# Stage 1 Archaeological Assessment (Background Study and Property Inspection)

Britannia Road Transportation Corridor Improvements
Tremaine Road to Highway 407
Class Environmental Assessment Study,
Town of Milton, Regional Municipality of Halton, Ontario

# Prepared for:

# **Delcan Corporation**

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Archaeological Licence PO94 (Lisa Merritt) MTC PIF PO94-046-2011 ASI File 10EA-182

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#### **EXECUTIVE SUMMARY**

Archaeological Services Inc. (ASI) was contracted by Delcan Corporation, Hamilton, on behalf of the Regional Municipality of Halton, to conduct a Stage 1 Archaeological Assessment (Background Study and Property Inspection) as part of the Britannia Road Transportation Corridor Improvements Class Environmental Assessment (EA), in the Milton, Regional Municipality of Halton, Ontario. The study corridor extends from Tremaine Road to Highway 407. Road improvements could include widening the existing roadway to 4-lanes, while protecting for 6-lanes, improvements at various intersections, and improvements to the vertical and horizontal alignments where necessary.

The Stage 1 Archaeological Assessment determined that 46 archaeological sites have been registered within 1 km of the study area. A review of the geography of the study area also suggests that the study corridor has potential for the identification of Aboriginal and historic archaeological remains.

Based on the results of the property inspection it was determined that while the Britannia Road right-of-way (ROW) has been heavily disturbed from road construction and utility installation, there is archaeological potential beyond the ROW limits throughout the length of the study corridor. In light of these results, ASI makes the following recommendations:

- The Britannia Road ROW does not retain archaeological potential due extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Additional archaeological assessment is therefore not required for road improvements within the current ROW boundaries and the Britannia Road ROW can be cleared of further archaeological concern;
- 2. The lands beyond the limits of the current Britannia Road ROW exhibit archaeological potential. If the proposed Britannia Road improvement project requires new lands beyond the current ROW limits then a Stage 2 Archaeological Assessment should be conducted on lands determined to have archaeological potential. This work will be done in accordance with the Ministry of Tourism and Culture's (MTC) 2011 Standards and Guidelines for Consultant Archaeologists in order to identify any archaeological remains that may be present.
- 3. A Cemetery Investigation is required for the ROW in front of two properties in the Britannia Road project corridor, Church of Christ (9850 Britannia Road) and Omagh Presbyterian



Church (2077 Britannia Road), should the proposed project impact these ROW lands. This work will be done in accordance with the MTC's 2011 *Standards and Guidelines for Consultant Archaeologists* and the *Cemetery Act*, to confirm the presence or absence of unmarked graves.

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 and Culture should be immediately notified.



# ARCHAEOLOGICAL SERVICES INC. ENVIRONMENTAL ASSESSMENT DIVISION

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# 1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by Delcan Corporation, Hamilton, on behalf of the Regional Municipality of Halton, to conduct a Stage 1 Archaeological Assessment (background research and property inspection) as part of the Britannia Road Transportation Corridor Improvements Class Environmental Assessment (EA), in the Milton, Regional Municipality of Halton, Ontario (Figure 1). The study corridor extends from Tremaine Road to Highway 407. Road improvements could include widening the existing roadway to 4-lanes, while protecting for 6-lanes, improvements at various intersections, and improvements to the vertical and horizontal alignments where necessary.

This assessment was conducted under the project management of Caitlin Lacy (R303) and Sarah Jagelewski, and the project direction of Lisa Merritt (PIF P094-046-2011), all of ASI.

The objectives of this report are:

- To provide information about the geography, history, previous archaeological fieldwork and current land condition of the study corridor;
- To evaluate in detail the archaeological potential of the study corridor 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 summarizes the background study that was conducted to provide the archaeological and historical context for the project study area; Section 2.0 addresses the property inspection that was undertaken to document its general environment, current land use history and conditions; Section 3.0 analyses the characteristics of the project study area and evaluates its archaeological potential; 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 and Culture's (MTC) 2011 Standards and Guidelines, 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 the *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 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* (MTC 2011).

Permission to access the study area and to carry out all activities necessary for the completion of the assessment was granted by Delcan on December 17, 2011.



# 1.2 Archaeological Context

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

The Stage 1 property inspection was conducted by Peter Carruthers, (P163), ASI, on April 15, 20, and 21, in order to gain first-hand knowledge of the geography, topography, and current conditions of the Britannia Rd study corridor. It was a visual inspection only and did not include the excavation or collection of archaeological resources.

# 1.2.1 Previous Archaeological Research

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MTC. 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 corridor under review is located in Borden blocks AiGx, AiGw, and AjGw.

According to the OASD (email communication, Robert von Bitter, MTC Data Coordinator, December 29, 2010), 46 previously identified archaeological sites are located within 1 km of the study corridor. Of these, 16 sites are located within the buffer used for considering archaeological potential.

Table 1: Regionally Significant Sites within 1km of the study area.

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AiGw-183		Aboriginal – undetermined	<b>Isolated Find</b>	MIA 1984
AiGw-188		Aboriginal – late Archaic	<b>Isolated Find</b>	MIA 1984
AiGw-292		Aboriginal – early Archaic	<b>Isolated Find</b>	P. Woodley 1997
AiGw-388	Umiak #1	Aboriginal – undetermined	Campsite	LMA 2004
AiGw-389	Umiak #2	Aboriginal – late Archaic	Campsite	LMA 2004
AiGw-390	Umiak #3	Aboriginal – undetermined	Campsite	LMA 2004
AiGw-391	Umiak #4	Aboriginal – late Archaic	Campsite	LMA 2004
AiGw-392	Umiak #5	Aboriginal – undetermined	Campsite	LMA 2004
AiGw-393	Umiak #6	Aboriginal – late Archaic	<b>Isolated Find</b>	LMA 2004
AiGw-394	Umiak #7	Aboriginal – undetermined	Lithic Scatter	LMA 2004
AiGx-43	Snow	Aboriginal – Archaic	Undetermined	A. Roberts 1976
AiGx-44	Snow 2	Aboriginal – Archaic	Undetermined	A. Roberts 1976
AiGx-45	Martin 2	Aboriginal – late Archaic	Undetermined	A. Roberts 1976
AiGx-46	Martin	Aboriginal – late Archaic	Undetermined	A. Roberts 1976
AiGx-95		Aboriginal – undetermined	<b>Isolated Find</b>	MIA 1984
AiGx-96		Aboriginal – late Archaic	<b>Isolated Find</b>	MIA 1984
AiGx-97		Aboriginal – early Woodland	<b>Isolated Find</b>	MIA 1984
AiGx-98		Aboriginal	<b>Isolated Find</b>	MIA 1984



Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AiGx-99		Aboriginal – undetermined	Campsite	MIA 1984
AiGx-100		Aboriginal – late Archaic	<b>Isolated Find</b>	MIA 1984
AiGx-246		Aboriginal – undetermined	<b>Isolated Find</b>	LMA 2004
AiGx-247		Aboriginal – undetermined	<b>Isolated Find</b>	LMA 2004
AjGw-60		Aboriginal – undetermined	Undetermined	A. Roberts 1979
·		Euro-Canadian	Homestead	MPA 1991
AjGw-261	Muddysauga	Aboriginal -undetermined	Campsite	LMA 1996
	•	Euro-Canadian	Homestead	
AjGw-263		Unknown	Unknown	Unknown
	Hall I	Euro-Canadian	Homestead	R. Sutton 2001,
AjGw-264				2005
AjGw-265		Unknown	Unknown	Unknown
AjGw-270	<b>Boot Sucker</b>	Aboriginal – undetermined	Campsite	R. Mayer 1996
				B. Stewart 1997
AjGw-272		Aboriginal – undetermined	Campsite	R. Mayer 1996
				B. Stewart 1997
AjGw-273		Aboriginal – undetermined	Campsite	R. Mayer 1996
				B. Stewart 1997
AjGw-274	Blue Moon	Aboriginal - middle Woodland	Campsite	R. Mayer 1996
				B. Stewart 1997
AjGw-275		Aboriginal – undetermined	Campsite	R. Mayer 1996
				B. Stewart 1997
AjGw-277		Aboriginal – middle Archaic	Isolated Find	R. Mayer 1996
AjGw-278		Aboriginal – undetermined	Campsite	R. Mayer 1996
AjGw-279		Aboriginal – undetermined	Campsite	R. Mayer 1996
				B. Stewart 1997
AjGw-281	Herrnberger	Aboriginal – middle Woodland	Isolated Find	R. Mayer 1996
AjGw-283	Barrington	Aboriginal – late Archaic	Campsite	R. Mayer 1996
	Hall II	Euro-Canadian	Homestead	R. Sutton 2001,
AjGw-320				2005
AjGw-321	Gruehl I	Aboriginal – undetermined	Campsite	R, Sutton 2001
AjGw-322	Gruehl II	Aboriginal – undetermined	Lithic Scatter	R. Sutton 2001
AjGw-323	Gruelh III	Aboriginal – late Archaic	<b>Isolated Find</b>	R. Sutton 2001
AjGw-410		Aboriginal – undetermined	Lithic Scatter	J. Wilson 2006
AjGw-417	Britannia	Aboriginal – undetermined	Campsite	AI 2006
	Farms Loc. 1			
AjGw-418		Euro-Canadian	Homestead	AI 2006
AjGw-419		Aboriginal – undetermined	Campsite	AI 2006
AjGw-422		Aboriginal – undetermined	Campsite	AI 2006

\*sites in bold located within or adjacent to the Britannia Road study corridor

In 1984 the Museum of Indian Archaeology (MIA), also known as the London Museum of Archaeology (LMA) and now the Museum of Ontario Archaeology undertook an archaeological assessment for Phase 2 Stage C Selection of Preferred Site for the Landfill Component of Solid Waste Management Class EA (MIA 1984). The overall assessment was conducted for six separate candidate sites. Candidate Site D was located in an agricultural field, south of Britannia Road between First Line and Regional Road 25. Eight archaeological sites, four of which are within 300 m of the Britannia Road ROW, were located at Candidate Site D. AiGx-95 to AiGx-97 are all isolated finds of Aboriginal cultural affiliation. AiGx-99 was located on a prominent knoll in an area of generally flat topography and adjacent to a tributary of Sixteen Mile Creek. The site consisted of four pieces of Onondaga chert and was thought to represent a



small Aboriginal campsite. A more thorough archaeological assessment was recommended. The Britannia Road improvements should not impact the previously registered archaeological sites; however, the preferred design should be reviewed to confirm this.

In 2004 the LMA also undertook an archaeological assessment of the Mil Con Three (UMIAK) lands, Town of Milton (Pearce 2004). The assessment resulted in the discovery of a series of seven archaeological sites (**AiGw-388** to **AiGw-394**). Further work was recommended at five of the seven sites. The Britannia Road improvements have the potential to impact these archaeological resources.

The Boot Sucker site (AiGw-270) is located south of Britannia Road and west of Ninth Line. The site was found on a flat, fallow agricultural field with wet, low land located to the south. The Boot Sucker site is a Pre-Contact campsite that features a lithic scatter. The site was researched in 1997 by Robert Mayer and Bruce Stewart who recommended the complete excavation of the site (McDonald and Stewart 1997).

Robert Mayer also researched the **AjGw-278** site in 1996 (Mayer 1996). Like Boot Sucker, this site is a Pre-Contact campsite that is located south of Britannia Road and west of Ninth Line. The site was found on level topography within 100 m of a tributary of Sixteen Mile creek. A number of lithics were found at the spot including a cluster of five flakes and one isolated flake. Mayer recommended more work for this site.

Archaeologix Inc researched a number of sites along the Britannia Road corridor in 2006 (Archaeologix Inc 2006). One site, **AjGw-418**, is located immediately west of the intersection of Britannia Road and 5<sup>th</sup> Line. This site is a Euro-Canadian homestead that yielded 282 artifacts in a 24 m x 32 m area. Further work was recommended for the site.

Two other sites, **AjGw-263** and **AjGw-265**, are located in close proximity to the study corridor but the information for these sites is yet to be published.

#### 1.2.2 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 physiography and soils are briefly discussed for the study area. Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south central 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.

The *Standards and Guidelines* (MTC 2011) 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.

Other geographic characteristics that can indicate archaeological potential include: 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. There may be physical indicators of their use, 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 (MTC 2011).

The study corridor is located within the bevelled till plains of the Peel Plain physiographic region of southern Ontario (Chapman and Putnam 1984:174-176). The Peel Plain physiographic region covers a large area across the central portions of the Regional Municipalities of York, Peel 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. Surficial geology for the study area is shown in Figure 2 and soil drainage is shown in Figure 3.

Soils within the study area consist primarily of Chinguacousy clay loam. In the Halton Region, these soils are imperfectly drained and developed in the clay and silty clay glacial till deposits, derived principally from locally occurring brown shales, sandstones, and fossiliferous limestone. Chinguacousy soils are found on the gently sloping positions in the landscape (Gillespie, Wicklund and Miller 1970).

The Sixteen Mile Creek watershed covers 357 km<sup>2</sup> and runs through portions of Milton, Halton Hills, Oakville and Mississauga. The watershed is composed of three broad drainage basins, the West, Middle and Eastern Branches, which converge below the Niagara Escarpment to flow south into Lake Ontario at the Town of Oakville (Conservation Halton n.d.). A number of tributaries of Sixteen Mile Creek cross Britannia Road between First Line and Highway 407.

The Bronte Creek watershed covers 304 km<sup>2</sup> and covers portions of Wellington County, the City of Hamilton, Burlington, Oakville and Milton. The main branch of Bronte Creek is 48 km long and there are 12 primary subwatersheds that feed into the creek (Conservation Halton n.d.). Two tributaries of Bronte Creek cross Britannia Road between Tremaine Road and First Line.

### 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 corridor formed the road allowance between Lots 5 and 6, Concessions I to IX in the former Township of Trafalgar North, County of Halton.



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#### 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 Attiwandaron, 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 Trafalgar Township was acquired by the British from the Mississaugas in 1795. In 1806, Samuel Wilmot surveyed the townships of Nelson, Trafalgar and Toronto from land obtained in this purchase, using Dundas Street (Highway 5) as a baseline from which to survey two concessions north and four concessions south. Dundas Street had been surveyed in 1793 as a military road connecting Lake Ontario, Lake Erie, Lake St. Clair and Lake Huron, as well as a road to aid Loyalist settlement and deter expansionist claims in Upper Canada. After the two concessions south of Dundas St. were opened up, two new east-west concession line access roads, the Upper Middle Road and the Lower Middle Road, were surveyed. These early east-west roads were later complemented in 1832 by the Lakeshore Road, which was constructed nearby and parallel to an aboriginal pathway skirting Lake Ontario. The concession roads of the 1806 survey, and the line roads running perpendicular, blocked out the township in areas a mile and quarter square with five 200-acre lots to a square. Between every five lots ran a line road (Mathews 1953:45).



Trafalgar Township was first named "Grant Township" in honour of Alexander Grant, who was the administrator of Upper Canada. In 1806, it was renamed in honour of the victory by Horatio Viscount Nelson at Cabo Trafalgar in Spain the previous year. Trafalgar was initially settled by the children of Loyalists, soldiers who served during the War of 1812, and by immigrants from England, Scotland and Ireland. By the 1840s, the township was noted for its well cultivated farms (Smith 1846:197; Armstrong 1985:148; Rayburn 1997:348).

The earliest families to settle within the township included those of Sovereign, Proudfoot, Katting, Freeman, Post, Biggar, Mulholland, Kenney, Chalmer, Albertson, Chisholms, Sproat, Brown and Hagar. According to the 1877 atlas, it contained 548 inhabitants with one grist mill and four saw mills in 1817.

Early settlement was often influenced by the presence of watercourses. The development of the network of concession roads and railroads through the course of the 19th century also frequently influenced the siting of farmsteads and early industries.

# 1.3.3 Historic Map Review

The 1877 *Illustrated Historical Atlas of the County of Halton* was reviewed to determine the potential for the presence of historical archaeological resources along the study area during the nineteenth century (Figure 4).

Historically, the study corridor formed the road allowance between Lots 5 and 6, Concessions I to IX in the former Township of Trafalgar North, County of Halton. Britannia Road is a historically surveyed road and a number of historic features, such as farmhouses and orchards, churches and cemeteries, cross-roads settlements, railscapes, and waterscapes are illustrated on the atlas map. The historical settlements of Boyne (intersection of Britannia Road West and Regional Road 25), Omagh (at Fourth Line), and Drumquin (at Trafalgar Road), are all located along the study corridor. The available data gathered from the atlas is summarized in Table 2. 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.

Table 2: Summary of Property Owners and Historic Features along the Study Corridor

Lot #	Conc. #	Property Owners	Historic Features
5	I	John Hunter	
5	II	John Bowes	Homestead
		C. T. Macartney	
	Ш	Mrs. E. Cowin	Homestead
		Thomas Crozier	Homestead, orchard
5	IV	George Buck	2 homesteads, orchard
		Alexander Patterson	3 homesteads, church
5	V	William McLean	Church
		William Ford	Homestead, orchard
		A. Ford	
5	VI	James C. Earl	Homestead
		John Leslie	
5	VII	William Mayne	
		Thomas H. Patterson	Homestead, orchard



Lot #	Conc. #	Property Owners	Historic Features
5	VIII	William Bell	
		William Cunningham	
5	IX	Robert McCarron	
		Alexander Cook	
6	I	Robert Suiter	
6	II	William C. Pettigrew	
		Samuel Pettigrew	
6	III	H.K. Beaty	School House
		William Alderson	Homestead
		Mrs. D. Campbell	2 homestead
		John Chew	Church, homesteads
6	IV	Robert Elliott	
		E. McCann	Homestead, orchard
6	V	Henry Robinson	Omagh Post Office, school
		Norval & Johnson	house
6	VI	Robert Bigger	
		D.R. Kenney	Homestead, orchard
6	VII	David Featherstone	
		William Tolson	2 homestead, orchard
6	VIII	William Hood	
		John Kentner	Homestead, orchard
6	IX	Robert Kentner	
		William Numan	

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 since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 m of an early settlement road, such as Britannia Road, are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The *Standards and Guidelines* (MTC 2011) stipulates that 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. A number of properties located along the study corridor have been designated under the *Ontario Heritage Act* or are listed on a municipal register. Details concerning these properties can be found in the Cultural Heritage Assessment Report prepared for this project (ASI 2011)

#### 2.0 FIELD METHODS (PROPERTY INSPECTION)

A property inspection was conducted Peter Carruthers, (P163), ASI, on April 15, 20, and 21, in order to gain first-hand knowledge of the geography, topography, and current conditions of the Britannia Road study corridor. In addition, the archaeological potential of the study corridor was evaluated and mapped.



A property inspection is a visual inspection only and does not include excavation or collection of archaeological resources.

The Britannia Road study corridor was inspected during optimal weather conditions permitting good visibility of land features. Previously identified features of archaeological potential were examined, additional features of archaeological potential not visible on mapping were identified and documented as well as any features that will affect assessment strategies. Field observations are compiled onto maps of the study areas in Section 7.0 (Figures 5-12) and associated photography is presented in Section 8.0 (Plates 1-43).

#### 3.0 ANALYSIS AND CONCLUSIONS

The archaeological and historical context has been analyzed to help determine the archaeological potential of the study area. This data is presented below in Section 3.1. Results of the analysis of the property inspection are then presented for the Britannia Road corridor in Section 3.2.

# 3.1 Analysis of Archaeological Potential

The *Standards and Guidelines for Consultant Archaeologists* list characteristics that indicate where archaeological resources are most likely to be found (MTC 2011). Archaeological potential is confirmed when one or more features of archaeological potential are present.

Per Section 1.3.1 of the standards and guidelines, the study area meets the following criteria used for determining archaeological potential:

- Previously identified archaeological sites (i.e. Bootsucker site)
- Water source: primary secondary, or past water source (i.e. Sixteen Mile Creek, Bronte Creek);
- Early Euro-Canadian settlement (i.e. Boyne, Omagh, Drumquin); and
- Early historical transportation routes (i.e. Britannia Road).

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

# 3.2 Analysis of Property Inspection Results

As mentioned in Section 1.0, the project involves road improvements along Britannia Road from Tremaine Road to Highway 407. Road improvements could include widening the existing roadway to 4-lanes, while protecting for 6-lanes, improvements at various intersections, and improvements to the vertical and horizontal alignments where necessary.

Part of the Britannia Road study corridor is comprised of a right-of-way (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 Britannia Road project corridor spans from Tremaine Road to the Highway 407 interchange. It runs through three historic settlements (Boyne, Omagh, and Drumquin) and features eight intersections. The Britannia Road ROW has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. ROW disturbances can be attributed to typical road construction, including grading and utility installation (i.e. hydro, water, and lighting) (Plates 6, 9, 11, 12, 24, 27, 37, 39, 40-42). Commercial and residential development has also disturbed some of the adjacent landscape (Plates 32-35). Due to the extent of previous disturbance, the Britannia Road ROW, with two exceptions, and portions of the adjacent lands do not exhibit archaeological site potential. No further archaeological assessment is required on these lands (Figures 5-12: areas marked in yellow).

Beyond the disturbed ROW, several areas have remained relatively undisturbed and exhibit archaeological potential. Most of the areas of potential are relatively undisturbed fields that have not been impacted by construction activities (Plates 1-5, 7, 8, 10, 15, 17-19, 22, 23, 25, 28-31, 38). Other areas of potential are located around historic houses or roads (Plates 13, 16, 21, 26, 36). Should road improvements encroach upon undisturbed land beyond the disturbed ROW, a Stage 2 property assessment should be conducted (Figures 5-12: areas marked in pink).

Two cemeteries are located in the Britannia Road study corridor (Plates 14 and 20). The cemeteries are associated with two churches, the Church of Christ (9850 Britannia Road) and the Omagh Presbyterian Church (2077 Britannia Road). The Britannia Road ROW adjacent to these two properties requires further investigation should the proposed work alter the current road conditions adjacent to either property.

It must be recognized that the modern physical boundaries of a cemetery are not entirely reliable indicators of its actual extent. There is considerable potential for the presence of unmarked graves beyond the limits if cemeteries, particularly those with origins in the nineteenth century. Accordingly, any construction work adjacent to a known cemetery must be preceded by a Stage 3 Archaeological Assessment. Such an assessment typically entails mechanical stripping of topsoil and examining the subsoil for the presence of grave shafts.

#### 3.3 Conclusions

The Stage 1 Archaeological Assessment was conducted to assist with the road improvements along Britannia Road from Tremiane Road to Highway 407. The assessment determined that 46 archaeological sites have been registered within a 1 km of the study area. A review of the geography of the study area also suggested that it has potential for the identification of Aboriginal and historic archaeological remains. The property inspection determined that while the Britannia Road ROW is heavily disturbed, there was



potential beyond the ROW limits throughout the length of the study corridor, and that there are two historic cemeteries located adjacent to the study area limits.

#### 4.0 RECOMMENDATIONS

In light of the results of the background research and property inspection undertaken for the Stage 1 Archaeological Assessment of the Britannia Road transportation corridor, ASI makes the following recommendations:

- The Britannia Road ROW does not retain archaeological potential due to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. (Figures 5-12, areas marked in yellow). Additional archaeological assessment is not required within the current ROW boundaries and the Britannia Road ROW can be cleared of further archaeological concern;
- 2. The lands beyond the limits of the current Britannia Road ROW exhibit archaeological potential. If the proposed Britannia Road improvement project requires new lands beyond the current ROW limits then a Stage 2 Archaeological Assessment should be conducted on lands determined to have archaeological potential (Figures 5-12, areas marked in pink). This work will be done in accordance with the MTC's 2011 Standards and Guidelines for Consultant Archaeologists in order to identify any archaeological remains that may be present.
- 3. A Cemetery Investigation is required for the ROW in front of two properties in the Britannia Road project corridor, Church of Christ (9850 Britannia Road) and Omagh Presbyterian Church (2077 Britannia Road), should the proposed project impact these ROW lands. This work will be done in accordance with the MTC's 2011 Standards and Guidelines for Consultant Archaeologists and the Cemetery Act, to confirm the presence or absence of unmarked graves.

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 and Culture 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 and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 1990, c 0.18. The report is reviewed to ensure that the licensed consultant archaeologist has met the terms and conditions of their archaeological licence, and that the archaeological fieldwork and report recommendations ensure the conservation, preservation and protection of the cultural heritage of Ontario;



- 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
  - The *Cemeteries Act* requires that any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Consumer Services.

The documentation related to this archaeological assessment will be curated by Archaeological Services Inc. until such a time that 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 project owner(s), the Ontario Ministry of Tourism and Culture, and any other legitimate interest groups.



#### 6.0 WORKS CITED

# Archaeologix Inc

2006 Archaeological Assessment (Stage 3), 5<sup>th</sup> Line Farming, Britannia Farms, Town of Milton, Halton County, Ontario.

## Armstrong, Frederick H.

1985 Handbook of Upper Canadian Chronology. Toronto: Dundurn Press.

# Archaeological Services Inc. (ASI)

The Archaeological Study for the Growth Related Integrated Strategy, City of Hamilton. Final Report. Report on file with the Ministry of Culture, Toronto. (Revised 2005).

2011 Cultural Heritage Assessment Report, Britannia Road Transportation Corridor Improvements. Draft Report. Located at ASI, Toronto.

## Champlain, Samuel de

n.d. Voyages of Samuel de Champlain, Volume 3. Canadian Institute for Historical Microreproductions.

## Chapman, L. J. and F. Putnam

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

## Conservation Halton

n.d. Natural Environment: Watersheds. (website accessed February 4, 2011) <a href="http://www.conservationhalton.on.ca/ShowCategory.cfm?subCatID=1000">http://www.conservationhalton.on.ca/ShowCategory.cfm?subCatID=1000</a>

#### Gillespie, J.E., R.E. Wicklund and M.H. Miller

1970 The Soils of Halton County. The Ontario Soil Survey Report No. 43. Canada Dept. of Agriculture, Ottawa.

#### Mathews, Hazel C.

1971 *Oakville and the Sixteen*. Toronto: University of Toronto Press.

# Mayer, Pihl, Poulton and Associates, Incorporated (MPP)

1986 Report on Phase I of an Archaeological Masterplan for the Town of Vaughan: Background Research and Feasibility Study, Volume 1. Report on file at the Ministry of Culture, Toronto.

#### Mayer, Robert G.

1996 Archaeological Assessment (Stage 2), Highway 407 ROW Property S1-31.

#### McDonald, J and W. B. Stewart

1997 Final Report: Archaeological Assessment of Highway 407 ROW – Stage 3: Testing & Stage 4: Mitigation of the Property S1-31 Sites.



MIA

Halton Environmental Assessment, Landfill Component of Solid Waste Management,
 Phase 2, Stage 2C, Selection of Preferred Site: Technical Report No. 8: Archaeological Assessment.

Miles & Co.

1877 Illustrated Historical Atlas of the County of Halton, Ontario. Miles & Co., Toronto.

Ministry of Tourism and Culture

2005 Ontario Heritage Act.

2011 Standards and Guidelines for Consultant Archaeologists. Cultural Programs Branch, Ontario Ministry of Tourism and Culture, Toronto.

Pearce, Robert

2004 Report on the Stage 1 & Stage 2 A. A. of the Min Con Three (UMIAK) Lands, Town of Milton, R. M. of Halton.

Pope, J. H.

1877 Illustrated historical atlas of the county of Halton, Ont. Walker & Miles, Toronto.

Rayburn, Alan.

1997 Place Names of Ontario. Toronto: University of Toronto Press.

Smith, W.H.

1846 Smith's Canadian Gazetteer. Toronto: H. & W. Rowsell.



# **7.0** MAPS

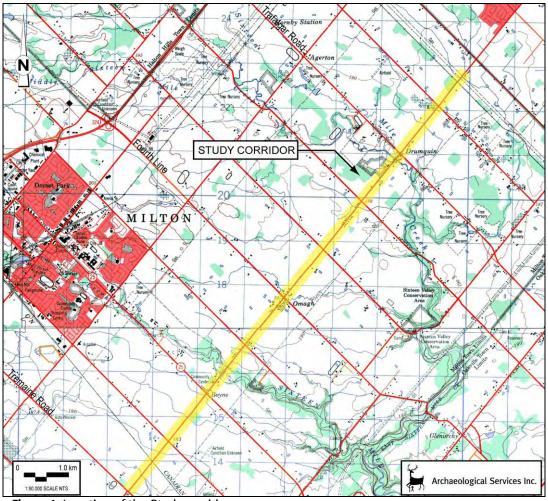


Figure 1: Location of the Study corridor.

Base Map: NTS Sheet 30 M/05 (Hamilton-Burlington) and 30 M/12 (Brampton)

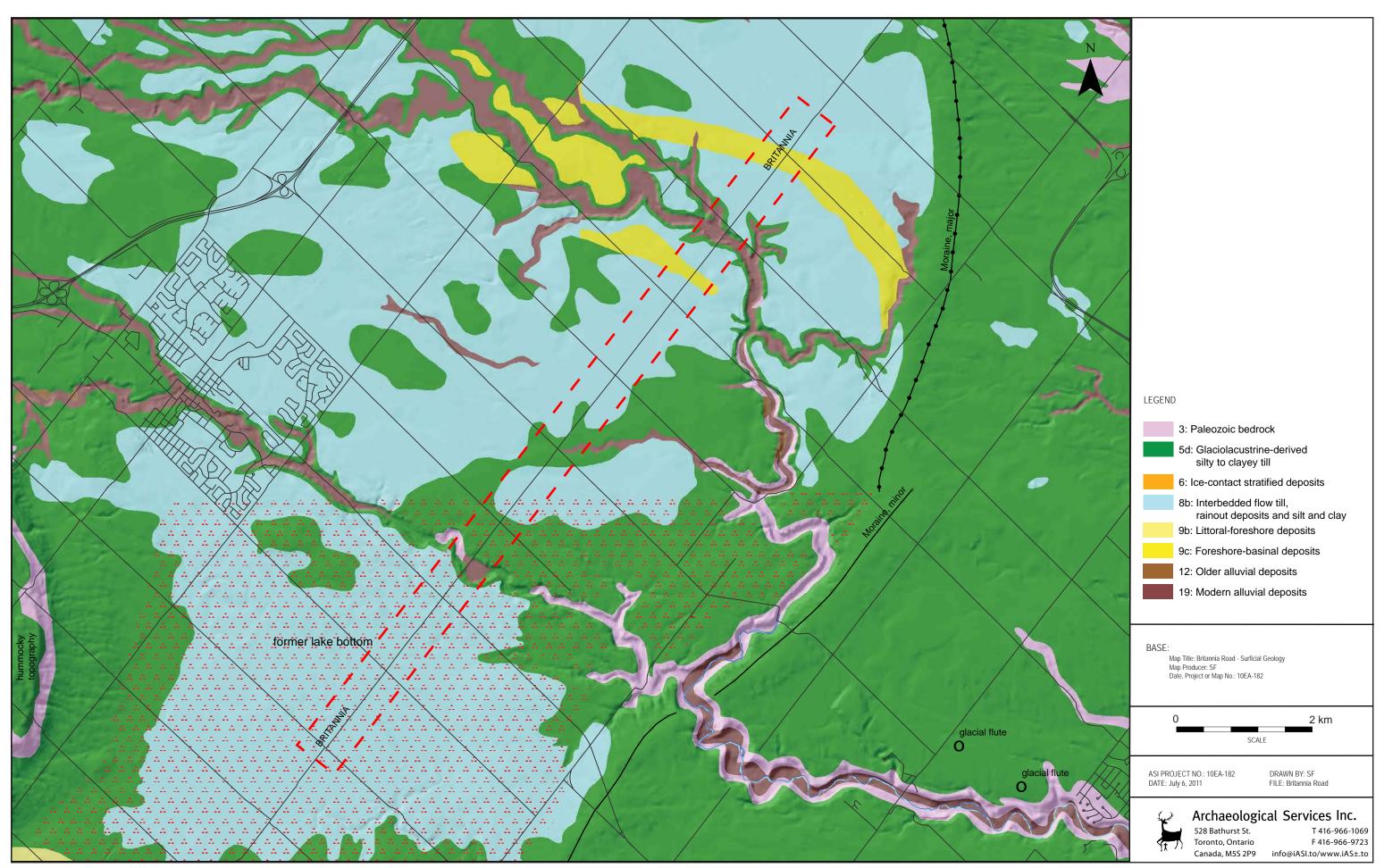


Figure 2: Britannia Road - Surficial Geology



Figure 3: Britannia Road - Drainage



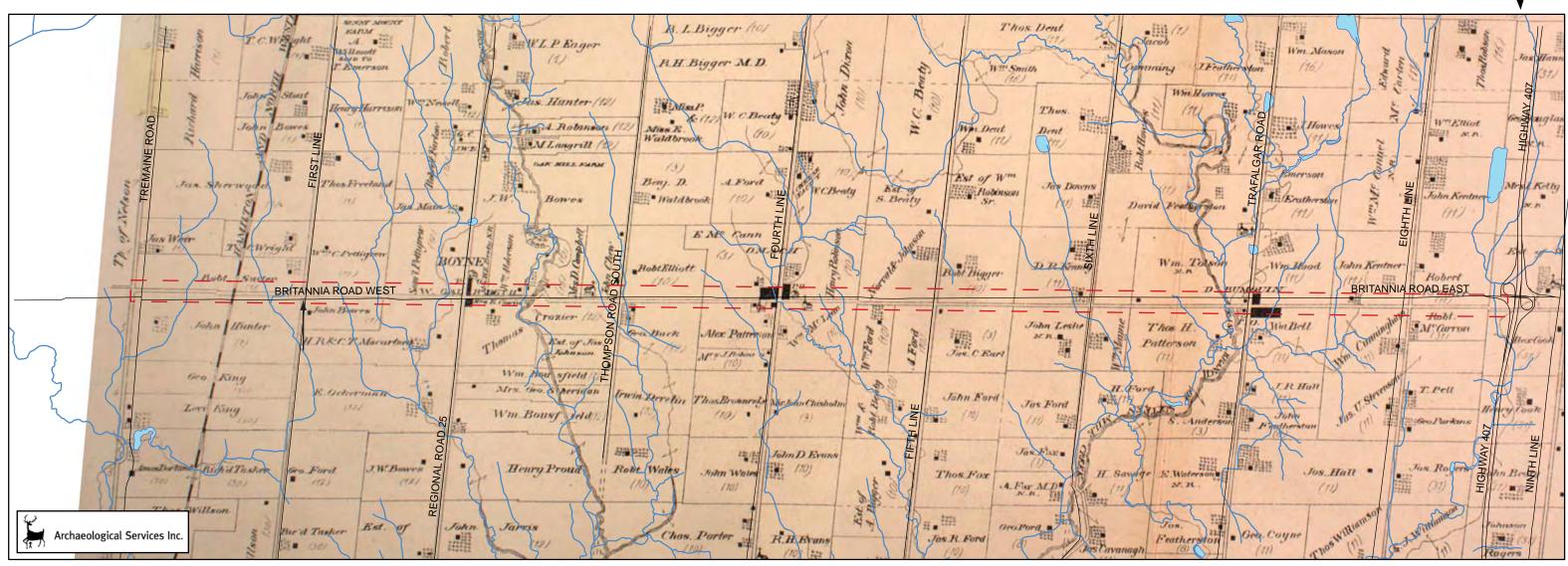


Figure 4: The study area overlaid on the 1877 map of the County of Halton

Base Map: 1877 Illustrated Historical Atlas of the County of Halton, Ontario



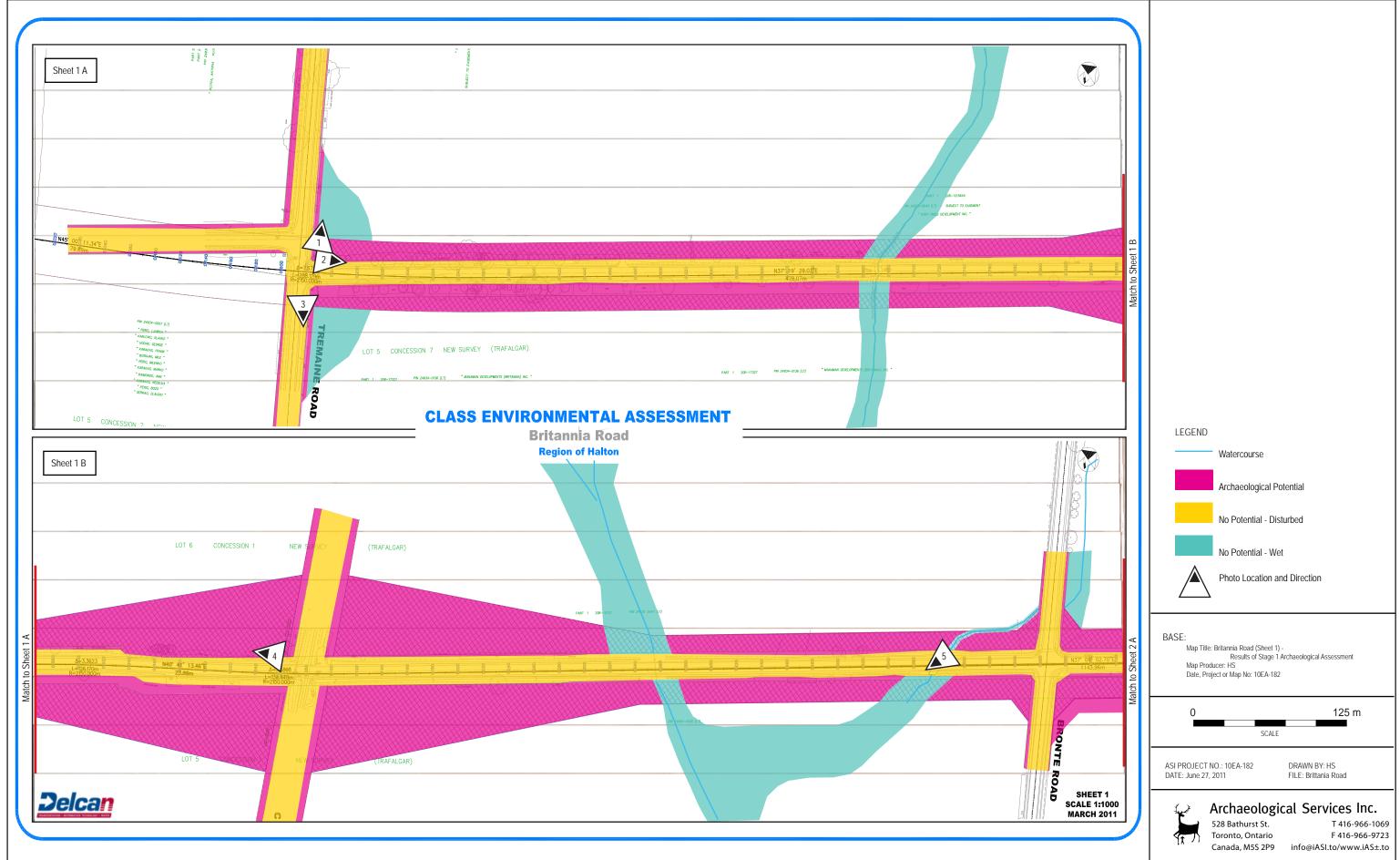


Figure 5: Britannia Road (Sheet 1) - Results of Stage 1 Archaeological Assessment

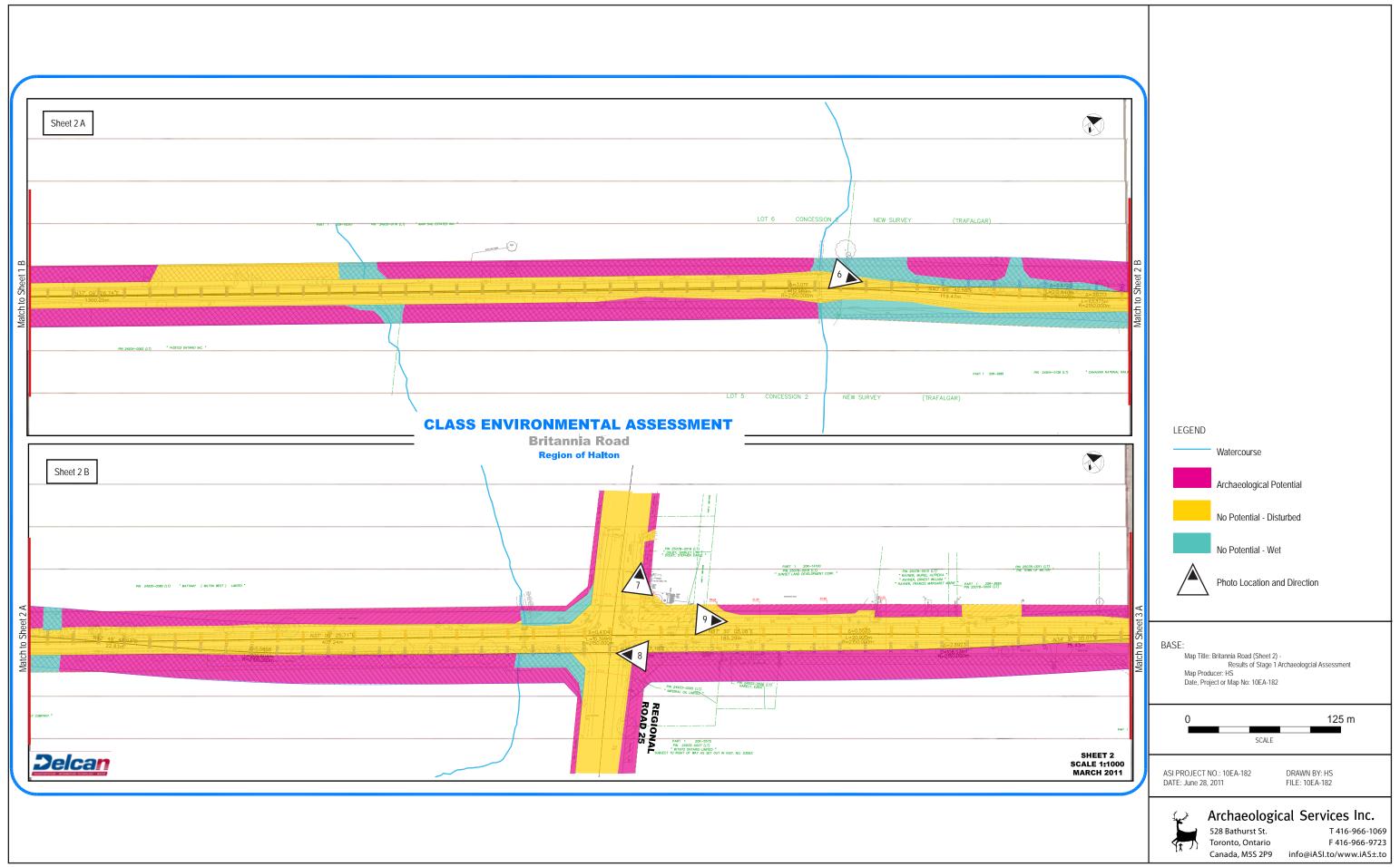


Figure 6: Britannia Road (Sheet 2) - Results of Stage 1 Archaeological Assessment

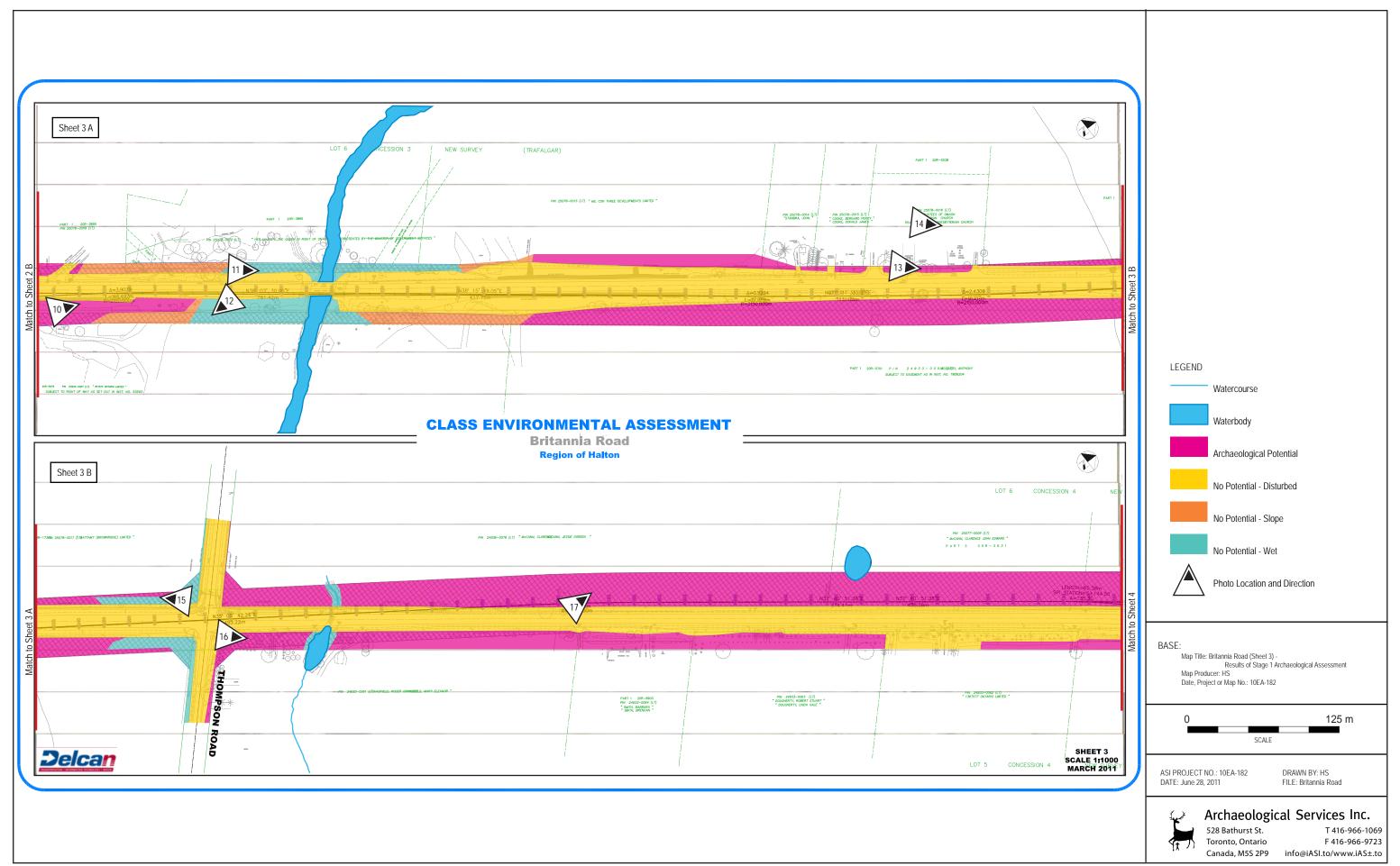


Figure 7: Britannia Road (Sheet 3) - Results of Stage 1 Archaeological Assessment

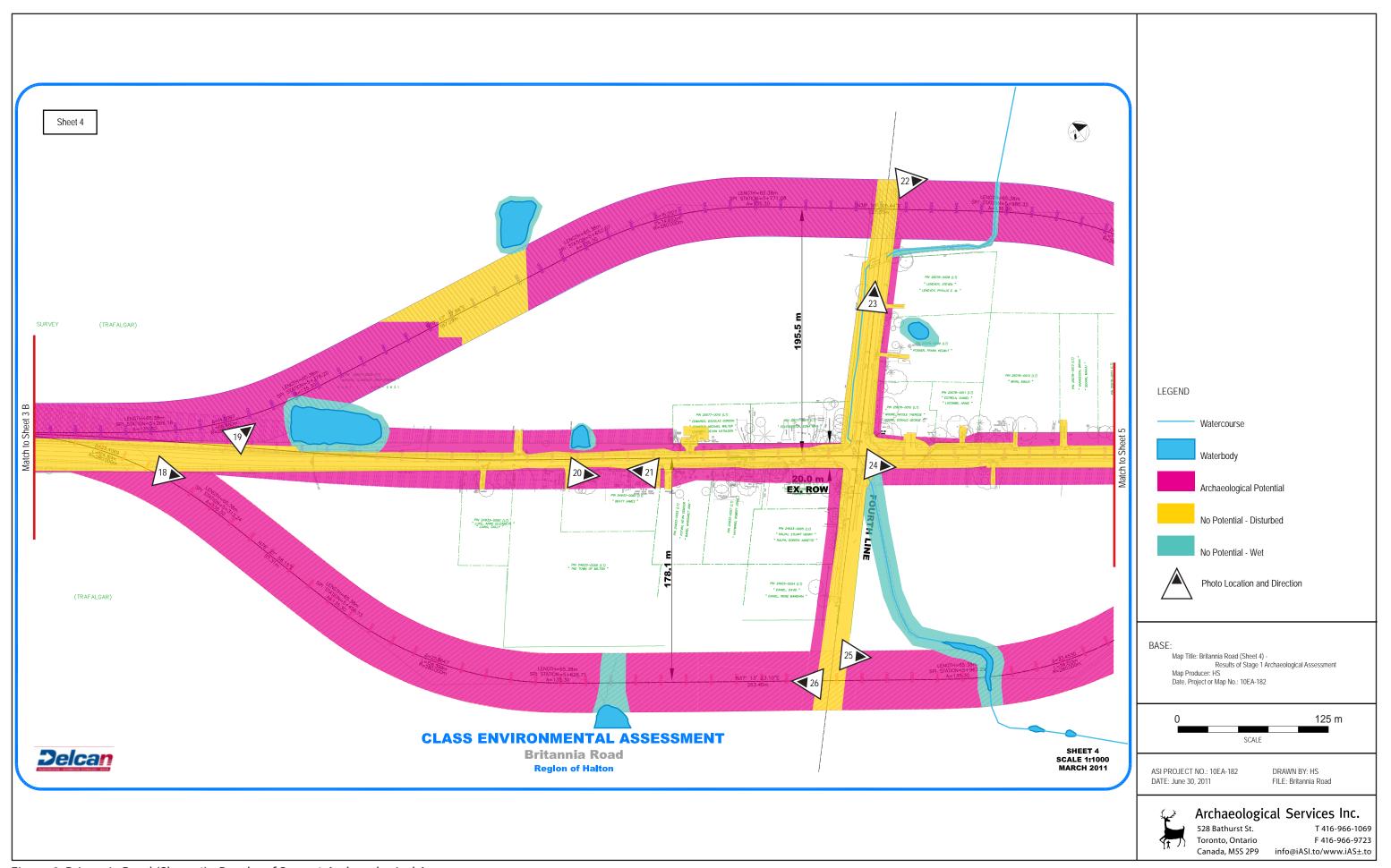


Figure 8: Britannia Road (Sheet 4) - Results of Stage 1 Archaeological Assessment

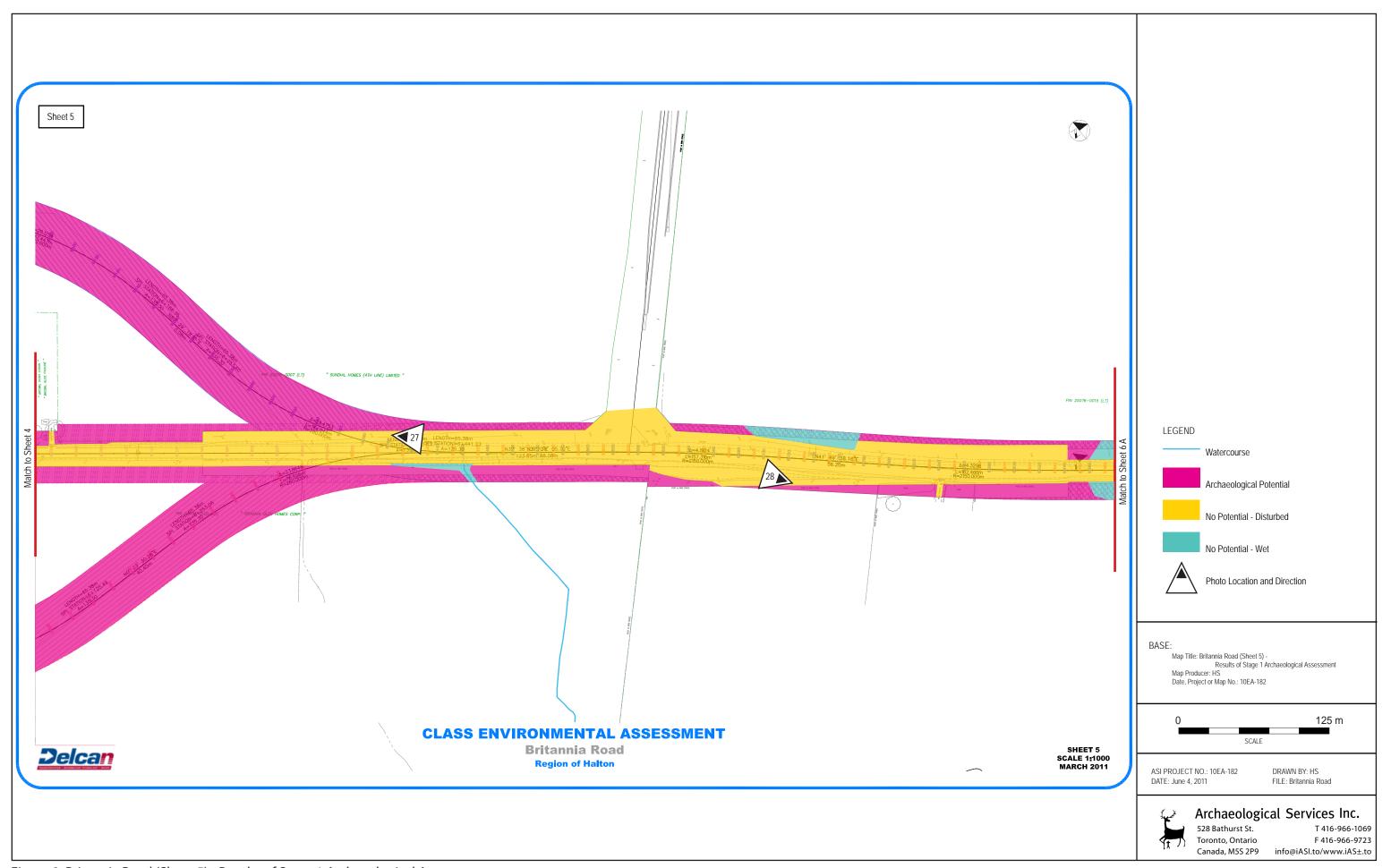


Figure 9: Britannia Road (Sheet 5) - Results of Stage 1 Archaeological Assessment

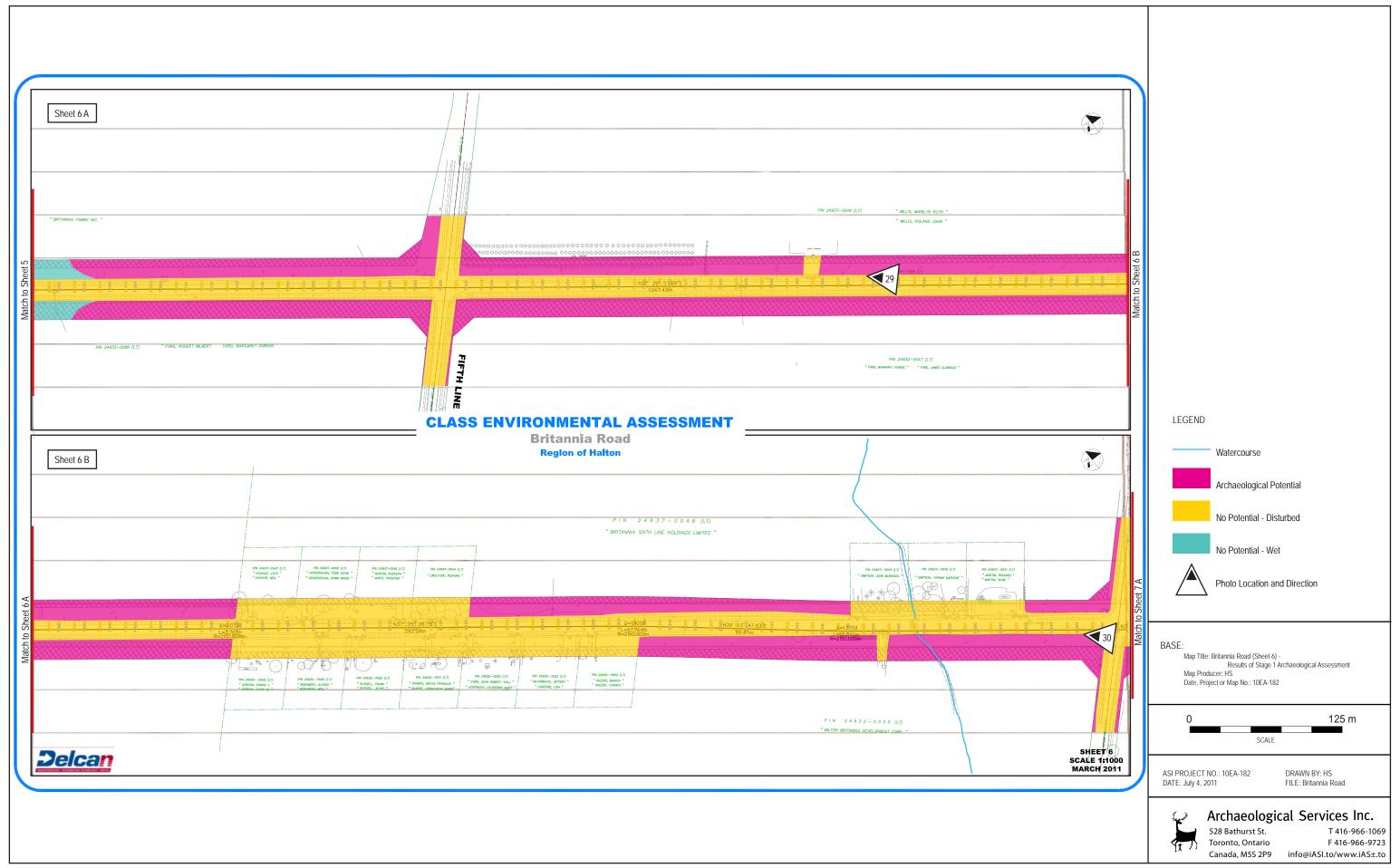


Figure 10: Britannia Road (Sheet 6) - Results of Stage 1 Archaeological Assessment

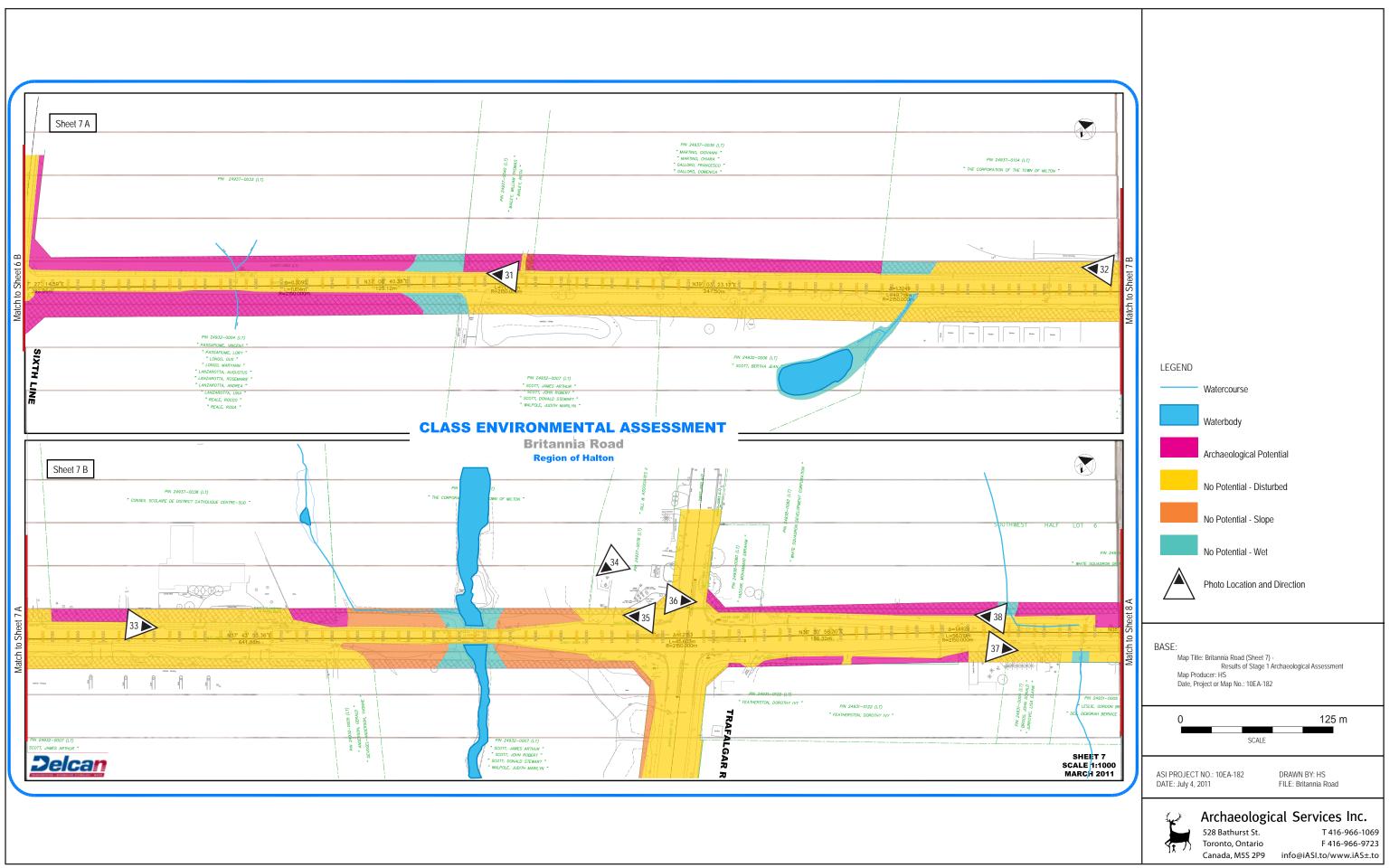


Figure 11: Britannia Road (Sheet 7) - Results of Stage 1 Archaeological Assessment

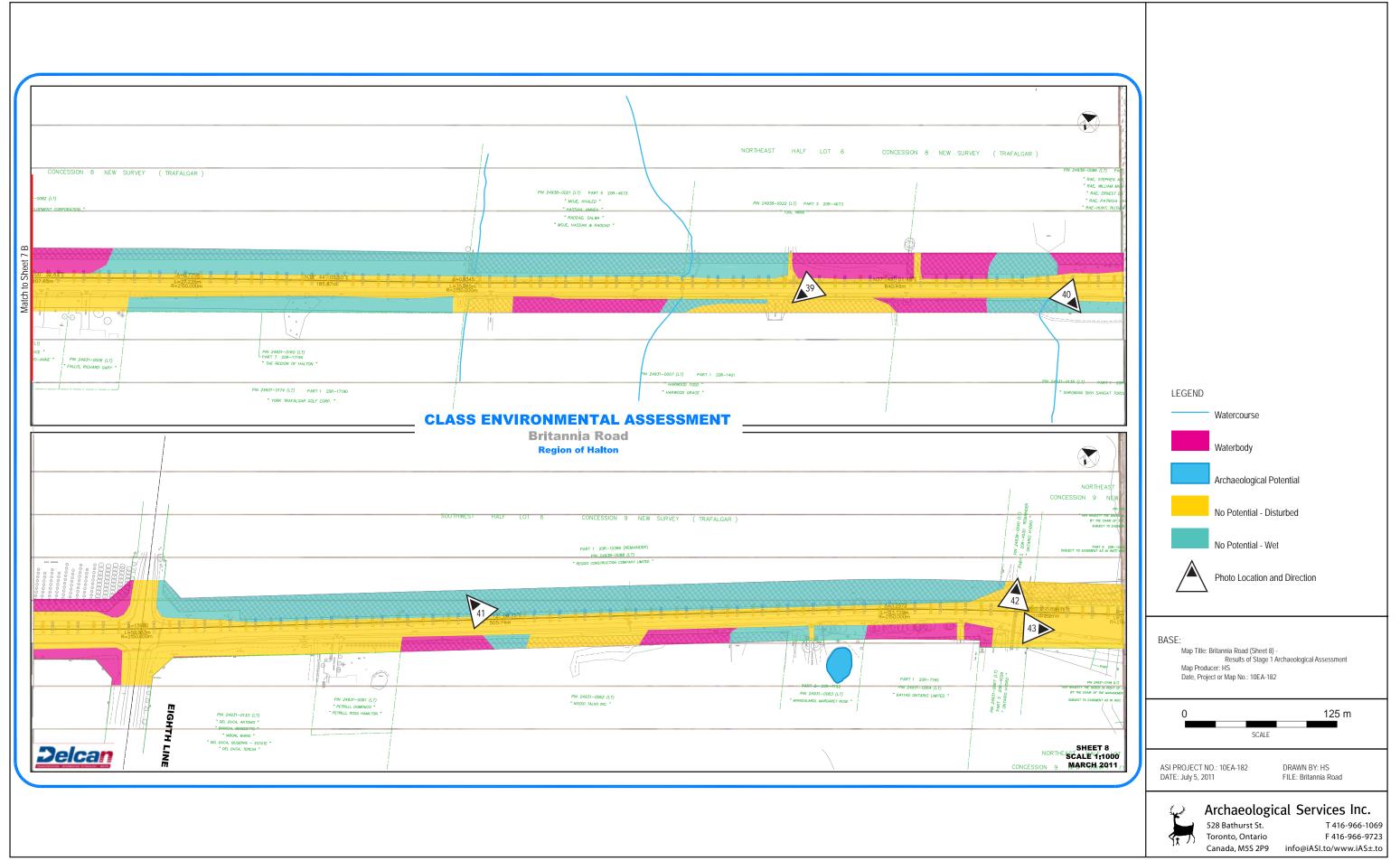


Figure 12: Britannia Road (Sheet 8) - Results of Stage 1 Archaeological Assessment

# 8.0 IMAGES



**Plate 1:** Northwest view along Tremaine Rd. Disturbed ROW on left and field with potential on right.



**Plate 3:** Southeast view of wet areas in field. Disturbed ROW on right. Field with potential in background.



**Plate 5:** South view across Britannia Rd. Disturbed ROW with no potential. Potential on both sides of road in fields.



**Plate 2:** Northeast view of wet area in field. Disturbed ROW on right and field with potential on left.



**Plate 4.** Southwest view of wet area southwest of tracks. Potential on both sides of road beyond ROW.



**Plate 6:** Northeast view along Britannia Rd. Disturbed ROW. Wet on both sides of road.



Plate 7: Northwest view up RR 25. Disturbed on both sides between ROW. Potential beyond ROW on right.



Disturbed ROW but potential beyond fence line.



Plate 9: Northeast view along Britannia Rd. ROW and parking area are disturbed. Field beyond has potential.



Plate 10: North-northeast view along road cut. Land beyond ROW has potential (test pit).



Plate 11: Northeast view along Britannia Rd road infill over creek. Wet area below bridge. No potential.



Plate 12: South view from Britannia Rd of valley bottom and road fill.



**Plate 13:** Northeast view across Omagh Presbyterian Church and cemetery.



**Plate 15:** Southwest view of wet corner at Britannia Rd and Thompson Rd. Field beyond wet area has potential.



**Plate 17:** North view along Britannia Rd. Disturbed ROW. Potential in field beyond fence line.



**Plate 14:** Northeast view along Britannia Rd in front of Church and Cemetery. ROW will require a Cemetery Investigation.



**Plate 16:** Northeast view along Britannia Rd. Potential to right of fence. Historic farmstead in background.



**Plate 18:** Northeast view along southern by-pass alternative. All potential beyond disturbed ROW.



**Plate 19:** North view along northern by-pass alternative. Potential in field beyond fence and excavated pond.



**Plate 21:** Southwest view of church and cemetery grounds. ROW in front of cemetery requires Cemetery Investigation.



**Plate 23:** Northwest view along Fourth Line. Wet along stream and disturbed by construction. Potential in lawns on right side.



**Plate 20:** Northeast view of cemetery located around the historic Church of Christ.



**Plate 22:** North-northeast view along margin of northwest alternative. Potential in fields.



**Plate 24:** Northeast view of bridge reconstruction of intersection at Britannia Rd and Fourth Line. Disturbed with no potential.



**Plate 25:** Northeast view along margin of southeast alternative. Potential along fence line and in fields.



**Plate 27:** Southwest view along Britannia Rd. Disturbed ROW with no potential.



**Plate 29:** Southwest view along Britannia Rd. Disturbed ROW. Potential in field beyond fence.



**Plate 26:** Southwest view along mid-line of southwest alternative. Potential in historic farmstead.



**Plate 28:** East-northeast view from Britannia Rd. Disturbed ROW. Potential in field and around buildings in distance.



**Plate 30:** Southwest view along Britannia Rd. Disturbed ROW with no potential. Fields on both sides have potential beyond disturbance.



**Plate 31:** Southwest view along Britannia Rd. Disturbed ROW and wet land with no potential. Field beyond wet land has potential.



Plate 33: Northeast view of land in front of school. All graded and disturbed. No potential.



**Plate 35:** Southwest view along Britannia Rd. Corner is graded and disturbed. No potential.



**Plate 32:** Southwest view of land in front of school. All graded and no potential.



Plate 34: South view of Sixteen Mile Creek. No potential. Green space in foreground is graded and disturbed.



Plate 36: Northeast view of historic house on northwest corner of intersection. Potential surrounding house beyond disturbed ROW.





Plate 37: Northeast view along Britannia Rd. Lawns are graded and disturbed. No potential.



Plate 39: South view of Britannia Rd. Disturbed ROW and wet area in distance. No potential.



**Plate 41:** West view of wet and low-lying area located beyond Britannia Rd ROW. No potential.



**Plate 38:** Southwest view along fence line. Potential adjacent to fence on left and in field to right.



**Plate 40:** East view into wet area beside Britannia Rd. No potential.



**Plate 42:** Northwest view along rail corridor. Disturbed with no potential. Wet land on left with no potential.



**Plate 43:** Northeast view towards HWY 407 interchange. Disturbed on all sides. No potential.

