Parcel	Sites within 1 km
GSH2411/2717/2555/2956	None
GSH2555	Location 62 (AhHi-7)
GSH2767	None
GSH2838	Location 60 (AhHi-5), Location 61 (AhHi-6)
GSH3065	None
GSH3068	None
Grand Bend Line from GSH1528 to GSH1016	None
Babylon Line from GSH2058 to GSH2030	Location 35 (AhHj-9), Location 48 (AhHj-18), Location 57 (AhHj-25)
Blackbush Line from GSH1758 to GSH2252	Location 54 (AhHj-23), Location 56 (AhHj-24)
Mollard Line from GSH1559 to GSH1099	Location 20 (AhHk-141), Location 21 (AhHk-142), Location 28 (AhHk-143), Location 38 (AhHk-148)
Bronson Line at GSH1077	Location 50 (AhHj-20), Location 51 (AhHj-21), Location 52 (AhHj-22), Location 53
Huron Street at GSH1013	Location 10, Location 11 (AhHj-4), Location 12, Location 37 (AhHj-11)

1.3.3 Natural Environment

Environmental factors played a substantial role in shaping early land-use and site selection processes, particularly in small Pre-Contact societies with non-complex, subsistence-oriented economies. Euro-Canadian settlers also gravitated towards favourable environments, particularly those with agriculturally-suitable soils and a moderate climate. In order to fully comprehend the archaeological context of the study area, the following five features of the local natural environment must be considered: 1) forests; 2) drainage systems; 3) climatic conditions; 4) physiography; and 5) soil types.

The study area lies within the Great Lakes-St. Lawrence forest, which is a transitional zone between the southern deciduous forest and the northern boreal forest covering approximately 20,000,000 ha. Vegetation here consists of a mixture of coniferous trees and deciduous trees, as well as many species of ferns, fungi, shrubs and mosses. The most prominent conifers are eastern white pine, red pine, eastern hemlock and white cedar, while deciduous trees are best represented by yellow birch, sugar and red maple, basswood and red oak. Other species more commonly occurring in the north are also present, including white and black spruce, jack pine, aspen and white birch (MNR 2013).

Only part of the original forest cover remains standing today, however, as early Euro-Canadian agriculturalists conducted large-scale clearing operations to prepare the land for cultivation. In Pre-Contact times, however, this dense forest would have been particularly bountiful. It is believed that the First Nations of the Great Lakes region exploited close to 500 plant species for food, beverages, food flavourings, medicines, smoking, building materials, fibres, dyes and basketry (Mason 1981:59–60). Furthermore, this diverse vegetation would have served as both home and food for a wide range of game animals, including white tailed deer, turkey, passenger pigeon, cottontail rabbit, elk, muskrat and beaver (Mason 1981:60).

In terms of local drainage systems, the parcels fall within parts of the South Gilles, Upper Parkhill, Lower Parkhill, Black Creek, Upper Ausable and Little Ausable watersheds, all of which comprise part of the Ausable Bayfield Conservation Authority (ABCA 2013). Multiple waters sources are located in the vicinity of each parcel, and the distances between the sources and these parcels are summarized in Table 5.

Table 5: Summary of Distances between Parcels and Water Sources

Parcel	Closest Water Source	Distance to Closest Water Source
GSH1006	Tributary into Lake Huron	470 m west
GSH 1007	Tributary into Lake Huron	165 m west
GSH1012	Tributary of Ausable River	135 m south
GSH1013	Mud Creek	695 m west
GSH1020	Tributary of Parkhill Creek	5 m west
GSH1022/2176	Tributary of Parkhill Creek	50 m north
GSH1023	Tributary of Parkhill Creek	144 m north
GSH1033	Unnamed Stream	412 m south
GSH1034	Tributary of Lake Huron	187 m northeast
GSH1035	Tributary of Parkhill Creek	241 m southeast
GSH1038	Tributary of Lake Huron	149 m north
GSH1039	Tributary of Lake Huron	224 m northwest
GSH1040	Tributary of Lake Huron	54 m north
GSH1043	Black Creek	506 m east
GSH1048	Tributary of Lake Huron	289 m south
GSH1049	Tributary of Lake Huron	453 m northwest
GSH1056	Tributary of Lake Huron	5 m east
GSH1061	Tributary of Parkhill Creek	599 m
GSH1062	Tributary of Parkhill Creek	193 m southwest
GSH1067	Tributary of Parkhill Creek	420 m north
GSH1068	Tributary of Parkhill Creek	5 m south
GSH1072	Tributary of Parkhill Creek	962 m west
GSH1077 (East, Centre)	Tributary of Parkhill Creek	1 m north
GSH1077 (West)/1766 (North)	Tributary of Parkhill Creek	376 m northeast
GSH1095	Tributary of Parkhill Creek	612 m east
GSH1118	Tributary of Lake Huron	113 m north
GSH1360	Tributary of Lake Huron	76 m north
GSH1390	Hay Swamp	181 m east
GSH1461	Tributary of Ausable River	205 m southwest
GSH1481	Tributary of Mud Creek	822 m southwest
GSH1493	Tributary of Ausable River	1,113 m east
GSH1498/1659	Tributary of Parkhill Creek	113 m south
GSH1505/2252/1504	Tributary of Lake Huron	1 m west
GSH1507	Tributary of Parkhill Creek	226 m south

Parcel	Closest Water Source	Distance to Closest Water Source
GSH1509	Tributary of Parkhill Creek	Traversed in the south
GSH1526	Tributary of Parkhill Creek	108 m south
GSH1528	Tributary of Parkhill Creek	103 m southwest
GSH1605	Tributary of Parkhill Creek	1 m east
GSH1617	Tributary of Parkhill Creek	Adjacent in the south
GSH1744/1765	Tributary of Parkhill Creek	87 m south
GSH1757	Tributary of Lake Huron	317 m southwest
GSH1758	Tributary of Lake Huron	10 m north
GSH1766 (South)	Tributary of Parkhill Creek	94 m south
GSH1780	Tributary of Parkhill Creek	184 m southeast
GSH1949	Tributary of Parkhill Creek	363 m north
GSH2028	Tributary of Mud Creek	9 m north
GSH2043	Tributary of Mud Creek	20 m south
GSH2046	Tributary of Mud Creek	14 m north
GSH2053	Tributary of Mud Creek	172 m west
GSH2056	Tributary of Mud Creek	538 m southeast
GSH2099	Hay Swamp	148 m east
GSH2108	Mud Creek	272 m west
GSH2133	Mud Creek	291 m east
GSH2158	Tributary of Mud Creek	467 m north
GSH2236	Tributary of Lake Huron	218 m east
GSH2237	Tributary of Lake Huron	271 m north
GSH2238	Tributary of Lake Huron	200 m south
GSH2255	Tributary of Mud Creek	111 m west
GSH2381	Little Ausable River	324 m east
GSH2411/2717/2956	Hay Swamp	467 m northeast
GSH2555	Tributary of Ausable River	Traversed in the centre
GSH2767	Tributary of Mud Creek	487 m northwest
GSH2838	Tributary of Mud Creek	325 m north
GSH3065	Tributary of Fish Creek	507 m southeast
GSH3068	Fish Creek	Traversed in the centre
Grand Bend Line from GSH1528 to GSH1016	Tributary of Parkhill Creek	Traversed in the centre
Babylon Line from GSH2058 to GSH2030	Tributary of Mud Creek	Traversed in the south
Blackbush Line from GSH1758 to GSH2252	Tributary of Lake Huron	191 m south
Mollard Line from GSH1559 to GSH1099	Tributary of Parkhill Creek	Traversed in the north
Bronson Line at GSH1077	Tributary of Parkhill Creek	Traversed in the centre
Huron Street at GSH1013	Tributary of Mud Creek	587 m north

The local climatic region is that of the Western Uplands, which comprises the majority of Huron County save for a narrow strip of land along the Lake Huron shoreline known as the Lake Huron-Georgian Bay region. In the vicinity of the study area (Brucefield), the climate is

characterized by mean July temperatures of 20.0 ºC and mean February temperatures of -7.8 ºC. The area experiences a growing season that typically lasts between 189 and 196 days, with approximately 125 to 140 frost-free days per year. The average annual precipitation level is 874 mm, with between 200 and 300 cm of snowfall per year (Hoffman et al. 1952:19–23). On the whole, this agriculturally-favourable climate would have been well-suited for the general farm crops grown during the Euro-Canadian period.

Physiographically, the subject parcels fall within parts of the Huron Fringe, Huron Slope, the western belt of the Horseshoe Moraines and the Stratford Till Plain. These regions can be summarized as follows:

- The Huron Fringe is a narrow strip of land along the southern and eastern shores of Lake Huron covering an area of 112,664 ha. This area comprises the wave-cut terraces of glacial Lake Algonquin and Lake Nipissing with their boulders, gravel bars and sand dunes (Chapman and Putnam 1984:161–162).
- The Huron Slope is a 258,999 ha strip of land situated between the Algonquin shorecliff and the Wyoming Moraine. In general terms, this area comprises a clay plain modified by a narrow strip of sand and the twin beaches of glacial Lake Warren (flaking the moraine). The surface below the beaches has been smoothed, whereas the surface above the beaches is similar to that of the Stratford till plain (Chapman and Putnam 1984:160–161).
- The Horseshoe Moraines region consists of two principal landform components: 1) irregular, stony knobs and ridges which are composed mostly of till with some sand and gravel deposits (kames); and 2) more-or-less pitted sand and gravel terraces and swampy valley floors (Chapman and Putnam 1984:127–129).
- The Stratford Till Plain is a broad clay plain characterized by ground moraines interrupted by terminal moraines, extending from London to Listowel. The till, consisting of brown calcareous silty clay, is a product of the Huron ice lobe. The area tends to be muddy and prone to abundant rain and snow resulting from its location east of Lake Huron (Chapman and Putnam 1984:133–135).

These diverse physiographic elements have accumulated over grey shale and limestone bedrock belonging to the Middle Devonian Dundee formation (Davidson 1989:42).

A wide variety of soil types occur within the subject parcels, which is unsurprising given their broad spatial distribution. In general, the assessed lands contain Bookton sandy loam, Huron clay loam, Perth clay loam, Toledo clay loam, Brookston clay loam, Burford loam, Berrien sandy loam, Muck and/or Bottomland soils. The specific soil type(s) occurring within each parcel and their associated drainage qualities are summarized in Table 6.

Table 6: Summary of Soil Types by Parcel

Parcel	Material Type	Drainage Qualities
GSH1006	Bookton Sandy Loam	Good
GSH 1007	Huron Clay Loam	Good
GSH1012	Perth Clay Loam	Imperfect
GSH1013	Huron Clay Loam	Good

Parcel	Material Type	Drainage Qualities
GSH1020	Toledo Clay Loam	Poor
GSH1022/2176	Toledo Clay Loam	Poor
GSH1023	Brookston Clay Loam	Poor
GSH1033	Perth Clay Loam	Imperfect
GSH1034	Burford Loam	Good
GSH1035	Brookston Clay Loam	Poor
GSH1038	Huron Clay Loam	Good
GSH1039	Berrien Sandy Loam	Imperfect
GSH1040	Bottom Land	Variable
GSH1043	Berrien Sandy Loam, Bookton Sandy Loam	Imperfect, Good
GSH1048	Brookston Clay Loam	Poor
GSH1049	Perth Clay Loam	Imperfect
GSH1056	Bottom Land	Variable
GSH1061	Perth Clay Loam	Imperfect
GSH1062	Burford Loam, Perth Clay Loam	Good, Imperfect
GSH1067	Huron Clay Loam, Perth Clay Loam	Good, Imperfect
GSH1068	Toledo Clay Loam	Poor
GSH1072	Huron Clay Loam	Good
GSH1077 (East, Centre)	Berrien Sandy Loam, Bottom Land	Imperfect, Variable
GSH1077 (West)/1766 (North)	Berrien Sandy Loam	Imperfect
GSH1095	Brookston Clay Loam	Poor
GSH1118	Huron Clay Loam	Good
GSH1360	Bookton Sandy Loam, Huron Clay Loam	Good, Good
GSH1390	Berrien Sandy Loam, Bookton Sandy Loam	Imperfect, Good
GSH1461	Perth Clay Loam	Imperfect
GSH1481	Huron Clay Loam	Good
GSH1493	Huron Clay Loam	Good
GSH1498/1659	Brookston Clay Loam	Poor
GSH1505/2252/1504	Brookston Clay Loam, Berrien Sandy Loam, Bottom Land	Poor, Imperfect, Variable
GSH1507	Brookston Clay Loam	Poor
GSH1509	Brookston Clay Loam	Poor
GSH1526	Brookston Clay Loam, Bottom Land	Poor, Variable
GSH1528	Brookston Clay Loam	Poor
GSH1605	Berrien Sandy Loam, Bottom Land	Imperfect, Variable
GSH1617	Berrien Sandy Loam	Imperfect
GSH1744/1765	Bottom Land, Perth Clay Loam	Variable, Imperfect
GSH1757	Brookston Clay Loam	Poor
GSH1758	Brookston Clay Loam	Poor
GSH 1766 (South)	Berrien Sandy Loam	Imperfect
GSH1780	Burford Loam	Good
GSH1949	Berrien Sandy Loam	Imperfect
GSH2028	Perth Clay Loam	Imperfect

Parcel	Material Type	Drainage Qualities
GSH2043	Perth Clay Loam	Imperfect
GSH2046	Perth Clay Loam	Imperfect
GSH2053	Perth Clay Loam	Imperfect
GSH2056	Perth Clay Loam	Imperfect
GSH2099	Brady Sandy Loam	Imperfect
GSH2108	Huron Clay Loam, Muck (Bog)	Good, Poor
GSH2133	Huron Clay Loam	Good
GSH2158	Perth Clay Loam	Imperfect
GSH2236	Brookston Clay Loam	Poor
GSH2237	Berrien Sandy Loam	Imperfect
GSH2238	Berrien Sandy Loam	Imperfect
GSH2255	Huron Clay Loam	Good
GSH2381	Brookston Clay Loam	Poor
GSH2411/2717/2956	Perth Clay Loam	Imperfect
GSH2555	Brookston Clay Loam, Perth Clay Loam	Poor, Imperfect
GSH2767	Perth Clay Loam	Imperfect
GSH2838	Huron Clay Loam	Good
GSH3065	Huron Clay Loam, Perth Clay Loam	Good, Imperfect
GSH3068	Bottom Land, Huron Clay Loam, Perth Clay Loam	Variable, Good, Imperfect
Grand Bend Line from GSH1528 to GSH1016	Brookston Clay Loam, Bottom Land	Poor, Variable
Babylon Line from GSH2058 to GSH2030	Perth Clay Loam	Imperfect
Blackbush Line from GSH1758 to GSH2252	Brookston Clay Loam	Poor
Mollard Line from GSH1559 to GSH1099	Toledo Clay Loam	Poor
Bronson Line at GSH1077	Burford Loam, Huron Clay Loam, Perth Clay Loam	Good, Good, Imperfect
Huron Street at GSH1013	Huron Clay Loam	Good

In summary, the study area possesses a number of environmental characteristics which would have made it attractive to both Pre-Contact and Euro-Canadian populations. The rich Great Lakes-St. Lawrence forest and the nearby water sources would have attracted a wide variety of game animals, and consequently, early hunters. The areas of well-drained soils would have been ideal for the maize horticulture of Middle to Late Woodland peoples and the mixed agriculture practiced by later Euro-Canadian populations. Finally, the proximity of the study area to the Ausable River and Lake Huron would also have influenced its settlement and land-use history. Such major waterways functioned as principal transportation routes in both Pre- and Post-Contact times.

1.3.4 Archaeological Fieldwork and Property Conditions

The Stage 2 property assessment was carried out on May 27, June 13, 19, July 2, 10, 30, August 9, 12–15, 19–20, 26–29 and September 3, 9, 2013 under MTCS licence #P007, PIF #P007-535-2013. This assessment encompassed all of the parcels indicated in Table 1 and involved 1) the on-site documentation of all areas of no archaeological potential, and 2) test pit and pedestrian survey in the identified areas of archaeological potential. Legal permission to enter and conduct all necessary fieldwork activities on project lands was granted by the property owners.

Key personnel involved during the assessment were P. Racher, Project Director; C.J. Gohm, Deliverables Manager; V. Cafik, Assistant Project Manager; S. Brown and J. Haxell, Field Operations Managers; S. Bolstridge, P. Epler, M. McCready and A. O'Shaughnessy, Field Directors; H. Buckton, A. Moulton and T. Taylor, Assistant Field Directors; J. Haxell, A. O'Shaughnessy and R. Tobicoe, GPS Technicians; and 29 additional crewmembers.

As discussed in Section 1.2.4, the subject parcels comprise parts of numerous municipal road ROWs (i.e., Kirkton Road, Crediton Road, Pepper Road, Rodgerville Road, Dashwood Road, Huron Street, Mollard Line, South Road, Bronson Line, Babylon Line, Blackbush Line, MacDonald Road, Greenway Drive, Eagleson Line, Goshen Line, Parr Line, Shipka Line, Grand Bend Line and Victoria Avenue West), private laneways and agricultural fields. The specific property characteristics, assessment methods and rationale, and weather and lighting conditions for the days of assessment are summarized in Section 2.1.

No unusual physical features were encountered during the assessments that affected fieldwork strategy decisions or the identification of artifacts or cultural features (e.g., dense root mats, boulders, rubble, etc.).

2.0 STAGE 2 PROPERTY ASSESSMENT

2.1 Field Methods

Given that the subject parcels consisted of actively or recently cultivated fields and lands where ploughing was not possible or viable, it was necessary to utilize both the pedestrian survey and test pit survey methods to complete the Stage 2 property assessment. The specific property characteristics, assessment methods and rationale are summarized in Table 7.

Table 7: Summary of Property Characteristics, Assessment Methods and Rationale by Parcel

Parcel	Property Characteristics	Assessment Method(s)	Rationale
GSH1006	Pepper Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1007	Rodgerville Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1012	Dashwood Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1013	Huron Street, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1020	Mollard Line, South Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1022/2176	Mollard Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1023	Agricultural Field, South Road, Shoulders, Ditches	Test Pit Survey and Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW Non-Agricultural and not Plough-Accessible
GSH1033	Agricultural Field, South Road, Shoulders, Ditches	Test Pit Survey and Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW Non-Agricultural and not Plough-Accessible
GSH1034	Bronson Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1035	Agricultural Field, South Road, Shoulders, Ditches	Test Pit Survey and Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW Non-Agricultural and not Plough-Accessible
GSH1038	Pepper Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1039	Pepper Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1040	Bronson Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1043	Babylon Line, Shoulders, Ditches (East); Rodgerville Road, Shoulders, Ditches (North)	Visual Inspection (East); Combination Test Pit and Visual Inspection to Confirm Disturbance (North)	Clearly Disturbed Due to Grading and Road Buildup (East); Non-Agricultural and not Plough-Accessible (North)
GSH1048	Blackbush Line, Shoulders, Ditches	Visual Inspection	Clearly Disturbed Due to Grading and Road Buildup
GSH1049	MacDonald Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible

Parcel	Property Characteristics	Assessment Method(s)	Rationale
GSH1056	Bronson Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1061	Bronson Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1062	Agricultural Field, South Road, Shoulders, Ditches	Test Pit Survey and Visual Inspection	Agricultural Field not Plough-Accessible; ROW Clearly Disturbed Due to Grading and Road Buildup
GSH1067	Bronson Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1068	Recently Cultivated Agricultural Land, Greenway Drive, Shoulders, Ditches	Pedestrian Survey (Additional Lands) Combination Test Pit and Visual Inspection to Confirm Disturbance (ROWs)	Ploughed and Weathered Agricultural Field in the South; Non-Agricultural and not Plough-Accessible ROWs
GSH1072	Agricultural Land, South Road, Shoulders, Ditches	Test Pit Survey, Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW non-Agricultural and not Plough-Accessible
GSH1077 (East, Centre)	Crediton Road, Shoulders, Ditches, Laneways, Agricultural and Non-Agricultural Land	Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW non-Agricultural and not Plough-Accessible
GSH1077 (West)/1766 (North)	Crediton Road, Blackbush Line, Shoulders, Ditches, Agricultural Land	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural; Non-Plough Accessible Agricultural Field
GSH1095	Eagleson Line, Shoulders, Ditches, Laneway, Agricultural Land	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW non-Agricultural and not Plough-Accessible
GSH1118	Pepper Road, Shoulders, Ditches, Agricultural Land	Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW non-Agricultural and not Plough-Accessible
GSH1360	Goshen Line, Pepper Road, Shoulders, Ditches, Driveway	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1390	Babylon Line, Shoulders, Ditches, Laneways	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1461	Dashwood Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1481	Parr Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1493	Parr Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1498/1659	Shipka Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1505/2252/1504	Kipton Road, Shoulders, Ditches, Recently Cultivated Agricultural Land	Combination Test Pit and Visual Inspection to Confirm Disturbance; Pedestrian Survey	Non-Agricultural and not Plough-Accessible; Ploughed and Weathered Agricultural Field
GSH1507	Shipka Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1509	Shipka Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1526	Grand Bend Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1528	Grand Bend Line, Shoulders, Ditches, Laneways	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible

Parcel	Property Characteristics	Assessment Method(s)	Rationale
GSH1605	Crediton Road, Shoulders, Ditches, Recently Cultivated Agricultural Land	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance; Pedestrian Survey	ROWs Non-Agricultural and not Plough-Accessible; Ploughed and Weathered Agricultural Field (Add Land)
GSH1617	Crediton Road, Shoulders, Ditches	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1744/1765	Blackbush Line, Shoulders, Ditches, Laneways	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1757	Blackbush Line, Shoulders, Ditches, Field Access	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1758	Blackbush Line, Shoulders, Ditches, Laneways, Field Access	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1766 (South)	Blackbush Line, Shoulders, Ditches	Visual Inspection	Clearly Disturbed Due to Grading and Road Buildup
GSH1780	South Road, Shoulders, Ditches	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH1949	Blackbush Line, Shoulders, Ditches, Agricultural Field	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Agricultural Field not Plough-Accessible; ROW non-Agricultural and not Plough-Accessible
GSH2028	Babylon Line, Shoulders, Ditches, Laneways	Visual Inspection	Clearly Disturbed Due to Grading and Road Buildup
GSH2043	Babylon Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2046	Babylon Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2053	Crediton Road, Shoulders, Ditches	Visual Inspection	Clearly Disturbed Due to Grading and Road Buildup
GSH2056	Babylon Line, Shoulders, Ditches, Laneways	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2099	Dashwood Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2108	Huron Street, Shoulders, Ditches	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2133	Kirkton Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2158	Babylon Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2236	Kirkton Road, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2237	Shipka Line, Shoulders, Ditches, Laneways	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2238	Shipka Line, Shoulders, Ditches, Laneways	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
GSH2255	Victoria Avenue West, Shoulders, Ditches	Visual Inspection	Clearly Disturbed Due to Grading and Road Buildup

Parcel	Property Characteristics	Assessment Method(s)	Rationale
GSH2381	Agricultural Land	Pedestrian Survey	Agricultural Field with appropriate crop conditions for a reduced interval to achieve 80% visibility
GSH2411/2717/2956	Agricultural Land	Pedestrian Survey (Southwest and Northwest); Test Pit Survey (East)	Ploughed and Weathered (Southwest); Appropriate crop conditions for a reduced interval to achieve 80% visibility (Northwest); Not Plough-Accessible (East)
GSH2555	Agricultural Land	Pedestrian Survey	Ploughed and Weathered Agricultural Field
GSH2767	Laneway	Visual Inspection	Clearly Disturbed Due Construction of Laneway
GSH2838	Laneways, Outbuildings, Non-Agricultural Lands	Visual Inspection	Clearly Disturbed Due to Laneway Construction and Building Footprints
GSH3065	Recently Cultivated Agricultural Land	Pedestrian Survey	Ploughed and Weathered Agricultural Field
GSH3068	Recently Cultivated Agricultural Land (West); Woodlot (East)	Pedestrian Survey (West); Test Pit Survey (East)	Ploughed and Weathered Agricultural Field; Woodlot non-Agricultural and not Plough-Accessible
Grand Bend Line from GSH1528 to GSH1016	Grand Bend Line, South Road, Shoulders, Ditches, Laneways	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
Babylon Line from GSH2058 to GSH2030	Babylon Line, Shoulders, Ditches, Laneways	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
Blackbush Line from GSH1758 to GSH2252	Blackbush Line, Shoulders, Ditches	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
Mollard Line from GSH1559 to GSH1099	Mollard Line, Shoulders, Ditches, Laneways	Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible
Bronson Line at GSH1077	Bronson Line, Shoulders, Ditches, Laneways	Visual Inspection	Clearly Disturbed Due to Grading and Road Buildup
Huron Street at GSH1013	Huron Street, Babylon Line, Shoulders, Ditches, Laneway	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Non-Agricultural and not Plough-Accessible

Parts of the parcels associated with GSH1023, GSH1033, GSH1035, GSH1062, GSH1072, GSH1077 (West)/1766 (North), GSH1095, GSH1118 and GSH1949 traversed agricultural lands that were unsuitable for pedestrian survey at the time of assessment (i.e., there was less than 80% ground surface visibility due to crop growth, and reduced transect intervals would not improve the visibility). Due to the nature of the project location, these areas could not be ploughed without impacting non-project lands, and were subjected to test pit survey (see below). Part of parcel GSH2717 was also unsuitable for pedestrian survey at the time of assessment, and the proponent obtained approval from the MTCS to allow test pitting in this area as an alternate survey method (MTCS 2013b).

Since the assessment took place over the course of several months, daily weather and lighting conditions were variable. On any given day, however, survey was only carried out when weather and lighting conditions were ideal for finding evidence of archaeological resources. A day-by-day breakdown of these weather and lighting conditions appears in Table 8. ARA therefore confirms that fieldwork was carried out under weather and lighting conditions that met the requirements set out in Section 2.1 Standard 3 of the *Standards and Guidelines for Consultant Archeologists* (MTC 2011:29).

Table 8: Summary of Weather and Lighting Conditions

Parcel	Assessment Date	Weather Conditions	Temperature (Max °C)	Lighting Conditions
GSH1006	August 14, 2013	Cloudy	18	Good
GSH1007	August 14, 2013	Cloudy	18	Good
GSH1012	August 9, 2013	Partly Cloudy	23	Very Good
GSH1013	August 9, 2013	Partly Cloudy	23	Very Good
GSH1020	August 12, 2013	Sunny	22	Excellent
GSH1022/2176	August 13, 2013	Cloudy	18	Good
GSH1023	August 13, 2013	Cloudy	18	Good
GSH1033	August 15, 2013	Sunny	20	Excellent
GSH1034	August 15, 2013	Sunny	20	Excellent
GSH1035	August 15, 2013	Sunny	20	Excellent
	August 27, 2013	Cloudy	26	Good
GSH1038	August 14, 2013	Cloudy	18	Good
GSH1039	August 14, 2013	Cloudy	18	Good
GSH1040	August 29, 2013	Sunny	23	Excellent
GSH1043	August 14, 2013	Cloudy	18	Good
	August 29, 2013	Sunny	23	Excellent
GSH1048	August 15, 2013	Sunny	20	Excellent
GSH1049	August 15, 2013	Sunny	20	Excellent
GSH1056	August 15, 2013	Sunny	20	Excellent
GSH1061	August 19, 2013	Sunny	25	Excellent
GSH1062	August 15, 2013	Sunny	20	Excellent
GSH1067	August 14, 2013	Cloudy	18	Good
GSH1068	May 27, 2013 (Add Land)	Sunny	18	Excellent
	August 12, 2013 (ROW)	Sunny	22	Excellent
GSH1072	August 14, 2013	Cloudy	18	Good
GSH1077 (East, Center)	August 28, 2013	Cloudy	27	Good
GSH1077 (West)/1766 (North)	August 28, 2013	Cloudy	27	Good
	September 3, 2013	Cloudy	20	Good
GSH1095	August 13, 2013	Cloudy	18	Good
	August 14, 2013	Cloudy	18	Good
GSH1118	August 14, 2013	Cloudy	18	Good
GSH1360	August 14, 2013	Cloudy	18	Good
GSH1390	August 14, 2013	Cloudy	18	Good

Parcel	Assessment Date	Weather Conditions	Temperature (Max °C)	Lighting Conditions
GSH1461	August 9, 2013	Partly Cloudy	23	Very Good
GSH1481	August 9, 2013	Partly Cloudy	23	Very Good
GSH1493	August 9, 2013	Partly Cloudy	23	Very Good
GSH1498/1659	August 15, 2013	Sunny	20	Excellent
GSH1505/1504/2252	July 2, 2013	Cloudy	22	Good
	August 20, 2013	Sunny	27	Excellent
GSH1507	August 14, 2013	Cloudy	18	Good
GSH1509	August 15, 2013	Sunny	20	Excellent
GSH1526	August 13, 2013	Cloudy	18	Good
GSH1528	August 12, 2013	Sunny	22	Excellent
GSH1605	June 13, 2013 (Add Land)	Sunny	18	Excellent
	August 13, 2013 (ROW)	Cloudy	18	Good
	August 26, 2013 (ROW)	Cloudy	25	Good
	August 27, 2013 (ROW)	Cloudy	26	Good
GSH1617	August 15, 2013	Sunny	20	Excellent
GSH1744/1765	August 19, 2013	Sunny	25	Excellent
GSH1757	August 19, 2013	Sunny	25	Excellent
GSH1758	August 19, 2013	Sunny	25	Excellent
GSH1766 (South)	August 28, 2013	Cloudy	27	Good
GSH1780	August 27, 2013	Cloudy	26	Good
GSH1949	August 15, 2013	Sunny	20	Excellent
GSH2028	August 13, 2013	Cloudy	18	Good
GSH2043	August 9, 2013	Partly Cloudy	23	Very Good
GSH2046	August 9, 2013	Partly Cloudy	23	Very Good
GSH2053	August 15, 2013	Sunny	20	Excellent
GSH2056	August 13, 2013	Cloudy	18	Good
GSH2099	August 9, 2013	Partly Cloudy	23	Very Good
GSH2108	August 9, 2013	Partly Cloudy	23	Very Good
GSH2133	August 9, 2013	Partly Cloudy	23	Very Good
GSH2158	August 13, 2013	Cloudy	18	Good
GSH2236	September 3, 2013	Cloudy	20	Good
GSH2237	August 15, 2013	Sunny	20	Excellent
GSH2238	August 15, 2013	Sunny	20	Excellent
GSH2255	August 28, 2013	Cloudy	27	Good
GSH2381	September 9, 2013	Partly Cloudy	23	Very Good
GSH2411/2717/2956	July 30, 2013	Sunny	20	Excellent
	September 9, 2013	Partly Cloudy	23	Very Good
GSH2555	July 10, 2013	Partly Cloudy	26	Very Good
GSH2767	August 29, 2013	Sunny	23	Excellent
GSH2838	August 29, 2013	Sunny	23	Excellent
GSH3065	August 20 2013	Sunny	27	Excellent
GSH3068	July 30, 2013	Sunny	20	Excellent

Parcel	Assessment Date	Weather Conditions	Temperature (Max °C)	Lighting Conditions
	August 20, 2013	Sunny	27	Excellent
Grand Bend Line from GSH1528 to GSH1016	August 29, 2013	Sunny	23	Excellent
	September 3, 2013	Cloudy	20	Good
Babylon Line from GSH2058 to GSH2030	August 29, 2013	Sunny	23	Excellent
Blackbush Line from GSH1758 to GSH2252	August 28, 2013	Cloudy	27	Good
Mollard Line from GSH1559 to GSH1099	August 26, 2013	Cloudy	25	Good
Bronson Line at GSH1077	August 29, 2013	Sunny	23	Excellent
Huron Street at GSH1013	August 9, 2013	Partly Cloudy	23	Very Good

In the actively or recently cultivated parts of the study area, the property assessment was carried out using the pedestrian survey method. Section 2.1.1 of the *Standards and Guidelines for Consultant Archaeologists* provides clear requirements for the condition of such lands prior to the commencement of fieldwork: all fields must be recently ploughed; all soils must be well-weathered; and at least 80% of the ploughed ground surface must be visible (MTC 2011:30). Section 2.1.1 Guideline 2 also allows for pedestrian survey of planted fields at a reduced interval to achieve the minimum 80% visibility when crop conditions are appropriate (i.e., where weed growth between the rows has been prevented). These requirements were met during the pedestrian survey component of the Stage 2 assessment.

Following the standard strategy for pedestrian survey outlined in Section 2.1.1 of the *Standards and Guidelines for Consultant Archaeologists*, ARA crewmembers traversed the study area along parallel transects established at a maximum interval of 5 m, yielding at least 20 survey transects per hectare. If archaeological materials were encountered in the course of the pedestrian survey, the transect interval would be closed to 1 m and a close inspection of the ground would be conducted for 20 m in all directions (see SD Map 1). For sites with potential for further CHVI, all diagnostic artifacts and a representative sample of non-diagnostic artifacts would then be collected for analysis. For large Euro-Canadian sites a sufficient sample of refined ceramic sherds would be collected to form the basis for accurate dating. All remaining artifacts would be left *in situ* until a proper Stage 3 Controlled Surface Pickup could be carried out. For small sites with little to no potential for further CHVI (i.e., Location 64), the majority of the artifacts would be collected in order to fully document the deposit.

In those parts of the study area that physically could not be ploughed or where ploughing was not viable, the assessment was conducted using the test pit survey method (sometimes referred to as shovel-testing). In this method, ARA crewmembers hand-excavated small regular test pits with a minimum diameter of 30 cm at prescribed intervals across the study area. Section 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists* stipulates that lands within 300 m of any feature of archaeological potential be examined at 5 m intervals, and any lands more than 300 m from such features be examined at 10 m intervals (MTC 2011:31–32). Given the presence of multiple indicators of archaeological potential in the vicinity of the study area (e.g., a variety of water sources and historically-surveyed roadways), a 5 m interval was adopted for the property assessment.

In accordance with Section 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists*, each test pit was excavated into the first 5 cm of subsoil (MTC 2011:32). The resultant pits were then examined for stratigraphy, cultural features and/or evidence of fill. The soil from each test pit was screened through 6 mm mesh and examined for archaeological materials. If archaeological materials were encountered over the course of the test pitting survey, each Positive Test Pit would be documented and all artifacts would be collected according to their associated test pit. All test pits were backfilled upon completion, as per the property owners' instruction (MTC 2011:32).

In accordance with Section 2.1.8 of the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011:38), a combination of property inspection and test pitting was used to confirm the extents of any disturbed areas identified during the test pit survey. These areas either initially appeared to have archaeological potential or were of indeterminate archaeological potential, and were therefore subjected to test pitting (i.e., shovel tested, found to be disturbed). Test pits were placed throughout these areas of unclear archaeological potential to confirm that these areas had been completely disturbed. In accordance with the requirements set out in Section 1.2 of the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011:15–16), the visually inspected areas were examined systematically (at a 5 m interval) under ideal weather and lighting conditions with excellent ground surface visibility.

Artifacts that may indicate the presence of significant cultural deposits include bone, charcoal, lithics (stone tools and refuse generated by their production and use), ceramics, glass and metal. Archaeological features such as pits, foundations and other non-portable remains may also be detected during a Stage 2 property assessment. All archaeological materials with potential CHVI are documented, whether associated with Pre-Contact Aboriginal groups or Post-Contact First Nations, Métis and Euro-Canadian populations. Artifact locations are recorded on topographic maps, in field notes and on a variety of GPS handheld units. Specifically, ARA utilized a Topcon HiPer SR RTK GNSS Receiver and Field Controller capable of network-corrected measurements to 1 cm accuracy (using the UTM17 NAD83 coordinate system), a Topcon GRS-1 RTK GNSS Receiver and Field Controller capable of network-corrected measurements to 1 cm accuracy (using the UTM17 NAD83 coordinate system), and a Garmin eTrex Legend, WAAS-enabled, GPS handheld unit capable of +/- 2 m accuracy (using the UTM17 NAD83 coordinate system) on different occasions between May and September 2013.

All parts of the study area were assessed according to these methods, save for those that clearly did not have archaeological potential and did not require any test pitting to confirm disturbance. Section 2.1 of the *Standards and Guidelines for Consultant Archaeologists* states that only those areas that have steep slopes greater than 20°, are permanently wet or consist of exposed bedrock, or have been subjected to deep land alterations that have severely damaged the integrity of archaeological resources can be considered exempt from requiring Stage 2 assessment (MTC 2011:28). These areas were subject to a property inspection in accordance the requirements set out in Section 1.2 of the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011:15–16). Specifically, the visually inspected areas were examined systematically (at a 5 m interval) under ideal weather and lighting conditions with excellent ground surface visibility.

ARA's on-site documentation resulted in the identification of numerous disturbed areas over the course of the Stage 2 assessment. Specifically, construction activities associated with the creation of paved roadways, embankments, drainage ditches and culverts have resulted in the removal of archaeological potential from many of the parcels. These areas were not subject to Stage 2 assessment, as they had no archaeological potential.

The results of the Stage 2 property assessment are summarized in Map 29–Map 107, and the specific field methods utilized at each parcel and the associated images are presented in Table 9. In fulfillment of the requirements set out in Section 7.8 of the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011:137), the field methods utilized during the assessment as a whole are summarized in Table 10.

Table 9: Summary of Assessment Methods and Images by Parcel

Parcel	Assessment Method(s)	Image(s)	Area(s) of No Archaeological Potential	Image(s)
GSH1006	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 1–Image 2	Disturbed Lands	Image 3
GSH1007	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 4–Image 5	Disturbed Lands	Image 6
GSH1012	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 7–Image 8	Disturbed Lands	Image 9
GSH1013	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 10–Image 11	Disturbed Lands	Image 12
GSH1020	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 13	Disturbed Lands	Image 14
GSH1022/2176	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 15–Image 16	Disturbed Lands	Image 17
GSH1023	Test Pit Survey and Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 18–Image 21	Disturbed Lands	Image 22
GSH1033	Test Pit Survey and Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 23–Image 24	Disturbed Lands	Image 25
GSH1034	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 26–Image 27	Disturbed Lands	Image 28
GSH1035	Test Pit Survey and Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 29–Image 32; Image 34–Image 35	Disturbed Lands	Image 33; Image 35
GSH1038	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 37–Image 38	Disturbed Lands	Image 39
GSH1039	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 40	Disturbed Lands	Image 41
GSH1040	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 42–Image 43	Disturbed Lands	Image 44
GSH1043	Visual Inspection (East); Combination Test Pit and Visual Inspection to Confirm Disturbance (North)	Image 45–Image 46	Disturbed Lands	Image 47–Image 48
GSH1048	Visual Inspection	N/A	Disturbed Lands	Image 49
GSH1049	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 50	Disturbed Lands	Image 51
GSH1056	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 52–Image 53	None	Image 54

Parcel	Assessment Method(s)	Image(s)	Area(s) of No Archaeological Potential	Image(s)
GSH1061	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 55–Image 56	Disturbed Lands	Image 57
GSH1062	Test Pit Survey and Visual Inspection	Image 58–Image 59	Disturbed Lands	Image 60
GSH1067	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 61–Image 62	Disturbed Lands	Image 63
GSH1068	Pedestrian Survey (Additional Lands) Combination Test Pit and Visual Inspection to Confirm Disturbance (ROWs)	Image 64–Image 66; Image 68–Image 69	Disturbed Lands	Image 67; Image 70
GSH1072	Test Pit Survey, Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 71–Image 74	Disturbed Lands	Image 75
GSH1077 (East, Centre)	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 76–Image 77	Disturbed Lands	Image 78
GSH1077 (West)/1766 (North)	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 79–Image 80	Disturbed Lands	Image 81
GSH1095	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 82–Image 84	Disturbed Lands	Image 85
GSH1118	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 86–Image 87	Disturbed Lands	Image 70
GSH1360	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 89–Image 90; Image 92	Disturbed Lands	Image 91; Image 93
GSH1390	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 94–Image 95	Disturbed Lands	Image 96
GSH1461	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 97–Image 98	Disturbed Lands	Image 99
GSH1481	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 100–Image 101	Disturbed Lands	Image 102
GSH1493	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 103–Image 104	Disturbed Lands	Image 105
GSH1498/1659	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 106–Image 107	Disturbed Lands	Image 108
GSH1505/2252/1504	Combination Test Pit and Visual Inspection to Confirm Disturbance; Pedestrian Survey	Image 109–Image 112	Disturbed Lands	Image 113
GSH1507	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 114	None	Image 115
GSH1509	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 116–Image 117	Disturbed Lands	Image 118
GSH1526	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 119–Image 120	None	Image 121
GSH1528	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 122–Image 124	Disturbed Lands	Image 125
GSH1605	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance; Pedestrian Survey	Image 126–Image 129; Image 131–Image 132	Disturbed Lands	Image 130; Image 133
GSH1617	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 134–Image 135	Disturbed Lands	Image 136
GSH1744/1765	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 137–Image 139	Disturbed Lands	Image 140

Parcel	Assessment Method(s)	Image(s)	Area(s) of No Archaeological Potential	Image(s)
GSH1757	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 141–Image 142	Disturbed Lands	Image 143
GSH1758	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 144–Image 145	Disturbed Lands	Image 146
GSH 1766 (South)	Visual Inspection	N/A	Disturbed Lands	Image 147
GSH1780	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 148–Image 149	Disturbed Lands	Image 150
GSH1949	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 151–Image 152	Disturbed Lands	Image 153
GSH2028	Visual Inspection	N/A	Disturbed Lands	Image 154
GSH2043	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 155–Image 156	Disturbed Lands	Image 157
GSH2046	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 158–Image 159	Disturbed Lands	Image 160
GSH2053	Visual Inspection	N/A	Disturbed Lands	Image 161–Image 162
GSH2056	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 163	Disturbed Lands	Image 164
GSH2099	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 165–Image 166	None	Image 167
GSH2108	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 168–Image 169	Disturbed Lands	Image 170
GSH2133	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 171	Disturbed Lands	Image 172
GSH2158	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 173	Disturbed Lands	Image 174
GSH2236	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 175–Image 176	Disturbed Lands	Image 177
GSH2237	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 178	Disturbed Lands	Image 179
GSH2238	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 180	Disturbed Lands	Image 181
GSH2255	Visual Inspection	N/A	Disturbed Lands	Image 182
GSH2381	Pedestrian Survey	Image 183–Image 184	None	N/A
GSH2411/2717/2956	Pedestrian Survey (Southwest and Northwest); Test Pit Survey (East)	Image 185–Image 190	None	N/A
GSH2555	Pedestrian Survey	Image 191–Image 192	None	N/A
GSH2767	Visual Inspection	N/A	Disturbed Lands	Image 193
GSH2838	Visual Inspection	N/A	Disturbed Lands	Image 194
GSH3065	Pedestrian Survey	Image 195–Image 196	None	N/A
GSH3068	Pedestrian Survey (West); Test Pit Survey (East)	Image 197–Image 200	None	N/A
Grand Bend Line from GSH1528 to GSH1016	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 201; Image 203	Disturbed Lands	Image 202; Image 204
Babylon Line from GSH2058 to GSH2030	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 205–Image 206; Image 208–Image 209	Disturbed Lands	Image 207; Image 210
Blackbush Line from GSH1758 to GSH2252	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 211–Image 212	None	Image 213
Mollard Line from GSH1559 to GSH1099	Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 214–Image 215	Disturbed Lands	Image 216

Parcel	Assessment Method(s)	Image(s)	Area(s) of No Archaeological Potential	Image(s)
Bronson Line at GSH1077	Visual Inspection	N/A	Disturbed Lands	Image 217
Huron Street at GSH1013	Test Pit Survey; Combination Test Pit and Visual Inspection to Confirm Disturbance	Image 218–Image 219	Disturbed Lands	Image 220

Table 10: Summary of Utilized Field Methods

Category	Study Area
Property assessed by test pit survey at a maximum interval of 5 m	2.52% (1.16 ha)
Property assessed by pedestrian survey at a maximum interval of 5 m	44.36% (20.40 ha)
Property assessed by test pit survey and visual inspection to confirm disturbance	12.81% (5.89 ha)
Property not assessed because of disturbed areas	40.30% (18.53 ha)
Property not assessed because of permanently wet areas	0.00% (0.00 ha)
Property not assessed because of sloped areas	0.00% (0.00 ha)
Property not assessed because of exposed bedrock	0.00% (0.00 ha)
Property assessed where standard survey intervals could not be maintained	0.00% (0.00 ha)
Total	**100% (45.97 ha)**

In keeping with the requirements set out in Section 2.1 Standard 4 of the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011:29), GPS coordinates were recorded for fixed reference landmarks (e.g., Ontario Land Surveyor benchmarks, Hydro poles, standard iron bars, etc.) located in the vicinity of the study area. The GPS co-ordinates for the documented fixed reference landmarks appear in Table 11, and the locations of these landmarks are presented in Map 29–Map 107.

Table 11: GPS Co-ordinates for Fixed Reference Landmarks

Parcel	Fixed Reference Landmark ID	Label	UTM Zone	Easting (m)	Northing (m)
GSH1006	N/A	FRL 1	17	452,054	4,804,010
GSH 1007	N/A	FRL 2	17	449,692	4,805,771
GSH1012	(BRY4AE)	FRL 3	17	453,076	4,800,020
GSH1013	(C6LC6T)	FRL 4	17	452,140	4,797,817
GSH1020	N/A	FRL 5	17	438,954	4,790,113
GSH1022/2176	N/A	FRL 6	17	439,032	4,790,615
GSH1023	N/A	FRL 7	17	439,587	4,789,972
GSH1033	N/A	FRL 8	17	447,696	4,790,985
GSH1034	N/A	FRL 9	17	448,458	4,799,849
GSH1035	N/A	FRL 10	17	445,608	4,790,710
GSH1038	N/A	FRL 11	17	447,959	4,803,443
GSH1039	N/A	FRL 11	17	447,959	4,803,443
GSH1040	N/A	FRL 12	17	448,115	4,802,238
GSH1043	N/A	FRL 13	17	451,796	4,805,722

Parcel	Fixed Reference Landmark ID	Label	UTM Zone	Easting (m)	Northing (m)
	N/A	FRL 14	17	451,215	4,805,979
GSH1048	N/A	FRL 15	17	446,074	4,801,927
GSH1049	N/A	FRL 16	17	448,225	4,801,437
GSH1056	N/A	FRL 17	17	447,771	4,804,670
GSH1061	N/A	FRL 18	17	449,273	4,794,277
GSH1062	N/A	FRL 19	17	449,723	4,791,272
GSH1067	N/A	FRL 20	17	449,786	4,790,834
GSH1068	N/A	FRL 21	17	436,379	4,787,788
	N/A	FRL 22	17	438,864	4,789,231
GSH1072	N/A	FRL 23	17	449,758	4,791,279
GSH1077 (East, Centre)	N/A	FRL 24	17	448,129	4,793,122
GSH1077 (West)/1766 (North)	N/A	FRL 25	17	447,390	4,793,010
GSH1095	N/A	FRL 26	17	439,717	4,788,359
GSH1118	N/A	FRL 27	17	449,982	4,803,737
GSH1360	N/A	FRL 28	17	449,889	4,804,415
	N/A	FRL 27	17	449,982	4,803,737
GSH1390	N/A	FRL 29	17	451,901	4,804,830
GSH1461	(BRY48L)	FRL 30	17	453,234	4,800,042
GSH1481	(CA6THD)	FRL 31	17	455,685	4,793,243
GSH1493	(CAG25F)	FRL 32	17	455,433	4,795,039
GSH1498/1659	N/A	FRL 33	17	445,130	4,793,980
GSH1505/2252/1504	N/A	FRL 34	17	447,063	4,795,087
GSH1507	N/A	FRL 35	17	445,387	4,792,201
GSH1509	N/A	FRL 36	17	445,506	4,791,503
GSH1526	N/A	FRL 37	17	441,341	4,791,430
GSH1528	N/A	FRL 38	17	441,434	4,790,791
GSH1605	N/A	FRL 39	17	441,243	4,792,121
GSH1617	N/A	FRL 40	17	445,060	4,792,699
GSH1744/1765	N/A	FRL 41	17	447,316	4,793,528
GSH1757	N/A	FRL 42	17	446,901	4,796,283
GSH1758	N/A	FRL 43	17	447,002	4,795,584
GSH1766 (South)	N/A	FRL 25	17	447,390	4,793,010
GSH1780	N/A	FRL 8	17	447,696	4,790,985
GSH1949	N/A	FRL 44	17	447,557	4,791,806
GSH2028	N/A	FRL 45	17	453,910	4,791,210
GSH2043	(C6LFYY)	FRL 46	17	453,158	4,796,303
GSH2046	(C6LGRT)	FRL 47	17	453,337	4,795,089
GSH2053	N/A	FRL 48	17	454,463	4,794,018
GSH2056	N/A	FRL 49	17	453,692	4,792,767
GSH2099	(BRY3VB)	FRL 50	17	453,825	4,800,109
GSH2108	(C6LC3E)	FRL 51	17	451,907	4,797,789
GSH2133	(C6M8LK)	FRL 52	17	451,168	4,795,634
GSH2158	N/A	FRL 53	17	453,653	4,793,020

Parcel	Fixed Reference Landmark ID	Label	UTM Zone	Easting (m)	Northing (m)
GSH2236	N/A	FRL 34	17	447,063	4,795,087
GSH2237	N/A	FRL 54	17	444,836	4,796,015
GSH2238	N/A	FRL 55	17	444,775	4,796,416
GSH2255	N/A	FRL 56	17	454,992	4,794,074
GSH2381	N/A	FRL 57	17	465,755	4,795,587
GSH2411/2717/2956	(CAG25F)	FRL 32	17	455,433	4,795,039
GSH2555	N/A	FRL 60	17	461,541	4,795,881
GSH2767	N/A	FRL 58	17	471,810	4,796,436
GSH2838	N/A	FRL 59	17	469,761	4,796,175
GSH3065	N/A	FRL 58	17	471,810	4,796,436
GSH3068	N/A	FRL 58	17	471,810	4,796,436
Grand Bend Line from GSH1528 to GSH1016	N/A	FRL 38	17	441,434	4,790,791
Babylon Line from GSH2058 to GSH2030	N/A	FRL 45	17	453,910	4,791,210
Blackbush Line from GSH1758 to GSH2252	N/A	FRL 43	17	447,002	4,795,584
Mollard Line from GSH1559 to GSH1099	N/A	FRL 22	17	438,864	4,789,231
Bronson Line at GSH1077	N/A	FRL 18	17	449,273	4,794,277
Huron Street at GSH1013	(C6LC6T)	FRL 4	17	452,140	4,797,817

During the laboratory processing of the retained artifacts, ARA's Material Culturalist carried out detailed documentation and analyses of the archaeological materials in order to provide 1) a record of the artifacts and other materials from the site, 2) a basis for all recommendations and 3) enough basic information to help future researchers determine whether the site is relevant to their studies (MTC 2011:97). All of the artifacts were classified using ARA's devised typological system, which is an adaptation of the *Parks Canada Database Artifact Inventory Coding Guide* (Parks Canada 2002). In this system, chert types are determined in accordance with the *Cherts of Southern Ontario* (Eley and von Bitter 1989), and lithics are classified using the definitions set out in the *Field Manual for Avocational Archaeologists in Ontario* (Adams et al. 1995) and *Archaeological Laboratory Methods: An Introduction* (Sutton and Arkush 2002). Euro-Canadian artifacts are classified into groups, materials, object types and object names using a variety of reference aids (e.g., Adams et al. 1995; Kenyon and Kenyon 2008; Miller 2000; Lindsey 2013).

2.2 Summary of Results

The Stage 2 property assessment, completed under optimal conditions, resulted in the identification of one location of archaeological material: Location 64. The position of this site is presented in SD Map 1, and the associated GPS co-ordinates are presented in SD Table 1; these data reveal detailed site location information and therefore cannot be included in the main report.

In keeping with the requirements set out in Sections 7.8.2–7.8.4 of the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011:137–139), the documentation of this archaeological

findspot appears in Section 2.3. This section comprises an overview of the assessment results, a comprehensive record of finds, a discussion of the artifactual analysis and conclusions, and the presentation of ARA's recommendation for the site.

The artifact collection from the Stage 2 assessment is housed in polyethylene bags that are stored in Archive Box A257. This box is a 10"(H) x 12"(W) x 15"(D) light duty, double bottom corrugated cardboard box, and is labelled accordingly. Archive box numbers are assigned in numerical order and all associated information is entered into an Archive Box Catalogue for accurate tracking. All catalogue and collection information is kept on a secure server. Upon project completion, the Archive boxes are transported to ARA's head office (located at 97 Gatewood Road, Kitchener) and are stored in numerical order on steel storage shelves.

2.3 Location 64

2.3.1 Record of Finds

2.3.1.1 Overview

Site Type: A 28 x 16 m Euro-Canadian artifact scatter with 1 Pre-Contact lithic; 16 of 17 artifacts collected
Location: Western part of parcel GSH1505
Property: Lot 15, Concession 15 in the Geographic Township of Stephen
GPS Co-ordinates: See Supplementary Documentation
Diagnostic Artifacts: 7
Material(s) Identified: Ferrous, Glass, Ceramic, Selkirk Chert

2.3.1.2 Description

Location 64 consists of a 28 x 16 m scatter of 16 Euro-Canadian artifacts and 1 Pre-Contact lithic tool identified during the pedestrian survey of parcel GSH1505 (see Map 108; SD Map 2). The discovery of artifacts within a previously assessed area (PIF #P218-038-2011 and #P366-017-2012) prompted ARA to re-assess these lands in order to fully document the scatter. Despite an intensified survey of all agricultural lands within 20 m of this site, no other archaeological materials were identified.

A total of 16 artifacts were collected for laboratory analysis during the assessment, and the remaining artifact was left in the field to assist in site re-location, if necessary. The 16 artifacts from Location 64 are fully documented in Appendix B, Records 1–13 (see Image 221). The full artifact analysis appears in Section 2.3.2.

The Location 64 artifact assemblage consisted primarily of fragmentary glass storage containers (50.00%), ceramic tableware (12.50%) and nails (12.50%). Only one artifact exhibited evidence of burning or heat alteration (6.25% of the total assemblage), which was a piece of melted glass. One potential artifact concentration was identified in the northeastern part of the scatter. No cultural features or structural elements were identified in the vicinity of Location 64 during the Stage 2 assessment.

The artifacts from Location 64 can be effectively classified into 'Aboriginal', 'architectural', 'ceramic food related', 'ceramic non-food related, 'glass food related', 'glass non-food related' and 'non-architectural metal' groups. A quantitative summary of artifacts by group appears in Table 12.

Table 12: Summary of Artifacts – Location 64

Group	Object Type	Object Name	Freq.	% of Assemblage	% of Group
Aboriginal	Informal Tool	Multi-Tool	1	6.25%	100.00%
		Informal Tool Total	1	6.25%	100.00%
	Aboriginal Total		**1**	**6.25%**	**100.00%**
Architectural	Hardware	Nail	2	12.50%	100.00%
		Hardware Total	2	12.50%	100.00%
	Architectural Total		**2**	**12.50%**	**100.00%**
Ceramic Food Related	Storage Container	Storage (Unidentifiable)	1	6.25%	50.00%
		Storage Container Total	1	6.25%	50.00%
	Tableware	Tableware (Unidentifiable)	1	6.25%	50.00%
		Tableware Total	1	6.25%	50.00%
	Ceramic Food Related Total		**2**	**12.50%**	**100.00%**
Ceramic Non-Food Related	Personal Care	Toiletry Jar	1	6.25%	100.00%
		Personal Care Total	1	6.25%	100.00%
	Ceramic Non-Food Related Total		**1**	**6.25%**	**100.00%**
Glass Food Related	Storage Container	Beer Bottle	1	6.25%	12.50%
		Bottle (Unidentifiable)	6	37.50%	75.00%
		Closure	1	6.25%	12.50%
		Storage Container Total	8	50.00%	100.00%
	Glass Food Related Total		**8**	**50.00%**	**100.00%**
Glass Non-Food Related	Miscellaneous	Melted	1	6.25%	100.00%
		Miscellaneous Total	1	6.25%	100.00%
	Glass Non-Food Related Total		**1**	**6.25%**	**100.00%**
Non-Architectural Metal	Miscellaneous	Scrap Metal	1	6.25%	100.00%
		Miscellaneous Total	1	6.25%	100.00%
	Non-Architectural Metal Total		**1**	**6.25%**	**100.00%**
Grand Total			**16**	**100.00%**	

2.3.1.3 Inventory of the Documentary Record

The inventory of the documentary record for the Stage 2 assessment is summarized in Table 13. This inventory includes a quantitative summary of the field notes, photographs and mapping materials involved in the assessment, all of which are stored at ARA's processing facility located at 154 Otonabee Drive, Kitchener, Ontario.

Table 13: Stage 2 Documentary Record

Field Documents	Total	Nature	Location
Photographs	671	Digital	On server at 154 Otonabee Drive, Kitchener; Folder P007-535-2013
Field Notes	21	Digital and hard copy	Filed and on server at 154 Otonabee Drive, Kitchener; P007-535-2013
Field Maps	95	Digital and hard copy	Filed and on server at 154 Otonabee Drive, Kitchener; P007-535-2013

2.3.2 Analysis and Conclusions

Of the 16 artifacts collected during the assessment of Location 64, a total of 7 (43.75% of the assemblage) can be dated based on the presence of recognizable diagnostic characteristics. The diagnostic artifacts are summarized in Table 14.

Table 14: Analysis of Diagnostic Artifacts – Location 64

Group	Material	Object Name	Datable Attribute	Freq.	% of Total Diagnostic	Date Range	Reference
Architectural	Ferrous	Nail	Cut	2	28.57%	ca.1830–1890	Adams 1995:105
Ceramic Food Related	Porcelaneous Ware	Tableware (Unidentifiable)	Plain	1	14.29%	ca. 1820–Present	TAMU 2013
	Stoneware (Fine)	Storage (Unidentifiable)	Plain	1	14.29%	ca. 1630–Present	Miller 2000:10; Lennox and Fitzgerald 1990:432–437; Collard 1967:139
Ceramic Non-Food Related	Porcelain	Toiletry Jar	Northrop & Lyman Company	1	14.29%	ca. 1854–1980	Sullivan 1983:1
Glass Food Related	Glass	Beer Bottle	Machine Made Bottle	1	14.29%	1899–Present	Miller 2000:8
		Bottle (Unidentifiable)	Enameled Label (Applied Coloured Label)	1	14.29%	1935–Present	Lindsey 2012; Miller 2000:8
Total				**7**	**100.00%**		

As Table 14 demonstrates, the diagnostics from Location 64 generally date between the mid–late 19th century and the present. Ferrous nails were the most common diagnostic artifact type (n=2; 28.57% of the diagnostic assemblage). Manufactured by slicing thin sheets of iron, cut nails are characterized by a rectangular cross-section (Nelson 1968). Cut nails began to replace wrought nails ca.1830, and were used throughout the remainder of the 19th century. The popularity of cut nails began to decline ca. 1890 (Adams 1995:105).

Often used in fine tablewares and tea sets, porcelaneous ware is characterized by its dense and entirely vitrified body, similar to that of English porcelain. Porcelaneous wares were first produced ca. 1820 and are still manufactured today (TAMU 2013).

Next to porcelain, stoneware comprises one of the least porous ceramics found on archaeological sites in Ontario. The fabric of this ceramic is extremely hard and durable, and generally presents as grey, buff or yellow-red in colour (Adams 1995:101). Because of its relative density, stoneware was used for primarily utilitarian purposes (i.e., storage, crockery, ink wells). A more poorly-made stoneware was being produced in England ca. 1630 and shipped to North America, but shortly before 1840 "Improved Stoneware" (stoneware with perfected glazes) became common place on the Canadian Market (Miller 2000:10; Collard 1984:139).

Northrop & Lyman Company vessels are commonly found on late 19th century Euro-Canadian sites. The company began as a retail drugstore and later became a large pharmaceutical firm producing various medicinal products. At one time, the company was one of the largest dealers in patent medicines in Canada. Northrop and Lyman Company was in business from ca. 1854–1980 (Sullivan 1983:1).

Also called 'applied colour labels', enamelled labels are produced by fusing heated, powdered glass to the surface of a vessel and then fired. Such labels are most commonly found on soda, milk and beer bottles produced from 1935 through to present day (Lindsey 2013; Miller 2000:8). The late 19th century saw a shift towards automating the bottle making process worldwide. In this process, machine-blown air is used to blow glass into moulds (Jones and Sullivan 1985:35). Miller suggests that the first semi-automated wide-mouth storage glass production occurred in 1893, and that narrow mouth bottles followed closely after in 1899 (Miller 2000:8).

Given that the assemblage from Location 64 consisted primarily of fragmentary glass storage containers (50.00%), ceramic tableware (12.50%) and nails (12.50%), it is possible that the deposit represents the remains of a small domestic midden locality. Based on the seven diagnostic artifacts, this potential midden appears to date primarily to the late 19th and 20th centuries. According to H. Belden & Co.'s *Illustrated Historical Atlas of the County of Huron, Ontario* (1879), T. Lamport owned this property ca. 1879. Given that the Lamport homestead is depicted in the northeastern part of the parcel (i.e., quite distant from Location 64), this deposit may have been associated with a later owner of the property (see Map 26). The isolated lithic multi-tool was of an undetermined Pre-Contact date.

According to the criteria set out in Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists*, a Post-Contact archaeological site requires further assessment when it consists of a minimum of 20 pre-1900 Euro-Canadian artifacts and/or a 20th century assemblage with possible CHVI (MTC 2011:41). Given that only two of the diagnostic artifacts (the cut nails) could be confidently dated to pre-1900, and that there is no other indication that the assemblage has CHVI, this site does not meet any of the criteria established by the MTCS for determining whether further assessment is required. Similarly, the isolated Pre-Contact lithic did not meet any of the MTCS's criteria for Pre-Contact sites.

Based on these findings, it is the considered opinion of ARA that Location 64 is of no further CHVI and does not warrant a Stage 3 site-specific assessment. Based on the evidence from the Stage 2 assessment, it is also clear that the site will not require Stage 4 mitigation of development impacts.

2.3.3 Recommendations

Location 64 did not meet any of the criteria defined in Section 7.12 of the *Standards and Guidelines for Consultant Archaeologists* for determining whether an archaeological site warrants a Site Record Form (MTC 2011:160–161). Accordingly, it has not been assigned a Borden number.

When compared against the criteria in Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011:39–40), this archaeological site was found to be of no further CHVI. ARA accordingly recommends that no further archaeological assessment of Location 64 be required.

3.0 SYNTHESIS OF CONCLUSIONS AND RECOMMENDATIONS

The Stage 2 property assessment of the additional lands and ROWs was completed in September 2013. Legal permission to enter and conduct all necessary fieldwork activities on project lands was granted by the property owners. This assessment resulted in the discovery of one location of archaeological material: Location 64 on parcel GSH1505. Location 64 comprised a 28 x 16 m scatter of 16 Euro-Canadian artifacts and 1 Pre-Contact lithic tool, and 16 artifacts were collected for laboratory analysis. The diagnostic artifacts indicated that the deposit dated to the late 19th and 20th centuries, but only two of these artifacts definitively dated to pre-1900 due to long periods of production and use. The lithic multi-tool was of an undetermined Pre-Contact date. Location 64 was found to be of no further CHVI.

Based on these findings, ARA recommends that no further archaeological assessment of Location 64 be required, and that the remainder of the assessed lands also require no further archaeological assessment. Should the proposed project location change in this area, additional archaeological work may be required. A *Letter of Review and Acceptance into the Ontario Public Register of Archaeological Reports* is requested, as provided for in Section 65.1 of the *Ontario Heritage Act*.

4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

Section 7.5.9 of the *Standards and Guidelines for Consultant Archaeologists* requires that the following information be provided for the benefit of the proponent and approval authority in the land use planning and development process (MTC 2011:126–127):

- This report is submitted to the 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, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological 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, 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.

5.0 IMAGES

Image 1: View of Crewmember Test Pitting to Confirm Disturbance at GSH1006
(Photo Taken August 14, 2013; Facing South)

Image 2: View of Disturbed Test Pit at GSH1006
(Photo Taken August 14, 2013)

Image 3: Area of No Archaeological Potential – Disturbed Lands at GSH1006
(Photo Taken August 14, 2013; Facing East)

Image 4: View of Crewmember Test Pitting to Confirm Disturbance at GSH1007
(Photo Taken August 14, 2013; Facing North)