STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT OF 230 FINCH AVENUE, PIN 26370-0370, PART 4, PLAN 40R-29767
PART OF LOT 33, CONCESSION 2, GEOGRAPHIC TOWNSHIP OF PICKERING, ONTARIO COUNTY, CITY OF PICKERING, REGIONAL MUNICIPALITY OF DURHAM, ONTARIO

**ORIGINAL REPORT** 

Prepared for:

Highglen Homes Limited 10148 Warden Avenue, Markham, ON L6C 1N3 T: 905-887-4818

Archaeological Licence: P449 (Bhardwaj) MHSTCI PIFs# P449-0397-2019 and P449-0413-2020 ASI File: 19PL-300

28 July 2020



STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT OF
230 FINCH AVENUE, PIN 26370-0370,
PART 4, PLAN 40R-29767
PART OF LOT 33, CONCESSION 2,
GEOGRAPHIC TOWNSHIP OF PICKERING, ONTARIO COUNTY,
CITY OF PICKERING, ONTARIO

#### **EXECUTIVE SUMMARY**

ASI was contracted by Highglen Homes Limited to complete a Stage 1 and 2 Archaeological Assessment of 230 Finch Avenue, PIN 26370-0370, Part 4, Plan 40R-29767 part of Lot 33, Concession 2, in the Geographic Township of Pickering, County of Ontario, now in the City of Pickering, Regional Municipality of Durham. The subject property is approximately 0.4 hectares 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 on November 11, 2019.

The Stage 1 background assessment entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the property, along with nineteenth-and twentieth-century settlement trends. A Stage 1 field review was conducted on November 28, 2019. This research concluded there was potential for the presence of both Indigenous and Euro-Canadian archaeological resources on the subject property.

The Stage 2 assessment was conducted over May 5-6, 2020, by means of a test pit survey undertaken at five-metre intervals. Despite careful scrutiny, no archaeological resources were encountered during the course of the survey.

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

### **PROJECT PERSONNEL**

Senior Project Managers: Beverly Garner, Hons. BA

Senior Archaeologist | Manager - Planning Assessment Division

Jennifer Ley, Hons. BA (R376)

Associate Archaeologist | Assistant Manager - Planning Assessment Division

Project Managers: Emily Fitzpatrick, MA (R1092)

Associate Archaeologist | Project Manager – Planning Assessment Division

Caitlin Lacy, BA (R303)

Associate Archaeologist | Project Manager – Environmental Assessment

Division

Project Director: Robb Bhardwaj, MA (P449)

Associate Archaeologist | Field Director - Planning Assessment Division

Project Administrator: Lauren Vince, BA (Hon) (P1235)

Archaeologist | Project Administrator - Planning Assessment Division

Stage 1 Field Director: Caitlin Lacy

Stage 2 Field Director: Marie-Annick Prévost, PhD (R1079)

Archaeologist | Field Director - Operations Division

Field Archaeologists: Corbin Berger, BA (Hon) (R1181)

Archaeologist | Field Director - Operations Division

José Gutierrez, MA (R1213)

Archaeologist | Field Director - Operations Division

Wesley Oldham, BA (Hon) (R292)

Senior Archaeologist | Senior Field Director - Mitigation Division

Report Preparation: Emily Fitzpatrick

Caitlin Lacy

Graphics: Eric Bongelli, MES

Archaeologist | Geomatics Specialist – Operations Division

Jonas Fernandez, MSc (R281)

Lead Archaeologist | Manager - Geomatics, Operations Division

Report Reviewers: Beverly Garner

Jennifer Lev



# **TABLE OF CONTENTS**

	VE SUMMARY		
-	PERSONNELi		
	F CONTENTSii		
	PROJECT CONTEXT		
1.1	Development Context		
1.2	Historical Context		
1.2.			
1.2.			
1.2	, , , , ,		
1.2			
1.2	<b>o</b>		
1.3	Archaeological Context4		
1.3.	.0		
<i>1.3</i> .	<b>0</b>		
<i>1.3</i> .			
<i>1.3</i> .			
<i>1.3</i> .			
	FIELD METHODS $\epsilon$		
2.1	Property Inspection6		
2.2	Test Pit Survey		
	RECORD OF FINDS		
4.0	ANALYSIS AND CONCLUSIONS		
5.0	RECOMMENDATIONS8		
7.0	BIBLIOGRAPHY10		
8.0	PLATES12		
9.0	MAPS		
	.0 ANALYSIS AND CONCLUSIONS		
Table 2:	Registered Sites within a 1 km Radius of the Subject Property4		
	List of Plates		
	2112) Overview of subject property from south end. Note slight rise from south to north (November		
Plate 2: '	View across east side of subject property (November 2019)12		
Plate 3: '	View across subject property from west side of property (November 2019)12		
Plate 4:	Overview of subject property from north end (November 2019)12		
Plate 5: I	Field crew conducting test pit survey along western property limit, view north (May 2020)12		
Plate 6:	Field crew conducting test pit survey in northern area of property, view southeast (May 2020)12		
	Fest pit profile showing typical stratigraphy (May 2020)13		
Plate 8:	Test pit profile showing fill layers over capped A-horizon (May 2020)13		
	List of Figures		
Fi 1	_		
rigure 1:	Location of the Subject Property		
	Subject Property located on the 1860 <i>Tremaine Map of the County of Ontario</i>		
	Subject Property located on the 1877 Illustrated Historical Atlas of the County of Ontario		
	Subject Property located on the 1914 Markham Topographic Sheet		
Figure 5:	Subject Property overlaid on historic aerial imagery5		



Stage 1 and 2 Archaeological Assessment of 230 Finch Avenue, PIN 26370-0370, Part 4, Plan 40R-29767					
City of Pickering, Regional Municipality of Durham, ON	Page iv				
Figure 6: Subject Property overlaid on Google Earth imagery	6				
Figure 7: Existing Conditions of the Subject Property	7				
Figure 8: Results of the Stage 2 Archaeological Assessment	8				



### 1.0 PROJECT CONTEXT

ASI was contracted by Highglen Homes Limited to complete a Stage 1 and 2 Archaeological Assessment of 230 Finch Avenue, PIN 26370-0370, Part 4, Plan 40R-29767, part of Lot 33, Concession 2, in the Geographic Township of Pickering, County of Ontario, now in the City of Pickering, Regional Municipality of Durham (Figure 1). The subject property is approximately 0.4 hectares in size.

### 1.1 Development Context

This assessment was conducted under the senior project management of Ms. Beverly Garner and Ms. Jennifer Ley (R376), the project management of Ms. Emily Fitzpatrick (R1092) and Ms. Caitlin Lacy (R303), and under the project direction of Mr. Robb Bhardwaj (MHSTCI PIFs P449-0397-2019 and P449-0413-2020). All activities carried out during this assessment were completed as part of a Zoning By-Law Amendment and a Land Division Consent, as required by the City of Pickering and the *Planning Act* (Ministry of Municipal Affairs and Housing [MMAH] 1990). Assessment activities were completed in accordance with the *Ontario Heritage Act* (Ministry of Culture [MCL] 1990; now administered by Ministry of Heritage, Sport, Tourism and Culture Industries [MHSTCI]) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (Ministry of Tourism and Culture [MTC] 2011; now administered by MHSTCI).

All work carried out for this assessment is also guided by the *Archaeological Potential Model for Durham Region* (ASI 2013), which provides further refinement with regards 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 on November 11, 2019. Buried utility locates were obtained prior to the initiation of fieldwork.

#### 1.2 Historical Context

The purpose of this section 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 Indigenous land use of the subject property. This is followed by a review of historic Euro-Canadian settlement trends.

Historically, the subject property is located in part of Lot 33, Concession 2, Geographic Township of Pickering, Ontario County. The subject property is comprised of an open grassed and treed lot fronting Finch Avenue, now in the City of Pickering.

### 1.2.1 Indigenous Overview

Southern Ontario has a cultural history that begins approximately 11,000 years ago and continues to the present. Table 1 provides a general summary of the pre-contact Indigenous settlement of the subject property and surrounding area.



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

Period	Archaeological/ Material Culture	Date Range	Lifeways/ Attributes			
PALEO-INDIAN						
Early	Gainey, Barnes, Crowfield	9000-8500 BC	Big game hunters			
Late	Holcombe, Hi-Lo, lanceolate	8500-7500 BC	Small nomadic groups			
ARCHAIC						
Early	Nettling, Bifurcate-base	7800-6000 BC	Nomadic hunters and gatherers			
Middle	Kirk, Stanly, Brewerton, Laurentian	6000-2000 BC	Transition to territorial settlements			
Late	Lamoka, Genesee, Crawford Knoll,	2500-500 BC	Polished/ground stone tools (small			
	Innes		stemmed)			
WOODLAND						
Early	Meadowood	800-400 BC	Introduction of pottery			
Middle	Point Peninsula, Saugeen	400 BC-AD 800	Incipient horticulture			
Late	Algonkian, Iroquoian	AD 800-1300	Transition to village life and agriculture			
	Algonkian, Iroquoian	AD 1300-1400	Establishment of large palisaded villages			
	Algonkian, Iroquoian	AD 1400-1600	Tribal differentiation and warfare			
HISTORIC						
Early	Huron, Neutral, Petun, Odawa, Ojibwa	AD 1600-1650	Tribal displacements			
Late	6 Nations, Ojibway	AD 1650-1800's				
	Euro-Canadian	AD 1800-present	European settlement			

### 1.2.2 Historical Overview

## Township of Pickering

Pickering Township was first surveyed in 1791, after the British signed a treaty with the Mississaugas in 1787, and designated it as Township 8, changed shortly thereafter to Edinburgh. The first legal settler in Pickering is said to have been William Peak, who arrived in 1798 and was reputed to have been an Indian trader and interpreter who settled along the lakeshore at the mouth of Duffins Creek (Armstrong 1985:146; Farewell 1907:12). The westerly portion of the township was settled in part by German settlers attracted to the area through the settlement proposal of William Berczy (Farewell 1907:11). The remainder of the township was settled by Loyalists, disbanded soldiers, emigrants from the United Kingdom, and a large number of Quakers from both Ireland and the United States (Farewell 1907:13–14). By 1851, Pickering was "one of the best settled townships in the County, and contains a number of fine farms, and has increased rapidly in both population and prosperity, within the last few years" (Smith 1851:22). Maps produced later in the nineteenth century (Shier 1860; Beers 1877) show the township to be heavily settled and period census returns show that the township contained a wide variety of industries and small businesses as well as husbandmen engaged in mixed agriculture. The township population was 187 in 1809, 375 in 1820, 1,042 in 1828, 3,752 in 1842, and 5,285 in 1901.

The main settlements in Pickering Township were located along Duffins Creek where early mills and various industries utilized the available hydraulic power of this watershed. One of the earliest roads constructed across Pickering was the Kingston Road, built by Asa Danforth in 1796 along the south end of the township near the lake. This road was illustrated on several early township maps. The road network in Pickering developed slowly, and, by 1850, the de Rottenburg map showed just three major north-south arteries between the Kingston Road and Highway 7 (De Rottenburg 1850).

Pickering Township experienced a decline in population in the rural areas in the early and midtwentieth century. It generally remained unchanged as a nineteenth-century agricultural landscape north of the lakeshore area, even with some loss of earlier farmsteads. A gradual subdivision of some farmland occurred in the latter half of the twentieth century. The Regional Municipality of Durham,



which saw the dissolution of the County of Ontario, was officially declared on January 1, 1974. At the same time the Township of Pickering became the Town of Pickering with the exception of a section in the southeast part and the Village of Pickering that joined the Town of Ajax. Urbanization that began in the southern part of Pickering in the post-World War II period accelerated and moved northward in the latter part of the century. It continues in the 21<sup>st</sup> century.

### 1.2.3 Review of Nineteenth and Early Twentieth Century Mapping

A review of historical mapping was undertaken in order to determine the presence of settlement features within the subject property during the nineteenth century and early twentieth century that may represent potential historical archaeological sites on the property<sup>1</sup>. It should be noted 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 regards to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases.

The 1860 *Tremaine Map of the County of Ontario* (Shier 1860) lists Ambrose Barnard as the owner of Lot 33 and no historical features or structures are illustrated in the vicinity of the property (Figure 2). The historical transportation corridor of present-day Finch Avenue flanks the south limit of the property and Petticoat Creek is depicted east of the property.

The 1877 *Illustrated Historical Atlas of the County of Ontario* (Beers 1877) indicates Lot 33 is now under the ownership of T. Barnett (Figure 3). Once again, no structures are illustrated with the subject property. Historical roads and watercourses are as depicted on the earlier mapping.

Early topographic mapping was also reviewed for the presence of potential historical features. Figure 4 illustrates the subject property located on the 1914 Markham topographic sheet (Department of Militia and Defence 1914). Land features such as waterways, wetlands, woodlots and elevation are clearly illustrated on this series of mapping. The subject property is located north of Finch Avenue and immediately adjacent to Petticoat Creek; streams are also located north and west of the property. A rail corridor is now also illustrated north of the subject property. The property appears cleared of trees for agriculture.

## 1.2.4 Review of Historical Aerial Imagery

The City of Toronto Archives possesses a series of aerial photographs which illustrate the development of the Toronto area between 1947 and 1992 (City of Toronto 2018) (Figure 5). Available imagery from 1960 shows the subject property situated within a rural landscape and consisting of greenspace with a few scattered trees adjacent to Petticoat Creek. Finch Avenue is immediately south of the property and appears to under construction at this time, likely for road widening. The images from 1970, 1981 and

<sup>&</sup>lt;sup>1</sup> Use of historic map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then georeferenced in order to provide the most accurate determination of the location of any property on historic mapping sources. The results of such exercises are often imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process. These include the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.



1992 show little change to the subject property and surrounding area. The property remains open greenspace with a few scattered trees in a rural landscape.

Imagery from Google Earth (Google Earth Pro 2019) was also reviewed to identify more recent land use and/or disturbance in the vicinity of the subject property (Figure 6). In 2002, the subject property remains open greenspace with a few scattered trees in a rural landscape. By 2007, the lands to the immediate west had been graded in advance of a subdivision development and silt fencing surrounds the development protecting the current subject property from any disturbances. The Google Earth image from 2018 shows that the subject property remains relatively unchanged, however the surrounding landscape is changing as smaller residential developments are completed.

## 1.2.5 Review of Historical Archaeological Potential

The S & G, Section 1.3.1 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. 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 siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early historical transportation route are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The S & G also defines buffers of 300 metres around registered historical sites or designated properties, areas of early historic settlement, and locations identified through local knowledge or informants (MTC 2011).

The Archaeological Potential Model for Durham Region considers a similar suite of criteria or indicators. There is potential for historical sites within 100 metres of registered or designated historical sites, cemeteries and features illustrated on historical maps. There is also potential within 200 metres of settlement roads and within 50 metres of early railways.

Given the property's proximity to present-day Finch Avenue, a historical transportation route, and Petticoat Creek, in additional to the modeling criteria developed for the *Archaeological Potential Model for Durham Region*, there is potential of encountering nineteenth-century historical material within the subject property depending on the degree of recent land disturbance.



### 1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the subject property, its environmental characteristics (including drainage, soils, surficial geology, topography, etc.), and current land use and field conditions.

### 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 MHSTCI; published and unpublished documentary sources; and the files of ASI.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) which is maintained by the MHSTCI. 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 AlGs Borden block.

While no archaeological sites have been registered within the subject property, 10 sites have been registered within a one-kilometre radius. These sites have been summarized in Table 2. The nearest registered site, AlGs-24, is approximately 125 metres north of the property limits

Table 2: Registered Sites within a 1 km Radius of the Subject Property

Borden No.	Site Name	<b>Cultural Affiliation</b>	Site Type	Researcher
AlGs-6	n/a	Pre-contact	Campsite	Kenyon 1960
AlGs-18	Shea	Late Woodland	Campsite	Unknown 1973
AlGs-24	<b>Gates Burial</b>	Pre-contact	Burial	Unknown 1973
				Unknown1973, TRCA
AlGs-25	Gates	Pre-contact	Scatter	2014
AlGs-26	n/a	Pre-contact	Burial	Unknown 1973
AlGs-28	Racetrack	Pre-contact	Findspot	Unknown 1973
AlGs-141	Hollinger	Late Archaic	Findspot	ASI 1992
AlGs-230	Altona Forest	Euro-Canadian	Dump	Burgar 1999
AlGs-493	n/a	Unknown	Unknown	Hoskins 2019
			Findspot,	
AkGs-16	Highbush	Archaic, Euro-Canadian	Homestead	ASI 1993, 1994

ASI = Archaeological Services Inc.; TRCA = Toronto and Region Conservation Authority

### 1.3.2 Previous Archaeological Assessments

Two archaeological assessments are known to have been conducted in the immediate vicinity (*i.e.*, within 50 metres) of the subject property.

In 2014, the Toronto and Region Conservation Authority (TRCA) completed a Stage 1 and 2 Archaeological Assessment in preparation of construction of a bioreactor near the intersection of Altona Road and Finch Avenue under PIF P338-058-2013. A test pit survey was conducted throughout the project area and a single lithic artifact was recovered during the assessment. No other artifacts or



cultural features were identified during the assessment and a recommendation for no further work was made (TRCA 2014).

In 2018, The Archaeologists Inc. completed a Stage 1 and 2 Archaeological Assessment for 2024-2026 Altona Road and 200 Finch Avenue under PIF P052-0840-2017. A test pit survey was conducted throughout the project area and no archaeological resources were recovered. A recommendation for no further work was made (The Archaeologists Inc. 2018).

### 1.3.3 Physiography

The subject property is situated within the Iroquois Plain physiographic region (Chapman and Putnam 1984), which is the former bed of glacial Lake Iroquois. The Lake Iroquois Strand is situated approximately 10 km inland from the current Lake Ontario shore. Below the strand, the quaternary sediments are dominated by outwash sands typical of nearshore deposits. The balance of the plain, towards the modern lake shore, is dominated by fine sediments of silt and clay, typical of off-shore deposits, overlying till (Chapman and Putnam 1984; Gravenor 1957). Several major watercourses cut across the plain, draining southward into Lake Ontario.

Glacial Lake Iroquois came into existence by about 12,000 BP, as the Ontario lobe of the Wisconsin glacier retreated from Lake Ontario. Isostatic uplift of its outlet, combined with blockage of subsequent lower outlets by glacial ice, produced a water plain substantially higher than modern Lake Ontario. Beginning around 12,000 BP, water levels dropped stepwise during the next few centuries in response to sill elevations at the changing outlet. By about 11,500 BP, when the St. Lawrence River outlet became established, the initial phase of Lake Ontario began, and this low water phase appears to have lasted until at least 10,500 BP. At this time the waters stood as much as 100 metres below current levels. However, isostatic uplift was already raising the outlet at Kingston so that by 10,000 BP, the water level had risen to about 80 metres below present. Uplift since then has continued to tilt Lake Ontario upward to the northeast, propagating a gradual transgressive expansion throughout the basin. The flooded mouths of creeks and rivers that rim the basin—such as are preserved at Second Marsh, provide visible reminders of this process (Anderson and Lewis 1985; Karrow 1967; Karrow and Warner 1990).

The subject property is within the Petticoat Creek watershed. The watershed covers approximately 26 square km and drains into Lake Ontario. Petticoat Creek is located within 50 metres of the eastern subject property limits.

### 1.3.4 Review of Pre-contact Archaeological Potential

The S & G, Section 1.3.1 stipulates that undisturbed lands within 300 metres of 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..



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 generic distance to water potential model has been refined for the *Archaeological Potential Model for Durham Region* (ASI 2013). According to the modelling criteria, undisturbed lands within 250 metres of major rivers and their tributaries, in addition to the Lake Ontario and Lake Simcoe shorelines have potential for the presence of pre-contact Indigenous archaeological sites. This 250-metre potential zone is also extended to the lands above glacial lake strands, while 200 metre buffers are applied to the lands below glacial lake strands.

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 Section 1.4.1, Standard 1 also defines buffers of 300 metres around registered pre-contact sites.

Based on the proximity of Petticoat Creek and the presence of previously registered pre-contact sites in the vicinity, there is the potential for the identification of Indigenous archaeological remains, dependant on the degree of later developments or soil alterations.

### 1.3.5 Existing Conditions

The subject property is approximately 0.4 hectares in size and is irregular in shape. The property is bounded by Finch Avenue to the south, Nature Haven Crescent and a residential development to the west, a single residence and lot to the east, and a treed area to the north (Figure 7). The current land use is as open green space, with low scrub vegetation and scattered with mixed deciduous and coniferous trees. Petticoat Creek flows just east of the subject property.

#### 2.0 FIELD METHODS

## 2.1 Property Inspection

A Stage 1 field review was completed on November 28, 2019 in order to document existing conditions as they may be expected to affect consideration of archaeological potential. The field review was conducted by Ms. Caitlin Lacy (R303). The weather was appropriate for the completion of fieldwork, consisting of sunny skies and cool temperatures. Representative photos documenting the field conditions during the Stage 1 fieldwork are presented in Section 8 of this report, and the location and direction of photos are mapped on Figure 8 (Plates 1-4).



## 2.2 Test Pit Survey

The Stage 2 field assessment was undertaken over May 5 and 6, 2020, in order to inventory, identify and describe any archaeological resources extant on the subject property prior to development. All fieldwork was conducted under the field direction of Ms. Marie-Annick Prévost (R1079). The weather conditions and lighting were appropriate for the completion of fieldwork, permitting good visibility of the land features. Field observations have been compiled on project mapping for the subject property (Figure 8).

All work was carried out in accordance with the S & G, Section 2.1.2. Test pits were hand excavated at least five cm into subsoil and all topsoil was screened through six 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 test pits were backfilled. The test pit survey was conducted at five-metre intervals (Plates 5-6).

Intact test pit profiles consisted of approximately 20 to 30 cm of very dark greyish brown (10YR 3/2) sandy loam with pebble/cobble inclusions (A-horizon Layer 1) overlaying a dark yellowish brown (10YR 4/6) coarse sand subsoil (B-horizon) (Plate 7).

Capped soil profiles were observed within five metres of the western and southern property limits, likely related to the development of Finch Avenue to the south and Nature Haven Crescent to the west. Capped soil profiles in this area consisted of approximately 20 cm of a very dark greyish brown (10YR 3/2) sandy loam laid topsoil (Layer 2) over 30 cm of very compact pale brown (10YR 6/3) sand (Layer 3), overlaying a thin layer (no more than five cm) of light gray (10YR 7/1) sand. Beneath this cap was an intact soil profile consisting of approximately 30-40 cm of (A-Horizon Layer 1) overlaying the subsoil (B-horizon) (Plate 8). Capped test pits had an average depth of approximately 97 cm.

### 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 ASI.

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 Heritage, Sport, Tourism and Cultural Industries, and any other legitimate interest groups.

#### 4.0 ANALYSIS AND CONCLUSIONS

ASI was contracted by Highglen Homes Limited to complete a Stage 2 Archaeological Assessment of 230 Finch Avenue, PIN 26370-0370, Part 4, Plan 40R-29767, part of Lot 33, Concession 2, in the Geographic Township of Pickering, County of Ontario, now in the City of Pickering, Regional Municipality of Durham. The subject property is approximately 0.4 hectares in size.

The Stage 1 background assessment entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the property, along with nineteenth and



twentieth-century settlement trends. Based on this research, it was determined that the subject property warranted a Stage 2 Archaeological Assessment.

The Stage 2 assessment was conducted by means of a test pit survey at five-metre intervals across the entire subject property. 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 Heritage, Sport, Tourism and Cultural Industries should be immediately notified.

The above recommendations are subject to Ministry approval and it is an offence to alter any archaeological site without Ministry of Heritage, Sport, Tourism, and Culture Industries concurrence. No grading or other activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of MHSTCI approval has been received.

#### 6.0 LEGISLATION COMPLIANCE ADVICE

ASI advises compliance with the following legislation:

- This report is submitted to the Minister of Heritage, Sport, Tourism, and Culture Industries 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 and Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regards 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, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.
- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.



### 7.0 BIBLIOGRAPHY

### Anderson, T.W., and C.F.M. Lewis

1985 Postglacial Water-Level History of the Lake Ontario Basin. In *Quaternary Evolution of the Great Lakes*, edited by P.F. Karrow and P.E. Calkin, pp. 231–253. Geological Association of Canada Special Paper 30.

## Armstrong, F. H.

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

### Beers, J.H.

1877 Illustrated Historical Atlas of the County of Ontario. Toronto.

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

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

### City of Toronto

2018 Aerial Photographs 1947 to 1992.

<a href="https://www.toronto.ca/city-government/accountability-operations-customer-service/access-city-information-or-records/city-of-toronto-archives/whats-online/maps/aerial-photographs/">https://www.toronto.ca/city-government/accountability-operations-customer-service/access-city-information-or-records/city-of-toronto-archives/whats-online/maps/aerial-photographs/>.

#### De Rottenburg, M.B.

Map of the Principal Communications in Canada West. Compiled from the Most Authentick Sources, Actual Surveys, District Maps &c. National Map Collection 3500 sheet 2. Ottawa.

#### Department of Militia and Defence

1914 Markham Sheet 30M/14. National Topographic System.

## Farewell, J. E.

1907 County of Ontario. Short Notes as to the Early Settlement and Progress of the County and Brief References to the Pioneers and Some Ontario County Men who have taken a Prominent Part in Provincial and Dominion Affairs. Gazette-Chronicle Press (Reprinted by Mika Publishing, Belleville, 1973), Whitby.

### Google Earth Pro

2018 2002 - 2017 Aerial Imagery. Google Inc.

## Gravenor, C. P.

1957 Superficial Geology of the Lindsay-Peterborough Area, Ontario, Victoria, Peterborough, Durham, and Northumberland Counties, Ontario. Memoir 288. Geological Survey of Canada, Ottawa.

#### Karrow, P.F.

1967 *Pleistocene Geology of the Scarborough Area*. Ontario Geological Survey Report 46. Ministry of Natural Resources, Toronto.



### Karrow, P.F., and B.G. Warner

1990 The Geological and Biological Environment for Human Occupation in Southern Ontario. In *The Archaeology of Ontario to A.D. 1650*, pp. 5–36. Occasional Publications 5. London Chapter, Ontario Archaeological Society, London.

## MCL (Ministry of Culture; now administered by MHSTCI)

1990 *Ontario Heritage Act, R.S.O.* 1990, c. O.18 [as amended in 2019].

## MMAH (Ministry of Municipal Affairs and Housing)

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

#### MTC (Ministry of Tourism and Culture; now administered by MHSTCI)

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

#### Shier, J.

1860 *Tremaine's Map of the County of Ontario, Upper Canada*. George C. Tremaine, Toronto.

## The Archaeologists Inc.

2018 Stage 1 & 2 Archaeological Assessment for 2024-2026 Altona Road and 200 Finch Avenue, Part of Lot 33, Concession 2, Geographic Township of Pickering, Now in the City of Pickering, Municipality of Durham [P052-0840-2017]. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto. Original Report.

## TRCA, (Toronto and Region Conservation Authority)

2014 Stage 1-2 Archaeological Assessment Petticoat Creek HIP, Lot 33, Concession 2, Historic Pickering Township, Ontario County, City of Pickering, Durham Region [P338-058-2013]. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto. Original Report.



### 8.0 PLATES



Plate 1: Overview of subject property from south end. Note slight rise from south to north (November 2019).



Plate 2: View across east side of subject property (November 2019).



Plate 3: View across subject property from west side of property (November 2019).



Plate 4: Overview of subject property from north end (November 2019).



Plate 5: Field crew conducting test pit survey along western property limit, view north (May 2020).



Plate 6: Field crew conducting test pit survey in northern area of property, view southeast (May 2020).





Plate 7: Test pit profile showing typical stratigraphy (May 2020).



Plate 8: Test pit profile showing fill layers over capped A-horizon (May 2020).



# 9.0 MAPS

Please see following pages for detailed assessment mapping.



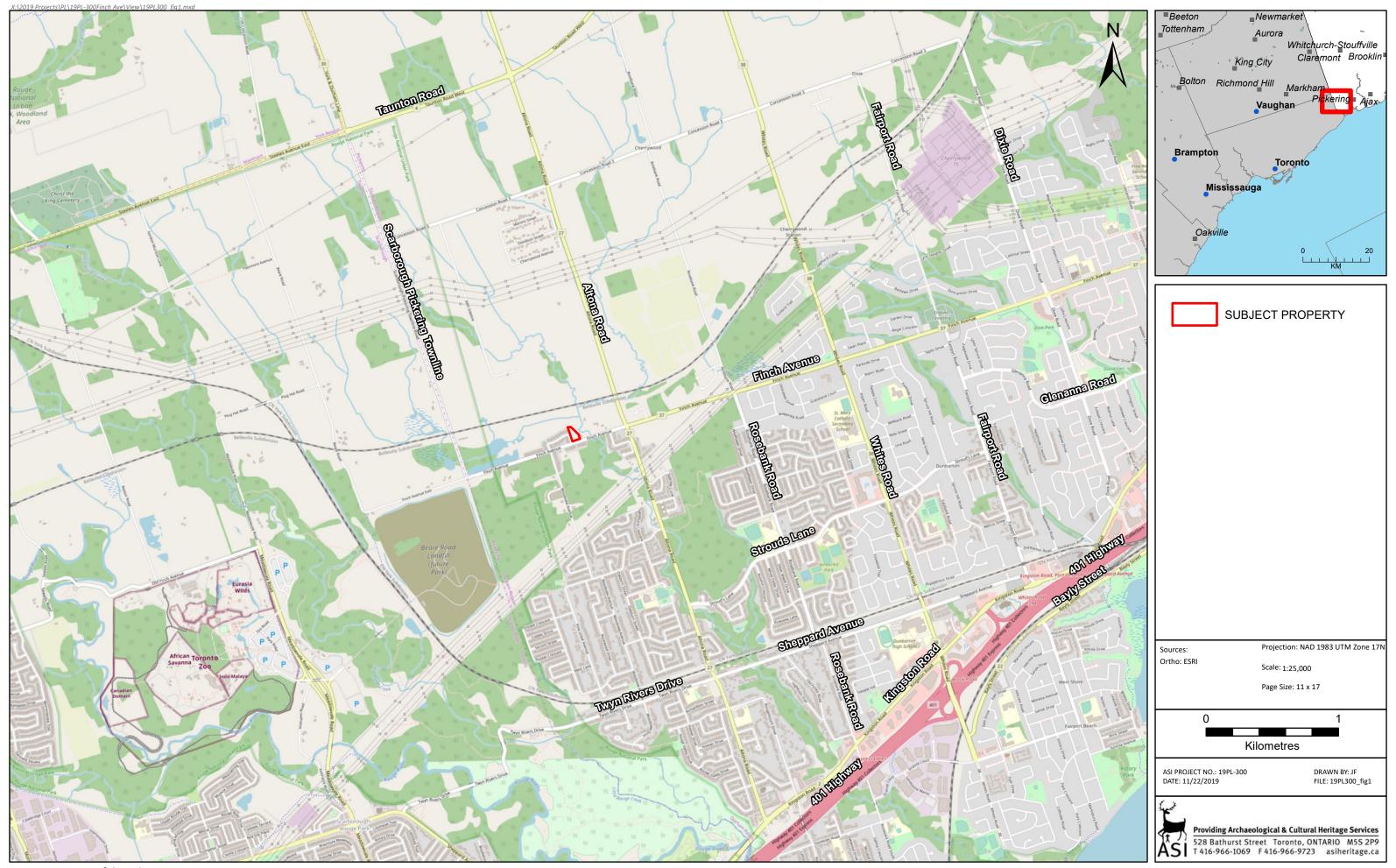


Figure 1: Location of the Subject Property

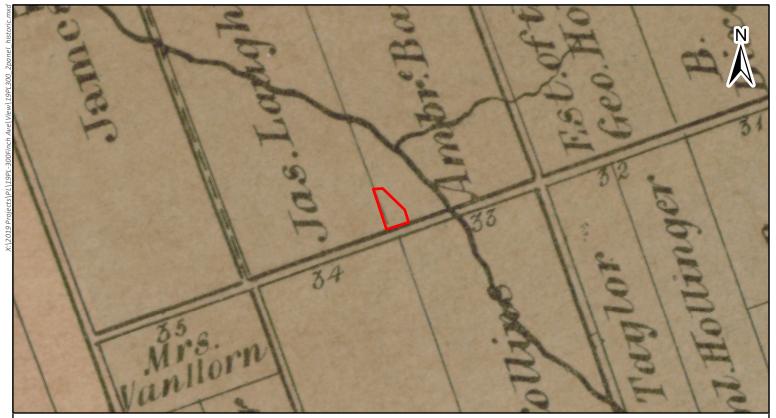


Figure 2: Subject Property located on the 1860 Tremaine Map of the County of Ontario



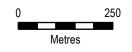
Figure 3: Subject Property located on the 1877 Illustrated Historical Atlas of the County of Ontario



SUBJECT PROPERTY

Sources: 1860 Tremaine Map of the County of Ontario 1877 Illustrated Historical Atlas of the County of Ontario

Projection: NAD 1983 UTM Zone 17N Scala:10,000 Page Size: 8.5 x 11



ASI PROJECT NO.: 19PL-300 DATE: 11/22/2019

DRAWN BY: JF FILE: 19PL300\_2panel\_historic

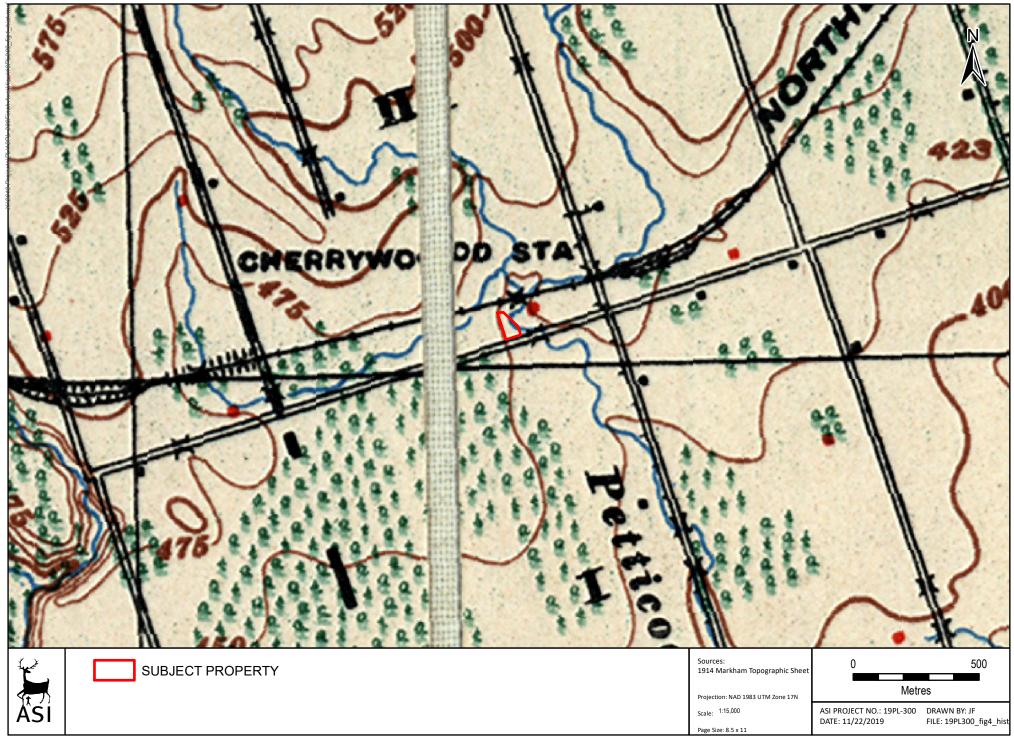


Figure 4: Subject Property located on the 1914 Markham Topographic Sheet

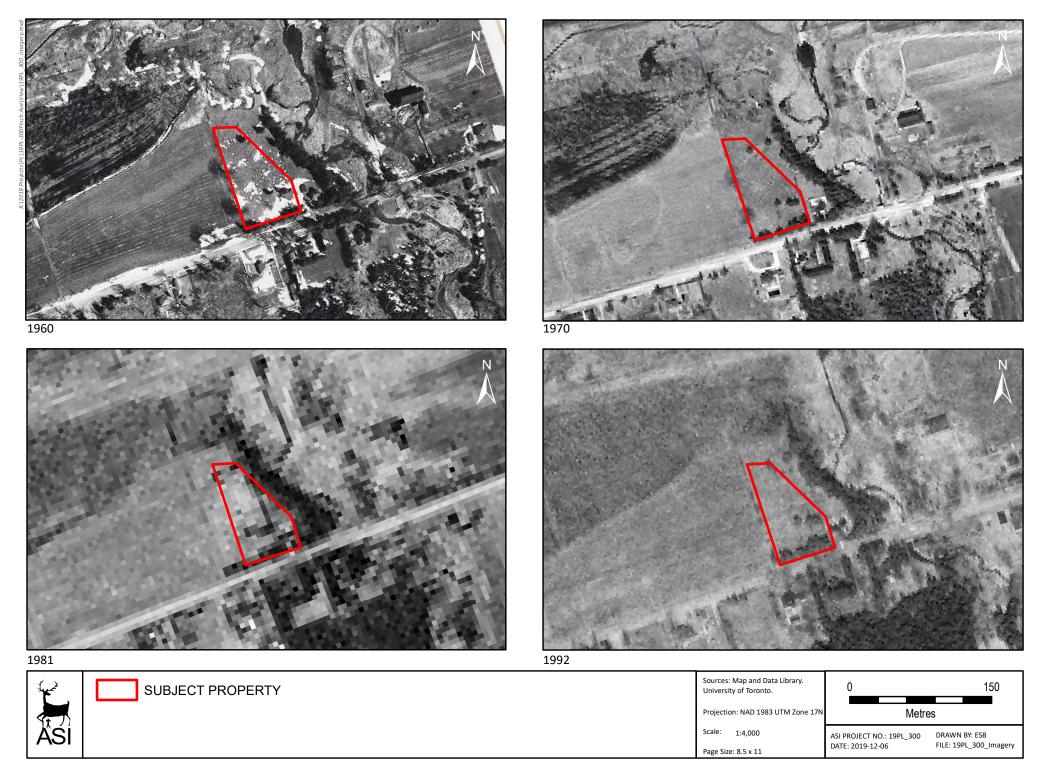


Figure 5: Subject Property overlaid on historic aerial imagery





2018



SUBJECT PROPERTY

Sources: Google Earth Pro, 2019

Projection: NAD 1983 UTM Zone 17N

Scale: 1:4,000

Scale: 1:4,000
Page Size: 8.5 x 11

0 150

Metres

ASI PROJECT NO.: 19PL\_300 DRAWN BY: ESB
DATE: 2019-12-09 FILE: 19PL\_300\_Imagery

Figure 6: Subject Property overlaid on Google Earth imagery

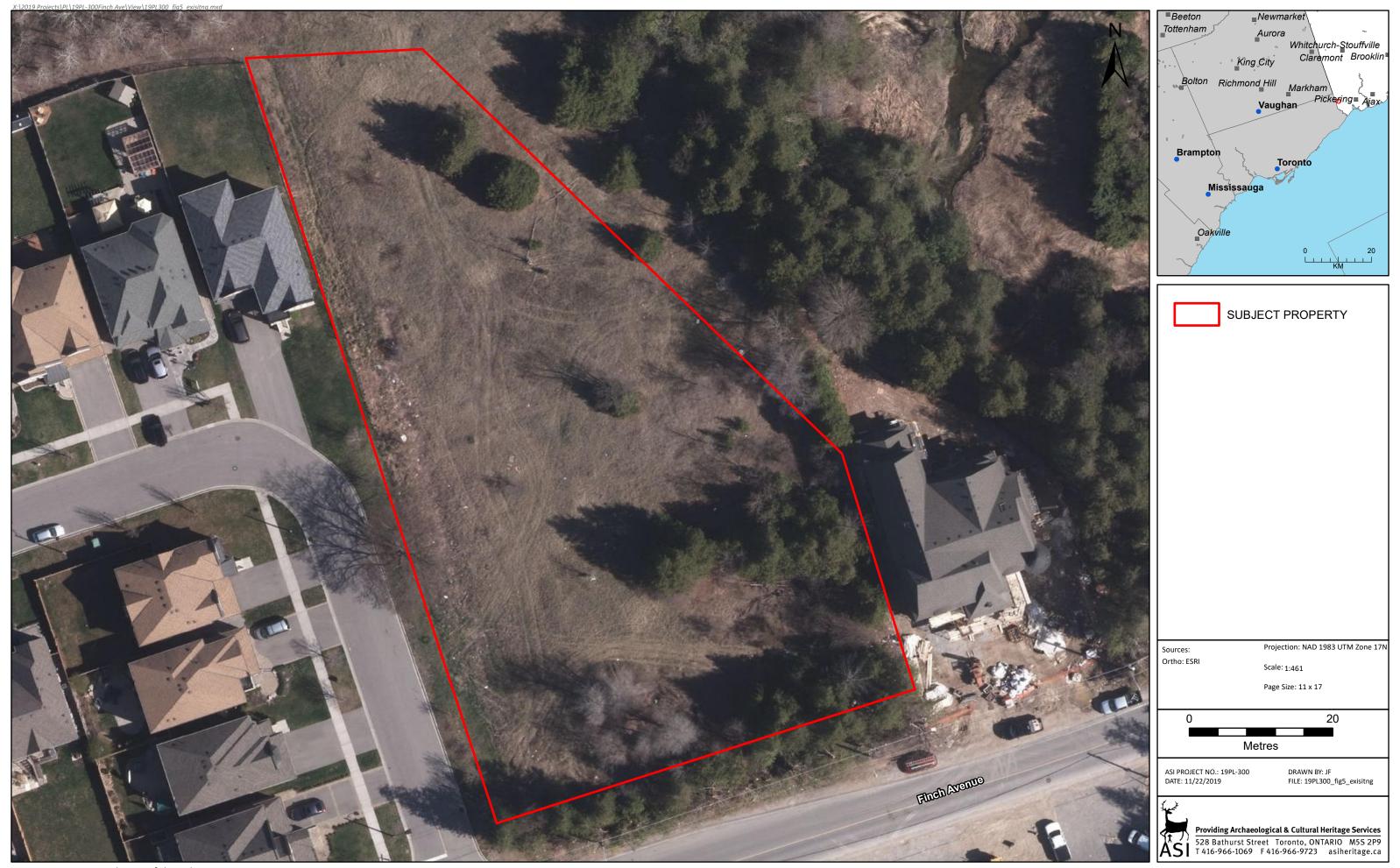


Figure 7: Existing Conditions of the Subject Property



Figure 8: Results of the Stage 2 Archaeological Assessment