Stage 1 Archaeological Assessment  
Background Study and Property Inspection  

Parkside Drive Road Improvements  
Class Environmental Assessment Study  

Concession 3, Lots 4-13 and Concession 4, Lots 4-13  
Former Township of East Flamborough, Wentworth County  

City of Hamilton, Ontario  

Prepared for:  

Delcan Corporation  
4342 Queen St, Suite 407  
Niagara Falls, Ontario, L2E 7J7  
Tel: 905-356-7003  
Fax: 905-356-7008  
a.macgregor@delcan.com  
www.delcan.com  

Archaeological Licence P094 (Lisa Merritt)  
MTCS PIF P094-130-2012  
ASI File 11EA-175  

April 20, 2012
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Background Study and Property Inspection

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City of Hamilton, Ontario

EXECUTIVE SUMMARY

Archaeological Services Inc (ASI) was contracted by Delcan Corporation, Niagara, on behalf of the City of Hamilton to conduct a Stage 1 Archaeological Assessment as part of the Parkside Drive Road Improvements Municipal Class Environmental Assessment (EA). The goal of the project is to address long term transportation requirements, protect for the future requirements, and to provide the facilities in a phased manner consistent with the Hamilton Transportation Master Plan. The study area is approximately 4 km long and extends along Parkside Drive from Highway 6 to 1.2 km north of Centre Road.

The Stage 1 background study determined that 56 archaeological sites have been registered within 1 km of the study area. A review of the geography of the study area suggested that the study area has potential for the identification of Aboriginal and Euro-Canadian archaeological resources.

The Stage 1 property inspection determined that while the majority of the Parkside Drive study area has not retained archaeological potential due to previous construction activity and low and wet conditions, several parcels of relatively undisturbed land retain archaeological potential.

In light of these results, ASI makes the following recommendations:

1. Archaeological potential exists in the study area in the form of several parcels of land adjacent to residential areas and in agricultural fields. These lands require a Stage 2 Archaeological Assessment, which will be conducted by a combination of pedestrian and test pit survey. A test pit survey includes the systematic excavation of small test pits by hand at 5 m intervals and can only be conducted when ploughing for pedestrian survey is not feasible;

2. Part of the study area has been previously assessed by ASI in 2008 and 2010. These lands do not retain archaeological potential and do not require further archaeological assessment;
3. Due to extensive and deep land alterations that have severely damaged the integrity of any potential archaeological resources, low and wet conditions, and steep slope, the remainder of the study area does not require further archaeological assessment; and,

4. Should the proposed work extend beyond the current Parkside Drive study area then further Stage 1 assessment must be conducted to determine the archaeological potential of the surrounding lands.
ARCHAEOLOGICAL SERVICES INC.  
ENVIRONMENTAL ASSESSMENT DIVISION

PROJECT PERSONNEL

Senior Project Manager and Project Director (licensee): Lisa Merritt, MSc [MTCS license P094]  
Senior Archaeologist, Assistant Manager, Environmental Assessment Division

Project Manager: Heidy Schopf, MES  
Research Archaeologist

Project Coordinator: Sarah Jagelewski, Hon. BA [MTCS license R405]  
Staff Archaeologist

Field Director: Peter Carruthers, MA, CAHP [MTCS license P163]  
Senior Associate

Report Writer and Graphics: Heidy Schopf

Graphics: Jonas Fernandez, MSc  
GIS Technician

Blake Williams, MLitt  
GIS Technician

Report Reviewer: Lisa Merritt
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1.0 PROJECT CONTEXT

Archaeological Services Inc (ASI) was contracted by Delcan Corporation, Niagara, on behalf of the City of Hamilton to conduct a Stage 1 Archaeological Assessment as part of the Parkside Drive Road Improvements Municipal Class Environmental Assessment (EA). The goal of the project is to address long term transportation requirements, protect for the future requirements, and to provide the facilities in a phased manner consistent with the Hamilton Transportation Master Plan. The study area is approximately 4 km long and extends along Parkside Drive from Highway 6 to north of Churchill Avenue (Figure 1).

This assessment was conducted under the project management of Heidy Schopf and senior project management of Lisa Merritt, both of ASI; Ms. Merritt was also the licensee for the project (PIF P094-130-2012).

The objectives of this report are:

- To provide information about the geography, history, previous archaeological fieldwork and current land condition of the study area;
- To evaluate in detail the archaeological potential of the study area which can be used, if necessary, to support recommendations for Stage 2 Archaeological Assessment for all or parts of the property; and
- To recommend appropriate strategies for Stage 2 Archaeological Assessment, if necessary.

This report describes the Stage 1 assessment that was conducted for this project and is organized as follows: Section 1.0 describes the project context and summarizes the background study that was conducted to provide the archaeological and historical context for the project study area; Section 2.0 describes the field methods used during the assessment and summarizes the results of the property inspection; Section 3.0 provides an analysis of the assessment results and evaluates the archaeological potential of the study area; Section 4.0 provides recommendations for the next assessment steps; and the remaining sections contain other report information that is required by the Ministry of Tourism, Culture and Sport’s (MTCS) Standards and Guidelines for Consultant Archaeologists (MTCS 2011), e.g., advice on compliance with legislation, works cited, mapping and photo-documentation.

1.1 Development Context

All work has been undertaken as required by Environmental Assessment Act, RSO (1990) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted under the Schedule C of the Municipal Class Environmental Assessment process.

All activities carried out during this assessment were completed in accordance with the terms of the Ontario Heritage Act (2005) and the Standards and Guidelines for Consultant Archaeologists (S&G).
Permission to access the study area and to carry out all activities necessary for the completion of the assessment was granted by Delcan Corporation on March 23, 2012.

1.2 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Parkside Drive study area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research in the study area; the site record forms for registered sites housed at the MTCS; published and unpublished documentary sources; and the files of ASI.

1.2.1 Current Land Use and Field Conditions

The study area features a number of different zoning designations (City of Hamilton 2006). Zoning designations listed for the study area include a variety of residential zones (R1, R4, R6), Conservation Management (CM), Prestige Industrial (M1), Neighbourhood Commercial (NC), Public Use (P), two institutional zones (P, I), and Park Open Space (02) (City of Hamilton 2005). The variety of land use designations along Parkside Drive is reflected in the current field conditions of the study area since some areas are disturbed by recent commercial, residential, industrial construction activities while other areas, such as parks and agricultural fields, remain relatively undisturbed.

The Stage 1 property inspection was conducted by Peter Carruthers (P163) ASI, on April 11 2012. The study area is approximately 4 km in length and consists primarily of the Parkside Drive right-of-way (ROW). The study area is bordered by a mix of residential housing, commercial, and institutional development as well as agricultural fields and open space.

1.2.2 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MTCS. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The study area under review is located in Borden blocks AhGx and AiGx.

According to the OASD (email communication, Robert von Bitter, MTCS Data Coordinator, March 13, 2012), 56 identified archaeological sites are located within 1 km of the study area. Details of the registered sites are summarized in Table 1.
<table>
<thead>
<tr>
<th>Borden #</th>
<th>Site Name</th>
<th>Cultural Affiliation</th>
<th>Site Type</th>
<th>Researcher</th>
</tr>
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<tbody>
<tr>
<td>AhGx-421</td>
<td>Clappison's Corners</td>
<td>Pre-Contact</td>
<td>Findspot</td>
<td>ASI (2001)</td>
</tr>
<tr>
<td>AhGx-422</td>
<td>-</td>
<td>Euro-Canadian</td>
<td>Homestead</td>
<td>ASI (2001)</td>
</tr>
<tr>
<td>AhGx-550</td>
<td>-</td>
<td>Pre-Contact</td>
<td>Findspot</td>
<td>Woodley (2004)</td>
</tr>
<tr>
<td>AhGx-551</td>
<td>-</td>
<td>Pre-Contact</td>
<td>Findspot</td>
<td>Woodley (2004)</td>
</tr>
<tr>
<td>AhGx-552</td>
<td>-</td>
<td>Pre-Contact</td>
<td>Lithic scatter</td>
<td>Woodley (2004)</td>
</tr>
<tr>
<td>AhGx-553</td>
<td>-</td>
<td>Pre-Contact</td>
<td>Findspot</td>
<td>Woodley (2004)</td>
</tr>
<tr>
<td>AhGx-554</td>
<td>-</td>
<td>Pre-Contact</td>
<td>Findspot</td>
<td>Woodley (2004)</td>
</tr>
<tr>
<td>AhGx-559</td>
<td>-</td>
<td>Euro-Canadian</td>
<td>Habitation</td>
<td>Wilson (2004)</td>
</tr>
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<td>AhGx-648</td>
<td>-</td>
<td>Aboriginal</td>
<td>Findspot</td>
<td>ASI (2008)</td>
</tr>
<tr>
<td>AhGx-649</td>
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<td>Aboriginal</td>
<td>Findspot</td>
<td>ASI (2008)</td>
</tr>
<tr>
<td>AhGx-656</td>
<td>AhGx-656-P28</td>
<td>Late Archaic, Aboriginal, Pre-contact</td>
<td>Lithic scatter</td>
<td>ASI (2008; 2009)</td>
</tr>
<tr>
<td>AhGx-657</td>
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<td>Findspot</td>
<td>ASI (2008)</td>
</tr>
<tr>
<td>AhGx-658</td>
<td>-</td>
<td>Euro-Canadian</td>
<td>Dump</td>
<td>ASI (2008)</td>
</tr>
<tr>
<td>AhGx-659</td>
<td>-</td>
<td>Euro-Canadian</td>
<td>Dump</td>
<td>ASI (2008)</td>
</tr>
<tr>
<td>AhGx-660</td>
<td>-</td>
<td>Euro-Canadian</td>
<td>Dump</td>
<td>ASI (2008)</td>
</tr>
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<td>AiGx-79</td>
<td>Gatesbury No. 1</td>
<td>Archaic, Paleoindian, Woodland, Iroquoian, Middleport</td>
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<td>Museum of Indian Archaeology (MIA 1983; 1984; 1989; 1990)</td>
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<tr>
<td>AiGx-84</td>
<td>Gatesbury No. 6</td>
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<td>AiGx-86</td>
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<td>MIA (1983; 1984; 1989; 1990)</td>
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<tr>
<td>AiGx-87</td>
<td>Gatesbury No. 9</td>
<td>Archaic, Early Woodland</td>
<td>Campsite</td>
<td>MIA (1983; 1984; 1989; 1990)</td>
</tr>
<tr>
<td>AiGx-92</td>
<td>Gatesbury No. 11</td>
<td>Early-Late Archaic</td>
<td>Campsite</td>
<td>MIA (1983; 1984; 1989; 1990)</td>
</tr>
<tr>
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<td>Late Archaic</td>
<td>Campsite</td>
<td>MIA (1983; 1984; 1989; 1990)</td>
</tr>
<tr>
<td>AiGx-164</td>
<td>Gatesbury 18</td>
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<td>Findspot</td>
<td>MIA (1989)</td>
</tr>
<tr>
<td>AiGx-165</td>
<td>Gatesbury 19</td>
<td>Aboriginal</td>
<td>Lithics</td>
<td>MIA (1989)</td>
</tr>
<tr>
<td>AiGx-166</td>
<td>Gatesbury 20</td>
<td>Aboriginal</td>
<td>Findspot</td>
<td>MIA (1989)</td>
</tr>
<tr>
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<td>-</td>
<td>Pre-Contact</td>
<td>Findspot</td>
<td>ASI (1996)</td>
</tr>
<tr>
<td>AiGx-196</td>
<td>-</td>
<td>Late Archaic, Crawford Knoll</td>
<td>Campsite</td>
<td>ASI (1996)</td>
</tr>
<tr>
<td>AiGx-197</td>
<td>-</td>
<td>Late Archaic, Genesee</td>
<td>Campsite</td>
<td>ASI (1996)</td>
</tr>
</tbody>
</table>
Of the 56 sites registered within 1 km of the study area, three sites are located within 50 m of Parkside Drive. Each site is discussed below.

ASI conducted Stage 1 and 2 archaeological assessment in Lot 10, Concession 4 of the former Township of Flamborough East in 2008 (PIF# P049-243-2007 and P049-283-2008). This work identified a number of sites including AhGx-648, AhGx-649, and AhGx-658. Both the AhGx-648 and AhGx-649 sites are pre-contact Aboriginal findspots located approximately 50 m north of Parkside Drive within an actively cultivated agricultural field. The AhDx-648 site consisted of a piece of Bois Blanc chert and a piece of Onondaga chert. The AhGx-649 site consisted of a refined biface of Onondaga Chert. No further work was recommended for either site. The AhGx-658 site is located north of Parkside Drive in an agricultural field. The site is a Euro-Canadian dump that dates to the late nineteenth/early twentieth century. A total of 50 artifacts were recovered including ceramic vessel fragments, container and window glass, smoking pipes, and a machine cut nail. No further work was recommended for this site.

Following the discovery of sites during the Stage 1 and 2 work discussed above, ASI conducted a Stage 3 archaeological assessment on Lot 10, Concession 4 in 2009 (PIF# P049-366-2008). The assessment focused on seven pre-contact lithic scatters and uncovered one previously unrecorded findspot (AhGx-650, AhGx-651, AhGx-652, AhGx-653, AhGx-654, AhGx-655, AhGx-656 and...
AhGx-681). The sites were cleared of archaeological concern and no further work was recommended.

ASI conducted a Stage 1 assessment of the Highway 5/Highway 6 interchange in 2012 (PIF# P094-060-2011). The assessment found that some lands in the Highway 5/Highway 6 study area did not retain archaeological potential due to previous construction activities, while other parts of the study area (e.g. agricultural fields) retained archaeological potential. For the purpose of this study, only the areas that were found to have no archaeological potential in the 2012 report are noted in the field results discussion and mapping of this study (See Sections 3.2 and 7.0).

### 1.2.3 Geography

In addition to the known archaeological sites, the state of the natural environment is an important predictor of archaeological potential. Accordingly, a description of the study area physiography and soils is provided below.

Section 1.3.1 of the S&G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario after the Pleistocene era, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Section 1.3.1 of the S&G also lists other geographic characteristics that can indicate archaeological potential including: elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. Physical indicators of use may be present, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential.

The study area is located in the Norfolk Sand Plain physiographic region of southern Ontario. The Norfolk Sand Plain is a wedge shaped plain with a broad, curved base along the shore of Lake Erie and tapers, northward to a point at Brantford on the Grand River (Chapman and Putnam 1984:153). The sands and silts of this region were deposited as a delta in glacial Lakes Whittlesey and Warren (Chapman and Putnam 1984:145). The drainage is through small rivers flowing to Lake Erie, with the exception of a small area in the northern limits of the region where the rivers act as a tributary to the Grand River. The project area is located in the northern tip of the Norfolk sand plain with the Niagara Escarpment located to the south.
Soils in the study area consist of Chinguacousy loam, Grimsby sandy loam, Jeddo loam, Oneida loam, Springvale sandy loam, and Vineland sandy loam. Details of the soil types included in the study area are provided in Table 2.

<table>
<thead>
<tr>
<th>Name</th>
<th>Great Group</th>
<th>Parent Materials</th>
<th>Drainage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinguacousy loam</td>
<td>Grey-Brown Podzolic</td>
<td>Clay loam till</td>
<td>Imperfectly drained</td>
</tr>
<tr>
<td>Grimsby sandy loam</td>
<td>Grey-Brown Podzolic</td>
<td>Water deposited medium and fine sand loam</td>
<td>Well drained</td>
</tr>
<tr>
<td>Jeddo loam</td>
<td>Humic Gleysol</td>
<td>Clay loam till</td>
<td>Poorly drained</td>
</tr>
<tr>
<td>Oneida loam</td>
<td>Grey-Brown Podzolic</td>
<td>Clay loam till</td>
<td>Well drained</td>
</tr>
<tr>
<td>Springvale sandy loam</td>
<td>Gray-Brown Poszolic</td>
<td>Sand over outwash gravel</td>
<td>Well drained</td>
</tr>
<tr>
<td>Vineland sandy loam</td>
<td>Gray-Brown Podzolic</td>
<td>Water deposited fine and medium sand</td>
<td>Imperfectly drained</td>
</tr>
</tbody>
</table>

Note: Information from Report No. 32 of the Ontario Soil Survey (Presant, Wicklund and Matthews 1965)

Surficial geology information is mapped and presented in Figure 2 and soil drainage is presented in Figure 3.

In terms of water sources, Grindstone Creek and unnamed tributaries of Rock Chapel Creek run through the study area. The headwaters of Grindstone Creek originate near Harpers Corners in north Flamborough, transverse the Niagara Escarpment near Waterdown, and wind through Hidden Valley before emptying into Hamilton Harbour/Burlington Bay. The Grindstone Creek covers an area of approximately 90 square kilometres (Lake Ontario Waterkeeper 2010).

### 1.3 Historical Context

This section provides a brief summary of historic research for the study area. A review of available primary and secondary source material was undertaken to produce a contextual overview, including a general description of settlement and historic land use. Historically, the study area is located in the road allowance between Concession 3, Lots 4-13 and Concession 4, Lots 4-13 in the former Township of East Flamborough, Wentworth County.

#### 1.3.1 Contact Period

The first record of a European visit to southern Ontario was made in 1615 by Samuel de Champlain, who reported that a group of Iroquoian-speaking people situated between the New York Iroquois and the Huron were at peace and remained “la nation neutre”. In subsequent years the French visited and traded among the Neutral, but the first documented visit was not until 1626, when the Recollet missionary Joseph de la Roche Daillon recorded his visit to the villages of the Attiwiwapon, whose name in the Huron language meant “those who speak a slightly different tongue” (the Neutral apparently referred to the Huron by the same term). Like the
Huron, Petun and New York Iroquois, the Neutral people were settled village horticulturalists. The Neutral territory included discrete settlement clusters in the lower Grand River, Fairchild-Big Creek, Upper Twenty Mile Creek, Spencer-Bronte Creek drainages, Milton, Grimsby, Eastern Niagara Escarpment and Onondaga Escarpment areas.

Between 1647 and 1651, the villages of the Neutral were destroyed by the New York Iroquois, who subsequently settled along strategic trade routes on the north shore of Lake Ontario for a brief period during the late 17th-century. One French explorer who is known to have entered the Burlington Bay area during this period was Rene-Robert Cavalier de La Salle, who left Montreal with a flotilla of nine canoes and eventually reached the head of Lake Ontario in September of 1669. After landing, de La Salle’s group travelled to the Seneca village of Tinaouataoua, the exact location of which is open to speculation (ASI 2004:13-14), and his explorations in the area may have utilized the Humber Trail (MPP 1986:42).

During the late 17th and early 18th centuries, the former Neutral territory came to be occupied by the Mississauga, an Algonquian-speaking southeastern Ojibwa people whose subsistence economy was based on garden farming, as well as hunting, fishing and gathering wild plants. The Mississauga and other Ojibwa groups began expanding southward from their homelands in the upper Great Lakes in the late 17th century, coming into occasional conflict with the New York Iroquois who had established themselves in southern Ontario (although alliances between the two groups were occasionally established as well). The colonial government recognized the Mississauga as the “owners” of the north shore of Lake Ontario and entered into negotiations for additional tracts of land as the need arose to facilitate European settlement (ASI 2004:14).

1.3.2 Township Survey and Settlement

The land within Flamborough Township was acquired by the British from the Mississauga in 1784. The first township survey was undertaken in 1793, and the first legal settlers occupied their land holdings in Flamborough West the same year and in Flamborough East in 1800. Flamborough East was originally known as Geneva Township, due to its location on Burlington Bay which was then called Lake Geneva. These townships were later renamed after a town and a geographical place called Flamborough Head in Yorkshire, England. Flamborough was initially settled by disbanded soldiers, mainly Butler’s Rangers, and other Loyalists following the end of the American Revolutionary War. East Flamborough was to have been reserved for the use of French nobility and royalists who fled from France during the “Reign of Terror” but this plan was never carried into effect. The original township was divided into East and West halves by provincial legislation in 1798. By the 1840s, both townships were noted for their excellent land and good farms (Boulton 1805:79; Smith 1846:59; Armstrong 1985:143; Green 1997:1-3; Rayburn 1997:120).

Nineteenth century maps were also consulted to determine potential historic period land used within the study area. Highway 5, which was originally known as Governor’s Road and later Dundas Road, was intended to aid settlement in Upper Canada and serve as a military road. Highway 6, formerly Townline Road, divides the former Townships of East and West Flamborough and was largely built to service the needs of the local agricultural economy.

The study area passes just north of the former Village of Waterdown. Waterdown is located along Highway 5, on the edge of the Niagara Escarpment. Grindstone Creek served as a major resource
for the community and served to attract the first settlers to the area. Alexander McDonnell was given a grant for land in the Waterdown area in 1796 and was the first to own land at the site (Mika and Mika 1983:600). The land was granted to Alexander Brown in 1805 after McDonnell failed to develop his holdings. Brown is credited with building the first mill at the Great Falls and his son later constructed Brown’s Wharf (Mika and Mika 1983:600).

By 1841 numerous houses and inns had been built in the Village of Waterdown and most of the lots were taken. Some of the first settlers include C. Cummings and A. Griffin, millers; H. Dunham, blacksmith, J. Graham, tanner; E.C. Griffin, merchant, and Mr. Reid, a baker (Mika and Mika 1983:600). Waterdown became the centre of East Flamborough Township and a township hall was constructed in 1857. Waterdown was incorporated as a village in 1878 and was dissolved and amalgamated with the Township of East Flamborough in 1974 to form the Township of Flamborough.

1.3.3 Historic Map Review

The 1859 *Map of the County of Wentworth* and the 1875 *Illustrated Historical Atlas of the County of Wentworth* were reviewed to determine the potential for the presence of historic archaeological resources within the study area during the nineteenth century (Figures 4 and 5). It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases.

Historically, the study area is located the road allowance between Concession 3 Lots 4-13 and Concession 4, Lots 4-13 in the former County of Wentworth. The 1859 and 1875 historic maps both show Parkside Drive and Highway 6 as historically surveyed roads. Numerous property owners and historic features are depicted adjacent to the road way. The town of Waterdown is also shown on both maps, in Concession 3, Lots 6 and 7. Details of property owners and historic features located in the study area are provided in Table 2.

<table>
<thead>
<tr>
<th>Conc. #</th>
<th>Lot #</th>
<th>Property Owners</th>
<th>Historic Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1859</td>
<td>1875</td>
<td>1859</td>
<td>1875</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Alexander Brown</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Alexander Brown</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>McMonies</td>
<td>Jas. McMonies</td>
<td>Waterdown (town)</td>
</tr>
<tr>
<td>7</td>
<td>Edmund Fields</td>
<td>Edmund Fields</td>
<td>Waterdown (town)</td>
</tr>
<tr>
<td>8</td>
<td>Edmund Fields</td>
<td>Edmund Fields</td>
<td>Farmstead, orchard</td>
</tr>
<tr>
<td>9</td>
<td>Luke Mullick, Thomas Stock</td>
<td>Luke Mullick, Thomas Stock</td>
<td>-</td>
</tr>
<tr>
<td>10</td>
<td>H.R. O'Reilly</td>
<td>Mrs. Howell</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 3: List of Property Owners and Historic Features in the study area
The 1909 and 1931 historic topographic maps were examined to identify developments within the study area during the early twentieth century (Figures 6 and 7).

The both historic topographic maps show that Parkside Drive and Hamilton Street as unmetalled roads. Highway 6 is labelled as “Guelph and Hamilton Stone Road” and both Highway 6 and Main Street are shown as metalled roads. Both maps also show a small bridge crossing a creek at the southern end of the study area near Highway 6. A number of houses are shown around the Village of Waterdown. Minor roads such as Mill Street and Victoria Street are depicted on both the 1909 and 1931 maps.

The 1931 map demonstrates that a no major development took place in the study area during the early twentieth century. The only major change noted is that the Canadian Pacific Railway had been constructed to the north and east of the study area between 1909 and 1931.
For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be captured by the basic proximity to the water model outlined in Section 1.2.2 of this report since these occupations were subject to similar environmental constraints.

Section 1.3.1 of the S&G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and early cemeteries, are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

2.0 FIELD METHODS

A property inspection was conducted in order to gain first-hand knowledge of the geography, topography, and current conditions of the Parkside Drive study area as per Section 1.2 of the S&G. A property inspection is a visual inspection only and does not include excavation or collection of archaeological resources.

Where applicable, Section 1.2, Standards 1-5 of the S&G were met as follows during the course of the property inspection:

- The Parkside Drive study area was inspected systematically during optimal weather conditions which permitted good visibility of land features;
- Weather conditions were a mix of sun and cloud and 8°C with no precipitation;
- Coverage was sufficient to identify previously identified features of archaeological potential and additional features not visible on mapping; and,
- Additional features were documented as well as any features that will affect assessment strategies.

The property inspection found that the parts of the study area have been disturbed by road construction activities and recent residential development, while other parts of the study area retain archaeological potential. Field observations are compiled onto a map of the study area in Section 7.0 (Figures 8-14) and associated photography is presented in Section 8.0 (Plates 1-18).

3.0 ANALYSIS AND CONCLUSIONS

The archaeological and historical context was analyzed to help determine the archaeological potential of the study area. A summary of the archaeological potential of the Parkside Drive study area is presented in Section 3.1 of this report and an evaluation of the property inspection results is presented in Section 3.2.
3.1 Analysis of Archaeological Potential

Section 1.3.1 of the S&G lists characteristics that indicate where archaeological resources are most likely to be found, and archaeological potential is confirmed when one or more features of archaeological potential are present. Accordingly, the Parkside Drive study area meets the following criteria used for determining archaeological potential:

- Previously known archaeological sites (e.g. Gatesbury No. 1 AiGx-79)
- Water source: primary, secondary, or past water source (e.g. Grindstone Creek)
- Early historical transportation routes (e.g. Parkside Drive)
- Areas of early Euro-Canadian settlement (e.g. farmstead)

These criteria characterize the study area as having potential for the identification of Aboriginal and Euro-Canadian archaeological resources.

3.2 Analysis of Property Inspection Results

As mentioned in Section 1.0 of this report, the Parkside Drive project involves the evaluation of Parkside Drive from Highway 6 to approximately 1.2 km north of Centre Road. The total length of the study area is about 4 km.

The Parkside Drive study area is comprised mainly of right-of-ways (ROW). Typically, the ROW can be divided into two areas: the disturbed ROW, and ROW lands beyond the disturbed ROW. The typically disturbed ROW extends outwards from either side of the centerline of the traveled lanes, and it includes the traveled lanes and shoulders and extends to the toe of the fill slope, the top of the cut slope, or the outside edge of the drainage ditch, whichever is furthest from the centerline. Subsurface disturbance within these lands may be considered extreme and pervasive, thereby negating any archaeological potential for such lands.

ROW construction disturbance may be found to extend beyond the typical disturbed ROW area, and this generally includes additional grading, cutting and filling, additional drainage ditching, watercourse alteration or channelization, servicing, removals, intensive landscaping, and heavy construction traffic. Areas beyond the typically disturbed ROW generally require archaeological assessment in order to determine archaeological potential relative to the type or scale of disturbances that may have occurred in these zones.

The property inspection revealed that the majority of the Parkside Drive study area consists of existing ROW and mixed-use development consisting of recent residential, commercial, and industrial properties. The majority of the proposed work takes place in the existing ROW of Parkside Drive. The ROW has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. These ROW disturbances can be attributed to typical road construction activities including paving, utility installation, grading, filling, and ditching (Plates 1-5, 7-13, 15-18). Due to these previous construction activities, the ROW lands in the Parkside Drive study area do not contain archaeological potential (Figures 8-14: areas marked in yellow).
Parts of the study area do not retain archaeological potential due to low and wet conditions (Plates 3 and 4; Figures 8 and 10: areas marked in blue). This determination is made in accordance with Section 2.1, Standard 2 of the S&G.

One small portion of the study area does not retain archaeological potential due to steep slope (greater than 20°) (Figure 14: area marked in orange). This determination is made in accordance with Section 2.1, Standard 2 of the S&G.

Parts of the study area have been subject to previous archaeological assessment (ASI 2008, PIF# P049-243-2007 and P049-283-2008; ASI 2012, PIF# P094-060-2011) (Figures 8 and 10: areas marked with black hatching). These areas can be considered clear of archaeological concern and do not require further assessment.

Areas of potential exist in the Parkside Drive study area beyond the disturbed ROW. These areas include relatively undisturbed lands bordering residential properties and lands in agricultural fields (Plates 2, 3, 6, 14, 15, 17). These lands retain archaeological potential and will require further archaeological assessment should they be impacted by the proposed work (Figures 8-14: areas marked in green).

### 3.3 Conclusions

The Stage 1 Archaeological Assessment was conducted to assist with the Parkside Drive EA. The assessment determined that 56 archaeological sites have been registered within 1 km of the study area. A review of the geography and history of the study area suggested that it has potential for the identification of Aboriginal and Euro-Canadian archaeological resources. The property inspection determined that while the majority of the Parkside Drive study area has not retained archaeological potential due to previous construction activity and low and wet conditions, several parcels of relatively undisturbed land retain archaeological potential.

### 4.0 RECOMMENDATIONS

In light of the results of the background research and property inspection undertaken for the Stage 1 Archaeological Assessment of Parkside Drive from south of Highway 6 to approximately 1.2 km north of Centre Road, ASI makes the following recommendations:

1. Archaeological potential exists in the study area in the form of several parcels of land adjacent to residential areas and in agricultural fields (Figures 8-14: areas marked in green). These lands require a Stage 2 Archaeological Assessment, which will be conducted by a combination of pedestrian and test pit survey. A test pit survey includes the systematic excavation of small test pits by hand at 5 m intervals and can only be conducted when ploughing for pedestrian survey is not feasible;

2. Part of the study area has been previously assessed (ASI 2008; ASI 2012) (Figures 8-14: areas marked with black hatching). These lands do not retain archaeological potential and do not require further archaeological assessment;
3. Due to extensive and deep land alterations that have severely damaged the integrity of any potential archaeological resources, low and wet conditions, and steep slope, the remainder of the study area does not require further archaeological assessment (Figures 8-14: areas marked with yellow and blue; and,

4. Should the proposed work extend beyond the current Parkside Drive study area then further Stage 1 assessment must be conducted to determine the archaeological potential of the surrounding lands.

Notwithstanding the results and recommendations presented in this study, Archaeological Services Inc. notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Tourism, Culture and Sport should be immediately notified.

5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI advises compliance with the following legislation:

- 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 sec. 48 (1) of the Ontario Heritage Act, and
6.0 BIBLIOGRAPHY

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Armstrong, Frederick H.

Boulton, D’Arcy

Chapman, L. J. and F. Putnam

City of Hamilton


Green, Patricia and Maurice H. Green.

Lake Ontario Waterkeeper
Mayer, Pihl, Poulton and Associates, Incorporated (MPP)  
1986  

Ontario Ministry of Environment 
1990  
*Environmental Assessment Act*

Ontario Ministry of Tourism and Culture 
2005  
*Ontario Heritage Act.*

2011  

Page & Smith 
1875  

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Rayburn, Alan  
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Surtees, Robert  
1859  
7.0 MAPS

Figure 1: Location of the study area

Base Map: NTS Sheet 30 M/05 (Hamilton-Burlington)
Figure 2: Surficial geology in the study area

Legend:
- prop_ROW_20m
- prop_ROW_23m
- prop_ROW_27m
- Property Line
- Vegetation
- Paleozoic Bedrock
- Diamicton
- Organic Deposits
- Sand
Figure 3: Soil drainage in the study area
Figure 4: The study area overlaid on the 1859 map of the County of Wentworth
Base Map: Map of the County of Wentworth, Canada West (Surtees 1859)

Figure 5: The study area overlaid on the 1875 map of the Township of East Flamborough
Base Map: Illustrated Historical Atlas of the County of Wentworth (Page & Smith 1875)
Figure 6: The study area overlaid on the 1909 historic topographic map of the City of Hamilton

Base Map: Hamilton Sheet No. 33 (NTS 1909)

Figure 7: The study area overlaid on the 1931 historic topographic map of the City of Hamilton

Base Map: Hamilton Sheet No. 33 (NTS 1931; Surveyed 1909, Reprinted with corrections 1931)
Figure 8: Parkside Drive (Sheet 1) - Results of Stage 1 Archaeological Assessment
Figure 9: Parkside Drive (Sheet 2) - Results of Stage 1 Archaeological Assessment
Figure 10: Parkside Drive (Sheet 3) - Results of Stage 1 Archaeological Assessment
Figure 11: Parkside Drive (Sheet 4) - Results of Stage 1 Archaeological Assessment
Figure 12: Parkside Drive (Sheet 5) - Results of Stage 1 Archaeological Assessment

Legend:
- Study Area
- Proposed ROW 20 m
- Proposed ROW 23 m
- Proposed ROW 27 m
- Archaeological Potential
- No Potential - Disturbed
- No Potential - Low and Wet
- Photo Location and Direction

BASE: Bing Aerial Imagery
(c) 2010 Microsoft Corporation and its data suppliers

Match to Sheet 6

Archaeological Services Inc.
528 Bathurst St.
Toronto, Ontario
Canada, M5S 2P9
T 416-966-1069
F 416-966-9723
info@iASI.to/www.iAS±.to

Figure 12: Parkside Drive (Sheet 5) - Results of Stage 1 Archaeological Assessment
Figure 13: Parkside Drive (Sheet 6) - Results of Stage 1 Archaeological Assessment
Figure 14: Parkside Drive (Sheet 7) - Results of Stage 1 Archaeological Assessment
8.0 IMAGES

Plate 1: Northeast view towards Parkside Drive. Ditching, utilities, and ROW disturbance. All disturbed and no potential.

Plate 2: Southwest view along Parkside Drive. Disturbed ROW and utilities on right. Field with potential on left.

Plate 3: Southwest view along Parkside Drive. Disturbed ROW and utilities on left. Wetland and field with potential on right.

Plate 4: East-northeast view from Parkside Drive. Disturbed ROW, utilities, and infrastructure. Forested wetland on right. No potential.

Plate 5: Southwest view along Parkside Drive. Disturbed ROW, utilities, and former commercial site. No potential.

Plate 6: Southwest view along Parkside Drive. Potential along tree line and in field beyond disturbed ROW.
Plate 7: Northeast view along Parkside Drive. All disturbed and graded – no potential.

Plate 8: East view across Parkside Drive. Disturbed ROW, utilities, and recent residential development. No potential.

Plate 9: North-northeast view from Parkside Drive. Recent residential development and ongoing construction. No potential.

Plate 10: Southwest view of Parkside Drive. Disturbed ROW, grading, and recent residential development. No potential.

Plate 11: North view across Parkside Drive towards school complex. All disturbed and no potential.

Plate 12: Southwest view along Parkside Drive. Disturbed ROW, grading, utilities, and residential development. No potential.
Plate 13: Southwest view along Parkside Drive. ROW, hydro lines, and graded playing field. All disturbed and no potential.

Plate 14: North view from Parkside Drive. Wooded lot has potential and requires further work if impacted.

Plate 15: Southwest view along Parkside Drive. No potential to right of tree line – all disturbed ROW. Potential at tree line, beyond disturbed ROW.

Plate 16: Southwest view along Parkside Drive. ROW, ditching, grading, and utilities. All disturbed and no potential.

Plate 17: Southwest view along Parkside Drive and across creek. No potential within ROW. But potential beyond proposed 23 m ROW.

Plate 18: Southwest view along Parkside Drive. Disturbed ROW, grading, and utilities. All disturbed and no potential.