

# Stage 1 Archaeological Assessment of

375 – 421 Kingston Road,  
(Formerly Part of Lots 31 and 32, Range 3 Broken Front  
Concession, Geographic Township of Pickering,  
Ontario County), Now in the City of Pickering, Regional  
Municipality of Durham, Ontario

**Prepared by:**



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MCM Project Information Number: P1034-0042-2025

**ORIGINAL REPORT**

Report Dated: December 22, 2025

## EXECUTIVE SUMMARY

**AS&G Archaeological Consulting Inc.** was contracted to conduct a Stage 1 Archaeological Assessment of 375 – 421 Kingston Road, (formerly part of Lots 31 and 32, Range 3 Broken Front Concession, Geographic Township of Pickering, Ontario County), now in the City of Pickering, Regional Municipality of Durham, Ontario.

The Stage 1 archaeological background study established there is potential for the recovery of archaeologically significant materials within portions of the project area. To determine if the archaeological potential classification of the project area is relevant, a desktop review of ground conditions was undertaken using contemporary satellite imagery, and historical atlas maps.

The project area is consists of 6 parcels of land located at municipal addresses 375-421 Kingston Road Pickering, and is approximately 1.74 hectares in size, measuring roughly 244 metres east-west by 100 metres north-south. A single multiple unit commercial building is present at 375 Kingston Road, 3 separate structures at 395 Kingston Road, and single commercial structure each located at 401, 409, 413, and 417 Kingston Road. Much of the project area has been extensively disturbed as a result of the presence of the structures within the project area and associated paved parking areas. The project area is bound by the Highway 401 to the south, Kingston Road to the North, Evelyn Avenue to the east and Rougemount Drive to the west.

The proposed development project was triggered by the *Planning Act* and the archaeological assessment was done in advance of site plan application.

The Stage 1 archaeological background study determined there is potential for the recovery of archaeologically significant materials within portions of the property proposed for development. **Therefore, the report recommends that the property (Map 7) requires a Stage 2 archaeological assessment.**

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## PROJECT PERSONNEL

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## INTRODUCTION

The *Ontario Heritage Act*, R.S.O. 1990 c. O.18, requires anyone wishing to carry out archaeological fieldwork in Ontario to have a license from the Ministry of Citizenship and Multiculturalism (MCM). All licensees are to file a report with the MCM containing details of the fieldwork that has been done for each project. Following standards and guidelines set out by the MCM is a condition of a licence to conduct archaeological fieldwork in Ontario.

**AS&G Archaeological Consulting Inc. (AS&G)** confirms that this report meets ministry report requirements as set out in the *2011 Standards and Guidelines for Consultant Archaeologists* and is filed in fulfillment of the terms and conditions an archaeological license.

### 1.0 PROJECT CONTEXT

This section of the report will provide the context for the archaeological fieldwork, including the development context, the historical context, and the archaeological context.

#### 1.1 Development Context

**AS&G Archaeological Consulting Inc.** was contracted to conduct a Stage 1 Archaeological Assessment of 375 – 421 Kingston Road, (formerly part of Lots 31 and 32, Range 3 Broken Front Concession, Geographic Township of Pickering, Ontario County), now in the City of Pickering, Regional Municipality of Durham, Ontario.

The proposed development project was triggered by the *Planning Act* and the archaeological assessment was done in advance of site plan application. The proponent intends to develop the sites into four towers on two podiums, featuring residential and retail uses, and on-site parking.

#### 1.2 Historical Context

Several sources were referenced to determine if features or characteristics indicating archaeological potential for Pre-Contact and Post-Contact resources exist within the project area. These included contemporary satellite imagery, and historical atlas maps.

## 1.3 Archaeological Context

### 1.3.1 Known Archaeological Sites within 1-km of the Project Area

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (O.A.S.D.), an inventory of the documented archaeological record in Ontario.

Summary information on the known archaeological sites in the vicinity of the project area was obtained from the MCM site database (MCM 2025). There are no known sites within the project area limits, however, there are ten (10) known sites situated within a one-kilometre radius of the project area, two (2) of which are located within 300 metres of the project area limits (Table 1).

Table 1: Sites Recorded within a One-Kilometre Radius of the Study Area					
<u>Borden Number</u>	Site Name	Time Period	Affinity	Site Type	Current Development Review Status
AkGs-8	Graham	Post-Contact	Other: Seneca	village	
AkGs-487*	Durham BRT H1	Post-Contact	Euro-Canadian	homestead	Further CHVI
AkGs-486		Woodland		camp/campsite	Further CHVI
AkGs-485		Woodland, Middle	Aboriginal	camp/campsite	No Further CHVI
AkGs-42		Pre-Contact Aboriginal		findspot	
AkGs-41*	Palmer Site	Post-Contact		outbuilding	No Further CHVI
			Aboriginal, Other: Seneca	Other: camp/campsite	
AkGs-4	Rouge River 2	Post-Contact			
AkGs-39	Cowan Circle	Pre-Contact	Aboriginal	findspot	
AkGs-17	Stonechurch	Pre-Contact	Aboriginal	Unknown	
AkGs-12	Rouge Trail	Woodland	Aboriginal		

\* Sites Located within 300 metres of Project Area Limits

### 1.3.2 Previous Archaeological Assessments on or within 50 m of the Project Area

Based on the current information available in the MCM archaeological sites database, **AS&G** is not aware of any previous archaeological assessments that have been conducted on or within a 50-metre radius of the subject property.

### 1.3.3 Current Conditions

The property is situated within the Southern Slope physiographic region of southern Ontario (Chapman and Putnam 1984:174-176). The Southern Slope physiographic region is one of three physiographic regions between Lake Ontario and the Oak Ridges Moraine, the others being the Iroquois lake plain and the Peel plain (Ibid. 74). The slope rises to approximately 300 to 400 feet above sea level and has an average width of approximately 6 to 7 miles and covers approximately 940 square miles (Ibid.). The eastern portion of the slope lies in Northumberland County and is characterized by large drumlins pointing to the southwest. The western portion of the slope lies largely to the north of the Peel plain but also includes the Trafalgar Moraine and the till plain to its south (Ibid. 172-173). The soil of the South slope is of varying quality, but it is known to be excellent for agricultural use (Ibid. 173). The soils are developed upon tills which are sandier in the east and more clayey in the west and the slopes of the region are often steeper in the east than in the west (Ibid.). South of the Peel plain in the City of Scarborough there is a gently rolling till plain exhibiting bolt fluting running about 30° west of north (330° azimuth) and low drumlins (Ibid.).

The project area is consists of 6 parcels of land located at municipal addresses 375-421 Kingston Road Pickering, and is approximately 1.74 hectares in size, measuring roughly 244 metres east-west by 100 metres north-south. A single multiple unit commercial building is present at 375 Kingston Road, 3 separate structures at 395 Kingston Road, and single commercial structure each located at 401, 409, 413, and 417 Kingston Road. Much of the project area has been extensively disturbed as a result of the presence of the structures within the project area and associated paved parking areas. The project area is bound by the Highway 401 to the south, Kingston Road to the North, Evelyn Avenue to the east and Rougemount Drive to the west.

## 2.0 BACKGROUND STUDY

A Stage 1 Archaeological Assessment is a systematic qualitative process executed to assess the archaeological potential of a property based on its historical use and its potential for early Euro-Canadian (early settler) and pre-contact Indigenous occupation. The objectives of a Stage 1 Background Study are: 1) to provide information about the project area's geography, history, previous archaeological fieldwork and current land condition; 2) to evaluate in detail the project area's archaeological potential, which will support recommendations for Stage 2 Property Assessment for all or parts of the project area if warranted; and 3) to recommend appropriate strategies for Stage 2 property assessment if warranted.

This Stage 1 Background Study was conducted in accordance with the *Standards and Guidelines for Consultant Archaeologists*, set out by the MCM (2011) pursuant to the Ontario Heritage Act, R.S.O. 1990, c.0.18.

The scope of work for the Stage 1 Background Study consisted of the following tasks:

- **AS&G** requested a Project Information Number (PIF) from the MCM VIA PastPort.
- Contacted the MCM to determine if recorded archaeological sites exist in the vicinity (1-km radius) of the project area, through a search of the Ontario Archaeological Sites Database maintained by the MCM.
- Contacted the MCM to determine if there are any known reports of previous archaeological fieldwork within a 50 m radius of the project area.
- Conducted a desktop review of the project area's physical setting to determine its potential for both historic and pre-contact human occupation, including its topography, hydrology, soils, and proximity to important resources and historical transportation routes and settlements.
- Reviewed the potential for historic period occupation as documented in historical atlases.
- Prepared a report of findings with recommendations regarding the need for further archaeological work if deemed necessary.

In Ontario, the framework for determining the presence of archaeological potential is taken from the *Standards and Guidelines for Consultant Archaeologists* (MCM 2011, Sections 1.3.1 & 1.3.2). Characteristics indicating archaeological potential include the near-by presence of previously identified archaeological sites, primary and secondary water sources, features indicating past water sources, accessible or inaccessible shoreline, pockets of well-drained sandy soil, distinctive land formations that might have special or spiritual places (such as waterfalls, rock outcrops, caverns, mounds, promontories and their bases, as well as resource areas that include food or medicinal plants, or scarce raw materials), early Euro-Canadian industry, areas of early Euro-Canadian settlement, early historical transportation routes, properties listed on a municipal register or designated under the *Ontario Heritage Act* as a federal, provincial, or municipal historic landmark or site; as well as properties that local histories or informants have identified as important locations for historical events, activities, and/or occupations.

Archaeological potential can be determined not to be present for the entire project area or a part of it when the area under consideration has been subjected to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as 'disturbed' or 'disturbance', and it may include quarrying, major landscaping involving grading below topsoil, building footprints, and sewage or infrastructure development. Archaeological potential is not removed where there is documented potential for deeply buried intact archaeological resources beneath land alterations, or where it cannot be clearly demonstrated through background research and project area inspection that there has been complete and intensive disturbance of an area. When complete disturbance cannot be demonstrated in Stage 1, it will be necessary to undertake a Stage 2 Assessment.

The background study determined that the following features or characteristics indicate archaeological potential for the project area:

- The project area is located in an area of early Euro-Canadian settlement and transportation routes.
- The property is situated within the Southern Slope physiographic region of southern Ontario (Chapman and Putnam 1984:174-176). The Southern Slope physiographic region is one of three physiographic regions between Lake Ontario and the Oak Ridges Moraine, the others being the Iroquois lake plain and the Peel plain (Ibid. 74). The slope rises to approximately 300 to 400 feet above sea

level and has an average width of approximately 6 to 7 miles and covers approximately 940 square miles (Ibid.). The soil of the South slope is of varying quality, but it is known to be excellent for agricultural use (Ibid. 173). The soils are developed upon tills which are sandier in the east and more clayey in the west and the slopes of the region are ofte

- n steeper in the east than in the west (Ibid.).
- There are ten (10) known archaeological sites located within a one-kilometre radius of the project area, two (2) of which are located within a 300-metre radius.

### 2.1.1 Indigenous Historical Context

The project area is situated in an area of Ontario that has a rich and diverse cultural history that extends back at least 11,000 years ago. To provide context for this report, the settlement history is summarized below.

#### 2.1.1.1 Pre-Contact Indigenous Period

Drawn from Ellis and Ferris (1990), Table 2 provides a general outline of the Pre-Contact and early Euro-Canadian Contact Period cultural history of the project area.

Table 2: General Archaeological Chronology for South-Central Ontario			
Period	Archeological/Material Culture	Date Range	Comments
<b>PALEO</b>			
Early	Gainey, Barnes, Crowfield, Fluted Points	11,000-10,500 BP	Big game hunters, i.e., caribou
Late	Holcombe, Hi-Lo, Lanceolate	10,500-9,500 BP	Paleo Point Technology
<b>ARCHAIC</b>			
Early	Bifurcate-base, Nettling, Side Notched	9,800-8,000 BP	Nomadic hunters/gathers
Middle	Stanley, Kirk, Brewerton, Laurentian	8,000-4,000 BP	Focused seasonal resource areas
Late	Lamoka, Genesee, Innes, Crawford Knoll	4,500-2,500 BP	Polished/ground stone tools
	Hind	3,000-2,600 BP	Burial ceremonialism
<b>WOODLAND</b>			
Early	Meadowood, Middlesex	2,800-2,000 BP	Introduction of pottery, elaborate burials
Middle	Princess Point, Saugeen, Point Peninsula	2,000-950 BP	Long-distance trade, burial mounds, horticulture

Table 2: General Archaeological Chronology for South-Central Ontario			
Period	Archeological/Material Culture	Date Range	Comments
Late	Pickering, Uren, Middleport (Anishinabek/Iroquois), Algonkian-Wendat Alliance	950-300 BP	Emergence of agricultural villages Large, palisaded villages Trade, alliances, and warfare
<b>HISTORIC</b>			
	Huron, Neutral, Petun, Odawa, Ojibwa Six Nations Iroquois, Ojibwa, Mississauga	350 BP-Present	Mission villages and Reserves
	Euro-Canadian		European settlement

### 2.1.1.2 Paleo Period

Archaeological evidence demonstrates that people inhabited south-central Ontario, shortly after the end of the Wisconsin Glacial Period, approximately 11,000 years ago. This early settlement period is referred to as the Paleo Period (Ellis and Deller 1990). Based upon current archaeological knowledge, Indigenous groups originally living south of the Great Lakes migrated to the area. The settlement patterns of Early Paleo peoples consisting of small bands, i.e., less than 35 individuals, maintained a seasonal pattern of mobility over vast territories.

These Early Paleo sites are typically located in elevated locations, with well-drained loamy soils, with many known sites found on former beach ridges, associated with glacial lakes (Ellis and Deller 1990). These sites were likely formed when they were occupied for short increments, over the course of many years, possibly as communal hunting camps. Their locations appear conducive to hunting migratory mammals, such as caribou (Ellis and Deller 1990).

During the Late Paleo Period (10,500-9,500 BP), the south-central Ontario environment started to become dominated by closed coniferous forests, with only some minor deciduous elements. The hunting landscape had also changed, as many of the large game species that had been hunted in the early part of the Paleo Period, either migrated further north, or in some cases, had become extinct, i.e., mastodons and mammoths (Ellis and Deller 1990). Comparable to the Early Paleo peoples, Late Paleo peoples covered large territories as a response to seasonal resource fluctuations. In Ontario, Late Paleo Period inhabitation appears more frequently in the archaeological record, comparable to the Early Paleo Period. Thus, it has



been suggested that migratory populations had increased in size (Ellis and Deller 1990).

### 2.1.1.3 Archaic Period

During the Early Archaic Period (9,800-8,000 BP), the jack and red pine forests that characterized the Late Paleo environment, were replaced by forests of white pine, with a few correlated deciduous trees (Ellis et al. 1990). Based on material culture, the Early Archaic Period is recognized by the shift to side and corner-notched projectile points. Other notable innovations, include the introduction of groundstone tools such as celts and axes. These tools suggest that there was a woodworking industry. Additionally, the presence of these, often large and not easily portable tools, suggests that there may have been a reduction in seasonal movement. However, the current understanding of the period suspects that population densities were still low, and seasonal territories remained extensive (Ellis et al. 1990).

During the Middle Archaic Period (8,000-4,000 BP), it is speculated that there was an increase in regional population growth, which precipitated a decrease in overall seasonal migration territories. Additionally, as a consequence of population growth, a shift in subsistence patterns occurred, as more people needed to be supported from the resources available within smaller geographic areas (Ellis et al. 1990). Thus, the Middle Archaic Period is characterized by the diversification of toolkits and diets, such as with the introduction of net-sinkers and bannerstones, as well as other stone tools specifically designed for the preparation of wild plant foods. The appearance of net-sinkers suggests that fishing was becoming an important aspect of the subsistence economy. In contrast, bannerstones were carefully crafted groundstone devices that served as a counterbalance for *atlatls* or "spear-throwers", used in hunting large game (Ellis et al. 1990).

Another characteristic of the Middle Archaic Period is an increased reliance on local, often poor-quality chert resources, for the manufacturing of projectile points and other chipped stone tools. Unlike earlier periods, when nomadic groups occupied vast territories, at least once in their seasonal migration it was possible for them to visit a primary outcrop of high-quality chert. However, during the Middle Archaic Period, individual groups inhabited smaller territories, which usually did not contain a source of high-quality raw material, and were forced to use the locally sourced, poorer quality chert resources (Ellis et al. 1990). It was also during the latter part of the Middle Archaic Period, that long-distance trade routes began to develop, which spanned the northeastern part of the North American



continent. For instance, copper tools, which were manufactured from a source located northwest of Lake Superior, were being widely traded (Ellis et al. 1990).

The trend toward a decreasing territory size and a broadening subsistence economy, continued during the Late Archaic Period (4,500-2,500 BP). Similarly, archaeologically Late Archaic sites are more numerous than Early or Middle Archaic sites, which is attributed to increasing population levels (Ellis et al. 1990). With the trend toward larger groups, the first cemeteries have also been dated to the Late Archaic Period. Prior to this, individuals were interred close to the location where they died. Furthermore, during the Late Archaic Period, if an individual died while away from their home territory, the remains would be kept until they could be placed in the group cemetery. Therefore, it is not unusual to find disarticulated skeletons, and/or skeletons lacking minor elements, i.e., fingers, toes and/or ribs (Ellis et al. 1990).

The appearance of cemeteries during the Late Archaic Period has been interpreted as a response to increased population densities. The increased populations also demonstrated evidence of regionalized variation in Late Archaic projectile point styles (Ellis et al. 1990). These differences were likely indicative of the different relationships the people had with the land and waters they inhabited. Additionally, trade networks established during the Middle Archaic Period continued to flourish. For instance, copper native to northern Ontario and marine shell artifacts from as far away as the Mid-Atlantic coast, are frequently encountered as ceremonial grave inclusions. Other artifacts such as polished stone pipes and banded slate gorgets, also appear on Late Archaic Period sites. One of the more unusual and interesting of the Late Archaic artifacts is the “birdstone”. Birdstones are small, bird-like effigies usually manufactured from green banded slate (Ellis et al. 1990).

#### 2.1.1.4 Woodland Period

For archaeologists, the Early Woodland Period (2,800-2,000 BP) is distinguished from the Late Archaic Period primarily by the addition of ceramic technology. The first pots were crudely constructed, had undecorated thick walls, and were friable. Spence et al. (1990) suggest they were used in the processing of nut oils, which required boiling crushed nut fragments in water and skimming off the oil. As these vessels were not easily portable, individual pots were likely not used for extended periods of time. Additionally, as there are many Early Woodland Period sites where no pottery was recovered, it has been suggested that these poorly

constructed vessels were not utilized by all Early Woodland peoples (Spence et al. 1990).

Other than the limited use of ceramics, there were other subtle differences between the Late Archaic and the Early Woodland Periods. For example, “pop-eyes”, a protrusion from the side of the head, was added to birdstones. Similarly, a slight modification was made to the thin, well-made projectile points made during the Archaic Period, i.e. Early Woodland variants were side-notched rather than the corner-notched (Spence et al. 1990). The trade networks which were established in the Middle and Late Archaic Periods, continued to flourish; however, there appeared to be a decrease in the trade of marine shell during the Early Woodland Period. Additionally, projectile points crafted from high quality American Midwest materials, began to be found on southwestern Ontario sites, dating toward the end of the Early Woodland Period (Spence et al. 1990).

The Middle Woodland (2,000-950 BP) is characterized by rich, densely occupied sites, which are usually found bordering major rivers and lakes. While these locations were inhabited periodically by earlier peoples, Middle Woodland sites are significant as they represent long periods of continuous occupations, i.e., hundreds of years (Spence et al. 1990). The shift in settlement patterning, created large deposits of artifacts, as the sites appear to have functioned as home bases that were occupied throughout the year. Numerous smaller Middle Woodland sites have been found inland, and likely functioned as specialized camps, for the exploitation of local resources (Spence et al. 1990).

The transition to a more sedentary lifestyle, also resulted in a shift in subsistence patterns, comparable to those of the Early Woodland Period. Although, groups still relied on hunting and gathering, fish became a predominant dietary staple, to meet their growing subsistence needs (Spence et al. 1990). Additionally, the people of the Middle Woodland Period, relied more on ceramic technology, with many vessels being heavily decorated with impressed designs covering the entire exterior surface and the upper portion of the interior of vessels (Spence et al. 1990).

Material culture changes that occurred in the early portion of the Late Woodland Period (950-300 BP), include the appearance of triangular projectile point styles, first seen with the Levanna form, as well as a change to more intricate designs on ceramics. These new methods included cord-wrapped stick decorated ceramics, which were created using the paddle and anvil forming technique (Bursey 1995; Ferris and Spence 1995; Spence et al. 1990; Williamson 1990).

The Late Woodland Period is also marked by an increasing reliance on corn (*Zea mays*) horticulture (Crawford et al. 1997; Fox 1990; Martin 2004; Smith 1990; Williamson 1990). Although corn was possibly introduced into southwestern Ontario from the American Midwest as early as 2,500 BP, it was not considered a dietary staple until at three to four hundred years later. From there, corn cultivation gradually spread into southcentral and southeastern Ontario. Thus, the Late Woodland Period is widely accepted as the beginning of a reliance on agriculture, for subsistence. Researchers have suggested that a warming trend, which increased the number of frost-free days, was likely a catalyst for the spread of maize into southern Ontario (Stothers and Yarnell 1977). Additionally, sites have been identified in a wider variety of environments, including riverine, lacustrine and wetlands (Dieterman 2001).

In southern Ontario, the first agricultural villages have been dated to approximately 1,200 BP to 700 BP. These sites are typically found on elevated areas, with well-drained sandy soils. These early villages share many characteristics with later Iroquoian settlements that were recorded at the time European contact, including longhouses and/or palisades (Dodd et al. 1990; Williamson 1990). However, the scale was much smaller, with early longhouses only averaging 12.4 metres in length. Furthermore, the excavation and exposure of cultural features archaeologically, indicate that there was the possibility of overlapping structures which has been interpreted as evidence of long-term occupation, as it indicates that the structures were present long enough to require them to be re-built (Dodd et al. 1990; Williamson 1990).

It was documented that due to soil depletion resulting from farming, and the scarcity of easily accessible firewood during this period, the Jesuits reported that the Huron moved their villages every 10-15 years (Pearce 2010). Since the more sedentary sites were occupied for considerably longer amounts of time, it is hypothesized that the Indigenous communities relied less heavily on corn. Furthermore, small seasonally occupied sites have also been documented, which relate specifically to nut collection, deer procurement, and fishing activities. Thus, the reduced demand on resources within close proximity to the settlement, coupled with the smaller reliance on crops, indicates that these groups maintained a considerably smaller population size (Pearce 2010).

Around 700-600 BP, the size of villages increased from approximately 0.6 hectares, to approximately 1-2 hectares. Correspondingly, the size of longhouses also increased significantly, to an average of 30 metres, with

some longhouses being documented as large as 45 metres in length (Dodd et al. 1990; Smith 1990). Although the enlargement of longhouses can be explained by the significant increase in overall population levels within villages, other possible hypotheses include changes to the greater socio-political and socio-economic structure of the communities. For instance, Dodd et al. (1990) have suggested that several smaller communities may have merged during this period, to increase protection and secure defense from neighbouring tribes. This hypothesis is supported by the presence of known settlements with up to seven rows of palisades, indicating the potential need for strong protective measures.

With the growth of population levels and an increase in village sizes during the Late Woodland Period, it is postulated that there was greater social organization and community planning occurring during this time. Whereas longhouses were originally haphazardly placed, the growing population levels and necessity for security and nearby resources, required further organization to accommodate the increasingly localized communities. For instance, archaeologists have documented the organization of two or more discrete groups of parallel, tightly spaced longhouses on several sites. It has been hypothesized that the organization and grouping of different habitations, may indicate the initial development of clans, a characteristic historically attributed to the Iroquoian peoples (Dodd et al. 1990).

Toward the end of the Late Woodland Period (approximately 600 BP), village sizes continued to increase, as did longhouse lengths, i.e., an average length of 62 metres. However, around approximately 500 BP, longhouse lengths were significantly shorter, with an average length of only 30 metres (Lennox and Fitzgerald 1990). The significant decrease in the overall length of longhouses in a short amount of time, is not well understood; however, it has been hypothesized that it is correlated with the introduction of European diseases, i.e., smallpox, which caused a steep reduction in Indigenous population sizes (Lennox and Fitzgerald 1990).

Even with the decrease in the length of longhouses, archaeologists have noted that some village populations continued to grow, with periodic expansions visually documented. With increase in disease and subsequently a rise in warfare between communities, it is postulated that the expansion was the result of the amalgamation of smaller villages during the early Euro-Canadian Post Contact Period. These sites also appeared to be heavily fortified with many rows of wooden palisades, again supporting the hypothesis that smaller villages united for defensive purposes (Anderson 2009).

### 2.1.1.5 Post-Contact Indigenous Period

At the end of the 17<sup>th</sup> century and beginning of the 18<sup>th</sup> century, the dispersal of several Iroquoian-speaking peoples by the New York State Iroquois, coupled with the return of the Algonkian-speaking groups from northern Ontario, formed the Post-Contact Indigenous occupation landscape of southern Ontario (Schmalz 1991). As European settlers encroached on traditional Indigenous territories, settlement sizes, populations, and material culture shifted. Despite this shift, there remains a continuity from ancient Indigenous groups to the communities written about in historical accounts (Ferris 2009). Thus, it should be noted that the Indigenous peoples of southern Ontario have deposited archaeologically significant resources throughout the province, demonstrating a shared traditional and continuing history, regardless of whether their presence is recorded in historic early Euro-Canadian documents.

The Scarborough area, included in the 1788 Johnson-Butler Purchase, is considered one of the oldest land agreements between the Crown and certain Anishinaabe peoples. The Johnson-Butler Purchase is also known as the 'Gunshot Treaty', as the distances are discussed in relation to how far an individual could hear a gunshot from the lake's edge (Boileau 2020). The Crown purchased this large tract of land along the northern shore of Lake Ontario for Euro-Canadian settlement. During the negotiations, the Indigenous people received £2,000 in ammunition, muskets, and tobacco from Johnson. Although the items were supposed to be a reward for continued loyalty to the Crown during the American Revolutionary War, it has often been interpreted as payment for this tract of land (Boileau 2020). These lands would eventually be included in the 1923 Williams Treaties, as the exact boundaries had not been properly defined (Boileau 2020).

The Williams Treaties also had broad implications for the First Nation Communities in Ontario. The Treaties were signed on October 31 and November 15, 1923, by Commissioner Angus Seymour Williams, representing the Dominion of Canada; Robert Victor Sinclair and Uriah McFadden, representing the Province of Ontario; the Anishinaabe Chippewa of Simcoe (First Nation Communities of Beausoleil, Georgina Island, and Rama); and the Anishinaabe Michi Saagig of the north shore of Lake Ontario (First Nation Communities of Alderville, Curve Lake, Hiawatha, and Scugog Island) (Government of Canada 1923). The two treaties encompass 12,944,400 acres of land, separated into three distinct tracts. Tract 1 is between the Etobicoke and Trent Rivers, bounded by Lake Ontario's Northern Shore, which then extends north to Lake Simcoe to create Tract 2.

Tract 3 includes the area between the Ottawa River and Lake Huron, which is delineated in the North by the Mattawa River-Lake Nipissing and French Line (Government of Canada 1923; Manners 2022). The Williams Treaties were the culmination of almost sixty years of the Chippewa and Mississauga (Michi Saagig) lobbying the Ontario and Canadian governments for protection and respect of their rights to harvest, hunt, fish, and trap on their traditional lands (Manners 2022).

The Williams Treaties were originally designed by the Crown to quell the complaints put forth by the various First Nation communities regarding settlers interfering and encroaching on their traditional lands. Instead, the Williams Treaties effectively obtained large tracts of unceded lands held by the First Nation communities, and removed their rights to harvest, hunt, fish, and trap outside of Reserve lands. Thus, the Treaties led to long-standing disputes between the First Nation Communities and the government, regarding compensation, land, harvesting, and access to traditional lands used for hunting, fishing, and trapping (Government of Canada 2018ab).

In 1992, the Chippewa and the Mississaugas filed a lawsuit against the Crown, under the claim that the Crown had not met their financial and legal obligations set forth in the Williams Treaties (Manners 2022). The matter would remain before the courts until 2018, when the Canadian and Ontario Governments formally settled the matter with the First Nation Communities, by including a billion dollars in compensation, the ability to add up to 11,000 acres to their respective reserve land base(s), and the recognition of the First Nation Communities to hunt, fish, harvest, and trap on their traditional lands. Additionally, the Honourable Carolyn Bennett, Minister of Crown-Indigenous Relations, issued a formal apology on behalf of the Government of Canada, in recognition of the negative impacts the Williams Treaties had on the Chippewas and the Mississaugas (Government of Canada 2018ab; Manners 2022).

#### **2.1.1.6 Oral History**

The traditional homelands of the Michi Saagiig (Mississauga Anishinaabeg) encompass a vast area of what is now known as southern Ontario. The Michi Saagiig are known as “the people of the big river mouths” and were also known as the “Salmon People” who occupied and fished the north shore of Lake Ontario where the various tributaries emptied into the lake. Their territories extended north into and beyond the Kawarthas as winter hunting grounds on which they would break off into smaller social groups



for the season, hunting and trapping on these lands, then returning to the lakeshore in spring for the summer months.

The Michi Saagiig were a highly mobile people, traveling vast distances to procure subsistence for their people. They were also known as the “Peacekeepers” among Indigenous nations. The Michi Saagiig homelands were located directly between two very powerful Confederacies: The Three Fires Confederacy to the north and the Haudenosaunee Confederacy to the south. The Michi Saagiig were the negotiators, the messengers, the diplomats, and they successfully mediated peace throughout this area of Ontario for countless generations.

Michi Saagiig oral histories speak to their people being in this area of Ontario for thousands of years. These stories recount the “Old Ones” who spoke an ancient Algonquian dialect. The histories explain that the current Ojibwa phonology is the 5<sup>th</sup> transformation of this language, demonstrating a linguistic connection that spans back into deep time. The Michi Saagiig of today are the descendants of the ancient peoples who lived in Ontario during the Archaic and Paleo periods. They are the original inhabitants of southern Ontario, and they are still here today.

The territories of the Michi Saagiig span from Gananoque in the east, all along the north shore of Lake Ontario, and west to the north shore of Lake Erie at Long Point. The territory spreads as far north as the tributaries that flow into these lakes, from Bancroft and north of the Haliburton highlands. This also includes all the tributaries that flow from the height of land north of Toronto like the Oak Ridges Moraine, and all of the rivers that flow into Lake Ontario (the Rideau, the Salmon, the Ganaraska, the Moira, the Trent, the Don, the Rouge, the Etobicoke, the Humber, and the Credit, as well as Wilmot and 16 Mile Creeks) through Burlington Bay and the Niagara region including the Welland and Niagara Rivers, and beyond. The western side of the Michi Saagiig Nation was located around the Grand River which was used as a portage route as the Niagara portage was too dangerous. The Michi Saagiig would portage from present-day Burlington to the Grand River and travel south to the open water on Lake Erie.

Michi Saagiig oral histories also speak to the occurrence of people coming into their territories sometime between 500-1000 A.D. seeking to establish villages and a corn growing economy – these newcomers included peoples that would later be known as the Huron-Wendat, Neutral, Petun/Tobacco Nations. The Michi Saagiig made Treaties with these newcomers and granted them permission to stay with the understanding

that they were visitors in these lands. Wampum was made to record these contracts, ceremonies would have bound each nation to their respective responsibilities within the political relationship, and these contracts would have been renewed annually (see Gitiga Migizi and Kapyrka 2015). These visitors were extremely successful as their corn economy grew as well as their populations. However, it was understood by all nations involved that this area of Ontario were the homeland territories of the Michi Saagiig.

The Odawa Nation worked with the Michi Saagiig to meet with the Huron-Wendat, the Petun, and Neutral Nations to continue the amicable political and economic relationship that existed – a symbiotic relationship that was mainly policed and enforced by the Odawa people.

Problems arose for the Michi Saagiig in the 1600s when the European way of life was introduced into southern Ontario. Also, around the same time, the Haudenosaunee were given firearms by the colonial governments in New York and Albany which ultimately made an expansion possible for them into Michi Saagiig territories. There began skirmishes with the various nations living in Ontario at the time. The Haudenosaunee engaged in fighting with the Huron-Wendat and between that and the onslaught of European diseases, the Iroquoian-speaking peoples in Ontario were decimated.

The onset of colonial settlement and missionary involvement severely disrupted the original relationships between these Indigenous nations. Disease and warfare had a devastating impact on the Indigenous peoples of Ontario, especially the large sedentary villages, which mostly included Iroquoian-speaking peoples. The Michi Saagiig were largely able to avoid the devastation caused by these processes by retreating to their wintering grounds to the north, essentially waiting for the smoke to clear.

Michi Saagiig Elder Gitiga Migizi (2017) recounts:

*We weren't affected as much as the larger villages because we learned to paddle away for several years until everything settled down. And we came back and tried to bury the bones of the Huron but it was overwhelming, it was all over, there were bones all over – that is our story.*

*There is a misnomer here, that this area of Ontario is not our traditional territory and that we came in here after the Huron-Wendat left or were defeated, but that is not true. That is a big misconception of our history*



*that needs to be corrected. We are the traditional people; we are the ones that signed treaties with the Crown. We are recognized as the ones who signed these treaties and we are the ones to be dealt with officially in any matters concerning territory in southern Ontario.*

*We had peacemakers go to the Haudenosaunee and live amongst them in order to change their ways. We had also diplomatically dealt with some of the strong chiefs to the north and tried to make peace as much as possible. So we are very important in terms of keeping the balance of relationships in harmony.*

*Some of the old leaders recognized that it became increasingly difficult to keep the peace after the Europeans introduced guns. But we still continued to meet, and we still continued to have some wampum, which doesn't mean we negated our territory or gave up our territory – we did not do that. We still consider ourselves a sovereign nation despite legal challenges against that. We still view ourselves as a nation and the government must negotiate from that basis.*

Often times, southern Ontario is described as being “vacant” after the dispersal of the Huron-Wendat peoples in 1649 (who fled east to Quebec and south to the United States). This is misleading as these territories remained the homelands of the Michi Saagiig Nation. The Michi Saagiig participated in eighteen treaties from 1781 to 1923 to allow the growing number of European settlers to establish in Ontario. Pressures from increased settlement forced the Michi Saagiig to slowly move into small family groups around the present-day communities: Curve Lake First Nation, Hiawatha First Nation, Alderville First Nation, Scugog Island First Nation, New Credit First Nation, and Mississauga First Nation. The Michi Saagiig have been in Ontario for thousands of years, and they remain here to this day.

**\*\*This historical context was prepared by Gitiga Migizi, a respected Elder and Knowledge Keeper of the Michi Saagiig Nation.\*\***

## **2.2 Post-Contact Historical Context**

### **2.2.1 Ontario County**

Ontario County was created in 1852, from the East Riding of York County. The County was enclosed by the shores of Lake Ontario in the south, by York County and Lake Simcoe in the west, Durham and Victoria counties in the east, and by the District of Muskoka in the north. Initially attached to York and Peel Counties for municipal and judicial purposes, Ontario County

separated in 1852. The original townships that existed within Ontario County include Brock, Mara, Pickering, Rama, Reach, Scott, Thorah, Uxbridge, and Whitby.

Settlement began in Ontario County in the late 1700s, but it remained sparse, with only a few families arriving to the area. However, following the War of 1812, there was a period of increased settlement and immigration to the region (Mika and Mika 1983: 112). Agriculture was one of the major industries in Ontario County, with the breeding and importing of cattle at its base. Apple growing in the southern areas of the county also brought commerce to the region. The Ontario lakeshore, bordering the southern edge of the county, provided for excellent harbours. These harbours facilitated greater access to trade and travel throughout the Great Lakes (Mika and Mika 1983). On January 1, 1974, Ontario County and Durham County were amalgamated into the Regional Municipality of Durham.

### ***2.2.2 Pickering Township***

The Township of Pickering, situated within Ontario County, was first acquired in 1784, and the initial survey took place several years later in 1791 (Armstrong 1985: 146). At the time of the initial survey, the township was approximately 73,200 acres in size (Ibid.). The first legal settler of the township is recorded as having been present in 1798 (Ibid.). William Peak is believed to have been the first settler of the area and other settlers arrived around 1802 or 1802 (Mika 1983: 213). Many of the first settlers of the township are believed to have had some affiliation with the army and were thus entitled to land grants within the township (Ibid.). The township was described by Smith as being located within the Home District, bound on the north by the township of Uxbridge; on the west by Markham and Scarborough; on the east by Whitby; and on the south by Lake Ontario (Smith 1846: 146). In 1974, the township of Pickering became the town of Pickering, being formed from what remained of the township after the annexation of some areas to the town of Ajax, and the Borough of Scarborough (Mika 1983: 213).

## **2.3 Past Land Use of the Project Area**

### ***2.3.1 Historic Atlas Mapping***

Historically, the project area lies in part of Lots 31 and 32, Range 3 Broken Front Concession, Geographic Township of Pickering, Ontario County.

*J. H. Beers & Co.'s 1877 Illustrated historical atlas of the county of Ontario, Ont.* indicates that the portions of Lot 31 and 32, Range 3 Broken Front Concession, Geographic Township of Pickering, Ontario County, in which the project area is located, were owned by a "G. S. Palmer" and "R. Rodd" respectively. No structures or features of interest are illustrated within the project area.

*Tremaine's 1860 Illustrated Map of the County of Ontario, Canada West* indicates that the portions of Lot 31 and 32, Range 3 Broken Front Concession, Geographic Township of Pickering, Ontario County, in which the project area is located, were owned by a "Seneca Palmer" and "John Wesley" respectively. No structures or features of interest are illustrated within the project area.

In discussing 19<sup>th</sup> century mapping, it must be remembered that historical county atlases were produced primarily to identify factories, offices, residences, and landholdings of subscribers, and were funded by subscription fees. Landowners who did not subscribe were not always listed on the maps. As such, all structures were not necessarily depicted or placed accurately.

### 3.0 ANALYSIS AND CONCLUSIONS

Section 1.3.1 of the 2011 *MCM Standards and Guidelines for Consultant Archaeologists* outlines features and characteristics of a project area which indicate archaeological potential. Based on the research outlined in the preceding sections of this report, these criteria are addressed as follows:

**Previously identified archaeological sites:** There are ten (10) known archaeological sites located within a one-kilometre radius of the project area, two (2) of which are located within a 300-metre radius.

**Water sources:** No water sources are present in the project area.

**Elevated topography:** The project area does not contain any examples of elevated topography.

**Pockets of well-drained sandy soil:** The soil of the South slope is of varying quality, but it is known to be excellent for agricultural use (Chapman and Putnam 1984: 173). The soils are developed upon tills which are sandier in the east and more clayey in the west and the slopes of the region are often steeper in the east than in the west (*Ibid.*).

**Distinctive land formations:** No distinctive land formations are identified within the project area.

**Resource areas:** No resource areas are identified within the project.

**Areas of early Euro-Canadian settlement:** The project area is within an area of early Euro-Canadian settlement.

**Property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations:**  
We are not aware of any such property.

In summary, the archaeological potential of the project area is supported by the following factors:

- The project area is located in an area of early Euro-Canadian settlement and transportation routes.
- The property is situated within the Southern Slope physiographic region of southern Ontario (Chapman and Putnam 1984:174-176). The Southern Slope physiographic region is one of three physiographic regions between Lake Ontario and the Oak Ridges Moraine, the others being the Iroquois lake plain and the Peel plain (Ibid. 74). The slope rises to approximately 300 to 400 feet above sea level and has an average width of approximately 6 to 7 miles and covers approximately 940 square miles (Ibid.). The soil of the South slope is of varying quality, but it is known to be excellent for agricultural use (Ibid. 173). The soils are developed upon tills which are sandier in the east and more clayey in the west and the slopes of the region are often steeper in the east than in the west (Ibid.).
- There are ten (10) known archaeological sites located within a one-kilometre radius of the project area, two (2) of which are located within a 300-metre radius.

Section 1.3.2 of the 2011 MCM Standards and Guidelines for Consultant Archaeologists outlines features that may indicate the removal or disturbance of archaeological potential. Such features may include quarrying, major landscaping involving grading below topsoil, building footprints, sewage and infrastructure development, etc.

The project area contains features which indicate the removal or disturbance of archaeological potential. These include:

- Much of the project area has been subject to deep and extensive disturbance as a result of previous development. This includes the presence of commercial structures and associated paved parking areas.

These areas should be subject to Stage 2 assessment to determine the extent of disturbance.

In summary, the Stage 1 background study concluded that the project area proposed for development possess potential for the recovery of archaeological resources remains and a Stage 2 assessment will require a Stage 2 archaeological assessment by means of pedestrian and test pit survey as appropriate to the varying conditions within the project area.

## 4.0 RECOMMENDATIONS

The report makes recommendations only regarding archaeological matters.

The Stage 1 archaeological background study determined there is potential for the recovery of archaeologically significant materials within portions of the property proposed for development. **Therefore, the report recommends that the property (Map 7) requires a Stage 2 archaeological assessment.**

## 5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

### **Section 7.5.9, Standard 1a**

This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, 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.

### **Section 7.5.9, Standard 1b**

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 Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

### **Section 7.5.9, Standard 1c**

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 Section 48 (1) of the *Ontario Heritage Act*.

### **Section 7.5.9, Standard 1d**

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

**Section 7.5.9, Standard 2**

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.

## 6.0 BIBLIOGRAPHY AND SOURCES

Anderson, Jacob

2009 *The Lawson Site: An Early Sixteenth Century Neutral Iroquoian Fortress*. Museum of Ontario Archaeology, Special Publication No. 2. London.

Armstrong, Frederick H.

1985 *Handbook of Upper Canadian Chronology*. Hamilton: Dundurn Press, Ltd.

Boileau, John

2020 *Johnson-Butler Purchase*. In *The Canadian Encyclopedia*. Accessed online at:  
[https://www.thecanadianencyclopedia.ca/en/article/johnson-butler-purchase#:~:text=The%20Johnson%2DButler%20Purchase%20of,Upp,er%20Canada%20\(later%20Ontario\).](https://www.thecanadianencyclopedia.ca/en/article/johnson-butler-purchase#:~:text=The%20Johnson%2DButler%20Purchase%20of,Upp,er%20Canada%20(later%20Ontario).)

Bursey, J.A.

1995 *The Transition from the Middle to Late Woodland Periods: A re-evaluation*. In *Origins of the People of the Longhouse: Proceedings of the 21<sup>st</sup> Annual Symposium of the Ontario Archaeological Society*, edited by A. Bekerman and G. Warrick, pp. 43-54. Ontario Archaeological Society, North York.

Chapman, L.J. and F. Putnam

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

Coyne, J.H.

1895 *The County of the Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot*. St. Thomas:Times Print.

Crawford G.W., Smith D.G., and V.E. Boyer

1997 *Dating the Entry of Corn (Zea mays) into the Lower Great Lakes Region*. *American Antiquity* 62: 112-119.

Dieterman, F.



- 2001 *Princess Point: The Landscape of Place*. Unpublished PhD Dissertation, Department of Anthropology, University of Toronto, Toronto.
- Dodd, C.F., Poulton, D.R., Lennox, P.A., Smith, D.G. and G.A. Warrick  
1990 The Middle Ontario Iroquoian Stage. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5:321-360.
- Ellis, C.J. and Deller, D.B.  
1990 Paleo-Indians. In C.J. Ellis, and N. Ferris, (Eds.). *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 37-64.
- Ellis, C.J. and N. Ferris (Eds.).  
1990 *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS.
- Ellis, C.J., Kenyon, I.T., and Spence, M.W.  
1990 The Archaic. In C.J. Ellis, and N. Ferris, (Eds.). *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp.65-124.
- Ferris, Neal  
2009 *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. University of Arizona Press, Tucson.
- Ferris, Neal, and Spence M.  
1995 The Woodland Traditions in Southern Ontario. *Revista de Arqueología Americana* 9:83-138.
- Fox, William A.  
1990 The Middle Woodland to Late Woodland Transition. In *The Archaeology of Southern Ontario to AD 1650*, edited by Chris Ellis and Neal Ferris, pp. 171-188. Occasional Publication Number 5. London Chapter, Ontario Archaeological Society, London.
- Government of Canada  
1923 Williams Treaty – Chippewas of Christian Island, Georgina Isle, and Rama. Library Archives of Canada. Electronic Document:

- <https://recherche-collection-search.bac-lac.gc.ca/eng/home/record?app=fonandcol&IdNumber=3987611>
- 2018a Williams Treaties First Nations Settlement Agreement. Electronic Document: <https://www.rcaanc-cirnac.gc.ca/eng/1542370282768/1542370308434>
- 2018b Statement of Apology for the Impacts of the 1923 Williams Treaties. Speaking Notes for the Honourable Carolyn Bennett. Electronic Document: <https://www.rcaanc-cirnac.gc.ca/eng/1542393580430/1542393607484>
- Lennox, Paul A., and William R. Fitzgerald
- 1990 The Culture History and Archaeology of the Neutral Iroquoians. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5:405-456.
- Manners, C
- 2022 The Williams Treaties. The Great Lake Research Alliance (GRASAC). Electronic Document: <https://grasac.artsci.utoronto.ca/?p=2169#:~:text=As%20a%20result%2C%20the%20Governments,and%20trap%20on%20their%20lands>
- Martin, S.W.J
- 2004 Lower Great Lakes Maize and Enchainment in the First Millennium A.D. *Ontario Archaeology* 77/78:135-159.
- Mika, N., and H. Mika
- 1983 Places in Ontario: Their Name Origins and History, Part III, N-Z: Vol. 3, Mika Publishing Company.
- Ministry of Citizenship and Multiculturalism (MCM)
- 2011 *Standards and Guidelines for Consultant Archaeologists*, Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.
- 2025 Ontario Archaeological Sites Database. PastPortal.
- Ministry of Natural Resources and Forestry (MNRF)
- 2025 Make a Topographic Map. Accessed online at: [https://www.lioapplications.lrc.gov.on.ca/MakeATopographicMap/index.html?viewer=Make\\_A\\_Topographic\\_Map.MATM&locale=en-US](https://www.lioapplications.lrc.gov.on.ca/MakeATopographicMap/index.html?viewer=Make_A_Topographic_Map.MATM&locale=en-US)
- Pearce, Robert J.

2010 Southwestern Ontario: The First 12,000 Years. Accessed online at:  
<http://www.diggingontario.uwo.ca>.

Schmalz, Peter S.

1991 *The Ojibwa of Southern Ontario*. University of Toronto Press, Toronto.

Smith, David G.

1990 Iroquoian Societies in Southern Ontario: Introduction and Historic Overview. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5:279-290.

Spence, M.W., Pihl, R.H., and Murphy, C.R.

1990 Cultural Complexes of the Early and Middle Woodland Periods. In Ellis, C.J. and N. Ferris (Eds.) *The Archaeology of Southern Ontario to A.D. 1650*. London, Ontario: Occasional Publication of the London Chapter, OAS, pp. 125-169.

Stothers, D.J. and R. Yarnell

1977 An Agricultural Revolution in the Lower Great Lakes. In *Geobotany*, edited by R. Moans, pp.209-232. Plenum, New York.

Tremaine, Geo. R.

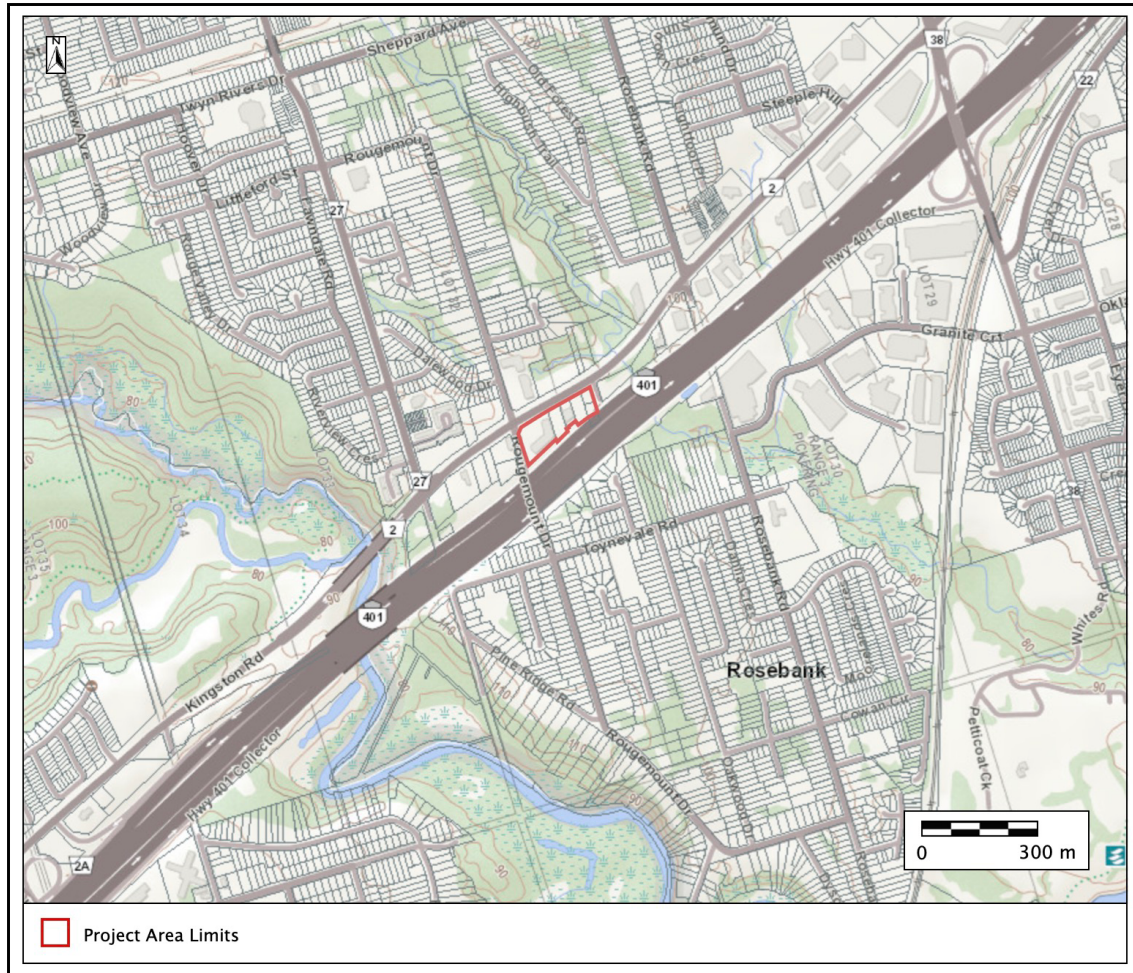
1860 Tremaine's Map of the County of Ontario, Canada West. Toronto.

Williamson, Ronald F.

1990 The Early Iroquoian Period of Southern Ontario. In: *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5:291-320.

2013 The Woodland Period, 900 BCE to 1700 CE. In Munson, M.K. and Jamieson, S.M (Eds.) *Before Archaeology: The Archaeology of a Province*. Montreal & Kingston, Ontario: McGill Queen's University Press.

## 7.0 MAPS

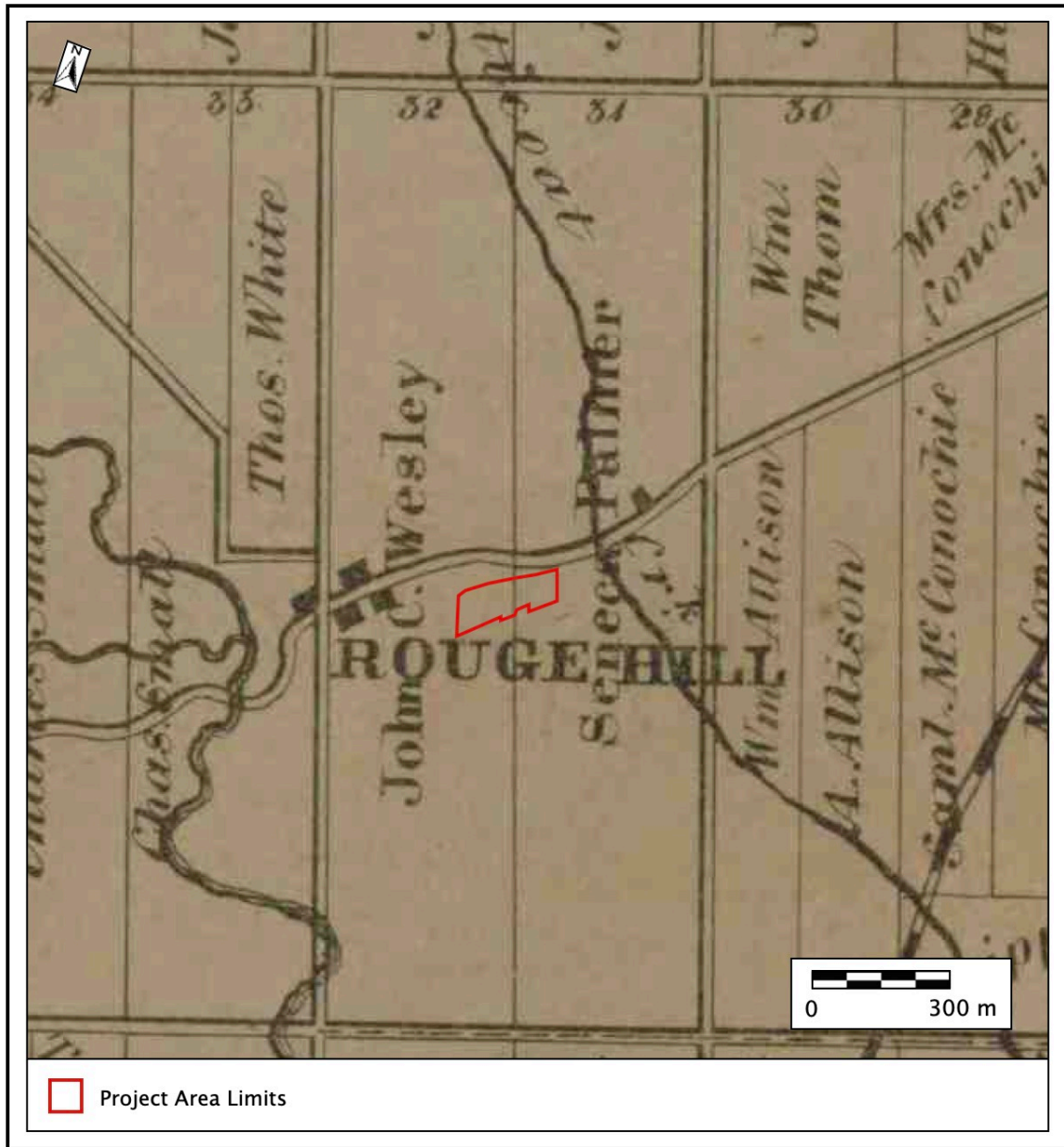


**Map 1:** General Location of Project Area (MNR 2025).





**Map 2:** Project Area Limits Overlaid on 2025 Satellite Imagery (Google Earth Pro 2025).



**Map 3:** Project Area Limits Overlaid on 1860 Historical Atlas Map (Tremaine 1860).



**Map 4:** Project Area Limits Overlaid on 1877 Historical Atlas Map (J. H. Beers & Co. 1877).



**LEGEND**

NO.	DESCRIPTION	AREA (SQ. METERS)	AREA (SQ. FEET)
1	LOT 5	1,000.00	2,470.00
2	LOT 6	1,000.00	2,470.00
3	LOT 10	1,000.00	2,470.00
4	LOT 17	1,000.00	2,470.00
5	LOT 18	1,000.00	2,470.00
6	LOT 19	1,000.00	2,470.00
7	LOT 20	1,000.00	2,470.00
8	LOT 21	1,000.00	2,470.00
9	LOT 22	1,000.00	2,470.00
10	LOT 23	1,000.00	2,470.00
11	LOT 24	1,000.00	2,470.00
12	LOT 25	1,000.00	2,470.00
13	LOT 26	1,000.00	2,470.00
14	LOT 27	1,000.00	2,470.00
15	LOT 28	1,000.00	2,470.00
16	LOT 29	1,000.00	2,470.00
17	LOT 30	1,000.00	2,470.00
18	LOT 31	1,000.00	2,470.00
19	LOT 32	1,000.00	2,470.00
20	LOT 33	1,000.00	2,470.00
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22	LOT 35	1,000.00	2,470.00
23	LOT 36	1,000.00	2,470.00
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**Map 7:** Results of the Stage 1 Archaeological Assessment.