro-Canadian	YES
45	AhHj-15	historic Euro-Canadian	YES
46	AhHj-16	historic Euro-Canadian	YES
47	AhHj-17	historic Euro-Canadian	YES
48	AhHj-18	historic Euro-Canadian	YES
49	AhHj-19	historic Euro-Canadian	YES
50	AhHj-20	historic Euro-Canadian	YES
51	AhHj-21	pre-contact Aboriginal	YES
52	AhHj-22	pre-contact Aboriginal	NO
53		pre-contact Aboriginal	NO
54	AhHj-23	pre-contact Aboriginal	YES
55	AiHj-18	pre-contact Aboriginal	NO
56	AhHj-24	historic Euro-Canadian	YES
57	AhHj-25	historic Euro-Canadian	YES
58		pre-contact Aboriginal	NO
59		historic Euro-Canadian	NO
60	AhHi-5	historic Euro-Canadian	YES





Location	Borden Number	Affiliation	Stage 3 Recommended?
61	AhHi-6	historic Euro-Canadian	YES
62	AhHi-7	historic Euro-Canadian	YES

While all of these sites were documented during the Stage 2 archaeological field work conducted within the NEEC Goshen Wind Energy Centre study area, 33 require further Stage 3 assessment. The remaining 28 sites have been sufficiently documented.

The Ministry of Tourism, Culture and Sport is asked to accept this report into the Ontario Public 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.





6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Ontario Minister of Tourism, Culture and Sport 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 cultural 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 and Culture, 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 cultural 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, R.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 field work 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 licence.





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8.0 IMAGES

Plate 1: Locations 1, 2, 3 and 4 Pre-Contact Aboriginal Artifacts, actual size





Plate 2: Location 5 (AhHk-139) Pre-Contact Aboriginal Artifacts, actual size

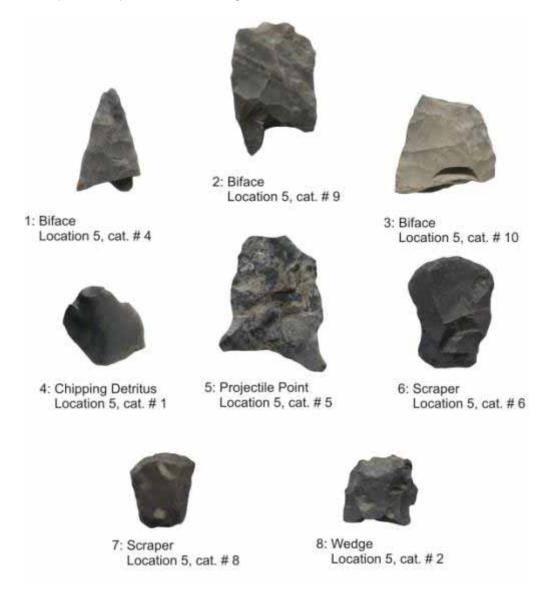




Plate 3: Location 7 (AhHk-140) Historic Euro-Canadian Artifacts, actual size

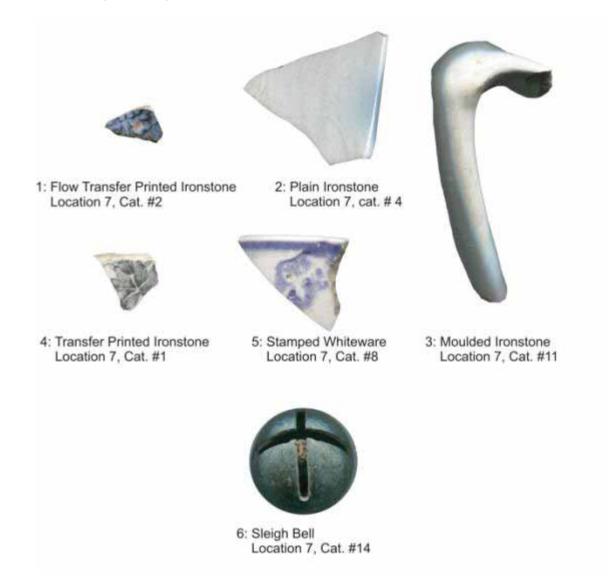




Plate 4: Locations 6, 8, 9, 10, 12 and 13 (AiHj-10) Pre-Contact Aboriginal Artifacts, actual size

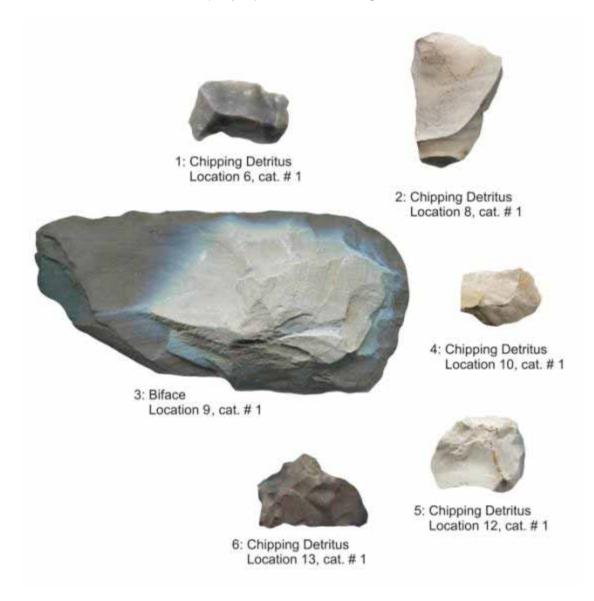




Plate 5: Location 11 (AhHj-4) Historic Euro-Canadian Artifacts, actual size



Plate 1: Location 14 Pre-Contact Aboriginal Artifacts, actual size

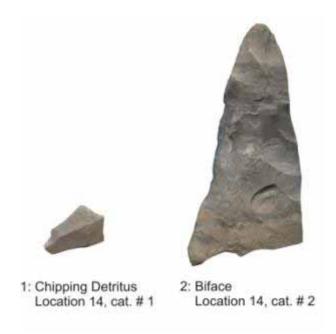




Plate 2: Locations 15 (AiHj-7), 17 and 18 (AiHj-11) Pre-Contact Aboriginal Artifacts, actual size

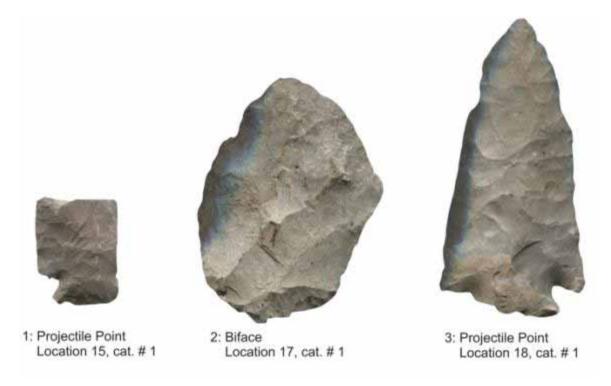




Plate 8: Location 16 (AhHj-5) Historic Euro-Canadian Artifacts, actual size



13: Machine Cut Nail

Location 16, cat. # 11



Plate 9: Locations 19 (AiHj-12), 20 (AhHk-141), 22 (AhHj-6), 23 (AiHj-13), 25 and 26 (AiHj-14) Pre-Contact Aboriginal Artifacts, actual size



1: Chipping Detritus Location 19, cat. # 1



2: Projectile Point Location 19, cat. # 2



 Projectile Point Location 20, cat. # 1



4: Projectile Point Location 22, cat. # 1



5: Projectile Point Location 23, cat. # 1



6: Biface Location 25, cat. # 1



7: Scraper Location 26, cat. # 2



Plate 10: Location 24 (AhHj-7) Pre-Contact Aboriginal Artifacts, actual size





3: Projectile Point Location 24, cat. #3



Plate 11: Location 21 (AhHk-142) Historic Euro-Canadian Artifacts, actual size

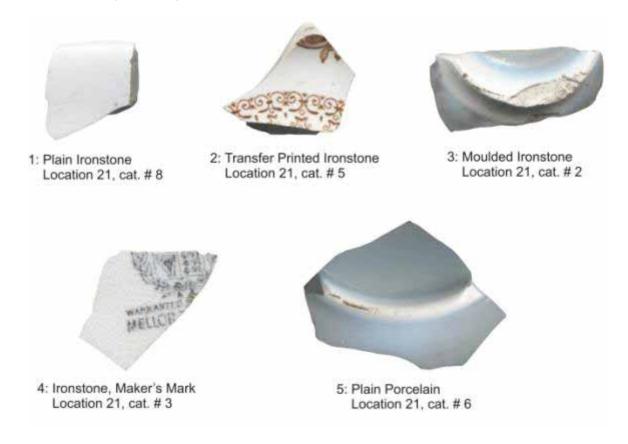


Plate 12: Location 28 (AhHk-143) Historic Euro-Canadian Artifacts, actual size







Plate 13: Locations 27 (AhHj-8), 31 (AhHk-144) and 32 Pre-Contact Aboriginal Artifacts, actual size





Plate 14: Location 33 (AhHk-145) Historic Euro-Canadian Artifacts, actual size





Polate 15: Location 34 (AhHj-10) Historic Euro-Canadian Artifacts, actual size

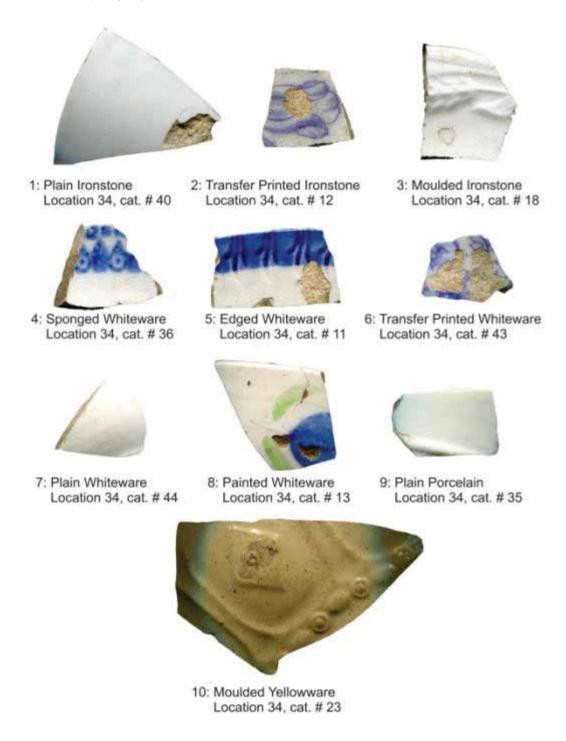




Plate 16: Location 34 (AhHj-10) Historic Euro-Canadian Artifacts, actual size



Plate 17: Location 35 (AhHj-9) Pre-Contact Aboriginal Artifact, actual size



1: Projectile Point Location 35, cat. # 1



Plate 18: Location 36 (AhHk-147) Historic Euro-Canadian Artifacts, actual size





Plate 19: Location 37 (AhHj-11) Historic Euro-Canadian Artifacts, actual size



1: Transfer Printed Ironstone 2: Plain Ironstone Location 37, cat. #63



Location 37, cat. #27



3: Flow Transfer Printed Ironstone Location 37, cat. #58



4: Stamped Ironstone Location 37, cat. #23



5: Banded Ironstone Location 37, cat. #39



6: Moulded Ironstone Location 37, cat. # 22



7: Ironstone, Maker's Mark Location 37, cat. # 24



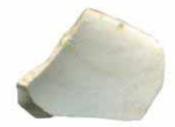
8: Transfer Printed Whiteware Location 37, cat. #42



9: Stamped Whiteware Location 37, cat. # 40



10: Painted Whiteware Location 37, cat. #43



11: Plain Semi-Porcelain Location 37. cat. #62



12: Plain Porcelain Location 37, cat. #57



13: Redware Location 37, cat. # 16



Plate 20: Location 37 (AhHj-11) Historic Euro-Canadian Artifacts, actual size



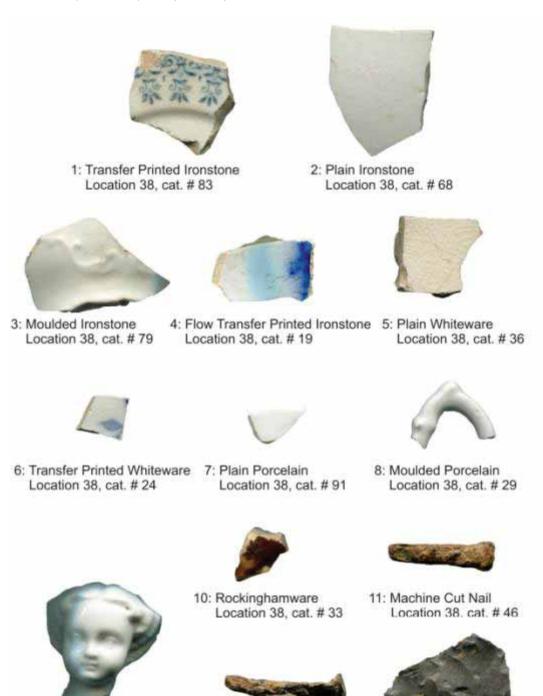


3: White Clay Pipe Stem Location 37, cat. # 5

4: White Clay Pipe Bowl Location 37, cat. # 48



Plate 21: Location 38 (AhHk-148) Multiple Component Artifacts, actual size



9: Porcelain Figurine

Location 38, cat. #89

Location 38, cat. #45

12: Wire Drawn Nail

13: Scraper

Location 38, cat. # 28



Plate 22: Location 39 (AhHj-12) Historic Euro-Canadian Artifacts, actual size





Plate 23: Location 39 (AhHj-12) Historic Euro-Canadian Artifacts, actual size

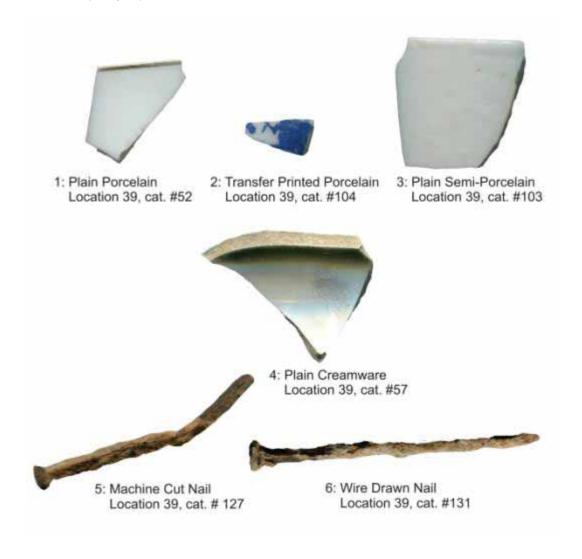




Plate 24: Location 39 (AhHj-12) Historic Euro-Canadian Artifacts, actual size





Plate 25: Location 39 (AhHj-12) Pre-Contact Aboriginal Artifacts, actual size



Plate 26: Location 40 Pre-Contact Aboriginal Artifact, actual size



Plate 27: Location 41 Pre-Contact Aboriginal Artifacts, actual size





Plate 28: Location 43 (AhHj-13) Historic Euro-Canadian Artifacts, actual size

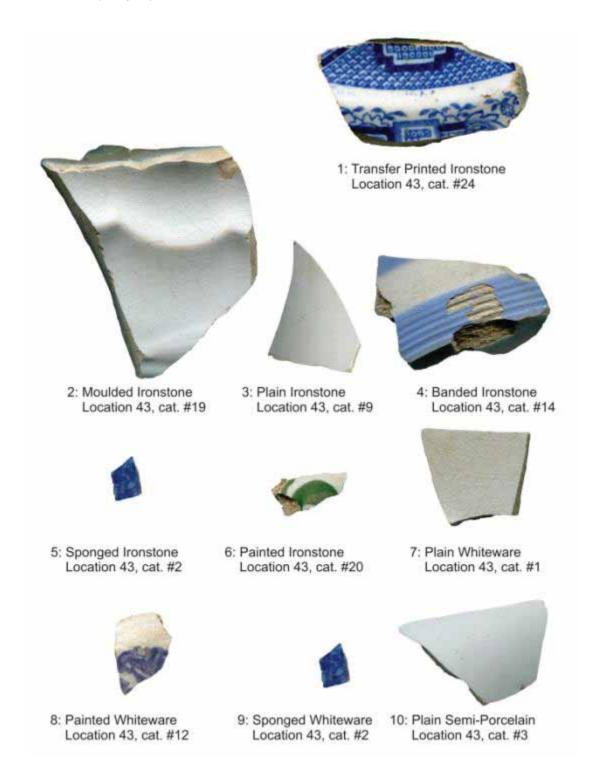




Plate 29: Location 43 Pre-Contact Aboriginal Artifact, actual size



11: Abrader Location 43, cat. # 25



Plate 30: Location 44 Historic Euro-Canadian Artifacts, actual size



1: Plain Ironstone Location 44, cat. # 14



2: Transfer Printed Ironstone Location 44, cat. # 1



 Moulded Ironstone Location 44, cat. # 11



4: Stamped Whiteware Location 44, cat. # 21



5: Painted Whiteware Location 44, cat. # 20



6: White Clay Pipe Stem Location 44, cat. # 3



7: Agate Button Location 44, cat. # 5





Plate 31: Location 45 Historic Euro-Canadian Artifacts, actual size





Plate 32: Location 46 (AhHj-16) Historic Euro-Canadian Artifacts, actual size

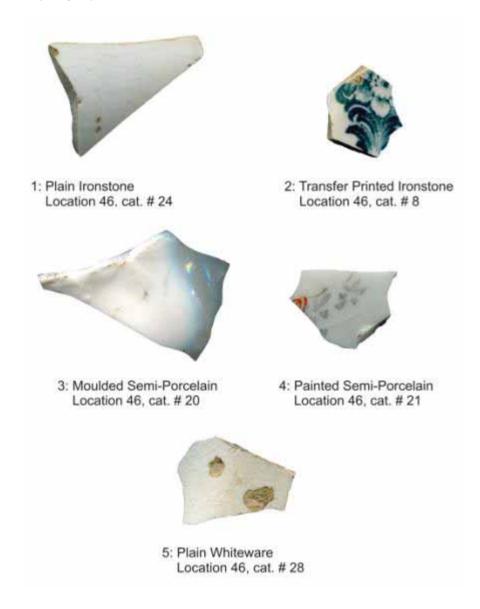




Plate 33: Location 47 (AhHj-17) Historic Euro-Canadian Artifacts, actual size





Plate 34: Location 48 (AhHj-18) Historic Euro-Canadian Artifacts, actual size





Plate 35: Location 48 (AhHj-18) Multiple Component Artifacts, actual size





Plate 36: Location 49 (AhHj-19) Historic Euro-Canadian Artifacts, actual size





Plate 37: Location 49 (AhHj-19) Historic Euro-Canadian Artifacts, actual size





Plate 38: Location 50 (AhHj-20) Historic Euro-Canadian Artifacts, actual size





Plate 39: Location 50 (AhHj-20) Historic Euro-Canadian Artifacts, actual size





Plate 40: Location 51 (AhHj-21) Pre-Contact Aboriginal Artifacts, actual size



Plate 41: Location 52 (AhHj-22) Pre-Contact Aboriginal Artifacts, actual size





Plate 42: Location 53 Pre-Contact Aboriginal Artifact, actual size



1: Chipping Detritus Location 53, cat. # 1

Plate 43: Location 54 (AhHj-23) Pre-Contact Aboriginal Artifact, actual size



1: Projectile Point Location 54, cat. # 1

Plate 44: Location 55 (AiHj-18) Pre-Contact Aboriginal Artifact, actual size



1: Projectile Point Location 55, cat. # 1



Plate 45: Location 56 (AhHj-24) Historic Euro-Canadian Artifacts, actual size



1: Transfer Printed Whiteware Location 56, cat. # 42



2: Plain Whiteware Location 56, cat. # 69



Stamped Whiteware Location 56, cat. # 43



 Flow Transfer Printed Whiteware Location 56, cat. # 13



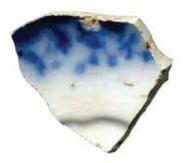
5: Plain Ironstone Location 56, cat. # 55



6: Transfer Printed Ironstone Location 56, cat. # 5



7: Moulded Ironstone Location 56, cat. # 17



8: Flow Transfer Printed Ironstone Location 56, cat. # 41



9: Ironstone, Maker's Mark Location 56, cat. # 1



Plate 46: Location 56 (AhHj-24) Historic Euro-Canadian Artifacts, actual size





Plate 47: Location 57 (AhHj-25) Historic Euro-Canadian Artifacts, actual size

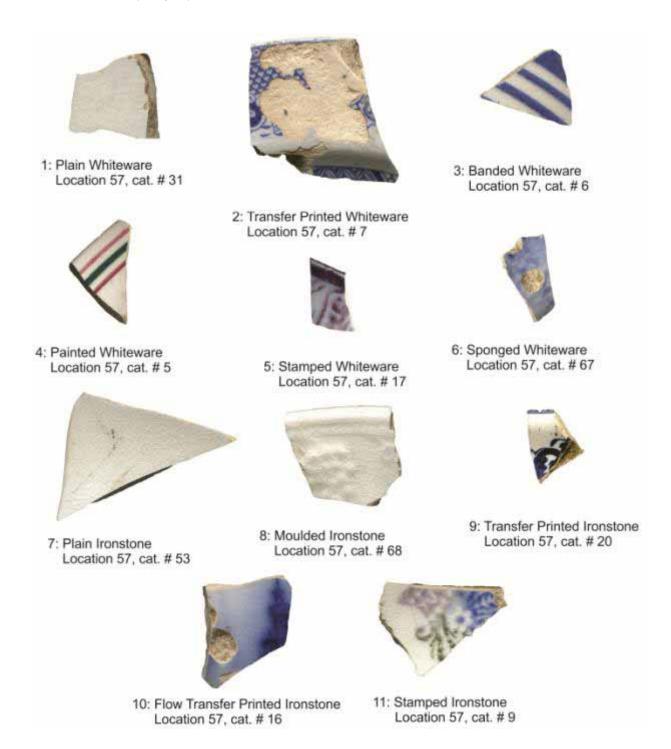




Plate 48: Location 57 (AhHj-25) Historic Euro-Canadian Artifacts, actual size



Plate 49: Location 58 Pre-Contact Aboriginal Artifact, actual size







Plate 50: Location 59 Historic Euro-Canadian Artifacts, actual size



1: Complete Glass Bottle Location 59, cat. #13



2: Plain Whiteware Location 59, cat. #16





Plate 51: Location 60 (AhHi-5) Historic Euro-Canadian Artifacts, actual size

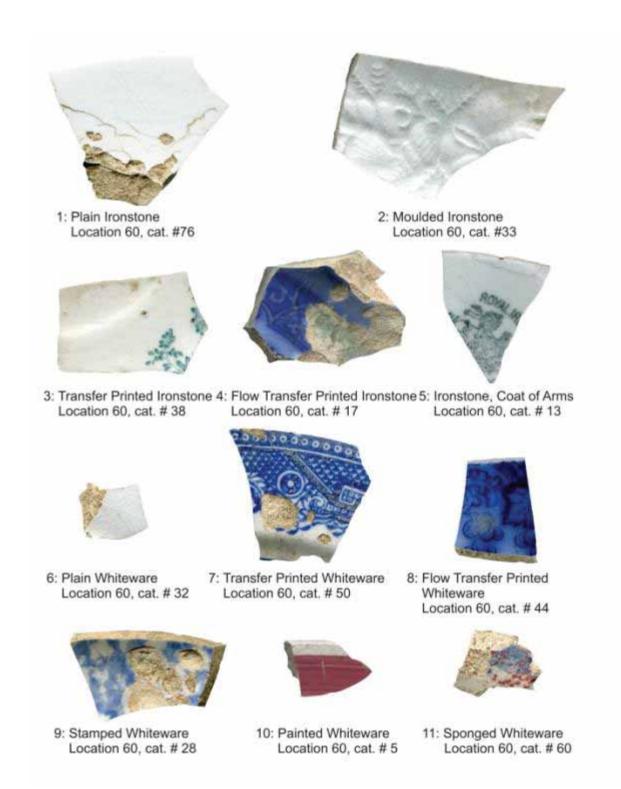






Plate 52: Location 60 (AhHi-5) Historic Euro-Canadian Artifacts, actual size

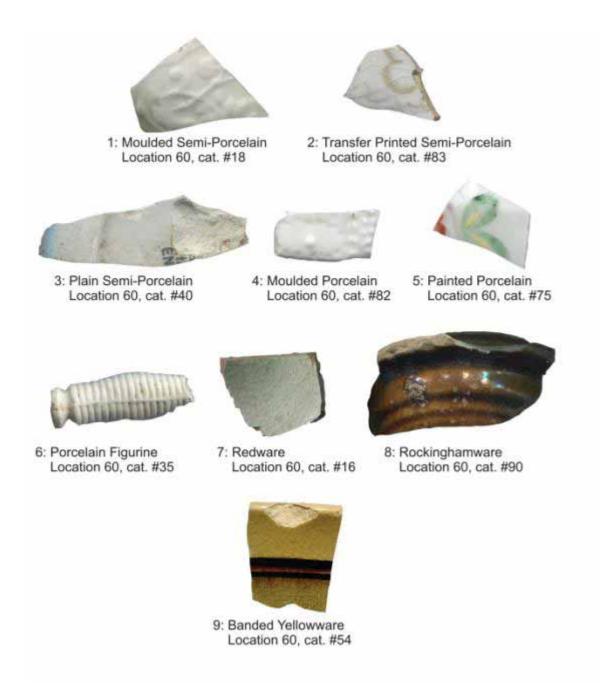




Plate 53: Location 60 (AhHi-5) Historic Euro-Canadian Artifacts, actual size







Plate 54: Location 61 (AhHi-6) Historic Euro-Canadian Artifacts, actual size





Plate 55: Location 61 (AhHi-6) Historic Euro-Canadian Artifacts, actual size





Plate 56: Location 62 (AhHi-7) Historic Euro-Canadian Artifacts, actual size



 Transfer Printed Whiteware Location 62, cat. #2



Sponged Whiteware Location 62, cat. #11



7: Transfer Printed Ironstone Location 62, cat. #10



2: Flow Transfer Printed Whiteware Location 62, cat. #7



 Flow Transfer Printed Ironstone Location 62, cat. #30



8: Stamped Ironstone Location 62, cat. #29



Edged Whiteware Location 62. cat. #1



6: Moulded Ironstone Location 62, cat. #15



9: Plain Ironstone Location 62, cat. #26



 Plain Semi-Porcelain Location 62, cat. #21



 Transfer Printed Semi-Porcelain Location 62, cat. #19



Plate57: Location 62 (AhHi-7) Multiple Component Artifacts, actual size



 Derbyshire Glazed Stoneware Location 62, cat. #6



White Cay Pipe Stem Location 62, cat. #12



3: Scraper Location 62, cat. #32



Plate58: Location 42Groundstone Celt, actual size



Obverse



Reverse





Photo 1: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1053, June 10, 2011.

Photo 2: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1007, April 26, 2012.





Photo 3: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1043, June 19, 2012.

Photo 4: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1056, April 18, 2012.







Photo 5: Stage 2, excavated test pit, facing down, GSH1059, July 6, 2012.

Photo 6: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1018, June 19, 2012.





Photo 7: Stage 2, test pit survey at five metre intervals, facing east, GSH1038, May 9, 2012.

Photo 8: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1360, April 26, 2012.







Photo 9: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1390, May 3, 2012.

Photo 10: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1005, June 4, 2012.





Photo 11: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1118, May 28, 2012.

Photo 12: Stage 2, pedestrian survey at five metre intervals, facing down, GSH1006, May 25, 2011.







Photo 13: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1040, April 25, 2012.

Photo 14: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1034, November 21, 2011.





Photo 15: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1012, May 5, 2011.

Photo 16: Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH2100, April 25, 2012.







Photo 17: Stage 2, pedestrian survey at five metre intervals, facing west, GSH2099, April 20, 2012.

Photo 18: Stage 2, pedestrian survey at five metre intervals, facing north, GSH2236, November 4, 2011.





Photo 19: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1987, November 18, 2011.

Photo 20: Stage 2, pedestrian survey at five metre intervals, facing southeast, GSH2137, November 21, 2011.







Photo 21: Stage 2, soil conditions during pedestrian survey at five metre intervals, facing north, GSH1015, May 3, 2012.

Photo 22: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1013, April 16, 2012.





Photo 23: Stage 2, pedestrian survey at five metre intervals, facing west, GSH2238 June 5, 2012.

Photo 24: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1725, November 8, 2011.







Photo 25: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1507, May 14, 2012.

Photo 26: Stage 2, pedestrian survey at five metre intervals, facing north, GSH2053, June 4, 2012.





Photo 27: Stage 2, excavated test unit, facing north, GSH1526, June 26, 2012.

Photo 28: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1508, November 28, 2011. Surveyed for previous layout.







Photo 29: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1739, November 15, 2011.

Photo 30: Stage 2, Pedestrian survey at five metre intervals, facing east, GSH2162, July 6, 2012.





Photo 31: Stage 2, pedestrian survey at five metre intervals, facing east, GSH2158, April 13, 2012.

Photo 32: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH2056, June 18, 2012.







Photo 33: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1482, November 3, 2011. Surveyed for previous layout.

Photo 34: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1637, July 4, 2012.





Photo 35: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1509, November, 17, 2011.

Photo 36: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1949, May 9, 2012.







Photo 37: Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH2057, November 11, 2011. Surveyed for previous layout.

Photo 38: Stage 2, pedestrian survey at five metre intervals, facing east, GSH2059, November 11, 2011. Surveyed for previous layout.





Photo 39: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1481, April 16, 2012.

Photo 40: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1528, June 19, 2012.







Photo 41: Stage 2, pedestrian survey at five metre intervals, facing northwest, GSH1079, November 2, 2011.

Photo 42: Stage 2, pedestrian survey at five metre intervals, facing southeast, GSH1781, November 15, 2011.





Photo 43: Stage 2, pedestrian survey at five metre intervals, facing west, GSH2176, April 18, 2012.

Photo 44: Stage 2, pedestrian survey at five metre intervals, facing northwest, GSH1020, November 3, 2011.







Photo 45: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1022, November 24, 2011.

Photo 46: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1090, November 8, 2011.





Photo 47: Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH1075, November 11, 2011.

Photo 48: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1532, May 2, 2012.







Photo 49: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1016, November 24, 2011.

Photo 50: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1780, May 1, 2012.





Photo 51: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1072, June 6, 2012.

Photo 52: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1032, November 24, 2012.







Photo 53: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1033, May 1, 2012.

Photo 54: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1066, May 1, 2012. Surveyed for previous layout.





Photo 55: Stage 2, pedestrian survey at five metre intervals, facing east, GSH2174, November 4, 2011.

Photo 56: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1091, November 8, 2011.







Photo 57: Stage 2, pedestrian survey at five metre intervals, facing west, GSH2024, April 26, 2012.

Photo 58: Stage 2, test pit excavation at five metre intervals, facing west, GSH1068, August 13, 2012.





Photo 59: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1757, May 4, 2012.

Photo 60: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1605, May 16, 2012.







Photo 61: Stage 2, pedestrian survey at five metre intervals, facing northwest, GSH1726, November 17, 2011. Surveyed for previous layout.

Photo 62: Stage 2, pedestrian survey at five metre intervals, facing south, GSH2237, November 21, 2011.





Photo 63: Stage 2, pedestrian survey at five metre intervals, facing northwest, GSH2043, November 11, 2011.

Photo 64: Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH2252, November 7, 2011.







Photo 65: Stage 2, soil conditions during pedestrian survey at five metre intervals, facing down, GSH1505, June 15, 2012.

Photo 66: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1505, June 15, 2012.





Photo 67: Stage 2, pedestrian survey at five metre intervals, facing south, GSH2133, April, 2012.

Photo 68: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1504, June 15, 2012.







Photo 69: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1729, November 15, 2011.

Photo 70: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1659, November 24, 2011.





Photo 71: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1503, May 3, 2012.

Photo 72: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH2046, June 27, 2012.









Photo 73: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1494, May 2, 2012.

Photo 74: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1732, November 24, 2011.





Photo 75: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1493, May 1, 2012.

Photo 76: Stage 2, pedestrian survey at five metre intervals, facing northwest GSH1744, June 27 2012.







Photo 77: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1765, November 4, 2011.

Photo 78: Stage 2, soil conditions during pedestrian survey at five metre intervals, facing down, GSH1492, June 4, 2012.





Photo 79: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1492, June 4, 2012.

Photo 80: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1078, November 11, 2011.







Photo 81: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1077, April 13, 2012.

Photo 82: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1734, November 2, 2011.





Photo 83: Stage 2, pedestrian survey at five metre intervals, facing east, GSH2052, April 13, 2012.

Photo 84: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1619, May 28, 2012.







Photo 85: Stage 2, pedestrian survey at five metre intervals, facing northwest, GSH1640, November 11, 2011. Surveyed for previous layout.

Photo 86: Stage 2, pedestrian survey at five metre intervals, facing south, GSH1766, May 1, 2012. Surveyed for previous layout.





Photo 87: Stage 2, soil conditions during pedestrian survey at five metre intervals, facing down, GSH1525, May 1, 2012.

Photo 88: Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH2176, January 25, 2012.







Photo 89: Stage 2, pedestrian survey at five metre intervals, facing north, GSH2174, April 18, 2012.

Photo 90: Stage 2, pedestrian survey at five metre intervals, facing northwest, GSH2237, November 21, 2011.





Photo 91: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1040, November 1, 2012.

Photo 92: Stage 2, pedestrian survey at five metre intervals, facing east, GSH2108, May 25, 2012.







Photo 93: Stage 2, pedestrian survey at five metre intervals, facing north, GSH2237, November 21, 2011.

Photo 94: Stage 2, pedestrian survey at five metre intervals, facing north, GSH2028, May 2, 2012.





Photo 95: Stage 2, pedestrian survey at five metre intervals, facing east, GSH2394, June 22, 2012.

Photo 96: Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH1039, January 25, 2012. Surveyed for previous layout.







Photo 97: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1048, May 9, 2012.

Photo 98. Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH1012, April 17, 2012.





Photo 99: Stage 2, pedestrian survey at five metre intervals, facing west, GSH1736, November 21, 2011. Surveyed for previous layout.

Photo 100: Stage 2, pedestrian survey at five metre intervals, facing southwest, GSH1727, November 24, 2011.







Photo 101: Stage 2, pedestrian survey at five metre intervals, facing east, GSH1949, May 9, 2012. Surveyed for previous layout.

Photo 102: Stage 2, pedestrian survey at five metre intervals, facing northeast, GSH2158, April 3, 2012.





Photo 103: Stage 2, pedestrian survey at five metre intervals, facing north, GSH2174, April 18, 2012.

Photo 104: Stage 2, pedestrian survey at five metre intervals, facing north, GSH1023, April 18, 2012.







Photo 105: Stage 2, pedestrian survey at five metre intervals, facing northwest, GSH1068, April 27, 2012.

Photo 106: Stage 2, disturbed area, facing north, GSH1034, November 21, 2011.





Photo 107: Stage 2, disturbed area, facing west, GSH1015, May 3, 2012.

Photo 108: Stage 2, disturbed area, facing east, GSH1015, May 3, 2012.







Photo 109: Stage 2, disturbed area, facing south, GSH1056, July 9, 2012.

Photo 110: Stage 2, disturbed area, facing north, GSH1148, July 9, 2012





Photo 111: Stage 2, disturbed area, facing north, GSH1152, July 9, 2012.

Photo 112: Stage 2, disturbed area, facing east, GSH1122, July 9, 2012.







Photo 113: Stage 2, disturbed area, facing south, GSH1124, July 10, 2012.

Photo 114: Stage 2, disturbed area, facing north, GSH1983, July 10, 2012.





Photo 115: Stage 2, disturbed area, facing south, GSH1763, July 9, 2012.

Photo 116: Stage 2, disturbed area, facing south, GSH1061, July 10, 2012







Photo 117: Stage 2, disturbed area, facing east, GSH2119, July 10, 2012.

Photo 118: Stage 2, disturbed area, facing south, GSH2045, July 10, 2012.





Photo 119: Stage 2, disturbed area, facing east, GSH2053, July 10, 2012.

Photo 120: Stage 2, disturbed area, facing south, GSH2165, July 10, 2012.







Photo 121: Stage 2, disturbed area, facing south, GSH1527, July 10, 2012.

Photo 122: Stage 2, disturbed area, facing east, GSH2838, June 6, 2012.







9.0 MAPS

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