

**STAGE 1&2 ARCHAEOLOGICAL ASSESSMENT OF
THE DUNOAK LANDS, PART OF LOT 9, CONCESSION 1, N.D.S.
FORMERLY IN THE TOWNSHIP OF TRAFALGAR SOUTH,
NOW IN THE TOWN OF OAKVILLE,
REGIONAL MUNICIPALITY OF HALTON**

Prepared for

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1 INTRODUCTION

Archaeological Services Inc. was contracted by Mattamy Homes (Halton Division) to conduct a Stage 1&2 archaeological assessment of the Dunoak lands located on part of Lot 9, Concession 1, N.D.S., formerly in the Township of Trafalgar South, now in the Town of Oakville, Regional Municipality of Halton (Figure 1). The subject property comprises approximately 44.49 hectares.

The assessment was conducted under the overall project direction of Dr. Robert MacDonald, pursuant to the Ontario Heritage Act (R.S.O. 1990, 2005) and in partial fulfilment of conditions imposed in compliance with the Ontario Planning Act (R.S.O. 1990). Stage 2 fieldwork was carried out under the direction of Dr. MacDonald and Dr. Shaun Austin on October 3, 4 and September 20, 2005, under a licence issued to Dr. MacDonald. Permission to access the land and to carry out all activities necessary for the purpose of this assessment was granted by Mr. Mark Bales on May 30, 2005.

The following report provides the study background, methodology, results, conclusions, and recommendations of this assessment.

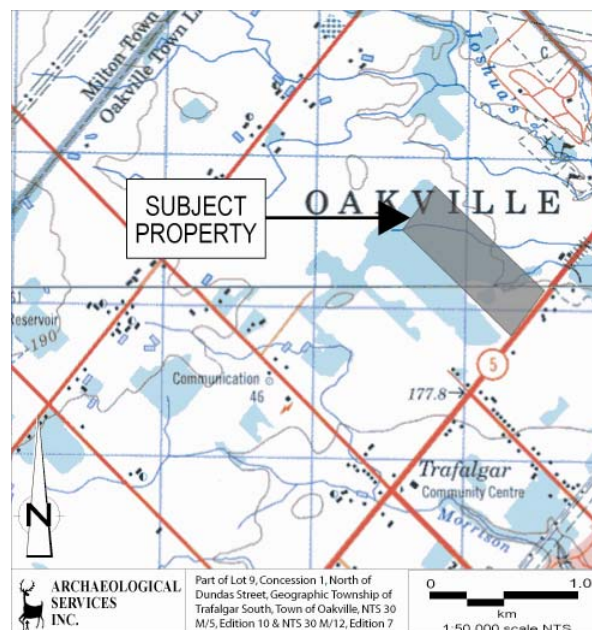


Figure 1: Location of Subject Property

2 STAGE 1 BACKGROUND RESEARCH

Stage 1 background research was conducted in order to identify any archaeological sites previously registered in the study area prior to field examination, and to assess its archaeological potential based on its physiographic setting, proximity to registered archaeological sites and a summary review of nineteenth-century maps.

2.1 Physiography

The study area is located within the Peel Plain physiographic region of southern Ontario (Chapman and Putnam 1984). This physiographic region covers a large area across the central portions of the Regional Municipalities of Peel, York, and Halton. The surface of the plain is characterized by level to gently rolling topography, with a consistent, gradual slope toward Lake Ontario. The plain is made up of deep deposits of dense, limestone and shale imbued till, often covered by a shallow layer of clay sediment.

While the clay soils of the plain may be imperfectly drained in inter-stream areas, the region is without large swamps or bogs. The swales from numerous seasonally active tributaries of Joshua's Creek meander across the subject lands in a southeasterly direction.

2.2 Previous Archaeological Research

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

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) which is maintained by the Ministry of Culture. This database contains archaeological sites registered within the Borden system. The Borden system was first proposed by Dr. Charles E. Borden and is based on a block of latitude and longitude. Each Borden block measures approximately 13 km east-west by 18.5 km north-south, and sites within each block are numbered sequentially as they are found. The study area under review is located within the AiGw and AjGw Borden blocks.

Thirty-two sites have been previously registered within a one-kilometre radius of the subject property. A summary of these sites is provided in Table 1. Regional sites can be expected to relate to the cultural/temporal categories outlined in Table 2.

Table 1: Registered Archaeological Sites Within One-Kilometre Radius of the Study Area				
Borden #	Site Name	Cultural Affiliation	Site Type	Researcher and Date
AiGw-179	No Name	Undetermined Pre-contact	Findspot	LMA* 1984
AiGw-180	No Name	Undetermined Pre-contact	Findspot	LMA 1984
AiGw-181	No Name	Undetermined Pre-contact	Findspot	LMA 1984
AiGw-182	No Name	Undetermined Pre-contact	Lithic scatter	LMA 1984
AiGw-211	Bastille	Undetermined Pre-contact	Findspot	ASI** 1990
AiGw-212	Robespierre	Undetermined Pre-contact	Lithic scatter	ASI 1990
AiGw-215	Potemkin	Undetermined Pre-contact	Lithic scatter	ASI 1990
AiGw-216	Acorn	Undetermined Pre-contact	Findspot	ASI 1990
AiGw-217	Walnut	Middle Archaic	Findspot	ASI 1990
AiGw-218	Levar-Reid	Euro-Canadian	Homestead	ASI 1990
AiGw-219	Oakdene	Undetermined Pre-contact	Findspot	ASI 1990
AiGw-227	Abigail Post Homestead	Undetermined Pre-contact, Euro-Canadian	Findspot, Historic scatter	MHS*** 1992
AiGw-228	Uptown Core Lands 2	Undetermined Pre-contact, Euro-Canadian	Lithic scatter, Historic scatter	MHS 1992
AiGw-229	Uptown Core Lands 3	Undetermined Pre-contact, Euro-Canadian	Lithic scatter, Schoolhouse	MHS 1992
AiGw-230	Daniel Munn Homestead	Undetermined Pre-contact, Euro-Canadian	Lithic scatter, Homestead	MHS 1992
AiGw-231	Uptown Core Lands 5	Undetermined Pre-contact	Findspot	MHS 1992
AiGw-235	PenEquity 2	Middle Archaic	Findspot	MHS 1993
AiGw-236	PenEquity 3	Undetermined Pre-contact	Lithic scatter	MHS 1993
AiGw-237	PenEquity 4	Middle Woodland	Findspot	MHS 1993
AiGw-238	PenEquity 5	Middle Archaic	Findspot	MHS 1993
AiGw-239	PenEquity 6	Undetermined Pre-contact	Lithic scatter	MHS 1993
AiGw-240	PenEquity 8	Early Woodland	Findspot	MHS 1993
AiGw-241	PenEquity 9	Late Archaic	Findspot	MHS 1993
AiGw-242	PenEquity 10	Middle Archaic	Findspot	MHS 1993
AiGw-243	PenEquity 11	Early Archaic	Findspot	MHS 1993

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher and Date
AiGw-261	Macoakville	Late Woodland	Findspot	MHS 1994
AiGw-334	Iroquois Ridge #1	Undetermined Pre-contact	Lithic scatter	R. Sutton 1999
AiGw-335	Iroquois Ridge #2	Middle Archaic	Findspot	R. Sutton 1999
AiGw-336	Iroquois Ridge #3	Middle Archaic	Findspot	R. Sutton 1999
AiGw-337	Iroquois Ridge #4	Early Archaic	Findspot	R. Sutton 1999
AjGw-227	Lernan	Euro-Canadian	Homestead	ASI 1992
AjGw-305	Phoenix	Euro-Canadian	Homestead, well	ASI 1999

*LMA = London Museum of Archaeology **ASI = Archaeological Services Inc ***MHS Mayer Heritage Services

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

2.3 Historical Atlas Review

The subject property is located on part of Lot 9, Concession 1, N.D.S., formerly in the Township of Trafalgar South, now in the Town of Oakville, Regional Municipality of Halton (Figure 2). According to the *Illustrated Historical Atlas of Halton County* (Walker & Miles 1877), the study area was part of the Hugh Coyne Estate in 1877. One structure,

presumably the main farmhouse, is illustrated within the limits of the subject lands, surrounded by orchards. This may not be the extent of historic features on the property, however, since not all features of interest were mapped systematically on the Ontario series of historical maps and atlases. Given that they were financed by subscription, subscribers were given preference with regard to the level of detail provided on the maps.

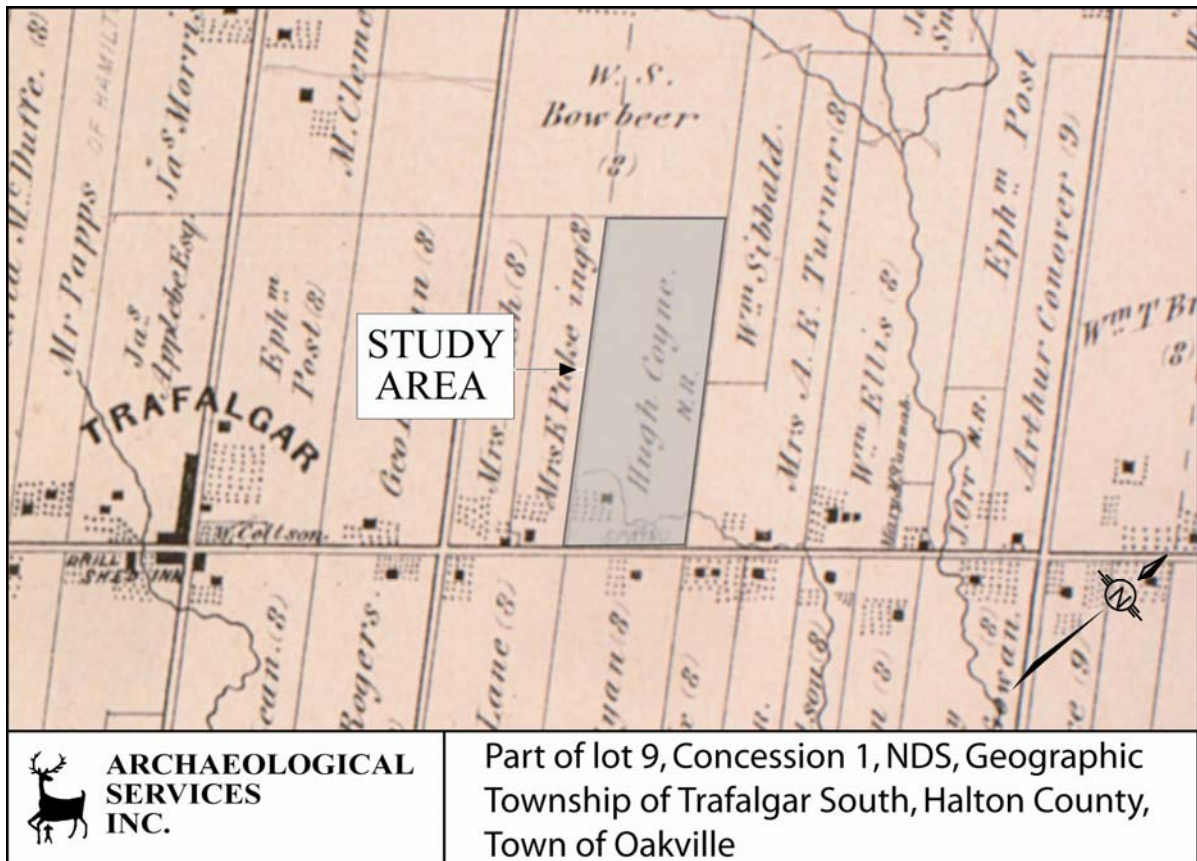


Figure 2: The Subject Property Superimposed on the 1877 Illustrated Historical Atlas Map

2.4 Overall Archaeological Site Potential

Potable water is arguably the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south-central Ontario since the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Accordingly, distance from water is one of the most commonly used variables for predictive modeling of archaeological site location. The *Ontario Ministry of Culture Primer on Archaeology, Land Use Planning and Development in Ontario* (1997:12-13) stipulates that undisturbed land within 300 metres

of a primary water source (lakeshore, river, large creek, etc.), and undisturbed land within 200 metres of a secondary water source (stream, spring, marsh, swamp, etc.), as well as undisturbed land within 300 metres of an ancient water source (as indicated by remnant beaches, shorecliffs, terraces, abandoned river channel features, etc.) and undisturbed lands within 250 metres of a previously registered archaeological site, are considered to have potential for the presence of pre-contact archaeological sites. Additional criteria include: locations on elevated ground; the presence of well-drained sandy soils, or locations on or near distinctive or unusual landforms such as water falls, chert outcrops, rock faces, caverns, mounds, etc.

The study area may be said to exhibit significant archaeological potential for the following reasons: 1) the swales from numerous seasonally active tributaries of Joshua's Creek meander across the subject lands in a southeasterly direction; 2) thirty-two pre-contact and historic archaeological sites have previously been registered within a one-kilometre radius; and 3) the historical atlas depicts a nineteenth century farmstead within the subject property.

3 STAGE 2 FIELDWORK

3.1 Methodology

Archaeological survey of the study area was carried out over three days: on September 20, 2005, under the field direction of Dr. Robert MacDonald, and on October 3 and 4, 2005, under the field direction of Dr. Shaun Austin. Weather conditions on the first two days of survey were sunny and humid, while on the third day it was sunny and mild.

Two sections of the subject lands were deemed to have no archaeological potential or integrity (Figure 3). The first is an area fronting Dundas Street that had been previously disturbed and covered with imported fill (Plate 1). The second is a small section of low, wet terrain in the southeast (Plate 2).

Two woodlots were assessed by means of shovel test pitting at five-metre intervals (Plate 3). Each test pit was hand excavated through the clay loam topsoil to subsoil at a depth ranging from 25 to 30 cm. The soil fills from each test pit was screened through six-millimetre mesh in order to facilitate the recovery of artifacts. No cultural material was encountered in any of the test pits. All test pits were backfilled.

The balance of the property consisted of arable land that had been ploughed and allowed to weather through several substantial rainfalls prior to being subjected to pedestrian survey at five-metre intervals. Surface visibility of the ploughed fields was considered excellent (Plate 3). When artifacts were encountered, the vicinity was intensively surveyed at 2 metre intervals. Universal Transverse Mercator (UTM) grid co-ordinates for isolated artifacts and the approximate centre of artifact scatters were recorded by means of a hand-held global positioning system (GPS) unit reading to within six metres. The datum employed was North

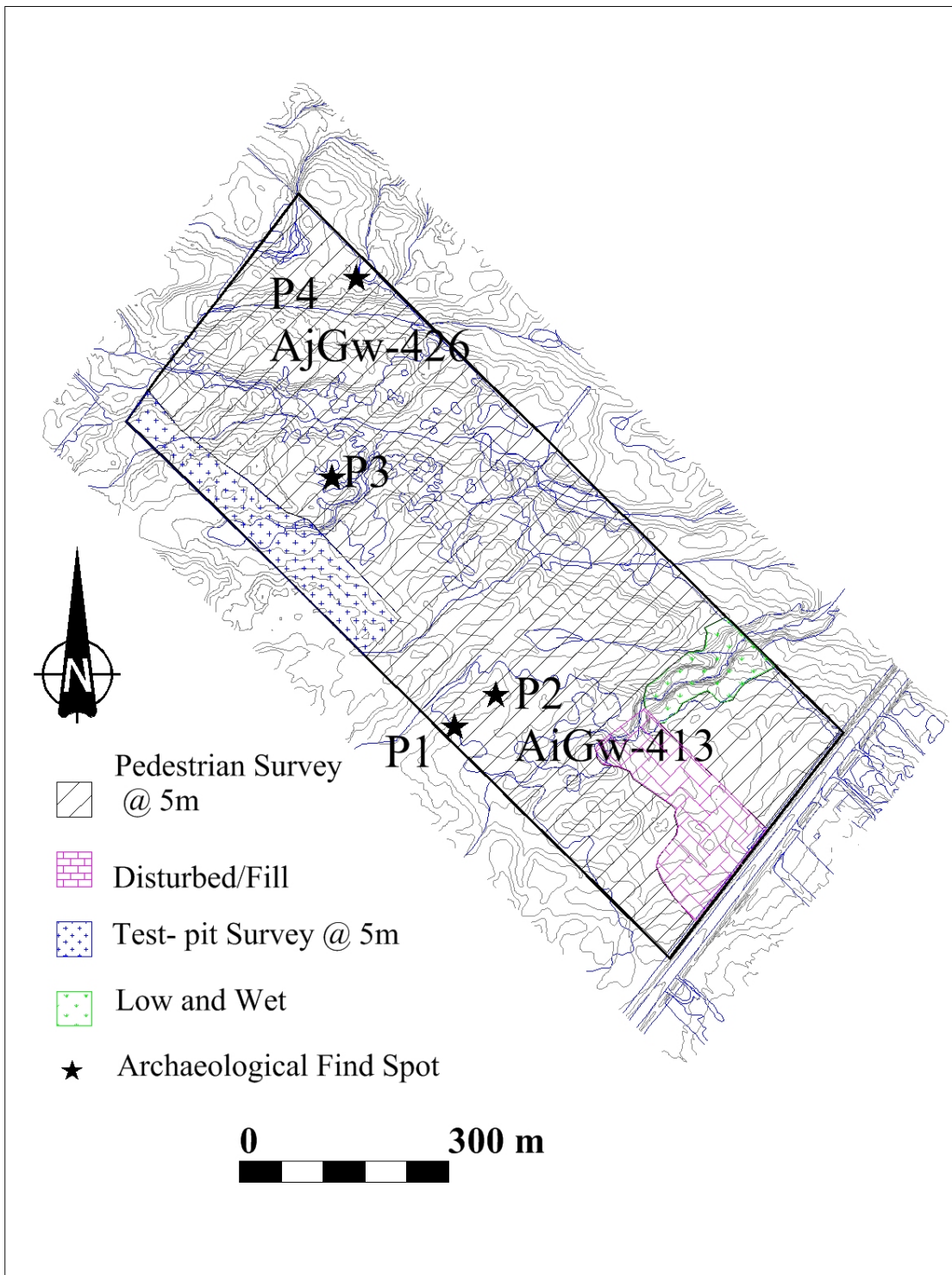


Figure 3: Subject Property



Plate 1: Disturbed, Filled Area Fronting Dundas St.



Plate 2: Low, Wet Area in the Southeast



Plate 3: Ploughed Fields Subjected to Pedestrian Survey

American Datum (NAD) 1927. This allowed the finds to be accurately plotted on a georeferenced, digital base map (Figure 3).

3.2 Results

As shown in Figure 3, four pre-contact aboriginal findspots were identified in the course of the pedestrian survey (Appendix A). As no evidence of the historic farmstead indicated on the historical atlas map was encountered, it seems likely that this may have been within the disturbed area fronting on Dundas Street (Figure 3; Plate 1).

3.2.1 Findspot P1 (17T-0604012, 4816947)

A fragment of Onondaga chert shatter was encountered in the west-central portion of the property approximately 30 metres south of a seasonally active swale. A 30-metre radius around this find was re-surveyed at two-metre intervals and no further cultural material was encountered.

3.2.2 Findspot P2 (AiGw-413) (17T-0604012, 4816947)

Approximately 80 metres southwest of P1 was found a biface fragment of Onondaga chert (Plate 4a). A 30-metre radius around this find was re-surveyed at two-metre intervals and no further cultural material was encountered.

3.2.3 Findspot P3 (17T-0603777, 4817259)

In the northwestern section of the subject lands, between two seasonally active swales, were found two chunks of Onondaga chert approximately three metres apart. A 30-metre radius around these finds was re-surveyed at two-metre intervals and no further cultural material was encountered.



Plate 4: a) P2, AiGw-413, Biface Fragment; b) P4 AjGw-426, Re-worked Projectile Point, Type Unidentified

3.2.4 Findspot P4 (AjGw-426) (17T-0603812, 4817546)

Finally a heavily re-worked projectile point of Onondaga chert was identified near the far northeastern corner of the study area (Plate 4b). A 30-metre radius around this find was re-surveyed at two-metre intervals and no further cultural material was encountered.

4 SUMMARY AND RECOMMENDATIONS

A Stage 1&2 archaeological assessment was carried out for the Dunoak lands located on part of Lot 9, Concession 1, N.D.S., formerly in the Township of Trafalgar South, now in the Town of Oakville, Regional Municipality of Halton. The subject property comprises approximately 44.49 hectares.

Stage 1 background research indicated that the subject lands exhibited significant archaeological potential, primarily due to: 1) swales from numerous seasonally active tributaries of Joshua's Creek meandering across the subject lands in a southeasterly direction; 2) the presence of 32 previously registered pre-contact and historic archaeological sites within a one-kilometre radius; and 3) the historical atlas depiction of a nineteenth century farmstead within the subject property.

The Stage 2 pedestrian survey resulted in the identification of four pre-contact aboriginal findspots, designated P1, P2 (AiGw-413), P3, and P4 (AjGw-426). A thirty-metre radius around each of these localities was re-surveyed at two-metre intervals and no further cultural material was encountered.

In light of these findings, we offer the following recommendations.

1. Findspots P1, P2 (AiGw-413), P3, and P4 (AjGw-426) are isolated artifacts that do not warrant further archaeological concern.
2. The balance of the subject property should be considered free of any further archaeological concern.
3. The above recommendation is subject to Ministry of Culture approval, and it is an offence to alter any archaeological site without Ministry concurrence. **No grading or other activities that may result in the destruction or disturbance of any of the archaeological sites documented by this assessment are permitted until notice of Ministry of Culture approval has been received.**
4. Should deeply buried archaeological remains be found on the subject property during construction activities, the Heritage Operations Unit of the Ministry of Culture should be notified immediately.
5. In the event that human remains are encountered during construction, the proponent should immediately contact both the Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Business Services, (416) 326-8392.

This documentation and materials related to the archaeological assessment of the subject property will be curated by Archaeological Services Inc. until such time as arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the Ontario Ministry of Culture and any other legitimate interest group(s).

5 REFERENCES CITED

Chapman, L.J. and F. Putnam

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

Ministry of Culture

1997 *Serving a Future for Our Past: Archaeology, Land Use Planning & Development in Ontario*. Cultural Programmes Branch, Archaeology & Heritage Planning Unit, Toronto.

Walker and Miles (publishers)

1877 *Illustrated Historical Atlas of Halton County*. Toronto: Walker & Miles.

APPENDIX A: ARTIFACT CATALOGUES

Findspot P1				
Category	Cat. #	Qty	Artifact Type	Material
Lithic	L1	1	SH - Shatter	Onondaga

Findspot P2 (AiGw-413)				
Category	Cat. #	Qty	Artifact Type	Material
Lithic	L1	1	BF - Biface fragment	Onondaga

Findspot P3					
Category	Cat. #	Qty	Artifact Type	Material	Comments
Lithic	L1	2	U - Unclassifiable	Onondaga	Chert chunks

Findspot P4 (AjGw-426)						
Category	Cat. #	Qty	Artifact Type	Material	Retouch/Utilized	Comments
Lithic	L1	1	PP - Projectile point	Onondaga	Yes	Projectile point base reworked into possible scraper or knife