Stage 1 & 2 Archaeological Assessment for
49 South Service Road,
Part of Lot 1, Range 2, Credit River Indian Reserve,
Part 3 43R37754; City of Mississauga,
Being all of Pin 13504-0978 (LT),
Geographic Township of Toronto South, Peel County



Prepared by

Licensee: Helen R. Haines Archaeological Consulting Licence P124 Project Information Number P124-0164-2022

THE ARCHAEOLOGISTS INC.

Original Report Report Dated: September 27th, 2022

EXECUTIVE SUMMARY

The Archaeologists Inc. was contracted to conduct a Stage 1 & 2 Archaeological Assessment for 49 South Service Road, Part of Lot 1, Range 2, Credit River Indian Reserve, Part 3 43R37754; City of Mississauga, Being all of Pin 13504-0978 (LT), Geographic Township of Toronto South, Peel County. The archaeological assessment report is being conducted in advance of a development request to the City of Mississauga and is being triggered by the Planning Act.

A Stage 1 background study of the subject property was conducted to provide information about the property's geography, history, previous archaeological fieldwork and current land condition in order to evaluate and document in detail the property's archaeological potential and to recommend appropriate strategies for Stage 2 survey. A Stage 2 property assessment was conducted to document all archaeological resources on the property, to determine whether the property contains archaeological resources requiring further assessment, and to recommend next steps. The characteristics of the property dictated that the Stage 2 survey be conducted by test pit survey.

The Stage 1 background study concluded that the property exhibits archaeological potential. The Stage 2 property assessment did not identify any archaeological resources within the subject property. The report recommends that no further archaeological assessment of the property is required.



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PROJECT PERSONNEL

Project/Field Director: Mr. T. Keith Powers (P052)

Field Archaeologists Mr. T. Keith Powers

Mr. John Ellis Mr. Sam Filipe Mr. Quinn Powers

Report Preparation: Mrs. Susan Dyer

Mrs. Karen Powers

Graphics Mr. T. Keith Powers



INTRODUCTION

The Ontario Heritage Act, R.S.O. 1990 c. O18, requires anyone wishing to carry out archaeological fieldwork in Ontario to have a license from the Ministry of Tourism, Culture & Sport (MTCS). All licensees are to file a report with the MTCS containing details of the fieldwork that has been done for each project. Following standards and guidelines set out by the MTCS is a condition of a license to conduct archaeological fieldwork in Ontario. The Archaeologists Inc. 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 (Section 7.5.5)

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 (Section 7.5.6, Standards 1-3)

Section 7.5.6, Standard 1

The Archaeologists Inc. was contracted to conduct a Stage 1 & 2 Archaeological Assessment for 49 South Service Road, Part of Lot 1, Range 2, Credit River Indian Reserve, Part 3 43R37754; City of Mississauga, Being all of Pin 13504-0978 (LT), Geographic Township of Toronto South, Peel County. The archaeological assessment report is being conducted in advance of a development request to the City of Mississauga and is being triggered by the Planning Act.

Section 7.5.6, Standard 2

There is no additional development-related information relevant to understanding the choice of fieldwork strategy or recommendations made in the report.

Section 7.5.6, Standard 3

Permission to access the study area to conduct all required archaeological fieldwork activities, including the recovery of artifacts was given by the landowner and their representative.

1.2 Historical Context (Section 7.5.7, Standards 1-2)

Section 7.5.7, Standard 1

In advance of the Stage 2 assessment, a Stage 1 background study of the subject property was conducted in order to document the property archaeological and land use history and present condition. Several sources were referenced to determine if features or characteristics indicating archaeological potential for pre-contact and post-contact resources exist.



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 been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases, resource areas, (including food or medicinal plants, scarce raw materials, early Euro-Canadian industry), areas of early Euro-Canadian settlement, early historical transportation routes, property listed on a municipal register or designated under the *Ontario Heritage Act* or that is a federal, provincial or municipal historic landmark or site, and property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations.

Archaeological potential can be determined not to be present for either the entire property or a part of it when the area under consideration has been subject 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 may include: quarrying, major landscaping involving grading below topsoil, building footprints, and sewage and 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 property inspection that there has been complete and intensive disturbance of an area. Where complete disturbance cannot be demonstrated in Stage 1, it will be necessary to undertake Stage 2 assessment.

The background study determined that the following features or characteristics indicate archaeological potential for the subject property:

- There are 10 registered archaeological sites within a one-kilometre radius of the subject property.
- The subject property is located within the Iroquois Plain physiographic region, which consists of well-drained soils, favourable for both precontact and historic occupation.
- The 1877 Historical Atlas for the Township of Toronto South indicates that a tributary of Lake Ontario runs through the Lot.
- The subject property is located in an area known historically as the Credit River Indian Reserve.

Summary of Land Use History

Pre-Contact Land Use

The Precontact period began with the arrival of nomadic peoples with the gradual retreat of the glaciers approximately 12,000 years ago. Between 12,000 and 10,000 years before present, the Palaeoindian period was characterized by people that lived in small family



groups, subsisting on large game and other fauna associated with the cooler environments of the period.

Archaic Period (10,000 - 2800 BP) - As the climate in southern Ontario warmed, Aboriginal populations adapted to these new environments. New technologies and subsistence strategies were introduced and developed. Woodworking implements such as groundstone axes, adzes and gouges began to appear, as did net-sinkers (for fishing), numerous types of spear points and items made from native copper, which was mined from the Lake Superior region. The presence of native copper on archaeological sites in southern Ontario and adjacent areas suggests that Archaic groups were involved in long range exchange and interaction. The trade networks established at this time were to persist between Aboriginal groups until European contact. Archaic peoples became seasonal hunters and gatherers to exploit seasonably available resources in differing geographic areas. As the seasons changed, these bands split into smaller groups and moved inland to exploit other resources that were available during the fall and winter such as deer, rabbit, squirrel and bear, which thrived in the forested margins of these areas.

TABLE 1: OUTLINE OF SOUTHERN ONTARIO PREHISTORY				
Period	Archaeological Culture	Date Range	Attributes	
PALEO-IND	IAN			
Early	Gainey, Barnes, Crowfield	9000-8500 BC	Big game hunters	
Late	Holcombe, Hi-Lo,	8500-7500 BC	Small nomadic groups	
	Lanceolate			
ARCHAIC				
Early	Nettling, Bifurcate-base	7800-6000 BC	Nomadic hunters and gatherers	
Middle	Kirk, Stanly, Brewerton,	6000-2000 BC	Transitional to territorial	
	Laurentian		settlements	
Late	Lamoka, Genesee,	2500-500 BC	Polished/ground stone tools (small	
	Crawford Knoll, Innes		stemmed points)	
WOODLAN	D		· · ·	
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,	AD 1600-1650	Tribal displacements	
-	Odawa, Ojibwa		-	
Late	Six Nations Iroquois,	AD 1650-1800's		
	Ojibwa			
	Euro/Canadian	AD 1800-present	European settlement	

The Woodland Period (2800 BP to AD 750) saw the gradual establishment of technological and social changes, especially the appearance of clay pots. Population



increases also led to the establishment of larger camps and villages with more permanent structures. Elaborate burial rituals and the interment of numerous exotic grave goods with the deceased began to take place. Increased trade and interaction between southern Ontario populations and groups as far away as the Atlantic coast and the Ohio Valley was also taking place. The Late Woodland period is marked by the introduction of maize to Southern Ontario, ca. AD 700. With the development of horticulture as the predominant subsistence base, the Late Woodland Period gave rise to a tremendous population increase and the establishment of permanent villages. Social changes were also taking place and distinct clustering of both longhouses within villages (clan development) and villages within a region (tribal development). The Late Woodland groups that inhabited the Toronto area eventually moved their villages northward toward Georgian Bay. It was these and other groups in southwest Ontario that eventually evolved into the Aboriginal nations who interacted with and were described by French missionaries and explorers during the early seventeenth century.

Land Use Assessment – Lot 4, Range 2 Credit River I.R.

The 1859 Tremaine Map of the County of Peel, and the and the 1877 Illustrated Historical Atlas of the Township of Toronto South were reviewed in order to document and define the setting of the subject property within the nineteenth and twentieth century context. The historic mapping indicates that the subject property is located within Lot 1, Range 2 Credit River Indian Reserve.

The 1859 map indicates the Lot appears to be owned by two people. It is unclear if the division of the Lot is what is now known as Hurontario Street, but that appears to be the case. Henry Parker appears to own the portion of the Lot to the west of Hurontario Street. What appears to be a structure is depicted on his portion of the Lot, located immediately adjacent to the tributary running through the Lot. Robert Cotton appears to own the east of Hurontario Street, where our subject property is located. No structures are illustrated on his portion of the Lot. No structures are illustrated on the Lot on any of the historic mapping.

The 1877 Atlas indicates that Sir Henry Parker owns the portion of the property to the west of Hurontario Street. No structures are illustrated on his portion of the Lot. A tributary runs through his section of the Lot. Robert Cotton still owns the portion of the Lot to the east of Hurontario Street. No structures are illustrated on his portion of the Lot.

It must be noted that not all features of interest today would have been considered within the scope of the Atlas at the time of publication. Nevertheless, the Atlas is considered one source for the assessment of archaeological potential. It can therefore be concluded based on the above features, that the study area has potential for the identification of potentially significant historical archaeological remains.

Section 7.5.7, Standard 2



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The Stage 2 property assessment of the subject property will employ the strategy for test pit, following the standards listed in Section 2.1.1 of the 2011 Standards and Guidelines for Consultant Archaeologists. These are the appropriate strategies based on Stage 1 background study. To our knowledge there is no other report containing relevant background information related to this development project.

1.3 Archaeological Context (Section 7.5.8, Standards 1-7)

Section 7.5.8, Standard 1

In order that an inventory of archaeological resources could be compiled for the study area, three sources of information were consulted: the site forms for registered sites housed at the Ministry of Tourism and Culture; published and unpublished documentary sources; and the files of *The Archaeologists Inc*.

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. According to MTCS records there are no known archaeological sites within the subject property but there are 10 known sites within a one-kilometre radius of the subject property (Table 1).

Borden #	Site Name	Cultural Affiliation	Site Type
AjGv-9	Avonbridge	Archaic	Other-camp/campsite
AjGv-8	Eley	Archaic	Other-camp/campsite
AjGv-74	Stavebank Roal site	Archaic, Late, Woodland, Middle	
AjGv-6	Geveny	Archaic	Other-camp/campsite
AjGv-5	Glenburny	Pre-Contact	Other-camp/campsite
AjGv-4	Stillmeadow		
AjGv-3	Hogsback	Woodland, Middle	Burial, camp/campsite
AjGv-2	Murphy		
AjGv-17	Nunan		
AjGv-12	Pinewood Trail		

Section 7.5.8, Standard 2

The study area is situated within the Iroquois Plain physiographic region of Southern Ontario, which extends around the western part of Lake Ontario, from the Niagara River to the Trent River, its width varying from a few hundred yards to about eight miles. The lowland bordering Lake Ontario, when the last glacier was receding but still occupied the St. Lawrence Valley, was inundated by a body of water known as Lake Iroquois. The undulating till plains above its old shorelines make up the Iroquois plain (Chapman & Putnam, 1984). The Iroquois lake plain, cut in previously deposited clay and till, is partly floored with sand deposits.

The subject property is located at municipal address 49 South Service Road, in the City of Mississauga. It is bound on the East by South Service Road, on the southwest by Hurontario Street and on the northwest by Queen Elizabeth Way. The subject property



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currently consists of existing standing structures, areas of tarmac/concrete parking and walkways and manicured lawn and treed areas.

Section 7.5.8, Standard 3

The Stage 2 archaeological fieldwork of the subject property was undertaken on September 21st, 2022 under favorable conditions for the assessment.

Section 7.5.8, Standard 4

No previous archaeological fieldwork has taken place within the limits of the project area. The Archaeologists Inc. is not aware of any other archaeological fieldwork carried out immediately adjacent (i.e. within 50m) of the subject property.

Section 7.5.8, Standard 5

We are unaware of previous findings and recommendations relevant to the current stage of work.

Section 7.5.8, Standard 6

There are no unusual physical features that may have affected fieldwork strategy decisions or the identification of artifacts or cultural features.

Section 7.5.8, Standard 7

There is no additional archaeological information that may be relevant to understanding the choice of fieldwork techniques or the recommendations of this report.



2.0 FIELD METHODS (Section 7.8.1, Standards 1-3)

This section of the report addresses Section 7.8.1 of the 2011 Standards and Guidelines for Consultant Archaeologists. It does not address Section 7.7.2 because no property inspection was done as a separate Stage 1.

Section 7.8.1, Standard 1

Portions of the property were not surveyed due to previous disturbance and slope. These include the existing structures and areas of tarmac/concrete parking and walkways.

Section 7.8.1, Standard 2

As relevant, we provide detailed and explicit descriptions addressing Standards 2a, b and c. Standard 2d is not relevant.

Section 7.8.1, Standard 2a - The general standards for property survey under Section 2.1 of the 2011 Standards and Guidelines for Consultant Archaeologists were addressed as follows:

- Section 2.1, S1 Only portions of the subject property were surveyed. Areas meeting the exemptions as per Standard 2b, were not surveyed.
- Section 2.1, S2a (land of no or low potential due to physical features such as permanently wet areas, exposed bedrock, and steep slopes) n/a.
- Section 2.1, S2b (no or low potential due to extensive and deep land alterations)

 The existing structures, along with associated tarmac/concrete parking and walkways. These areas are considered as having no or low potential based on the Stage 2 identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources.
- Section 2.1, S2c (lands recommended not to require Stage 2 assessment by a
 previous Stage 1 report where the ministry has accepted that Stage 1 into the
 register) n/a
- Section 2.1, S2d (lands designated for forest management activity w/o potential for impacts to archaeological sites, as determined through Stage 1 forest management plans process) n/a
- Section 2.1, S2e (lands formally prohibited from alterations) n/a
- Section 2.1, S2f (lands confirmed to be transferred to a public land holding body, etc) n/a
- Section 2.1, S3 The Stage 2 survey was conducted when weather and lighting conditions permitted excellent visibility of features.
- Section 2.1, S4 No GPS recordings were taken as no artifacts were found during the Stage 2 assessment.
- Section 2.1, S5 All field activities were mapped in reference to either fixed landmarks, survey stakes and development markers as appropriate. See report section 9.0 Maps.



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- Section 2.1, S6 See report section 8.0 *Images* for photo documentation of examples of field conditions encountered.
- Section 2.1, S7 n/a

Section 7.8.1, Standard 2b - The subject property was subject to a systematic test pit survey appropriate to the characteristics of the property.

The test pit survey of the property followed the standards within Section 2.1.2 of the 2011 Standards and Guidelines for Consultant Archaeologists. Test pit survey was only conducted where ploughing was not possible or viable, as per Standard 1. Test pits were spaced at maximum intervals of five metres and to within one metre of built structures, when present, or until test pits show evidence of recent ground disturbance. All test pits were at least 30 cm in diameter. Each test pit was excavated by hand, into the first five cm of subsoil and examined for stratigraphy, cultural features, or evidence of fill. No stratigraphy or cultural features were noted. Soils were screened through 6mm mesh. All test pits were backfilled.

Section 7.8.1, Standard 2c – Not all areas of the subject property were surveyed at five metre intervals. The disturbed areas noted above were not subjected to a systematic test pit survey at 5-metre intervals. These included the existing structures and areas of tarmac/concrete parking and walkways.

Section 7.8.1, Standard 3

Approximately 20% of the property was subject to a systematic test pit survey at a five metre interval. The remaining approximately 80% of the subject property was considered disturbed with the existing structures and areas of tarmac/concrete parking and walkways.



3.0 RECORD OF FINDS (Section 7.8.2, Standards 1-3)

This section documents all finds discovered as a result of the Stage 1 and 2 archaeological assessment of the subject property.

Section 7.8.2, Standard 1

No archaeological resources or sites were identified in the Stage 2.

Section 7.8.2, Standard 2

An inventory of the documentary record generated in the field is provided in Table 2.

Table 2: Inventory of Documentary Record			
Document Type	Description		
Field Notes	This report constitutes the field notes for this project		
Photographs	• 12 digital photographs		
Maps	• Figures in the report represent all of the maps generated in the field.		

Section 7.8.2, Standard 3

Information detailing exact site locations on the property is not submitted because no sites or archaeological resources were identified in the Stage 2 assessment.

4.0 ANALYSIS AND CONCLUSIONS (Section 7.8.3, Standards 1-2)

Section 7.8.3, Standard 1

No archaeological sites were identified. Standard 2 is not addressed because no sites were identified.

5.0 RECOMMENDATIONS (Section 7.8.4, Standards 1-3)

Section 7.8.4, Standard 1

This standard is not applicable as no sites were identified.

Section 7.8.4, Standard 2

The report makes recommendations only regarding archaeological matters.

Section 7.8.4, Standard 3

The Stage 2 survey did not identify any archaeological sites requiring further assessment or mitigation of impacts and it is recommended that no further archaeological assessment of the property be required.



6.0 ADVICE ON COMPLIANCE WITH LEGISLATION (Section 7.5.9, Standards 1-2)

Section 7.5.9, Standard 1a

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, 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 Tourism and Culture, 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.



7.0 BIBLIOGRAPHY AND SOURCES (Section 7.5.10, Standards 1)

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.

Ministry of Tourism and Culture

2011 Standards and Guidelines for Consultant Archaeologists.

Walker & Miles

1877 The Illustrated Historical Atlas of Peel County.

Toronto Township Credit Reserve

1846 Copy of P.L.T. John L. Dennis's Plan of Indian Reserve River Credit



8.0 IMAGES (Sections 7.5.11, 7.7.5, 7.8.6)



Plate 1 Shows area assessed by test pit survey.



Plate 2 Shows area assessed by test pit survey.





Plate 3 Shows area of tarmac/concrete and existing standing structure.



Plate 4 Shows area of tarmac/concrete and existing standing structure.



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Plate 5 Shows area of tarmac/concrete and existing standing structure.



Plate 6 Shows area of tarmac/concrete and existing standing structure.



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Plate 7 Shows area of tarmac/concrete and existing standing structure.



Plate 8 Shows area of tarmac/concrete.



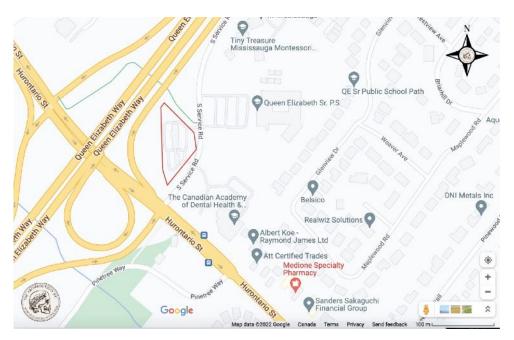
Stage 1 & 2 Archaeological Assessment for 49 South Service Road, Part of Lot 1, Range 2, Credit River Indian Reserve, Part 3 43R37754; City of Mississauga, Being all of Pin 13504-0978 (LT), Geographic Township of Toronto South, Peel County



Plate 9 Shows subject property conditions.

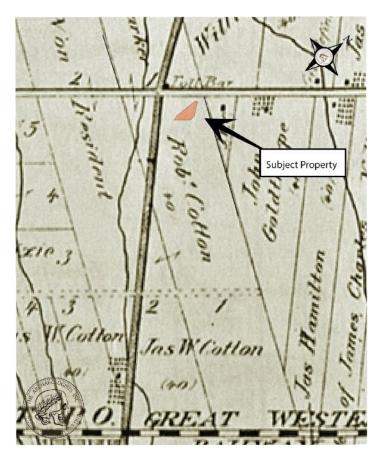


9.0 MAPS (Section 7.5.12, 7.7.6, 7.8.7)



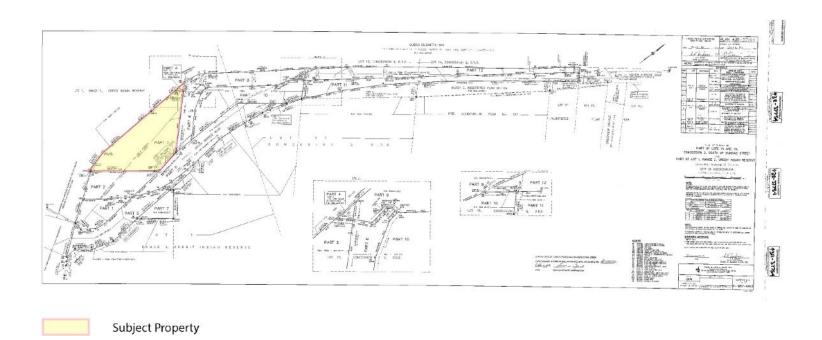
Map 1 General location of subject property.





 $\it Map~2$ Approximate location of subject property, overlaid in red, on 1877 Illustrated Atlas.

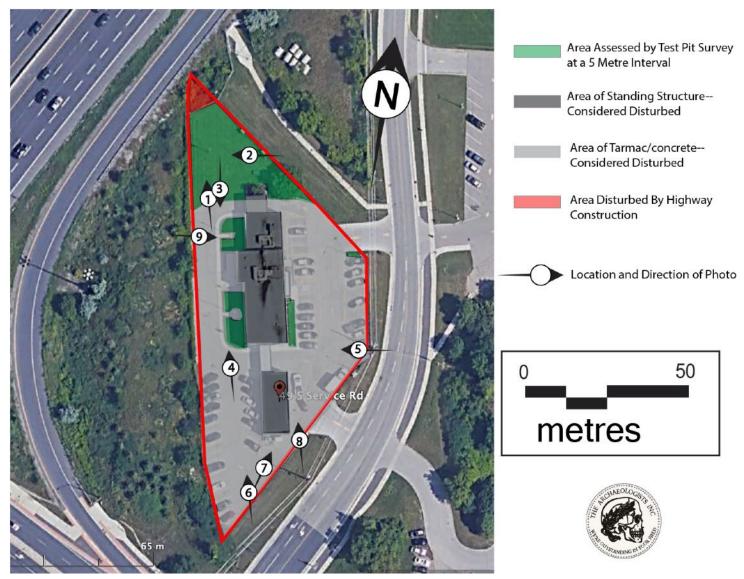




Map 3 Clear copy of mapping provided by proponent.



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Map 4 Results of Stage 2 archaeological assessment.

