

**STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT OF  
PROPOSED DRAFT PLAN OF SUBDIVISION,  
PART OF LOT 26, REGISTRAR'S COMPILED PLAN 1555  
PART OF LOT 22, CONCESSION 10,  
GEOGRAPHIC TOWNSHIP OF ESQUESING, COUNTY OF HALTON  
TOWN OF HALTON HILLS, REGIONAL MUNICIPALITY OF HALTON**

**ORIGINAL REPORT**

Prepared for:

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**EXECUTIVE SUMMARY**

ASI was contracted by 2312390 Ontario Inc. to complete a Stage 1 and 2 archaeological assessment of Proposed Draft Plan of Subdivision, Part of Lot 26, Registrar's Compiled Plan 1555, part of Lot 22, Concession 10, Geographic Township of Esquesing, Halton County, now in the hamlet of Glen Williams, Town of Halton Hills, Regional Municipality of Halton. The subject property is approximately 12.32 ha in size. Permission to access the subject property and to carry out all activities necessary for the completion of the assessment was granted by the proponent May 30, 2016.

The Stage 1 background assessment determined that a single archaeological site has been registered within a one km radius of the subject property. A review of the general physiography of the subject property and historic mapping suggested that the subject property encompasses an area that exhibits potential for the presence of pre-contact Indigenous and Euro-Canadian archaeological resources. However, review of land registry records and historical aerial photography confirm that gravel pit operations were present within part of the subject property and are likely an extension of the gravel pit located on Lot 23. The quarry was in operation in the 1950s and 1960s. These activities may have impacted the potential for the presence of Indigenous and historical Euro-Canadian archaeological resources where gravel extraction has previously occurred.

The Stage 2 field assessment included a test pit survey initiated at 5 m intervals and increased to 10 m intervals when disturbance was observed. Despite careful scrutiny, no archaeological resources were encountered during the course of the survey.

It is recommended that no further archaeological assessment of the property be required.



## PROJECT PERSONNEL

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## 1.0 PROJECT CONTEXT

ASI was contracted by 2312390 Ontario Inc. to complete a Stage 1 and 2 archaeological assessment of Proposed Draft Plan of Subdivision, Part of Lot 26, Registrar's Compiled Plan 1555, part of Lot 22, Concession 10, Geographic Township of Esquesing, Halton County, now in the hamlet of Glen Williams, Town of Halton Hills, Regional Municipality of Halton (Figure 1). The subject property is approximately 12.32 ha in size.

### 1.1 Development Context

This assessment was conducted under the project management of Ms. Beverly Garner and project direction of Mr. Andrew Clish (MTCS PIF P046-0214-2016). All activities carried out during this assessment were completed in partial fulfillment of the pre-development approvals required by the Town of Halton Hills. All work was completed in accordance with the *Ontario Heritage Act* (1990) and the Ministry of Tourism, Culture and Sport's 2011 *Standards and Guidelines for Consultant Archaeologists (S & G)*.

All work carried out for this assessment is also guided by the *Master Plan of Archaeological Resources for the Regional Municipality of Halton* (ASI 1998, 2008), which provides further refinement with regard to potential buffers surrounding any noted features or characteristics which affect archaeological potential.

Permission to access the subject property and to carry out all activities necessary for the completion of the assessment was granted by the proponent May 30, 2016. Buried utility locates were obtained prior to the initiation of fieldwork.

### 1.2 Historical Context

A Stage 1 archaeological assessment involves research to describe the known and potential archaeological resources within the vicinity of a subject property. The background research for such an assessment incorporates a review of previous archaeological research, physiography, and nineteenth and twentieth-century development for the subject property. Land registry records, census records, assessment/collector rolls, and local history resources were also review, where available.

The subject property is historically located within part of Lot 22, Concession 10, Geographic Township of Esquesing, County of Halton. The property currently consists of a former gravel pit as well as wooded area on the bank of the Credit River.

#### 1.2.1 Historic Overview

##### *Early Development of Glen Williams, Esquesing Township, Halton County*

Glen Williams is located in the northern section of the town of Halton Hills. It is situated on the Credit River, a mile and a half from Georgetown. Charles Williams was the first settler in 1824. The water privileges in this area caused the land to be quickly settled. The village was initially called Williamsburg but when the residents requested a post office the name was changed to Glen Williams. By 1877, it had a



population of about 500. Amongst its early industries were a steam shingle mill, a grist mill, a woollen mill, a pump and cistern manufactory, and a brickyard (Mika and Mika 1981, Pope 1877).

According to a 1969 report about sand and gravel in southern Ontario, the Georgetown glacial spillway extends from Cheltenham to Glen Williams “and extensive gravel deposits in this spillway have been worked.” The cap rock in this area is the Amabel Dolomite “a reefy, medium crystalline, highly fossiliferous, light buff, medium to massive-bedded dolomite.” The dolomite is “principally quarried as crushed stone for concrete aggregate and road stone” (Hewitt 1969).

### *Development of west half of Lot 22, Concession 10, Esquesing Township*

According to the Abstract Index to Deed Titles, the Crown Patent for the west half of Lot 22 was granted to James Leslie in 1840. The patent was for 100 acres. Amongst the individuals who acquired land in the west half of the lot in the nineteenth century were Frederick White, Joseph Tweddle, Major Mullen, James Laidlaw, James Forester, Walter Bell, Martha Hurst, David Starret, David Allan Cooper, Robert Norman, Robert McCullough, Samuel Beaumont, Samuel Morrison, Elizabeth Easson, and Adam Thomson. Amongst the individuals who acquired land in the first half of the twentieth century were Robert Blackstock, John Bennett, Thomas Richardson, William Davison, Sarah Sutcliffe, I. Logan, Edith Gill, Lucy Wagstaffe, Verna Dewhurst, Percy Sykes, Harold Bennett, and Albert Williams (MLRO n.d.[a]).

A note in the abstract index after the transactions for 1946 states: “For entries dealing with the west half of lot see Registry Plan 1555 – No further entries.” In the abstract index book for Plan 1555 it is noted that Lloyd Davidson sold part of the lot to James Hoey in 1946, who in turn sold part to William McGowan in 1952. McGowan then sold to Oriole Block Ltd. in 1955, who in turn granted part of the lot to Chateau Belair Development Ltd. in 1979. Plan 1555 was registered in 1986 (MLRO n.d.[b]).

Plan 1555 was dated 19 March 1985. It is entitled “Land Registrar’s Compiled Plan being a graphic index of part of lots 21 and 22 Concession 10 in the Geographic Township of Esquesing part of the Glen Williams Plan prepared by Winter and Abrey PLS all of registered plan 510 in the Township of Halton Hills” (MLRO n.d.[c]). Plan 510, dated 14 November 1952, was entitled “Plan of Subdivision of part of West half of Lot 22, Concession 10, Township of Esquesing.” It includes only the portion of the lot to the south of the area of study (MLRO n.d.[d]). The “Plan of Glen Williams Esquesing” is undated, but also only covers the part to the south of the area of study (MLRO n.d.[e]).

### *Industrial Sand and Gravel Company*

There is, however, mention of a sand and gravel company in the abstract index book for Lot 23, Concession 10. Charles Gordon Bishop is listed as making an agreement with the Industrial Sand and Gravel Company for “all sand, gravel, etc. upon the southwest [of lot 23] & other land” in 1953. The subject property was likely part of this gravel pit in Lot 23. Bishop had acquired this part of Lot 23 from William Henry Bishop in 1943, who had in turn acquired the land from Ina Gladys Blyth in 1939. Charles Bishop then deeded part of Lot 23 to Halton Hills Sand and Gravel Incorporated in 1980 (MLRO n.d.[a]).

A 1963 report from the Department of Mines noted that Industrial Sand and Gravel operated a gravel pit in Lot 23, Concession 10, Esquesing Township. It was described as being “on the east side of the road a mile north of Glen Williams.” The report notes that the “deposit consists of 20-30 feet of well-stratified clean medium to coarse gravel. Numerous pebbles of red Queenston Shale present in the face rarely



appear in the stockpile owing to attrition. The deposit is a spillway gravel.” The report further notes that a “pebble count of the gravel gives the following assemblage: Black River and Trenton limestones; dolomite; brown and maroon Dundas and Queenston siltstones; grey sandstone; Queenston shale, (rare); Precambrian acid igneous rocks and Precambrian metamorphic rocks” (Hewitt and Karrow 1963).

It would appear that the gravel pit was no longer operating by the late 1960s. According to a 1969 article by D. F. Hewitt “a gravel pit on lot 23 concession X, Esquesing Township, was formerly operated by Industrial Sand and Gravel” (Hewitt 1969).

It is possible that the area may have been used for sand and gravel prior to the 1953 deed cited above. A 1918 report in the Ontario Bureau of Mines reports that “north of Glen Williams there is a supply hill about 75 feet high and 125 feet wide where it crosses the road. The hill extends for several hundred yards on either side of the road and contains deposits of both sand and gravel. A sand pit has been opened on the side of the hill on the property of Jos. Beaumont of Glen Williams. Only a few loads were sold in the last few years. A small gravel pit has also been opened up from which material has been taken for road work” (Ledoux 1918). Unfortunately the report does not state the actual lot and concession but it is noteworthy that the abstract index for Lot 22 records Joseph Beaumont as acquiring part of the west half of Lot 22 in 1888, and the Beaumont family continues to be listed in the abstract index for this lot into the 1920s (MLRO n.d.[a]).

In summary, it would appear that the gravel pit on Lot 22 was likely an extension of the gravel pit located on Lot 23. The gravel company is first mentioned in the abstract index book for the year 1953, so it appears the quarry was in operation in the 1950s and 1960s. It may, however, also have been used in the earlier part of the twentieth century.

### **1.2.2 Review of Nineteenth and Twentieth Century Mapping**

A review of the 1858 *Tremaine Map of the County of Halton* and the 1877 *Illustrated Historical Atlas of the County of Halton* was completed in order to determine if these sources depict any nineteenth-century Euro-Canadian settlement features that may represent potential historical archaeological sites on the property (Figures 2-3). It should be further noted that not all features of interest were mapped systematically on the Ontario series of historical maps and atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps.

The 1858 *Tremaine Map* (Figure 2) depicts the subject property fronting the historically important concession road of present-day Confederation Street (9<sup>th</sup> Line). The map identifies two property owners within the subject property: Walter Bell and Laidlaw. No settlement features are illustrated within the subject property limits. The Credit River is illustrated to the immediate northeast.

According to the 1861 Census records, Walter Bell was a 61 year old Irish born farmer who lived with his wife Ester (aged 64) and four adult children; Elizabeth (aged 24), Nicholas (aged 23), Catherine (aged 21), and Walter W (aged 20). The family resided in a one and a half storey brick house built ca. 1842 and belonged to the Free Church (LAC 1861). According to the 1871 Census records, Bell continued to live on Lot 22 with his wife and three children; Richard (aged 32), Eliza (aged 29), and Catherine (aged 26). A servant, Thomas Langlein, also resided with the family (LAC 1871)<sup>1</sup>. Walter Bell died on September 21,

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<sup>1</sup> Note the poor quality of the 1861 census record may have lead to transcription errors as the names and ages listed differ from the later 1871 census record.





1873 from complications from a bacterial infection and is buried at the Glen Williams Cemetery (AO n.d.[a]).

A number of families with the name Laidlaw are listed in the 1861 Census records. It is unclear who would have resided on Lot 22 at this time.

The 1877 *Historical Atlas* (Figure 3) still depicts the subject property fronting the historically important concession road of present-day Confederation Street and within the historical settlement of Glen Williams. Property ownership details are not illustrated within the subject property limits, however, the patrons directory lists John Leslie as residing on Lot 22, Concession 10. Leslie, a native of Ireland, settled on the lot in 1821 and is listed as a farmer and brick maker (Pope 1877:71).

According to the 1881 Census records, John Leslie was a 68 year old Irish born farmer who lived with his wife Jane (aged 65) and three adult children; Robert (aged 40), Catherine (aged 28), and Eliza (aged 26). The family belonged to the Presbyterian Church of Canada (LAC 1881). According to the 1891 Census records, Leslie continued to reside on the lot with his wife and three children. Charles Gamble (aged 16) and Hattie Campbell (aged 7) also resided with the Leslie family and are listed as lodgers (LAC 1891). John Leslie died on October 22, 1900 from old age and is buried at the Glen Williams Cemetery (AO n.d.[b]). The Leslie family continued to reside on Lot 22 into the twentieth century.

Figure 4 illustrates the subject property superimposed over the 1909 *NTS Sheet Brampton*. Land features such as waterways, wetlands, woodlots and elevation are clearly illustrated. No structures appear within the subject property limits. The map illustrates the Credit River to the northeast of the subject property.

### **1.2.3 Review of Aerial Photography**

Historic aerial photography was reviewed in order to review previous land use and/or disturbance on the property (Figure 5). In 1954, the property appears to consist primarily of open land. Some disturbances are visible and indicate where the aforementioned gravel pit was located on Lot 23, and the present subject property. The north part of the subject property forms the bank of the Credit River and consists of a wooded area.

### **1.2.4 Review of Historical Archeological Potential**

The *S & G* (MTC 2011:18) 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. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks. 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, and properties that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations 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 captured by the basic proximity to the water model, 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 sitting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement transportation route are also considered to have potential for the presence of Euro-Canadian archaeological sites.

Given the proximity to the historically important concession road of present-day Confederation Street (9<sup>th</sup> Line) there is the potential of encountering nineteenth-century historical sites within the subject property, depending on the degree of recent land disturbances.

### **1.3 Archaeological Context**

Background research was completed to identify any archaeological sites in the subject property and to assess its archaeological potential.

#### ***1.3.1 Registered Archaeological Sites***

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

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

While no archaeological sites have been registered within the subject property or within 50 m, a single archaeological site has been registered within one km of the subject property (MCTS 2016). The Glen Williams Ossuary (AkGx-4) was first investigated in 1967, however, details of the activities conducted at the site are limited. The cultural/temporal categories outlined in Table 1.



**Table 1: Outline of Southern Ontario Prehistory**

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

### 1.3.2 *Previously Assessed Lands*

No previous assessments have been conducted within 50 m of the subject property.

### 1.3.3 *Physiography*

The Niagara Escarpment is by far one of the most prominent features in southern Ontario, and extends from the Niagara River to the northern tip of the Bruce Peninsula, continuing through the Manitoulin Islands (Chapman and Putman 1846:114-122). Vertical cliffs along the brow mostly outline the edge of the dolostone of the Lockport and Amabel Formations, which the slopes below are carved in red shale. Flanked by landscapes of glacial origin, the rock-hewn topography stands in striking contrast, and its steep-sided valleys are strongly suggestive of non-glacial regions. From Queenston, on the Niagara River, westward to Ancaster, the escarpment is a simple topographic break separating the two levels of the Niagara Peninsula.

### 1.3.4 *Review of Pre-contact Archaeological Potential*

The *S & G* (MTC 2011:17) stipulates that primary water sources (lakes, rivers, streams, creeks), secondary water sources (intermittent streams and creeks, springs, marshes, swamps), 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), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh) are characteristics that indicate archaeological potential.

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 modelling of site location. The subject property is immediately adjacent to the Credit River.

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, prairie) and scarce raw materials (quartz, copper, ochre, or outcrops of chert) are also considered characteristics that indicate archaeological potential.

The *S & G* (MTC 2011) also defines buffers of 100 metres around registered sites. There are no registered sites within 100 metres of the subject property.

Therefore, given the property's location relative to the Credit River, there is the potential for the identification of pre-contact archaeological remains, depending on the degree of later developments or soil alterations.

### **1.3.5 Subject Property Description**

The subject property is irregular in shape and is approximately 12.32 ha in size. The property currently consists of a mix of land including open grassed areas, a former gravel pit, and a wooded area. The north part of the subject property forms the bank of the Credit River. The property is bounded by Confederation Street and residential lots to the west, a wooded ravine to the north and east, and residential lots to the south (Figure 6). The topography of the subject property is undulating.

## **2.0 FIELD METHODS**

The Stage 2 field assessment was completed on July 4-8 and July 11, 2016 in order to inventory, identify and describe any archaeological resources extant on the subject property prior to development. All field work was conducted under the field direction of Robb Bhardwaj (P449).

All fieldwork was carried out in accordance with the *S & G*. The weather conditions were appropriate for the completion of field work, permitting good visibility of the land features. Photo locations and field observations have been compiled on project mapping (Figure 7). Representative photos documenting the field conditions during the Stage 2 fieldwork are presented in Section 8.0 of this report.

### **2.1 Areas of No Potential**

During the course of the Stage 2 property assessment, it was determined that portions of the subject property were deemed to have low or no potential due to past disturbances. Evidence of past gravel pit operations was noted within parts of the subject property (Plates 1-3). According to *S & G Section 2.1 Property Survey, Standard 2b*, the disturbances noted at these locations are considered too deep and extensive to warrant further survey. In total, these disturbances account for 20% of the subject property.



Additional lands lacking any further archaeological potential include the small wetland area adjacent to Confederation Street (Plate 4) and the sloping land on the bank of the Credit River as well as the sloping land in the southwest portion of the subject property (Plates 5-9). According to *S & G Section 2.1 Property Survey, Standard 2a (i) and 2a (iii)*, permanently wet areas and steep slopes (greater than 20°) are considered to have no or low potential. The permanently wet areas accounts for 1% and the sloped lands make up 28% of the subject property.

## 2.2 Test Pit Survey

All remaining lands deemed to have archaeological potential, approximately 51%, were assessed by means of a test pit survey. In accordance with the *S & G Section 2.1.2*, all areas with closed surface visibility were assessed by test pit survey initially at a 5 m intervals, and increased to 10 m when disturbances were encountered (Plates 10-15). Test pits were hand excavated at least 5 cm into subsoil and all topsoil was screened through 6 mm mesh to facilitate artifact recovery. Test pits were examined for stratigraphy, cultural features and evidence of fill. All test pits were at least 30 cm in diameter. Upon completion, all of the test pits were backfilled.

Intact soil profiles typically consisted of approximately 30 cm of brown (10YR 3/2) sandy loam, over brownish yellow (10YR 6/6) sandy loam subsoil (Plate 16).

Disturbed profiles varied across the property, but included: a laid topsoil layer, a rocky fill layer, and a gravel fill layer (Plates 17-18). Care was taken to ensure that no buried topsoil layer was present below the disturbances.

## 3.0 RECORD OF FINDS

Despite careful scrutiny, no archaeological resources were found during the course of the Stage 2 field assessment. Written field notes, annotated field maps, GPS logs and other archaeological data related to the subject property are located at Archaeological Services Inc.

The documentation and materials related to this project will be curated by ASI 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, Culture and Sport, and any other legitimate interest groups.

## 4.0 ANALYSIS AND CONCLUSION

ASI was contracted by 2312390 Ontario Inc. to complete a Stage 1 and 2 archaeological assessment of Proposed Draft Plan of Subdivision, Part of Lot 26, Registrar's Compiled Plan 1555, part of Lot 22, Concession 10, in the former Geographic Township of Esquesing, Halton County, now in the hamlet of Glen Williams, Town of Halton Hills, Regional Municipality of Halton. The subject property is approximately 12.32 ha in size.

The Stage 1 background assessment determined that a single archaeological site has been registered within a one km radius of the subject property. A review of the general physiography of the subject property and historic mapping suggested that the subject property encompasses an area that exhibits potential for the presence of pre-contact Indigenous and Euro-Canadian archaeological resources.



However, review of land registry records and historical aerial photography confirm that gravel pit operations were present within part of the subject property and are likely an extension of the gravel pit located on Lot 23. The quarry was in operation in the 1950s and 1960s. These activities may have impacted the potential for the presence of Indigenous and historical Euro-Canadian archaeological resources where gravel extraction has previously occurred.

The Stage 2 field assessment included a test pit survey initiated at 5 m intervals and increased to 10 m intervals when disturbance was observed. Despite careful scrutiny, no archaeological resources were encountered during the course of the survey.

## 5.0 RECOMMENDATIONS

In light of these results, the following recommendations are made:

1. It is recommended that no further archaeological assessment of the property be required.

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 Ministry of Tourism, Culture and Sport should be immediately notified.

## 6.0 ADVICE ON COMPLIANCE WITH 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*, RSO 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 field work and report recommendations ensure the conservation, preservation and protection 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 field work 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*.



- The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002. c.33 require that any person discovering human remains must immediately notify the police or coroner and the Registrar of Cemeteries, Ministry of Consumer Services.
- Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the Ontario Heritage Act and may not be altered, or have artifacts removed from them, except by a person holding an archaeological licence.

## 7.0 BIBLIOGRAPHY

### ASI (Archaeological Services Inc.)

- 1998 The Master Plan of Archaeological Resources for the Regional Municipality of Halton. Report prepared for the Regional Municipality of Halton, and on file at ASI.
- 2008 Master Plan of Archaeological Resources of the Regional Municipality of Halton, 2008 Update. ASI: Toronto.

### AO (Archives of Ontario)

- n.d.[a] Registrations of Deaths, 1869-1938 and Registrations of Ontario Overseas Deaths, 1939-1947. MS 944, reels 1-11. Archives of Ontario, Toronto, Ontario, Canada.
- n.d.[b] Registrations of Deaths, 1869-1938 and Registrations of Ontario Overseas Deaths, 1939-1947. MS935; Reel: 96. Archives of Ontario, Toronto, Ontario, Canada.

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

- 1984 *Physiography of Southern Ontario*. Third Edition. Toronto: Ontario Ministry of Natural Resources, Toronto.

### Hewitt, D.F.

- 1969 *Industrial Mineral Resources of the Brampton area – Halton, Peel and York Counties*. Industrial Mineral Report 23. Toronto: Ontario Department of Mines.

### Hewitt, D.F. and P.F. Karrow

- 1963 *Sand and Gravel in Southern Ontario*. Industrial Report No. 11. Ontario, Department of Mines, Toronto: Ontario Department of Mines.

### LAC (Library and Archives Canada)

- 1861 Census Returns For 1861; Roll: C-1030-1031. Ottawa, Ontario
- 1871 Census Returns for 1871; Roll: C-9956; Page: 13; Family No: 45. Ottawa, Ontario
- 1881 Census Returns for 1881; Roll: C\_13258; Page: 72; Family No: 333. Ottawa, Ontario
- 1891 Census Returns for 1891; Roll: T-6340; Family No: 129. Ottawa, Ontario

### Ledoux, A.

- 1918 *Sand and Gravel in Ontario* in Report of the Bureau of Mines. Toronto.

### Mika, N. and H. Mika,

- 1981 *Places in Ontario. Their Name Origins and History Part II (F-M)*. Mika Publishing, Belleville.



MCL (Ministry of Culture)

1990 Ontario Heritage Act, R.S.O. 1990, c. 0.18.

MLRO (Milton Land Registry Office)

n.d.[a] Abstract Index to Deed Titles, Book for Esquesing Township

n.d.[b] Abstract Index to Deed Titles, plan 1555, reel ER 58

n.d.[c] Plan 1555

n.d.[d] Plan 510

n.d.[e] Plan of Glen Williams

Ministry of Defence and Militia

1909 *NTS Sheet Brampton*. Toronto.

MMAH (Ministry of Municipal Affairs and Housing)

2005 Planning Act, R.S.O. 1990, c. P.13.

MTCS (Ministry of Tourism and Culture, now the Ministry of Tourism, Culture and Sport)

2011 *Standards and Guidelines for Consultant Archaeologists*. Toronto: Cultural Programs Branch, Archaeology and Planning Unit.

2016 Sites within a 1 km Radius of the Project, Ontario Archaeological Sites Database, June 17, 2016.

Pope, J.H.

1877 *Illustrated Historical Atlas of the Halton County, Ontario*. Walker & Miles, Toronto. (Reprinted 1976, Cummin Atlas Reports, Stratford).

Tremaine, George C.

1858 *Tremaine Map of the County of Halton, Canada West*, Toronto.





## 8.0 PLATES



Plate 1: View to north at former gravel pit area.



Plate 2: View of disturbed surface and former gravel pit location.



Plate 3: View of disturbed surface and former gravel pit location.



Plate 4: View across small wetland area.

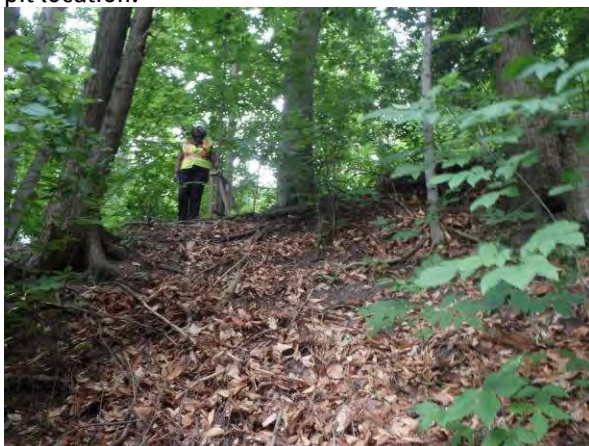


Plate 5: View southwest looking up slope.



Plate 6: View northeast demonstrating slope.



Plate 7: View east at sloped area in southwest.



Plate 8: View east looking up slope in former gravel pit.



Plate 9: View south looking up slope.



Plate 10: View of test pit survey at 5 m intervals.



Plate 11: View of area subject to test pit survey at 5 m intervals.



Plate 12: View of test pit survey at 5 m intervals.



Plate 13: View of area subject to test pit survey at 5 m intervals.



Plate 14: View of test pit survey at 5 m intervals.



Plate 15: View of area subject to test pit survey at 10 m intervals.



Plate 16: View of test pit with intact soil profile.



Plate 17: View of test pit with disturbed soil profile. Note test pit contained a laid topsoil layer and rocky fill over subsoil.

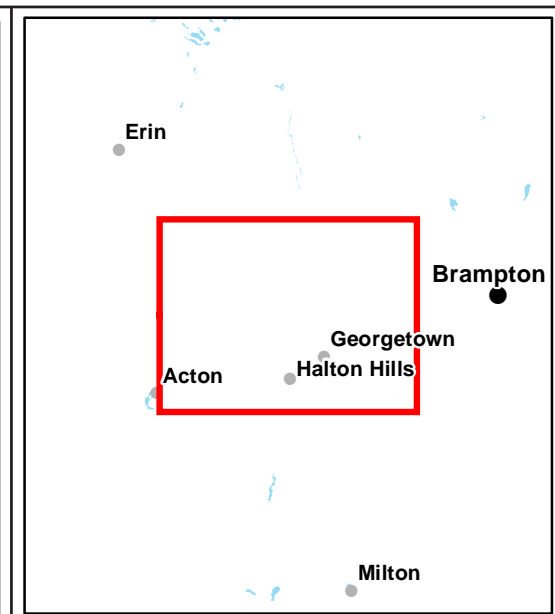
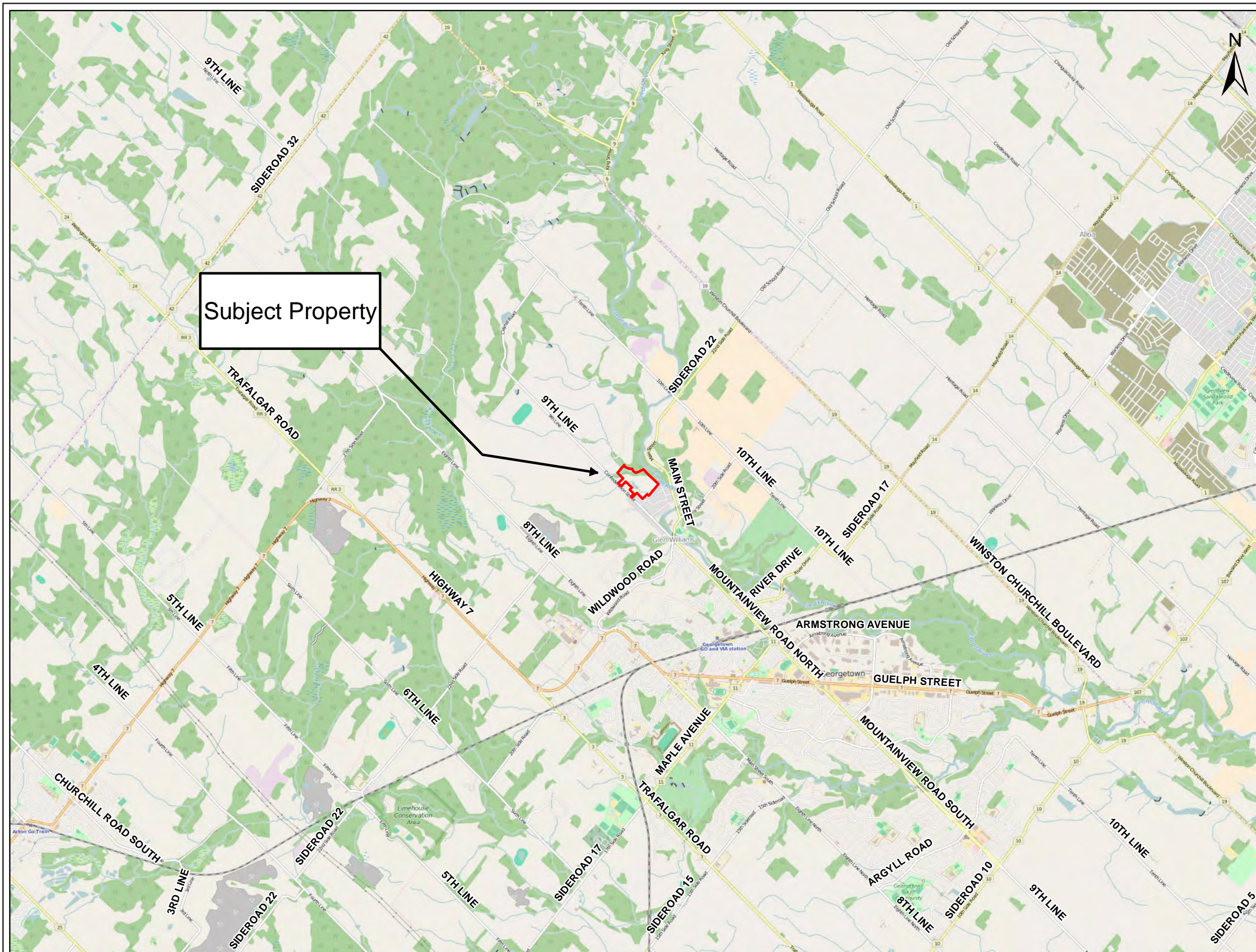



Plate 18: View of test pit with disturbed soil profile. Note test pit contained a laid topsoil layer, rocky fill, and gravel fill over subsoil.

## 9.0 MAPS


See the following pages for detailed assessment maps and figures.





 Subject Property

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

0  3  
 Kilometres

ASI PROJECT NO.: 16TS-137      DRAWN BY: BW  
 DATE: 16 Jun 2016              FILE: 16TS137\_Fig1


 **Archaeological & Cultural Heritage Services**  
 528 Bathurst Street Toronto, ONTARIO M5S 2P9  
 416-966-1069 | F416-966-9723 | asiheritage.ca




Figure 1: Location of the Subject Property.



Figure 2: Subject Property located on the 1858 Tremaine Map of the County of Halton.




Figure 3: Subject Property located on the 1877 Illustrated Historical Atlas of the County of Halton.


 <p>Archaeological &amp; Cultural Heritage Services 528 Bathurst Street Toronto, ONTARIO M5S 2P9 416-966-1069   F416-966-9723   asiheritage.ca</p>	 Subject Property		<p>0  250 Metres</p> <p>ASI PROJECT NO.: 16TS-137      DRAWN BY: BW DATE: 29 Aug 2016                  FILE: 16TS137_Fig2_3</p>
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 416-966-1069 | F416-966-9723 | asih heritage.ca

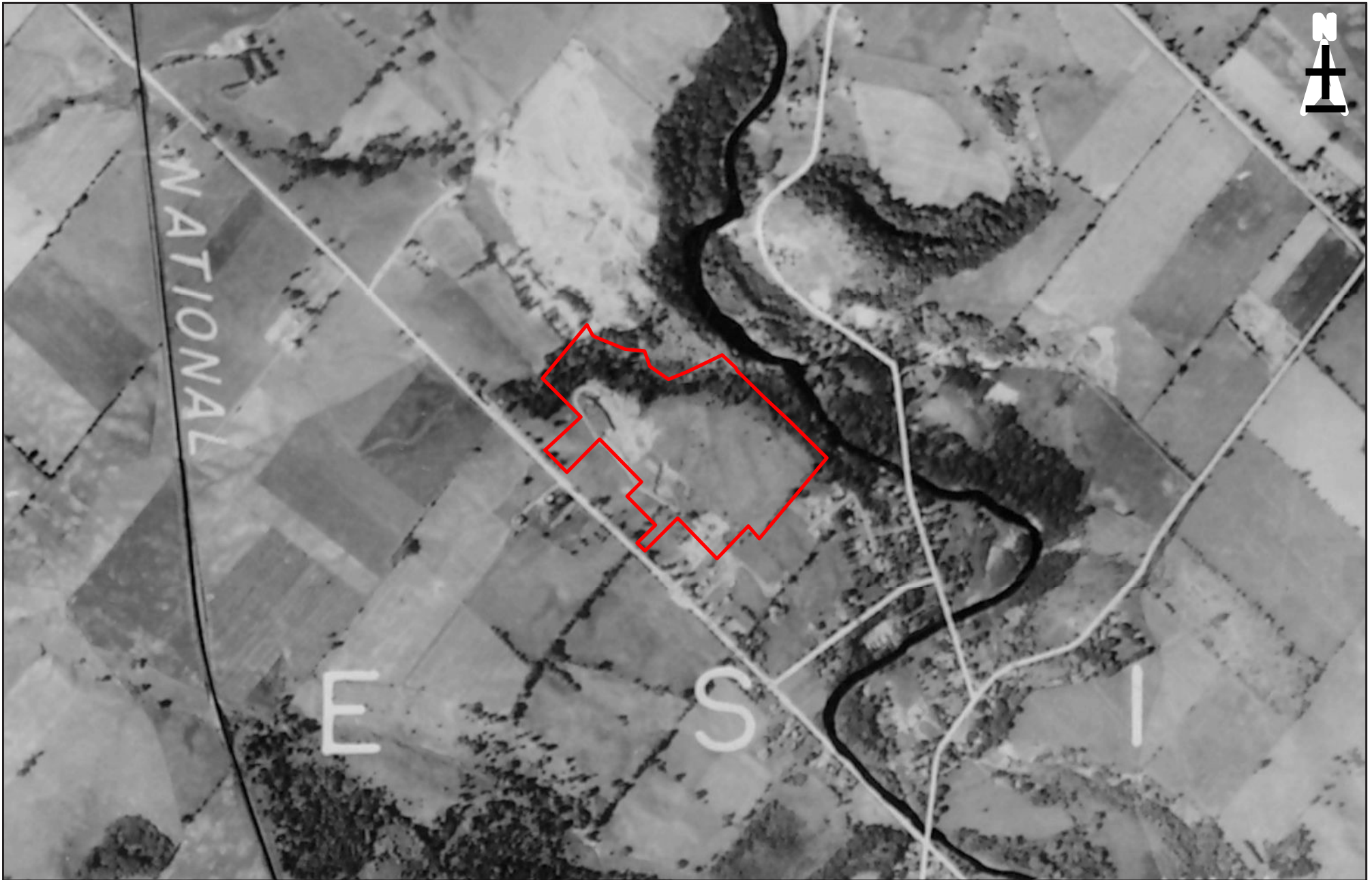
 Subject Property

BASE:  
 Brampton NTS Topo  
 1909


0  500  
 Metres

ASI PROJECT NO.: 16TS-137      DRAWN BY: BW  
 DATE: 20 Jun 2016              FILE: 16TS137\_Fig4\_1909


Figure 4: Subject Property located on the 1909 NTS Sheet Brampton.




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 Subject Property

BASE:  
 Halton Aerial  
 1954  
 University of Toronto

0  400  
 Metres

ASI PROJECT NO.: 16TS-137      DRAWN BY: BW  
 DATE: 29 Aug 2016              FILE: 16TS137\_FigX\_1954

Figure 5: Subject Property overlaid on the 1954 aerial photograph






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 Subject Property   
  Water  
 Road

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


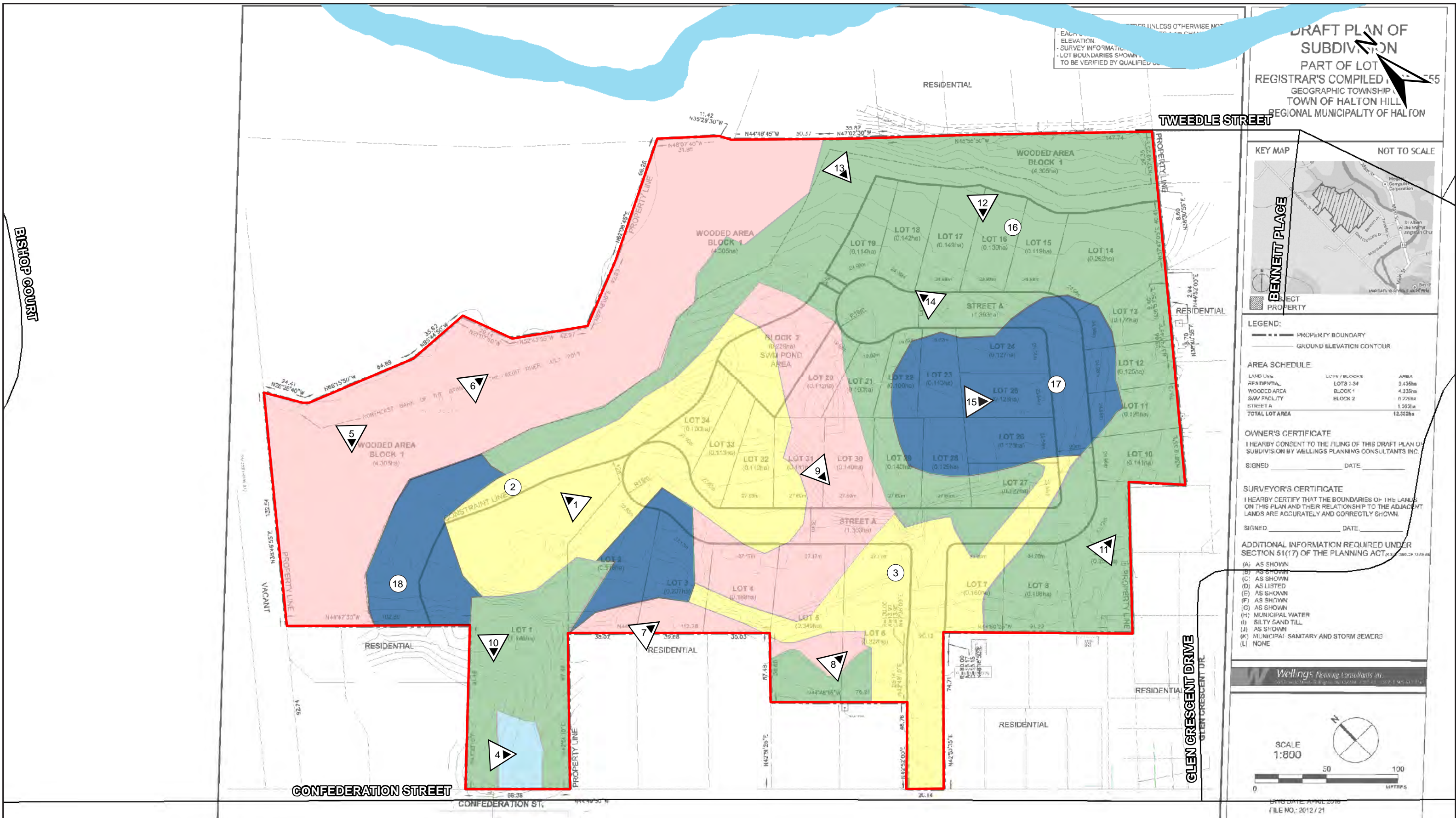
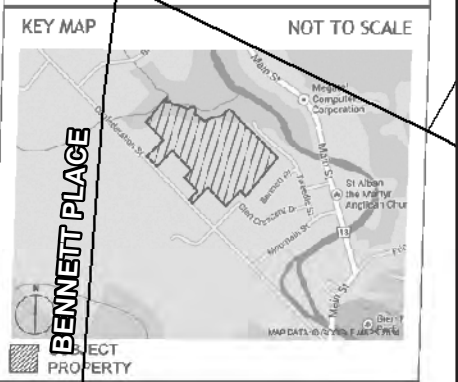
0  100  
**Metres**  
 ASI PROJECT NO.: 16TS-137    DRAWN BY: BW  
 DATE: 20 Jun 2016    FILE: 16TS137\_Fig5\_Ortho

Figure 6: Existing conditions of the Subject Property.



DRAFT PLAN OF SUBDIVISION  
 PART OF LOT 1555  
 REGISTRAR'S COMPILED PLAN 1555  
 GEOGRAPHIC TOWNSHIP OF HALTON  
 REGIONAL MUNICIPALITY OF HALTON



LEGEND:

- PROPERTY BOUNDARY
- GROUND ELEVATION CONTOUR

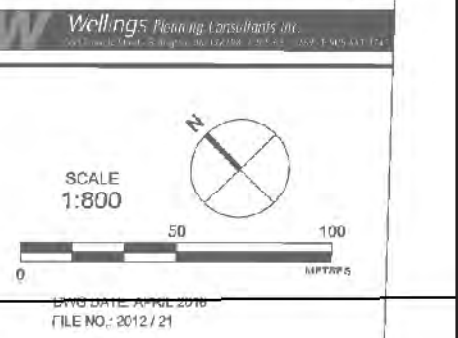
AREA SCHEDULE

LAND USE	LOT# / BLOCK#	AREA
RESIDENTIAL	LOTS 1-34	9.455ha
WOODED AREA	BLOCK 1	4.335ha
SWAMP FACILITY	BLOCK 2	0.255ha
STREET A		1.363ha
<b>TOTAL LOT AREA</b>		<b>15.408ha</b>

OWNER'S CERTIFICATE  
 I HEREBY CONSENT TO THE FILING OF THIS DRAFT PLAN OF SUBDIVISION BY WELLINGS PLANNING CONSULTANTS INC.  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

SURVEYOR'S CERTIFICATE  
 I HEREBY CERTIFY THAT THE BOUNDARIES OF THE LANDS ON THIS PLAN AND THEIR RELATIONSHIP TO THE ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.  
 SIGNED: \_\_\_\_\_ DATE: \_\_\_\_\_

- ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT, R.S.O. 1990, CHAPTER 190
- (A) AS SHOWN
  - (B) AS SHOWN
  - (C) AS SHOWN
  - (D) AS LISTED
  - (E) AS SHOWN
  - (F) AS SHOWN
  - (G) AS SHOWN
  - (H) MUNICIPAL WATER
  - (I) SILTY SAND TILL
  - (J) AS SHOWN
  - (K) MUNICIPAL SANITARY AND STORM SEWERS
  - (L) NONE



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Subject Property	Low and Wet; No Potential	Photo Locations
Disturbed; No Potential	Test Pit Survey at 5m; Intact	
Slope; No Potential	Test Pit Survey at 10m; Disturbed	

BASE:  
 Draft Plan of Subdivision  
 Plan 1555  
 Wellings Planning Consultants Inc.  
 April 2016

0 100  
 Metres  
 ASI PROJECT NO.: 16TS-137  
 DATE: 31 Aug 2016  
 DRAWN BY: BW  
 FILE: 16TS137\_Fig7\_Stg2

Figure 7: Stage 2 Archaeological Assessment Results