

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

**Hillsburgh Dam Bridge  
Municipal Class Environmental Assessment Study  
Part of Lot 24, Concession 7, Former Township of Erin  
Town of Erin, County of Wellington, Ontario**

**ORIGINAL**

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**EXECUTIVE SUMMARY**

Archaeological Services Inc (ASI) was contracted by Triton Engineering Services Limited on behalf of the Town of Erin to conduct a Stage 1 Archaeological Assessment (Background Study and Property Inspection) as part of the Hillsburgh Dam Bridge Municipal Class Environmental Assessment in the Town of Erin, Ontario. The dam bridge is located on Station Street in the Community of Hillsburgh, Town of Erin. The structure was constructed in 1917 and is in need of updating.

The Stage 1 background study determined that no previously registered archaeological sites are located within one kilometre of the study area. A review of the geography and history of the study area suggested that the study area has potential for the identification of Aboriginal and Euro-Canadian archaeological resources, depending on the degree to which soils have been disturbed.

The Stage 1 property inspection determined that the majority of the study area has been disturbed by previous dam construction and grading within the right-of-way (ROW). Small parts of the study area were documented to possess archaeological potential.

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

1. Archaeological potential exists in small parts of the study area. These lands require Stage 2 archaeological assessment by test-pit survey at five metre intervals prior to any proposed disturbance;
2. A large part of the study area has been documented to have been disturbed by the previous dam construction and grading within the ROW. These areas do not have archaeological potential and do not require further archaeological assessment; and,
3. Should the proposed work extend beyond the current 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**

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## 1.0 PROJECT CONTEXT

Archaeological Services Inc (ASI) was contracted by Triton Engineering Services Limited on behalf of the Town of Erin to conduct a Stage 1 Archaeological Assessment (Background Study and Property Inspection) as part of the Hillsburgh Dam Bridge Municipal Class Environmental Assessment in the Town of Erin, Ontario. The dam bridge is located on Station Street in the Community of Hillsburgh, Town of Erin (Figure 1). The structure was constructed in 1917 and is in need of updating.

The 2011 *Standards and Guidelines for Consultant Archaeologists (S & G)*, Section 1, administered by the Ministry of Tourism, Culture and Sport (MTCS) discusses the objectives of a Stage 1 archaeological assessment as follows:

- 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 archaeological 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 field methods used for the property inspection that was undertaken to document its general environment, current land use history and conditions of the study area; 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 S & G, e.g., advice on compliance with legislation, works cited, mapping and photo-documentation.

### 1.1 Development Context

All activities carried out during this assessment were completed in accordance with the *Environmental Assessment Act*, the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (2000, as amended in 2007 and 2011), the *Ontario Heritage Act* and the S & G.

Authorization to carry out the activities necessary to complete this Stage 1 archaeological assessment was granted to ASI by Triton Engineering Services Limited on August 19, 2014.

### 1.2 Historical Context

The purpose of this section, according to the S & G, Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information gathered through the Stage 1 background research. First, a summary is presented of the current understanding of the Aboriginal land use of the study area. This is followed by a review of the historical Euro-Canadian settlement history.



### **1.2.1 Aboriginal Land Use and Settlement**

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier, approximately 13,000 before present (BP) (Ferris 2013: 13). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 BP, the environment had progressively warmed (Edwards and Fritz 1988) and populations now occupied less extensive territories (Ellis and Deller 1990: 62-63).

Between approximately 10,000-5,500 BP, the Great Lakes basins experienced low-water levels and many sites which would have been located on those former shorelines were then submerged. This period produces the earliest evidence of heavy wood working tools and is indicative of greater investment of labour in felling trees for fuel, to build shelter, or to produce tools and is ultimately indicative of prolonged seasonal residency at sites. By approximately 8,000 BP, evidence exists for polished stone implements and worked native copper. The latter's source from the north shore of Lake Superior is evidence of extensive exchange networks. Between approximately 4,500-3,000 BP, there is evidence for investment of labour into social infrastructure and the establishment of band territories (Ellis *et al.* 1990; Ellis *et al.* 2009; *cf.* Brown 1995: 13).

Between 3,000-2,500 BP, populations continued with residential mobility harvesting seasonally available resources, including spawning fish. Exchange and interaction networks broaden at this time (Spence *et al.* 1990: 136, 138) and by approximately 2,000 BP, evidence exists for macro-band camps, focusing on the seasonal harvesting of resources (Spence *et al.* 1990: 155, 164). It is also during this period that maize was first introduced into southern Ontario, though it would have only supplemented people's diet (Birch and Williamson 2013: 13-15). Bands likely retreated to interior camps during the winter.

From approximately 1,000 BP until approximately 300 BP, lifeways became more similar to that described in early historical documents. Populations in the study area would have been Iroquoian speaking though full expression of Iroquoian culture is not recognised archaeologically until the fourteenth century AD. During the Early Iroquoian phase (AD 1000-AD 1300), the communal site is replaced by the village focussed on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson 1990: 317). By the second quarter of the first millennium BP, during the Middle Iroquoian phase (AD 1300-AD 1450), this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd *et al.* 1990: 343). In the Late Iroquoian phase (AD 1450-AD 1649) this process continued with the coalescence of these small villages into larger communities (Birch and Williamson 2013). Through this process, the socio-political organization of the Aboriginal Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

The Credit River watershed was used intensively by Woodland period populations and this is demonstrated in the archaeological record for the area. These sites include those from more recent ancestral Huron-Wendat settlements dating from at least the beginning of the fourteenth century (Antrex site – ASI 2010) until the mid-sixteenth century (Emerson Springs site – Hawkins 2004; Wallace site – Crawford 2003). By the turn of the seventeenth century the north shore of Lake Ontario was devoid of permanent settlement and the Credit River and Etobicoke-Mimico Creeks populations are believed to have relocated to join either the Huron-Wendat Nation or perhaps more likely the Tionontaté (Petun) Nation (Birch and Williamson 2013).



By 1600, the Five Nations Iroquois, in particular the Seneca, were the principle group using the central north shore of Lake Ontario, in particular for hunting, fishing, and for participation in the fur trade. One of the main settlements was located near the mouth of the Rouge River, one of the two branches of the Toronto Carrying Place, which was the route that linked Lake Ontario to the upper Great Lakes through Lake Simcoe. The Huron-Wendat and Petun were eventually dispersed by the Five Nations Iroquois in 1649 at which point the Seneca mainly took over control of the region (Heidenreich 1990: 489; Ramsden 1990).

Compared to settlements of the New York Iroquois, the “Iroquois du Nord” occupation of the landscape was less intensive. Only seven villages are identified by the early historic cartographers on the north shore of Lake Ontario and they are documented as considerably smaller than those in New York State. The populations were agriculturalists, growing maize, pumpkins and squash. These settlements also played the important alternate role of serving as stopovers and bases for New York Iroquois travelling to the north shore of Lake Ontario for the annual beaver hunt (Konrad 1974).

Beginning in the mid-late seventeenth century, the Mississaugas began to replace the Seneca as the controlling Aboriginal group along the north shore of Lake Ontario since the Iroquois confederacy had overstretched their territory between the 1650s and 1670s (Williamson 2008). The Iroquois could not hold the region and agreed to form an alliance with the Mississauga peoples and share hunting territories with them (Williamson 2008). The Mississaugas traded with both the British and the French in order to have wider access to European materials at better prices, and acted as trade intermediaries between the British and tribes in the north. By 1805, the lands from Burlington Bay to the Etobicoke River north of Eglinton Avenue were known as the ‘Mississague Tract’ (Boulton 1805: 48; Heritage Mississauga 2012: 18). The Mississaugas were also granted one mile (approximately 1.6 kilometres) on either side of the Credit River, Twelve Mile Creek and Sixteen Mile Creek. In 1818, the remainder of the Mississauga Tract was acquired by the Crown excluding the lands tracts flanking the Credit River, Twelve Mile Creek and Sixteen Mile Creek. In 1820, the remainder of Mississauga land was surrendered except approximately 81 hectares (ha) along the Credit River (Heritage Mississauga 2012: 18).

### ***1.2.2 Historic Euro-Canadian Land Use: Township Survey and Settlement***

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Aboriginal pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls for Great Lakes traffic and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Aboriginal trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).

Historically, the study area is located in the Former Township of Erin, County of Wellington in part of Lot 24, Concession 7.

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.



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 located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

#### *Erin Township.*

The land within Erin Township was acquired by the British from the Mississaugas in 1818. The first township survey was undertaken in 1819, and the first legal settlers occupied their land holdings in the following year. The township was first named after a poetic name for Ireland, *Ierne*, mentioned by the Greek geographer Strabo. Erin was initially settled by the children of Loyalists, soldiers who had served during the War of 1812, and by immigrants from England, Scotland and Ireland (Armstrong 1985: 143; Erin Centennial Committee 1967; McMillan 1974; Rayburn 1997: 113; Smith 1846: 55-56).

#### *Hillsburgh*

This post office village was situated on the Grand River on part Lots 22 to 25 Concessions 7 and 8, Erin Township. The village was founded in the 1840s, when a tavern and sawmill were constructed by Hiram and Nazareth Hill. It became a post office village in 1851. Registered plans of subdivision for this village date from 1857-1862. It contained two grist mills, a woollen factory, a foundry and tannery. The village also contained four churches, four stores, three hotels, and a telegraph office. It was a station on the Canadian Pacific Railway, and the population was approximately 400 in 1873 (Crossby 1873: 145; Rayburn 1997: 158; Scott 1997: 102; Winearls 1991: 697)

#### *Credit Valley Railway*

The Credit Valley Railway was constructed in between 1877 and 1879. The project was backed by George Laidlaw and was intended to connect Toronto with Orangeville via Streetsville. Construction began in 1874, and over several subsequent years several branches were added to the proposed line. The first section of track from Parkdale (Toronto) to Milton was opened in 1877. The line was completed in 1881 but nearly bankrupted the company. In 1883, the line was taken over by the Canadian Pacific Railway (Heritage Mississauga 2009).

### **1.2.3 Historic Map Review**

The 1881 *Illustrated Historical Atlas of Waterloo & Wellington Counties, Ontario* was reviewed to determine the potential for the presence of historic archaeological resources within the study area during the nineteenth century (Figure 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. Details of nineteenth century property owners are provided in Table 1.

Table 1: Nineteenth-century property owner(s) and historical features(s)  
*1881 Illustrated Historical Atlas of the Waterloo & Wellington Counties, Ontario*

Lot #	Concession #	Property Owner	Historical Feature(s)
24	7	Gooderham & Worts	

The historic mapping also indicates that the study area is located in proximity to the historic village of Hillsburgh and was historically owned by Gooderham and Worts.

#### **1.2.4 Summary of Historical Context**

The background research determined that the study area has been occupied by Aboriginal peoples for millennia. The study area is located within the traditional territory of the ancestral Huron-Wendat and was subsequently utilised by the Five Nations Iroquois during the mid-late seventeenth century and then by Mississauga peoples until 1818.

The background research and historic mapping also demonstrates that the study area is situated within the Former Township of Erin and is in proximity to the historic village of Hillsburgh. The parcel of the study area was historically owned by Gooderham and Worts.

### **1.3 Archaeological Context**

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the 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.

#### **1.3.1 Current Land Use and Field Conditions**

The study area is predominantly existing right-of-way (ROW) however part of the dam structure extends beyond ROW property. The study area is situated upon a dam bridge between two ponds, and is located adjacent to the southwest of the historic village of Hillsburgh which is predominantly residences. The surrounding landscape of the study area is rural.



### **1.3.2 Geography**

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

The S & G, Section 1.3.1, 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 since 5,000 BP (Karrow and Warner 1990: Figure 2.16), 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 S & G, Section 1.3.1, 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 situated within the Hillsburgh Sandhills physiographic region of southern Ontario within a former spillway (Chapman and Putnam 1984). The Hillsburgh sandhills are a natural boundary on the southeastern flank of the Dundalk till plain and covers an area of approximately 16,576 hectares. This region was the first land exposed by the recession of the Laurentide glacier. The region has an elevation of between 427-488 metres above sea level and is characterised by rough topography, sandy materials and a flat-bottomed swampy valley intersection the moraine. Fine sand is the prevalent soil type (Chapman and Putnam 1984: 135-136).

Spillways are the former glacial meltwater channels. They are often found in association with moraines but in opposition are entrenched rather than elevated landforms. They are often, though not always, occupied by stream courses, the fact of which raises the debate of their glacial origin. Spillways are typically broad troughs floored wholly or in part by gravel beds and are typically vegetated by cedar swamps in the lowest beds (Chapman and Putnam 1984: 15).

Soils within the study area include Caledon fine sandy loam (Dept. of Agriculture 1962). Caledon fine sandy loam is a well-drained soil developed on gravelly material but are stonefree. This soil occurs on undulating topography with long smooth slopes. The soil profile has been documented to have very dark grayish brown (10YR 3/2) fine sandy loam Ah horizon with fine crumb structure, very friable consistency, stonefree at a depth of between 0-8 centimetres. This horizon overlies a yellowish brown



(10YR 5/4) fine sandy loam Ae1 horizon with weak fine subangular blocky texture, very friable and stone free at a depth of between 8-38 centimetres. This overlies a light yellowish brown (10YR 6/4) fine loamy sand Ae2 horizon with single grain texture, loose, stonefree at a depth of between 38-66 centimetres. This overlies a dark yellowish brown (10YR 4/4) fine sandy loam Bt horizon with medium subangular blocky texture, friable at a depth of between 66-89 centimetres. This overlies a pale brown (10YR 6/3) gravel IIC horizon, single grain, loose texture, calcareous at a depth of 89+ centimeters (Hoffman *et al.* 1963: 36, 53).

Surficial geology information is presented in Figure 3. Soil drainage information for the study area is incomplete, however the available information is presented in Figure 4. The study area is underlain by areas of gravel. The study area includes areas of well-drained soil.

The study area is intersected by a tributary of the Credit River. The Credit River is approximately 90 kilometres long and its watershed features both Carolinian and Deciduous forests (CVCA n.d.). The watershed drains approximately 1000 square kilometres (CVCA 2006). The Credit River's headwaters originate at the Niagara Escarpment. The river transits the South Slope and Peel Plain physiographic regions until meeting its confluence with Lake Ontario at Port Credit in the Iroquois Plain physiographic region.

### **1.3.3 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 kilometres east to west, and approximately 18.5 kilometres 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 block *AkHa*.

According to the OASD (MTCS 2014), no previously registered archaeological site is located within one kilometre of the study area.

According to the background research, no previous archaeological assessment has been conducted within 50 metres of the study area.

### **1.3.4 Summary of Archaeological Context**

The study area is located in proximity to the historic village of Hillsburgh. A review of geography indicates that the study area includes a tributary of the Credit River and contains well-drained sandy soil. All these criteria indicate that the study area possesses potential for the recovery of Aboriginal and Euro-Canadian archaeological resources, depending on the degree to which the natural topography and soils in the study area have been disturbed by historic and modern development.



## **2.0 FIELD METHODS (PROPERTY INSPECTION)**

The Stage 1 property inspection was conducted by Paul David Ritchie (P392) and Peter Carruthers (P163), both of ASI, on October 23, 2014, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the study area. It was a visual inspection only and did not include excavation or collection of archaeological resources.

Weather conditions for the inspection were clear skies with a temperature of approximately 17 degrees Celsius and were deemed acceptable. 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 could affect assessment strategies. Field observations are compiled onto the maps of the study area in Section 7.0 (Figure 5), and associated photography is presented in Section 8.0 (Plates 1-5).

## **3.0 ANALYSIS AND CONCLUSIONS**

The historical and archaeological contexts were analyzed to help determine the archaeological potential of the study area. A summary of the archaeological potential of the 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**

The S & G, Section 1.3.1, 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 study area meets the following criteria used for determining archaeological potential:

- Water source: primary, secondary, or past water source (e.g. tributary of Credit River; spillway);
- Well-drained sandy soil (e.g. Caledon fine sandy loam); and,
- Historic settlement (e.g. village of Hillsburgh)

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

### **3.2 Analysis of Property Inspection Results**

A majority of the study area has been previously disturbed by construction of the existing dam as well as grading associated with the ROW (Figure 5: areas marked in yellow). To the north and south of the dam along the edges of the ROW property, lands were identified that possess archaeological potential (Figure 5: areas marked in green). These lands will require Stage 2 archaeological assessment by test-pit survey prior to any proposed disturbance.



### 3.3 Conclusions

The Stage 1 background study determined that no previously registered archaeological sites are located within one kilometre of the study area. A review of the geography and history of the study area suggested that the study area has potential for the identification of Aboriginal and Euro-Canadian archaeological resources, depending on the degree to which soils have been disturbed.

The Stage 1 property inspection determined that the majority of the study area has been disturbed by previous dam construction and grading within the ROW. Small parts of the study area were documented to possess archaeological potential.

### 4.0 RECOMMENDATIONS

In light of the results of this assessment, ASI makes the following recommendations:

1. Archaeological potential exists in small parts of the study area (Figure 5: areas marked in green). These lands require Stage 2 archaeological assessment by test-pit survey at five metre intervals prior to any proposed disturbance;
2. A large part of the study area has been documented to have been disturbed by the previous dam construction and grading within the ROW (Figure 5: areas marked in yellow). These areas do not have archaeological potential and do not require further archaeological assessment; and,
3. Should the proposed work extend beyond the current 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, ASI 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 MTCS 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 MTCS, 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
- The *Funeral, Burial and Cremation Services Act, 2002*, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner.

## 6.0 WORKS CITED

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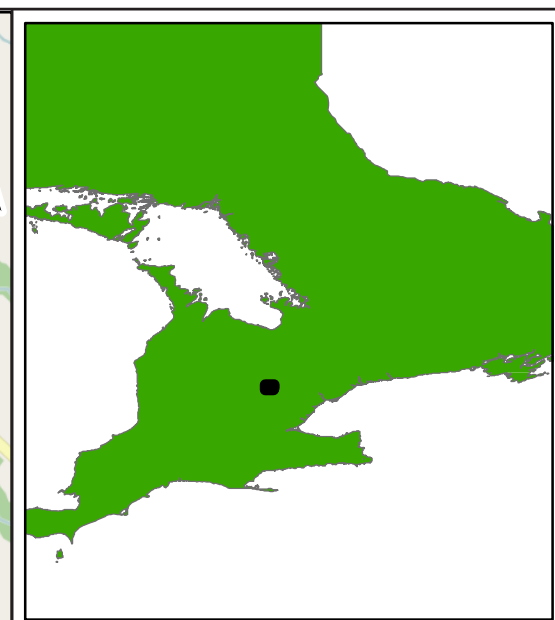
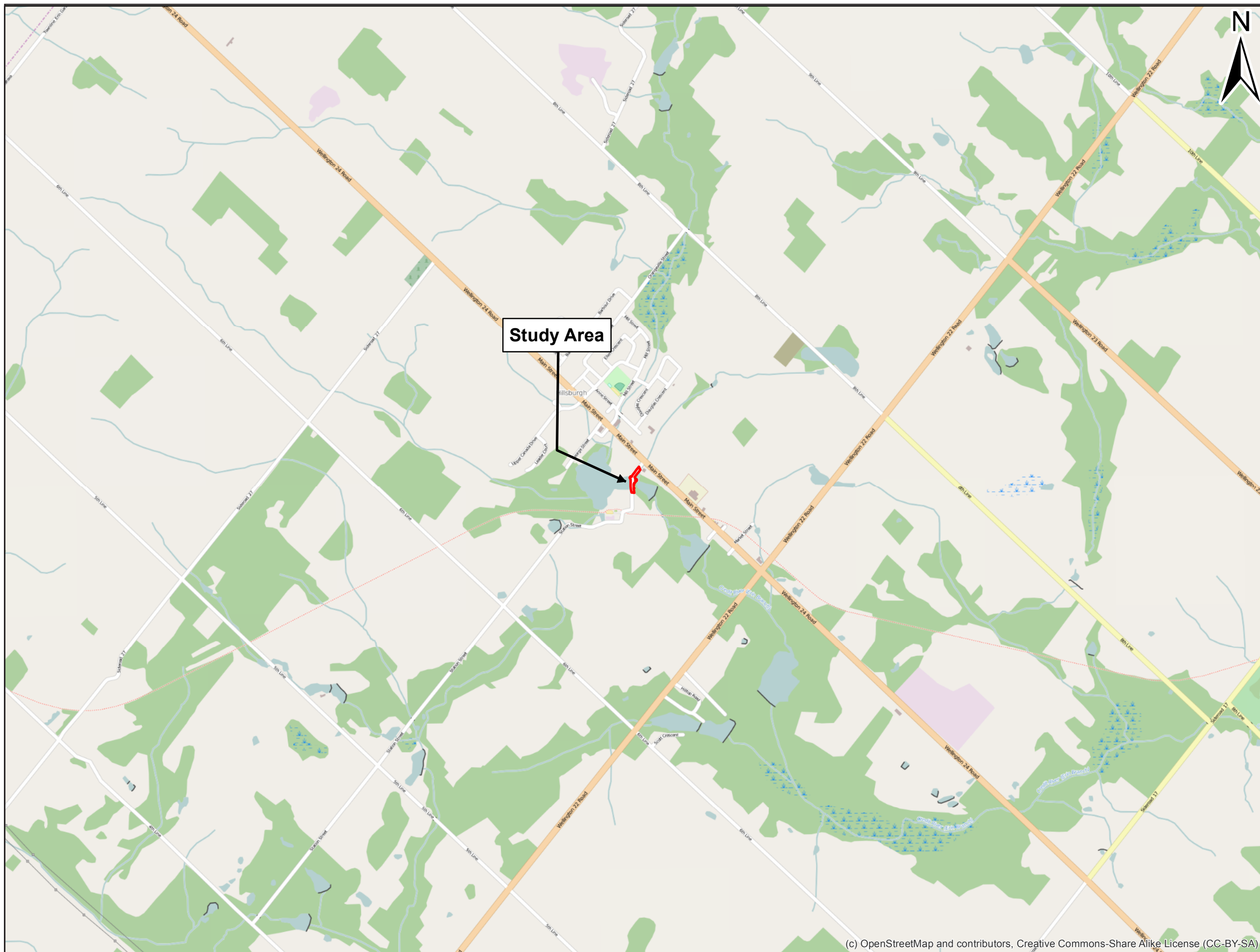
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## 7.0 MAPS





 Study Area

BASE: OpenStreetMap (OSM)  
OpenStreetMap and contributors,  
Creative Commons-Share Alike License (CC-BY-SA)  
2013

  
0 1,000  
Metres

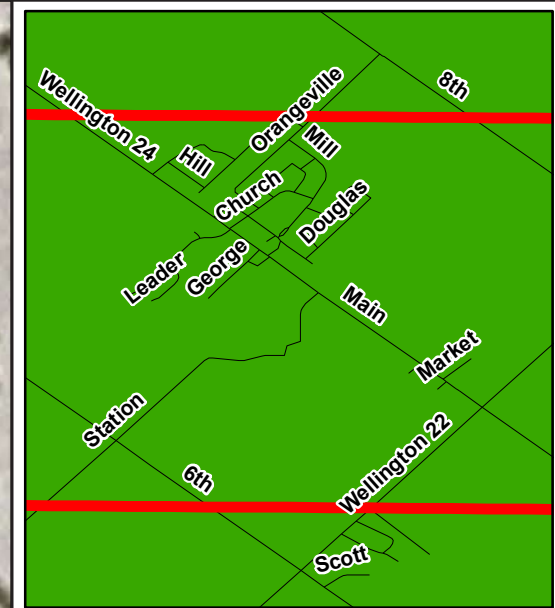
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528 Bathurst St. T 416-966-1069  
Toronto, Ontario F 416-966-9723  
Canada, M5S 2P9 info@iASI.to/www.iASI.to

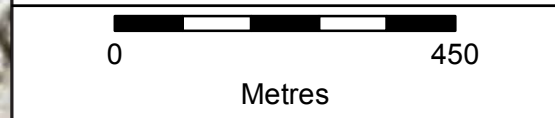
(c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)

Figure 1: Hillsburgh Dam Bridge Stage 1 Study Area Location



 Study Area

BASE:  
Wellington County  
Erin Township  
1881



ASI PROJECT NO.: 14EA-189  
DATE: 21 Oct 2014

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FILE: 14EA189\_Fig2\_1881


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Canada, M5S 2P9 info@iASI.to/www.iASI.to

Figure 2: Hillsburgh Dam Bridge Stage 1 Study Area (Approximate Location) overlaid on 1881 map of the Township of Erin

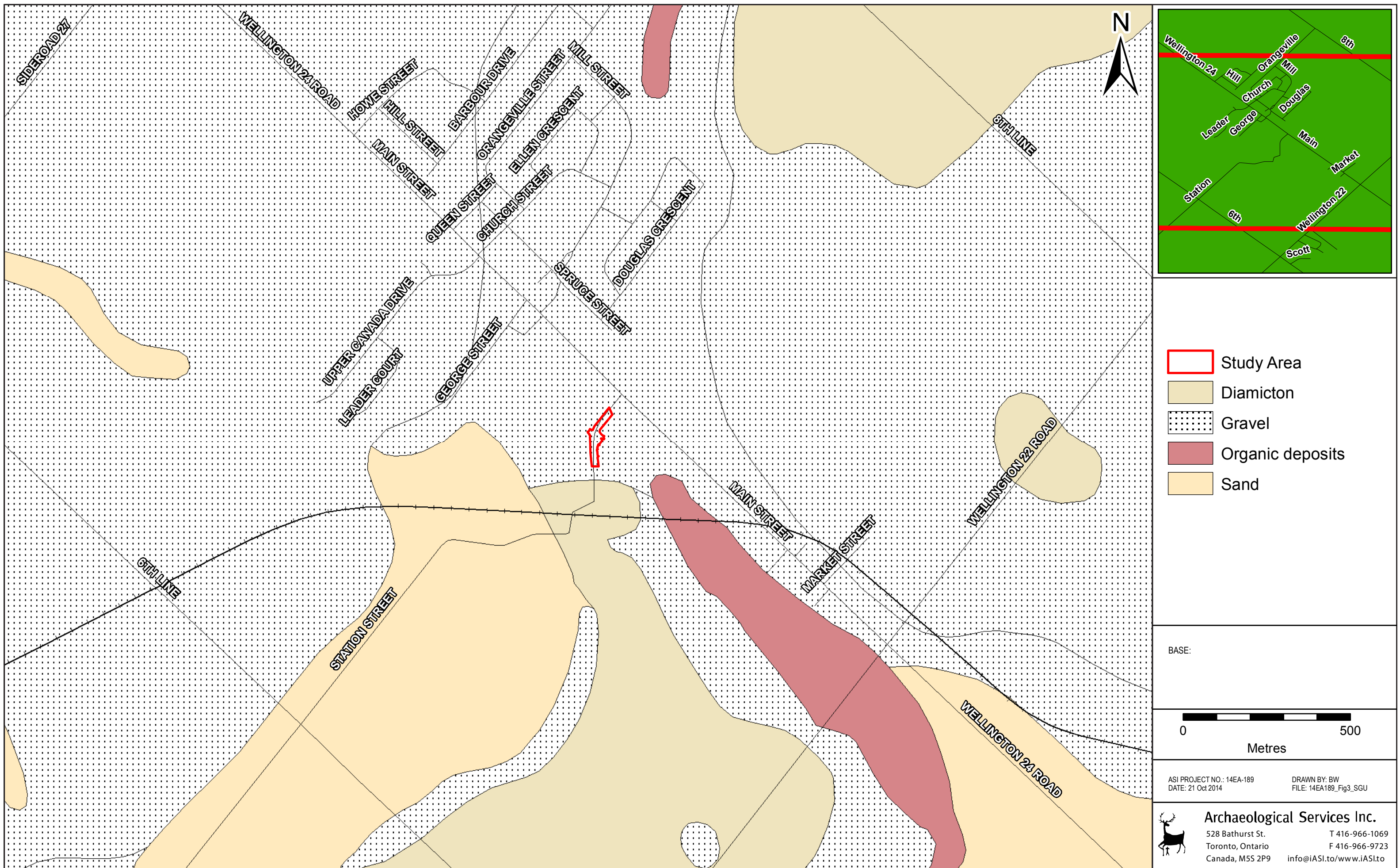


Figure 3: Hillsburgh Dam Bridge Stage 1 Study Area - Surficial Geology



Figure 4: Hillsburgh Dam Bridge Stage 1 Study Area - Soil Drainage

- Study Area
- No Data
- Well Drained
- Imperfectly Drained
- Poorly Drained
- Very Poorly Drained

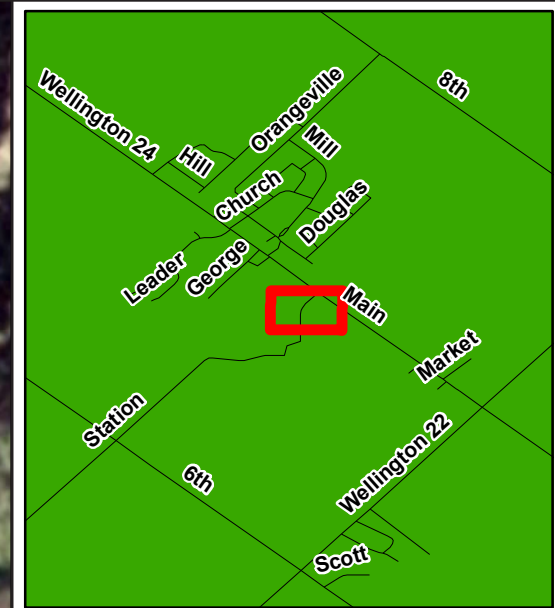
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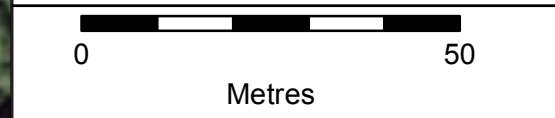
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- Study Area
- Photo Number and Location
- Archaeological Potential
- Disturbed- No Potential

BASE:  
 Ortho  
 Esri, DigitalGlobe, GeoEye, i-cubed, USDA,  
 USGS, AEX, Getmapping, Aerogrid, IGN,  
 IGP, swisstopo, and the GIS User Community



ASI PROJECT NO.: 14EA-189  
 DATE: 29 Oct 2014  
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Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Figure 5: Hillsburgh Dam Bridge Stage 1 Study Area - Property Inspection Results

## 8.0 IMAGES



Plate 1: View southwest of study area. ROW is disturbed with exception of lands to the northwest of view. Disturbed ROW has no potential. Lands with potential require test-pit survey at five metre intervals.



Plate 2: View SSE of study area. ROW is disturbed from dam construction. No potential.



Plate 3: View northwest of dam spillway. Area is disturbed. No potential.



Plate 4: View NNE of study area. Area is disturbed by dam construction and ROW grading. No potential.







Plate 5: View north of study area. ROW is disturbed. No potential.