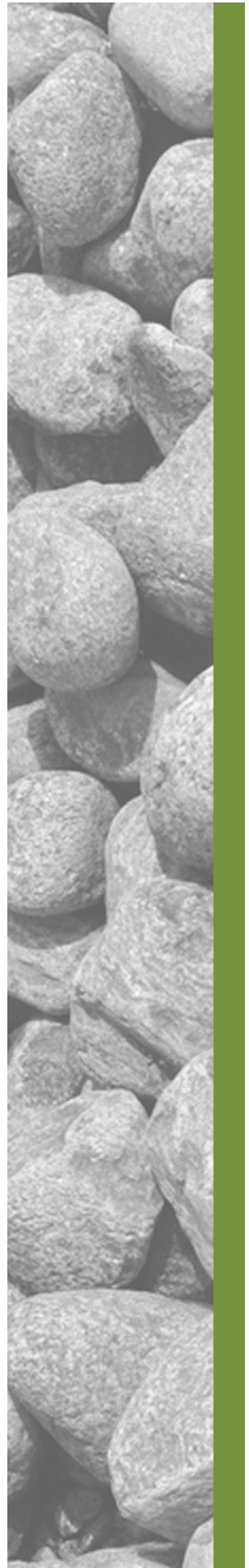


Appendix C

Archaeological Assessment (Stage 1 and 2)

TMHC



**Stage 1-2 Archaeological Assessment
Aggregate Pit License Expansion
Part of Lot 17, Concession 2 North Division
Geographic Township of North Dorchester
Now the Municipality of Thames Centre
Middlesex County, Ontario**

Original Report

Submitted to:
Ministry of Citizenship and Multiculturalism

Prepared for:
Harrington McAvan Ltd.
41 Main Street, Unit 102,
Unionville, Ontario L3R 2E5

Prepared by:
TMHC Inc.
1108 Dundas Street, Unit 105
London, ON N5W 3A7
519-641-7222
tmhc.ca



Licensee: Matthew Severn, MA P1093
PIF No: P1093-0010-2024
Project No: 2024-498
Dated: February 18, 2025



EXECUTIVE SUMMARY

A Stage 1 and 2 archaeological assessment was conducted for a proposed aggregate pit licensing application to permit a proposed expansion of an aggregate pit located in the Municipality of Thames Centre, Ontario. The project area is roughly 11.14 ha (27.5 ac) in size and is located within Lot 17, Concession 2 North Division in the Geographic Township of North Dorchester, now the Municipality of Thames Centre, Middlesex County, Ontario. The project area contains an active agricultural field. In 2024 TMHC was contracted by Harrington McAvan Limited on behalf of D & J Paton Bros Limited to carry out the assessment, which was conducted in accordance with the provisions of the *Aggregate Licensing Act*. The purpose of the assessment was to determine whether there were archaeological resources present within the project area.

The Stage 1 background study included a review of current land use, historic and modern maps, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. It also involved a review of previously registered archaeological resources within 1 km of the project area and previous archaeological assessments within 50 m. The background study indicated that the property had potential for the recovery of archaeological resources due the proximity (i.e., within 300 m) of features that signal archaeological potential, namely:

- mapped 19th-century thoroughfares (Trafalgar Street);
- mapped 19th -century structures; and,
- registered archaeological sites (AgHg-19 and AgHg-22).

The project area consists entirely of ploughable lands; these were subject to Stage 2 assessment via standard pedestrian survey at a 5 m transect interval (99.1%; 11.04 ha), in keeping with provincial standards. The remainder of the project area (0.1%; 0.9 ha) consists of a low and permanently wet area deemed of low archaeological potential. It was photo-documented.

All work met provincial standards, and no archaeological material was documented during the assessment. As such, no further archaeological assessment is recommended.

These recommendations are subject to the conditions laid out in Section 5.0 of this report, and to the Ministry of Citizenship and Multiculturalism's (MCM's) review and acceptance of this report into the provincial register of archaeological reports.



TABLE OF CONTENTS

Executive Summary	i
Table of Contents	ii
List of Images	iii
List of Maps	iii
List of Tables	iii
List of SD Maps	iii
Project Personnel	iv
Acknowledgements	iv
Territorial Acknowledgement	v
Indigenous Participants	vi
About TMHC	vii
Key Staff Bios	viii
Statement of Qualifications and Limitations	ix
Quality Information	x
1 Project Context	1
1.1 Development Context	1
1.1.1 Introduction	1
1.1.2 Purpose and Legislative Context	2
2 Stage 1 Background Review	3
2.1 Research Methods and Sources	3
2.2 Project Context: Archaeological Context	5
2.2.1 Project area: Overview and Physical Setting	5
2.2.2 Summary of Registered or Known Archaeological Sites	6
2.2.3 Summary of Past Archaeological Investigations within 50 m	6
2.3 Dates of Archaeological Fieldwork	7
2.4 Project Context: Historical Context	8
2.4.1 Indigenous Settlement in Middlesex County	8
2.4.2 Treaty History	11
2.4.3 Nineteenth-Century and Municipal Settlement	12
2.4.4 Review of Historic Maps	13
2.4.5 Review of Heritage Properties	13
2.5 Analysis and Conclusions	14
2.6 Recommendations	14
3 Stage 2 Archaeological Assessment	15
3.1 Field Methods	15
3.2 Record of Finds	15
3.3 Analysis and Conclusions	16
3.4 Recommendations	16
4 Summary	17
5 Advice on Compliance with Legislation	18
6 Bibliography	19
7 Images	22
8 Maps	26



SUPPLEMENTARY DOCUMENTATION 36
 Summary of Indigenous Engagement 38

LIST OF IMAGES

Image 1: Pedestrian Survey at 5 m Interval – Western Project Area..... 23
 Image 2: Pedestrian Survey at 5 m Interval – Eastern Project Area 23
 Image 3: Surface Visibility 24
 Image 4: Surface Visibility 24
 Image 5: Low and Permanently Wet Area in the Northern Project Area 25

LIST OF MAPS

Map 1: Location of the Project Area in Middlesex County, ON..... 27
 Map 2: Aerial Photograph Showing the Location of the Project Area 28
 Map 3: Physiography Within the Vicinity of the Project Area..... 29
 Map 4: Soils Within the Vicinity of the Project Area 30
 Map 5: Location of the Project Area Shown on the 1857 Map of Oxford County and the 1862 Map of Middlesex County..... 31
 Map 6: Location of the Project Area Shown on the 1876 Historical Atlas of Oxford County and the 1878 Historical Atlas of Middlesex County 32
 Map 7: Stage 2 Field Conditions and Assessment Methods..... 33
 Map 8: Stage 2 Field Conditions and Assessment Methods Shown on Proponent Mapping..... 34
 Map 9: Unaltered Proponent Mapping..... 35

LIST OF TABLES

Table 1: Registered Archaeological Sites within 1 km of the Project Area..... 6
 Table 2: Chronology of Indigenous Settlement in Middlesex County 8
 Table 3: Documentary Records 15

LIST OF SD MAPS

SD Map 1: Stage 2 Assessment Results (TMHC 2016)..... 37

LIST OF SD TABLES

SD Table 1: Summary of Indigenous Engagement Correspondence..... 39



PROJECT PERSONNEL

Project Manager	Matthew Severn, MA (PI093)
Project Administrators	Kellie Theaker, CHRP Victoria Scott, MA, MLis Sara Harvey
Health and Safety Coordinator	Wendi Jakob, C.Tech, CAPM
Fieldwork Coordinator	Valerie Wolfkamp, MA
Field Director	Lauren Donker, BA (R1386)
Field Technicians	Matthew Beaudoin, PhD (P324) Robert Brown, BA Caitlin Hendrick
GIS Technicians	Andrew Turner, BA (R1042) David Gostick, BA
Report Writers	Matthew Severn, MA (PI093) Lauren Donker, BA (R1386)
Senior Reviewer	Matthew Beaudoin, PhD (P324)

ACKNOWLEDGEMENTS

Bernie Janssen	Harrington McAvan Limited
Don and John Paton	D & J Paton Bros. Limited Landscape Supplies



TERRITORIAL ACKNOWLEDGEMENT

The project area is located on the traditional lands of the Anishinaabek (Ah-nish-in-a-bek), Haudenosaunee (Ho-den-no-show-nee), Lūnaapéewak (Len-ahpay-wuk), and Attawandaron (Add-a-won-da-run) peoples, on lands connected with the London Township Treaty of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous peoples (e.g., First Nations, Métis and Inuit) who are contemporary stewards of the land.



INDIGENOUS PARTICIPANTS

Loyane (Chief) – Sonohse:s (Turtle) Clan	Al Day		
Fieldwork Monitor	Elton (Bear) John		
Deshkan Ziibiing (Chippewas of the Thames First Nation)			
Coordinators:	Fallon Burch	Carolyn Albert	Jennifer Mills
Field Work Monitor	Jennifer Antone		



ABOUT TMHC

Established in 2003 with a head office in London, Ontario, TMHC Inc. (TMHC) provides a broad range of archaeological assessment, heritage planning and interpretation, cemetery, and community consultation services throughout the Province of Ontario. We specialize in providing heritage solutions that suit the past and present for a range of clients and intended audiences, while meeting the demands of the regulatory environment. Over the past two decades, TMHC has grown to become one of the largest privately-owned heritage consulting firms in Ontario and is today the largest predominately woman-owned CRM business in Canada.

Since 2004, TMHC has held retainers with Infrastructure Ontario, Hydro One, the Ministry of Transportation, Metrolinx, the City of Hamilton, and Niagara Parks Commission. In 2013, TMHC earned the Ontario Archaeological Society's award for Excellence in Cultural Resource Management. Our seasoned expertise and practical approach have allowed us to manage a wide variety of large, complex, and highly sensitive projects to successful completion. Through this work, we have gained corporate experience in helping our clients work through difficult issues to achieve resolution.

TMHC is skilled at meeting established deadlines and budgets, maintaining a healthy and safe work environment, and carrying out quality heritage activities to ensure that all projects are completed diligently and safely. Additionally, we have developed long-standing relationships of trust with Indigenous and descendent communities across Ontario and a good understanding of community interests and concerns in heritage matters, which assists in successful project completion.

TMHC is a Living Wage certified employer with the [Ontario Living Wage Network](#) and a member of the [Canadian Federation for Independent Business](#).



KEY STAFF BIOS

Matthew Beaudoin, PhD – Principal

Matthew received a PhD in Anthropology from Western University in 2013 and has a professional archaeological license with the Province of Ontario (P324). During his archaeological career, Matthew has conducted extensive field research and artifact analysis in Labrador and Ontario, and has taught the Field Methods Course and Principals of archaeology courses as a part-time faculty member at Western University. Matthew has also conducted ethnographic projects in Labrador, and has volunteered with the OAS to provide archaeological training to several Indigenous communities throughout the province.

Over the course of his career, Matthew has supervised over 600 archaeological assessments in Ontario, including Stages 1-4, under a variety of regulatory triggers including provincial and municipal Environmental Assessments, Green Energy projects, development projects under the *Planning Act*, and as due diligence process. Matthew has extensive experience managing large and complex archaeological projects in conjunction with other disciplines, specialists, and Indigenous communities including Enbridge Line 10 Westover Segment, Imperial Oil from Waterdown to Finch, and Highway 3 Widening in Kingsville. Since joining TMHC in 2008, Matthew has also been involved with several notable projects, such as the archaeological assessment of Stoney Point/Camp Ipperwash. For these and other projects, Matthew works closely with heritage staff at TMHC and with heritage staff employed by clients and stakeholder communities.

Matthew is an active member of the Canadian Archaeological Association, the Ontario Archaeological Society, the Society for American Archaeology, and the Society for Historical Archaeology.

Matthew Severn, MA – Archaeology Project Lead – Transportation Division

Matthew has been involved in Ontario archaeology for over a decade. Throughout that time, he has earned extensive experience participating in, directing and managing numerous archaeological assessments across all stages. These surveys have spanned Ontario with numerous assessments involving complex field methods and time-sensitive deadlines. Matthew has worked with and maintains respectful relationships among numerous Indigenous communities throughout Ontario seeking their insight and perspectives. Matthew has also catalogued and analysed various Indigenous artifacts and written numerous archaeological reports as required by the Ministry of Citizenship and Multiculturalism. Matthew received a Master's Degree from Western University in 2023. His research focused on two sites east of Sarnia that span the Woodland period. Matthew is a member of the Canadian Archaeological Association and currently serves as Vice President for the London Chapter of the Ontario Archaeological Society.



STATEMENT OF QUALIFICATIONS AND LIMITATIONS

The attached Report (the “Report”) has been prepared by TMHC Inc. (TMHC) for the benefit of the Client (the “Client”) in accordance with the agreement between TMHC and the Client, including the scope of work detailed therein (the “Agreement”).

The information, data, recommendations and conclusions contained in the Report (collectively, the “Information”):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the “Limitations”);
- represents TMHC’s professional judgment in light of the Limitation and industry standards for the preparation of similar reports;
- may be based on information provided to TMHC which has not been independently verified;
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued;
- must be read as a whole and sections thereof should not be read out of such context; and
- was prepared for the specific purposes described in the Report and the Agreement.

TMHC shall be entitled to rely upon the accuracy and completeness of information that was provided to it and has no obligation to update such information. TMHC accepts no responsibility for any events or circumstances that may have occurred since the date on which the Report was prepared and, in the case of subsurface, environmental or geotechnical conditions, is not responsible for any variability in such conditions, geographically or over time.

TMHC agrees that the Report represents its professional judgement as described above and that the Information has been prepared for the specific purpose and use described in the Report and the Agreement, but TMHC makes no other representations, or any guarantees or warranties whatsoever, whether express or implied, with respect to the Report, the Information or any part thereof.

Except (1) as agreed to in writing by TMHC and Client; (2) as required by-law; or (3) to the extent used by governmental reviewing agencies for the purpose of obtaining permits or approvals, the Report and the Information may be used and relied upon only by Client.

TMHC accepts no responsibility, and denies any liability whatsoever, to parties other than Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information (“improper use of the Report”), except to the extent those parties have obtained the prior written consent of TMHC to use and rely upon the Report and the Information. Any injury, loss or damages arising from improper use of the Report shall be borne by the party making such use.

This Statement of Qualifications and Limitations is attached to and forms part of the Report and any use of the Report is subject to the terms hereof.



QUALITY INFORMATION

Report prepared by:



Lauren Donker, BA (RI386)

Field Director

Project managed by:



Matthew Severn, MA (PI093)

Archaeology Project Lead

Report reviewed by:



Matthew Beaudoin, PhD (P324)

Principal/Manager of Archaeological Assessment



I PROJECT CONTEXT

I.1 Development Context

I.1.1 Introduction

A Stage 1 and 2 archaeological assessment was conducted for a proposed aggregate pit licensing application to permit a proposed expansion of an aggregate pit located in the Municipality of Thames Centre, Ontario. The project area is roughly 11.14 ha (27.5 ac) in size and is located within Lot 17, Concession 2 North Division in the Geographic Township of North Dorchester, now the Municipality of Thames Centre, Middlesex County, Ontario. The project area contains an active agricultural field. In 2024 TMHC was contracted by Harrington McAvan Limited on behalf of D & J Paton Bros Limited to carry out the assessment, which was conducted in accordance with the provisions of the *Aggregate Licensing Act*. The purpose of the assessment was to determine whether there were archaeological resources present within the project area.

All archaeological assessment activities were performed under the professional archaeological license of Matthew Severn, MA (P1093) and in accordance with the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011, "Standards and Guidelines"). Permission to enter the property and carry out all required archaeological activities, including collecting artifacts when found, was given by Harrington McAvan Limited on behalf of John Paton of D & J Paton Bros Limited.



1.1.2 Purpose and Legislative Context

The *Ontario Heritage Act* (R.S.O. 1990) ([OHA](#)) provides legislative oversight for the conservation, protection, and preservation of heritage resources in the Province of Ontario, including archaeological resources. The *OHA* assigns responsibility for doing so to a provincial ministry, now the Ministry of Citizenship and Multiculturalism (MCM). The MCM regulates how archaeological sites are dealt with by:

- Establishing a system to license individuals permitted to identify and investigate archaeological sites;
- Creating technical standards and guidelines for archaeological fieldwork and reporting;
- Maintaining a list of registered archaeological sites; and
- Overseeing transfers of archaeological collections.

The *OHA* does not speak to the need for undertaking archaeological assessments prior to land development. Instead, it regulates how such work must be undertaken and how archaeological sites are dealt with when the need for an archaeological assessment is prompted by other pieces of legislation.

The Aggregate Resources Act (RSO 1990) calls for the conservation of heritage resources and all class-specific license applications filed with the Ministry of Natural Resources must provide technical reports that outline measures for the identification and mitigation of archaeological resources within proposed extraction areas. Thus, cultural heritage resources must be considered within the licensing approval process. Aggregate extraction may only take place on properties that have been cleared of archaeological concern. A Stage 1 background review is carried out to determine if there is potential for the discovery of archaeological sites within a proposed licensed area. If a property demonstrates archaeological potential, a Stage 2 field survey must be carried out. If potentially significant sites are found during the field review, subsequent Stage 3 and Stage 4 assessments may be required.



2 STAGE I BACKGROUND REVIEW

2.1 Research Methods and Sources

A Stage I overview and background study was conducted to gather information about known and potential cultural heritage resources within the project area. According to the *Standards and Guidelines*, a Stage I background study must include a review of:

- an up-to-date listing of sites from the Ministry of Citizenship and Multiculturalism's (MCM) PastPortal for 1 km around the property;
- reports of previous archaeological fieldwork within a radius of 50 m around the property;
- topographic maps at 1:10,000 (recent and historical) or the most detailed scale available;
- historical settlement maps (e.g., historical atlas, survey);
- archaeological management plans or other archaeological potential mapping when available; and,
- commemorative plaques or monuments on or near the property.

For this project, the following activities were carried out to satisfy or exceed the above requirements:

- a database search was completed through MCM's PastPortal system that compiled a list of registered archaeological sites within 1 km of the project area (completed November 12, 2024);
- a review of known prior archaeological reports for the property and adjacent lands;
- Ontario Base Mapping (1:10,000) was reviewed through ArcGIS and mapping layers under the Open Government Licence – Canada and the Open Government Licence- Ontario;
- detailed mapping provided by the client was reviewed; and,
- a series of historic maps and photographs was reviewed related to the post-1800 land settlement.

Additional sources of information were also consulted, including modern aerial photographs, local history accounts, soils data provided by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA), physiographic data provided by the Ontario Ministry of Northern Development and Mines, and detailed topographic data provided by Land Information Ontario.

When compiled, background information was used to create a summary of the characteristics of the project area, to evaluate its archaeological potential. The Province of Ontario (MTC 2011; Section 1.3.1) has defined the criteria that identify archaeological potential as:

- previously identified archaeological sites;
- water sources;
 - primary water sources (e.g., lakes, rivers, streams, creeks);
 - secondary water sources (e.g., intermittent streams and creeks, springs, marshes, swamps);
 - features indicating past water sources (e.g., glacial lake shorelines, relic river or stream channels, shorelines of drained lakes or marshes, cobble beaches);
 - accessible or inaccessible shorelines (e.g., high bluffs, sandbars stretching into a marsh);
- elevated topography (e.g., eskers, drumlins, large knolls, plateau);
- pockets of well-drained sandy soils;
- distinctive land formations that might have been special or spiritual places (e.g., waterfalls, rock outcrops, caverns, mounds, promontories and their bases);



- resource areas, including:
 - food or medicinal plants (e.g., migratory routes, spawning areas, prairies);
 - scarce raw materials (e.g., quartz, copper, ochre, or chert outcrops);
 - early industry (e.g., fur trade, logging, prospecting, mining);
- areas of early 19th-century settlement, including:
 - early military locations;
 - pioneer settlement (e.g., homesteads, isolated cabins, farmstead complexes);
 - wharf or dock complexes;
 - pioneer churches;
 - early cemeteries;
- early transportation routes (e.g., trails, passes, roads, railways, portage routes);
- a property listed on a municipal register, designated under the *Ontario Heritage Act*, or that is a federal, provincial, or municipal historic landmark or site; and,
- a property that local histories or informants have identified with possible archaeological sites, historical event, activities, or occupations.

In Southern Ontario (south of the Canadian Shield), any lands within 300 m of any of the features listed above are considered to have potential for the discovery of archaeological resources.

Typically, a Stage 1 assessment will determine potential for Indigenous and 19th-century period sites independently. This is due to the fact that lifeways varied considerably during these eras, so the criteria used to evaluate potential for each type of site also varies.

It should be noted that some factors can also negate the potential for discovery of intact archaeological deposits. The *Standards and Guidelines* (MTC 2011; Section 1.3.2) indicates that archaeological potential can be removed in instances where land has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Major disturbances indicating removal of archaeological potential include, but are not limited to:

- quarrying;
- major landscaping involving grading below topsoil;
- building footprints; and,
- sewage and infrastructure development.

Some activities (agricultural cultivation, surface landscaping, installation of gravel trails, etc.) may result in minor alterations to the surface topsoil but do not necessarily affect or remove archaeological potential. It is not uncommon for archaeological sites, including structural foundations, subsurface features and burials, to be found intact beneath major surface features like roadways and parking lots. Archaeological potential is, therefore, not removed in cases where there is a chance of deeply buried deposits, as in a developed or urban context or floodplain where modern features or alluvial soils can effectively cap and preserve archaeological resources.



2.2 Project Context: Archaeological Context

2.2.1 Project area: Overview and Physical Setting

The project area is located within an agricultural field south of 6545 Trafalgar Street in the Municipality of Thames Centre. It is roughly 11.14 ha (27.5 ac) in size and is located within Lot 17, Concession 2 North Division, in the Geographic Township of North Dorchester, now the Municipality of Thames Centre, Middlesex County (Maps 1 and 2). The project area contains an active agricultural field bound by a treeline to the west, and woodlots to the south and east.

The project area falls within the Oxford Till Plain physiographic region, as defined by Chapman and Putnam (1984:143) and within a spillway and undrumlined till plain. The spillway crosses undrumlined till plain. The earliest of the glacial spillways laid down beds of silt and fine sand whereas later, when water levels lowered, gravelly alluvium was deposited over the lower parts of the basin and along the Thames River. For some time now the basin's sand and gravel deposits have been used for aggregate extraction (Chapman and Putnam 1984:146).

According to formal soil surveys for Middlesex County, the project area contains three soil types: Caledon sandy loam, Thorndale loam, and Burford sandy loam (Map 4).

Caledon sandy loam comprises much of the project area and is commonly developed on level to undulating topography (Hagerty and Kingston 1992: 44). Caledon sandy loam is sandy-textured and overlies gravelly, glaciofluvial outwash material (Hagerty and Kingston 1992: 44). Due to its coarse texture and gravel content Caledon soils typically have poor moisture retention (Hagerty and Kingston 1992: 45).

Thorndale loam is present in the northwest of the project area and is developed on level to undulating topography comprising loamy till. Higher gravel content consisting of cobbles and stones is typical. Thorndale loam is characterized as imperfectly draining with a high moisture holding capacity.

Located in the southern limits of the project area is Burford sandy loam. This soil type is developed on gravelly glaciofluvial outwash deposits with cobble-sized coarse fragments present. Burford sandy loam is characterized as rapidly draining.

The project area is situated within the Thames River drainage. The Middle Thames River is located approximately 2.6 km to the east, while Caddy Creek, a tributary of the Thames River, along with its unnamed tributaries flow roughly 1 km to the north and to the south of the project area (Map 1).



2.2.2 Summary of Registered or Known Archaeological Sites

According to PastPortal (accessed November 12, 2024) there are four registered archaeological sites within 1 km of the project area (Table 1). AgHg-19 is the closest registered site to the project area, being roughly 200 m to the northwest. AgHg-19 consists of a large scatter of late 19th-century to early 20th-century artifacts and two pieces of chipping detritus. Based on background research AgHg-19 was determined to not require additional assessment. AgHg-22 is the next closest registered site to the project area, being approximately 400 m to the northwest. AgHg-22 consists of an isolated find of a Brewerton-type projectile point.

Table 1: Registered Archaeological Sites within 1 km of the Project Area

Borden Number	Site Name	Time Period	Affinity	Site Type	Status
AgHg-23		Archaic, Early		findspot	No Further CHVI
AgHg-22		Archaic, Middle	Aboriginal	findspot	No Further CHVI
AgHg-19		Post-Contact, Pre-Contact	Aboriginal	Unknown, farmstead	No Further CHVI
AgHg-18		Post-Contact, Pre-Contact	Aboriginal	Unknown, farmstead	No Further CHVI

2.2.3 Summary of Past Archaeological Investigations within 50 m

During this study, records were found for one archaeological investigation within 50 m of the project area. However, it should be noted that the MCM currently does not provide an inventory of archaeological assessments to assist in this determination.

2.2.3.1 Stage 1 & 2 Archaeological Assessment – Proposed Aggregate Pit 6351 Trafalgar Street (SD Map 1)

In 2016, TMHC conducted Stage 1 and 2 archaeological assessments for an aggregate pit license application for part of Lots 16 and 17, Concession 2 NRT, Thames Centre, ON (near 6351 Trafalgar Street). The Stage 1 background research determined that the property retained archaeological potential and Stage 2 assessment was recommended. The Stage 2 survey consisted of a standard pedestrian survey at 5 m intervals and photo documentation of areas of low archaeological potential. The Stage 2 survey resulted in the discovery of two archaeological locations, designated as Location 1 (AgHg-18) and Location 2 (AgHg-19). Location 1 is a multicomponent site, consisting of 19th century material and one undiagnostic lithic artifact. Location 2 is also a multicomponent site, consisting of 19th century material and two undiagnostic lithic artifacts. The results of this assessment are presented in a report entitled *Stage 1&2 Archaeological Assessment, Proposed Aggregate Pit, 6351 Trafalgar Street, Part of Lots 16 and 17, Concession 2 Northern Division, Geographic Township of North Dorchester, now the Municipality of Thames Centre, Middlesex County, Ontario* (TMHC 2016; Licensee Matthew Beaudoin, PIF P324-0097-2016).



2.3 Dates of Archaeological Fieldwork

The Stage 2 fieldwork was conducted on November 27, 2024, in sunny and cold weather conditions under the direction of Lauren Donker, BA (R1386).



2.4 Project Context: Historical Context

2.4.1 Indigenous Settlement in Middlesex County

Middlesex County is home to numerous archaeological sites, including several Iroquoian villages, hamlets and cabins. In recent years, our archaeological knowledge of the area has improved greatly, at the hands of various cultural resource management surveys and archaeological research projects that have accompanied the industrial and residential expansion. Using existing data and regional syntheses, it is possible to propose a generalized model of Indigenous settlement in Middlesex County. The general themes, time periods and cultural traditions of Indigenous settlement, based on archaeological evidence, are provided below and in Table 2.

Table 2: Chronology of Indigenous Settlement in Middlesex County

Period	Time Range	Diagnostic Features	Archaeological Complexes
Early Paleo	9000-8400 BCE	fluted projectile points	Gainey, Barnes, Crowfield
Late Paleo	8400-8000 BCE	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Early Archaic	8000-6000 BCE	serrated, notched, bifurcate base points	Nettling, Bifurcate Base Horizon
Middle Archaic	6000-2500 BCE	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
Late Archaic	2000-1800 BCE	narrow points	Lamoka
Late Archaic	1800-1500 BCE	broad points	Genesee, Adder Orchard, Perkiomen
Late Archaic	1500-1100 BCE	small points	Crawford Knoll
Terminal Archaic	1100-950 BCE	first true cemeteries	Hind
Early Woodland	950-400 BCE	expanding stemmed points, Vinette pottery	Meadowood
Middle Woodland	400 BCE-500 CE	dentate, pseudo-scallop pottery	Saugeen/Couture
Transitional Woodland	500-900 CE	first corn, cord-wrapped stick pottery	Princess Point/Riviere au Vase
Late Woodland	900-1300 CE	first villages, corn horticulture, longhouses	
Late Woodland	1300-1400 CE	large villages and houses	
Late Woodland	1400-1650 CE	tribal emergence, territoriality	
Contact Period - Indigenous	1700 CE-present	treaties, mixture of Indigenous & European items	
Contact Period - Settler	1796 CE-present	industrial goods, homesteads	pioneer life, municipal settlement



2.4.1.1 Paleo Period

The first human populations to inhabit Middlesex County arrived between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different than they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleo by archaeologists, Ontario's Indigenous peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In this area, caribou may have provided the staple of the Paleo period diet, supplemented by wild plants, small game, birds and fish.

Given the low density of populations on the landscape at this time and their mobile nature, Paleo period sites are small and ephemeral. They are sometimes identified by the presence of fluted projectile points manufactured on a highly distinctive whitish-grey chert named "Fossil Hill" (after the formation) or "Collingwood." This material was acquired from sources near the edge of the escarpment on Blue Mountain. It was exploited by populations from as far south as the London area, who would have traveled to the source as part of their seasonal round. There are known Paleo period sites in Middlesex County and these are often found in association with the kettle ponds that dot its rolling landscape and with glacial lake shorelines.

2.4.1.2 Archaic Period

Settlement and subsistence patterns changed significantly during the Archaic period as both the landscape and ecosystem adjusted to the retreat of the glaciers. Building on earlier patterns, early Archaic period populations continued the mobile lifestyle of their predecessors. Through time and with the development of more resource rich local environments, these groups gradually reduced the size of the territories they exploited on a regular basis. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record.

Since the large cold weather mammal species that formed the basis of the Paleo period subsistence pattern became extinct or moved northward with the onset of warmer climate conditions, Archaic period populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environments and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of plenty. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more plentiful than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g., celts, adzes) and ornaments (e.g., bannerstones, gorgets), bifaces or tool blanks, animal bone (where and when preserved) and waste flakes, a by-product of the tool making process.

2.4.1.3 Early, Middle and Transitional Woodland Periods

Significant changes in cultural and environmental patterns are witnessed in the Woodland period (c. 950 BCE-1700 CE). By this time, the coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more substantial in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The



Woodland period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe.

Early and Middle Woodland period peoples are also known for a well-developed burial complex and ground stone tool industry. Unique Early Woodland period ground stone items include pop-eyed birdstones and gorgets. In addition, there is evidence of the development of widespread trading with groups throughout the northeast. The recovery of marine shells from the Lake Superior area indicates that exchanges of exotic materials and finished items from distant places were commonplace.

2.4.1.4 Late Woodland Period

During the Late Woodland period, much of Southwestern Ontario was occupied by two groups: Iroquoians and what are thought by archaeologists to be Algonquin speaking populations (the term “Western Basin Tradition” has been used to describe this cultural complex). In the east, the Iroquoian occupants were the Attawandaron, a tribal group described by European missionaries and whose historic homeland was significantly further east. Like other known Iroquoian groups including the Huron (Wendat) and Petun (Tionontati), the Attawandaron practiced a system of intensive horticulture based on three primary subsistence crops (corn, beans and squash). Their villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. The Jesuit Relations describe several Attawandaron centres in existence in the 17th century, including sites where missions were later established. While precontact Attawandaron sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular stone projectile points, clay pipes and ground stone implements, sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g., glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit priests (e.g., finger rings, stoneware, rosaries, glassware). The Attawandaron were dispersed and their population decimated by the arrival of epidemic European diseases and inter-tribal warfare. Many were adopted into other Iroquoian communities.

Archaeologists have also documented the in-situ development of Late Woodland period archaeological traditions from Middle Woodland period precedents that are believed to have an Algonquin cultural origin, quite distinct from Iroquoian populations who lived to the east. The archaeological record of these groups has been labeled the “Western Basin Tradition.” During the Late Woodland period, complex settlements are characteristic of these people and, at their peak, are characterized by fortified villages containing large, likely extended family, structures. Some of the villages are surrounded by earthworks. There is evidence for the cultivation of corn and beans by roughly 900 CE. The pottery traditions of these people varied significantly from those of their Iroquoian neighbors. Early vessels, called Wayne ware, are small, thin-walled pots covered with vertical cord marking and tool impressions. Vessels become more elaborate through time, incorporating multiple bands of tool impressions, castellated rims and incised decoration. Late pottery is characteristically bag-shaped and often incorporates dentate stamping as well as appliqué strips and strap handles, similar to some Mississippian tradition pottery. As was not the case with much Iroquoian pottery, clay fabrics were mixed with shell temper.



2.4.2 Treaty History

The project area is encompassed by the London Township Treaty No. 6, which was signed September 7, 1796, between the British Crown and the Chippewa Nation:

WHEREAS we the principal Chiefs, Warriors, and People of the Cheppewa Nation of Indians being desirous for a certain consideration hereinafter mentioned of selling and disposing of a certain parcel or tract of land situated and lying on the north side of the River Thames or River La Tranche and known in the Indian name by Escunnisepe unto His Britannic Majesty King George the Third our great Father.

This treaty encompassed land on the north side of the Thames River west of the Forks in London and on the north side of the south branch of the Thames east of the Forks until near what is now Woodstock. Portions of both Middlesex and Oxford Countis are included in the treaty area.

Although the treaty's language is framed as "extinguishment" of Indigenous rights and title to the region, exactly what was understood to have been relinquished and retained by the Chippewa Nation is contested (Deshkan Ziibing 2016; Miskokomon 2013):

... our understanding from our elders, an understanding we share with many other Anishinaabe nations, is that our treaties did not "surrender" our lands, despite what Britain and Canada have presumed (Deshkan Ziibing 2016:5).

Deshkan Ziibing, otherwise known as the Chippewas of the Thames First Nation (COTTFN), is the closest signatory Descendant community. COTTFN recognizes that other Anishinaabe nations were also signatories (Deshkan Ziibing 2016:5).

In 1701, the Fort Albany/Nanfan Treaty was signed between the Haudenosaunee Confederacy and the acting governor of New York, on behalf of the British Crown. That agreement covered a vast territory encompassing most of the lower Great Lakes, claimed as the Haudenosaunee's Beaver Hunting Grounds. Much of the same territory also falls within the Dish with One Spoon Wampum. The wampum represents an agreement between the Haudenosaunee and the Anishinaabeg to share the hunting territories around the Great Lakes (Glover 2020). In 1840, after losing their land base in New York State, over 200 Oneida members formed Oneida Nation of Thames near Delaware, Ontario. The community purchased their new settlement lands with their own funds and did not receive a Crown allotted reserve (Oneida Nation of the Thames 2023). Their presence reintroduced Haudenosaunee stewardship practices to the region which continue today.



2.4.3 Nineteenth-Century and Municipal Settlement

Historically, the project area falls within Lot 17, Concession 2 North Division, Geographic Township of North Dorchester, Middlesex County, Ontario. A brief discussion of 19th-century settlement and land use in the township is provided below to identify features signaling archaeological potential.

2.4.3.1 Middlesex County

Prior to the earliest municipal settlement in Middlesex County, the Thames River Valley environs were actively used for hunting by Chippewa, Ottawa and Pottowatami people. It was from them that the British Crown purchased the lands that eventually became Middlesex County between 1790 and 1796 (Armstrong 1986; Gibb 2001). Shortly after the purchase, Abraham Iredell surveyed the general area. John Graves Simcoe, the first Lieut.-Governor of Upper Canada, visited the Thames River environs in 1793 on his journey to Detroit from Niagara. He admired the countryside and the forks of the Thames aspiring to establish the capital of Upper Canada there. With the gathering American threat to the then capital Niagara, Simcoe was forced to choose an interim site immediately and establish a temporary capital in Toronto, renamed York (Armstrong 1986). Unable to begin work on his capital as he hoped, Simcoe took several steps that would eventually lead to the development of the city including securing the town site and the building of Dundas Street which was planned to stretch from Dundas near Hamilton westward to the Forks of the Thames. Due to the site's remoteness, it would be many years before settlers moved into the area. Simcoe departed Upper Canada in 1796 and Toronto remained the capital of Upper Canada.

Administratively, great changes took place right across the province at the end of the eighteenth century. The Upper Canadian government tried to provide administrative services near areas as soon as they became fairly well populated. In 1798 the government, urged by this need created the District of London which consisted of Middlesex County including London and Westminster Township among others, as well as Oxford and Norfolk Counties with the district capital located at Vittoria in Norfolk County (Armstrong 1986). At this time, settlement in Middlesex County was primarily restricted to small pockets at the south end of the county along the shores of Lake Erie in what is now Elgin County.

By 1822 the basic road system in and around Middlesex County was evolving. Port Stanley offered lakeside port entry for migrants destined for the London District (Whebell 1992), with travel facilitated by Kettle Creek or the Port Stanley to London Road (now Highway 4). Dundas Street also connected to Toronto, and Commissioners Road, which was open for sleighs by 1799, was easily passable by 1828. With the road improvements helping to open Middlesex County to further settlement and the subsequent growing population, Vittoria was no longer a viable location as a district capital. In 1826, after some debate, the administration was transferred to the more centrally located London (Armstrong 1986). That same year London was officially founded as a hamlet. An act of the Provincial Parliament was passed to make provisions for a town survey and the building of a new courthouse on Simcoe's Crown Reserve at the Forks, which until then had remained empty.

2.4.3.2 North Dorchester Township

Colonel Talbot coordinated the early settlement of North Dorchester Township and hired Colonel Burwell to conduct the survey (H.R. Page & Co. 1878:12). The earliest communities in North Dorchester Township were Nilestown, Putnam, and Dorchester (originally two communities called Frampton and Edwardsburg). Businessmen were attracted to these areas by large stands of timber. Dorchester was well known in both American and Canadian markets as a 'pine and cedar area'. Timber was regularly shipped on rafts down the



Thames River to Chatham and Detroit for export. William Niles (founder of Nilestown) traveled to Dorchester Township in 1820 to purchase lumber. He has been commissioned by Governor Lewis Cass of Michigan to obtain timber for the Detroit market. By 1810 there were already two lumber mills in operation, one owned by William Reynolds and another operated by William Putnam (founder of the community of Putnam). Lumber mill centres (Nilestown, Putnam, and Dorchester) were the first communities to emerge in the township.

Significant settlement in North Dorchester was preceded by the construction of roads. The “Commissioners Road”, later called Hamilton Road, was originally not more than a bush trail; an 1831 record of the road lists it as a road that went from Joshua Putnam’s house to Dundas Street in London. The road was graded, graveled, and planked at a relatively early date, traveling through the pine forest to Dorchester (Baker and Neary 2003:53). Tolls were charged at various places along the road. Sand and gravel beds were found to exist throughout Middlesex County, particularly near Putnam, and heavy gravel was used throughout the townships for the toll-road system (Goodspeed & Goodspeed 1889:14).

The first recorded meeting for Dorchester Township was in 1817. The individuals who attended the meeting of the informal government included Henry Reynolds, Edward Hendrick, William Niles, Patrick Heron, Sanders Burley, William Putnam and Joshua Putnam (Ross 1967). The first Municipal Council meeting took place in 1850 at which time William Niles was appointed Reeve. At this time both northern and southern portions of Dorchester Township were united. In 1852 the Townships of North and South Dorchester separated, with the former remaining in Middlesex County and South Dorchester forming part of Elgin County. Along with the North and South separation, the portion of Dorchester Township lying north of the Thames River and east of the middle of the road allowance between Lots 18 and 19 was detached from Dorchester Township and annexed by North Oxford Township. At the same time, a portion of the Townships of West and North Oxford were combined into the Village of Ingersoll (NOCP 1967:33).

2.4.4 Review of Historic Maps

Historically, the project area falls within Lot 17, Concession 2 North Division, Geographic Township of North Dorchester, Middlesex County, Ontario.

Tremaine’s 1862 *Map of The County of Middlesex* depicts Lot 17 as divided into three parcels with the project area located within the northeast most parcel associated with Beavers (Map 5). Trafalgar Street is depicted as open at this time. No structures are shown on Tremaine’s 1862 map.

The 1878 *Historical Atlas of the County of Middlesex* reveals Lot 17 remains subdivided into three unequal parcels (Map 6). The northwest parcel containing the project area is associated with E. Bevens. A structure and associated orchard are depicted in the vicinity of the project area, fronting Trafalgar Street, which remains open.

2.4.5 Review of Heritage Properties

There are no designated heritage properties or plaques within 50 m of the project area.



2.5 Analysis and Conclusions

As noted in Section 2.1, the Province of Ontario has identified numerous factors that signal the potential of a property to contain archaeological resources. Based on the archaeological and historical context reviewed above, the project area is in proximity (i.e., within 300 m) to features that signal archaeological potential, namely:

- mapped 19th-century thoroughfares (Trafalgar Street);
- mapped 19th-century structures; and,
- registered archaeological sites (AgHg-19 and AgHg-22).

2.6 Recommendations

Given that the project area demonstrated potential for the discovery of archaeological resources, a Stage 2 archaeological assessment was recommended. In keeping with provincial standards, the areas within the project area that consist of agricultural field are recommended for assessment by pedestrian survey at a 5 m transect interval to achieve the provincial standard. As the project area is considered to have archaeological potential pending Stage 2 field inspection, a separate map detailing zones of archaeological potential is not provided herein (MTC 2011; Section 7.7.4, Standard 1 and Section 7.7.6, Standards 1 and 2).



3 STAGE 2 ARCHAEOLOGICAL ASSESSMENT

3.1 Field Methods

All fieldwork was undertaken in good weather and lighting conditions. No conditions were encountered that would hinder the identification or recovery of artifacts. The property boundaries were determined in the field based on proponent mapping, landscape features, property fencing, and GPS co-ordinates.

The majority of the project area (approximately 99.1%; 11.04 ha) is comprised of agricultural fields, which were subject to pedestrian survey at a 5 m interval (Images 1 and 2) following ploughing and weathering under heavy rains (Images 3 and 4). Surface visibility was good to excellent (80% or greater). It was anticipated that, if cultural material was identified during the survey, the transects would be reduced to 1 m or less for a minimum 20 m radius around each find and intensively examined to determine the spatial extent of each site. Only a representative number of artifacts would be collected at each location to adequately date it, with the general aim being to leave enough in the field for site re-identification. However, if a location obviously did not meet the criteria for Stage 3 archaeological assessment at the time of the field survey, all of the surface artifacts would be collected and mapped using a E-Survey E-600 GPS/Glonass Network Rover, a high precision survey unit that advertises subcentimetre accuracy.

As per Section 2.1, Standard 2 of the *Standards and Guidelines* (MTC 2011:28-29), certain physical features and deep land alterations are considered as having low archaeological potential and are thus exempt from the standard pedestrian survey. Approximately 0.9% (0.1 ha) of the project area was deemed to be low-lying and permanently wet, consisting of a swale and was photo-documented (Image 5).

Map 7 illustrates the Stage 2 field conditions and assessment methods; the location and orientation of all photographs appearing in this report are also shown on this map. Map 8 presents the Stage 2 results on the proponent mapping. An unaltered proponent map is provided as Map 9.

3.2 Record of Finds

No archaeological materials or sites were identified during the Stage 2 archaeological assessment of the project area. Table 3 provides an inventory of the documentary records generated during this project.

All files are currently being stored at the TMHC corporate office located at 1108 Dundas Street, Unit 105, London, ON, N5W 3A7.

Table 3: Documentary Records

Date	Field Notes	Field Maps	Digital Images
Nov. 27, 2024	Digital and hard copies	Digital and hard copies	16 Images



3.3 Analysis and Conclusions

A Stage 2 field assessment was conducted in keeping with the MCM's *Standards and Guidelines* (MTC 2011). The pedestrian survey did not result in the documentation of archaeological resources.

3.4 Recommendations

All work met provincial standards, and no archaeological material was documented during the assessment. As such, no further archaeological assessment is recommended.

These recommendations are subject to the conditions laid out in Section 5.0 of this report and to the MCM's review and acceptance of this report into the provincial register.



4 SUMMARY

A Stage 1 and 2 archaeological assessment was conducted for a proposed aggregate pit license application to permit a proposed expansion of an aggregate pit located in part of Lot 17, Concession 2 North Division, Thames Centre, ON. The project area is roughly 11.14 ha (27.5 ac) in size. The Stage 1 assessment revealed that the property had potential for the discovery of archaeological resources and a Stage 2 survey was recommended and carried out. The Stage 2 assessment (standard pedestrian survey at a 5 m interval) did not result in the documentation of archaeological resources. As such, no further archaeological assessment is recommended.



5 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the MCM 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 MCM, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 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 human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Public and Business Service Delivery and Procurement.



6 BIBLIOGRAPHY

Armstrong, F.H.

1986 *The Forest City: An Illustrated History of London, Canada*. Burlington: Windsor Publications Ltd.

Baker, M., and H.B. Neary,

2003 *London Street Names: An Illustrated Guide*. Toronto: James Lorimer & Company Ltd.

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

1984 *The Physiography of Southern Ontario*. Two Volumes. Third Edition. Ontario Geological Survey. Toronto: Ontario Ministry of Natural Resources.

2007 *Physiography of Southern Ontario, Ontario Geological Survey, Ministry of Northern Development and Mines, Miscellaneous Release-Data 228*.

Deshkan Ziiibiing/Chippewas of the Thames First Nation

2016 *Wiindmaagewin Consultation Protocol*. Chippewas of the Thames First Nation, Delaware, ON.

Gibb, A. (ed)

2001 *London Township*. Two Volumes. Arva: London Township History Book Committee.

Glover, F.

2020 A Dish with One Spoon. *Canadian Encyclopedia*. [Website Link](#). Accessed February 2, 2024.

Goodspeed, W. A. and C. L Goodspeed

1889 *The History of Middlesex County, Canada*. Brock, D. (ed). Reprint, Belleville: Mika Studio, 1972.

Hagerty, T.P and M.S. Kingston

1992 *The Soils of Middlesex County*, Report No. 56 of the Ontario Centre for Soil Resource Evaluation Vol 2. Resources Management Branch, Ontario Ministry of Agriculture and Food. Guelph, ON.

H.R. Page & Co.

1878 *Illustrated Historical Atlas of the County of Middlesex, Ont.* Toronto: Gorrell, Craig & Co. Lith.

Goodspeed, W. A. and C. L Goodspeed

1889 *The History of Middlesex County, Canada*. Brock, D. (ed). Reprint, Belleville: Mika Studio, 1972.

Government of Ontario

1990 *Ontario Heritage Act, R.S.O. 1990*. (c. 0.18). Queen's Printer for Ontario. [Website Link](#). Accessed February 16, 2021.

2002 *Funeral, Burial and Cremation Services Act, 2002, S.O. 2002*. (c. 33). Queen's Printer for Ontario. [Website Link](#). Accessed April 7, 2022.



Microsoft

2019 Computer generated building footprints for Canada, *Microsoft Open Source*. [Website Link](#). Accessed November 3, 2021.

Ministry of Citizenship and Multiculturalism (MCM)

2024 Ontario's Past Portal, Online Database. King's Printer for Ontario. [Website Link](#). Accessed November 12, 2024.

Ministry of Municipal Affairs and Housing (MMAH)

2024 *Provincial Planning Statement, 2024*. King's Printer for Ontario. [Website Link](#). Accessed October 15, 2024.

Ministry of Tourism and Culture (MTC; now Ministry of Citizenship and Multiculturalism)

2011 *Standards and Guidelines for Consultant Archaeologists*. Toronto: Queen's Printer for Ontario.

Miskokomon, J.

2013 Affidavit of Joe Miskokomon, Chief of Chippewas of the Thames First Nation. Application Pursuant to Section 58 of the National Energy Board (NEB) Act, Line 9B Reversal and Line 9 Capacity Expansion Project. Enbridge Pipelines Inc

North Oxford Centennial Project Committee (NOOCC)

1967 *History of North Oxford Township, 1867-1967*. Ingersoll: North Oxford Township Council.

Oneida Nation of the Thames

2023 History of Oneida. [Website Link](#). Accessed February 2, 2024.

Ontario Geological Survey

2010 Surficial Geology of Southern Ontario. *Ontario Geological Survey, Ministry of Northern Development, Mines and Forestry*, Miscellaneous Release-Data 128-REV.

Ontario Ministry of Agricultural, Food and Rural Affairs (OMAFRA)

2019 Soil Survey Complex. [Website Link](#). Accessed June 1, 2023.

OpenStreetMap

2021 Geofabrik Extract. [Website Link](#). Accessed December 10, 2021.

Ross, E.

1967 *North Dorchester: A Century Past to Present*. Dorchester: North Dorchester Centennial Committee.

TMHC

2016 *Stage 1&2 Archaeological Assessment, Proposed Aggregate Pit, 6351 Trafalgar Street, Part of Lots 16 and 17, Concession 2 Northern Division, Geographic Township of North Dorchester, now the Municipality of Thames Centre, Middlesex County, Ontario*. Licensee Matthew Beaudoin, PIF P324-0097-2016. Report on file with the MCM.



Whebell, C.F.J.

1992 The London Strategem: From Concept to Consummation, 1791-1855. In St-Denis, G. (ed), *Simcoe's Choice: Celebrating London's Bicentennial 1793-1993*. Toronto: Dundurn Press. pp. 31-66.



7 IMAGES



Image 1: Pedestrian Survey at 5 m Interval – Western Project Area

Looking Northeast



Image 2: Pedestrian Survey at 5 m Interval – Eastern Project Area

Looking North



Image 3: Surface Visibility

Looking North



Image 4: Surface Visibility

Looking Northeast





Image 5: Low and Permanently Wet Area in the Northern Project Area

Looking West

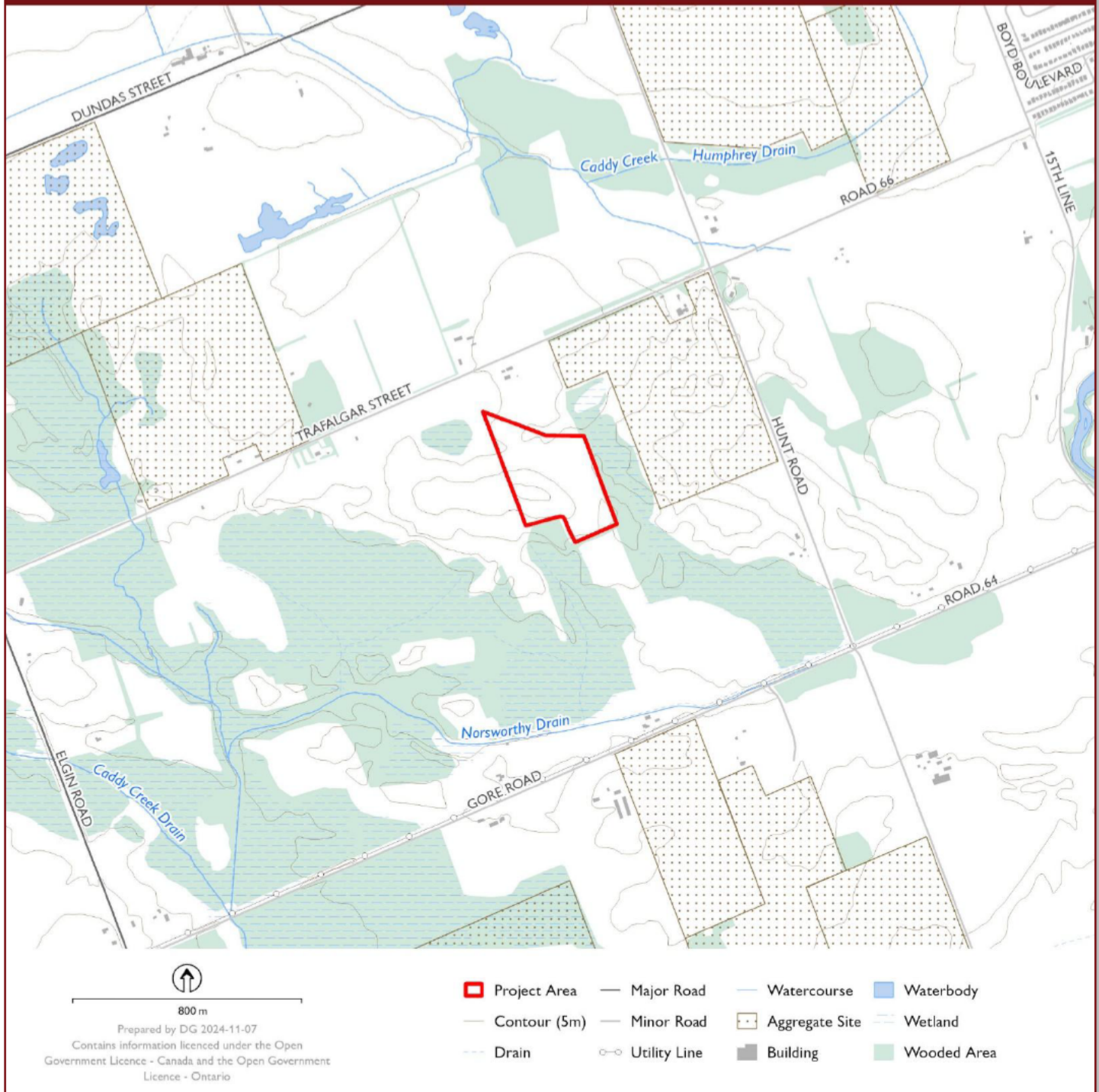




8 MAPS



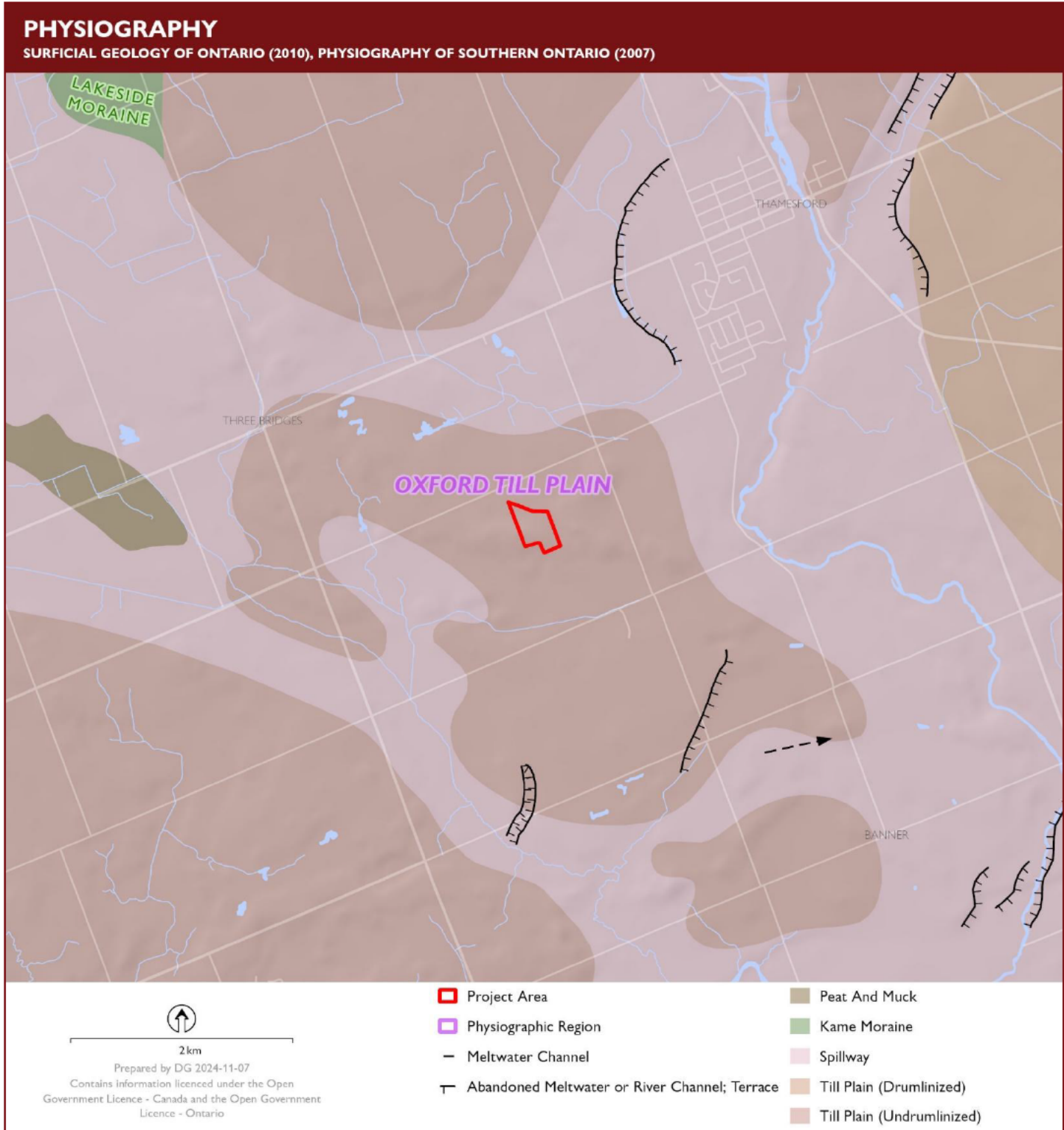
PROJECT LOCATION



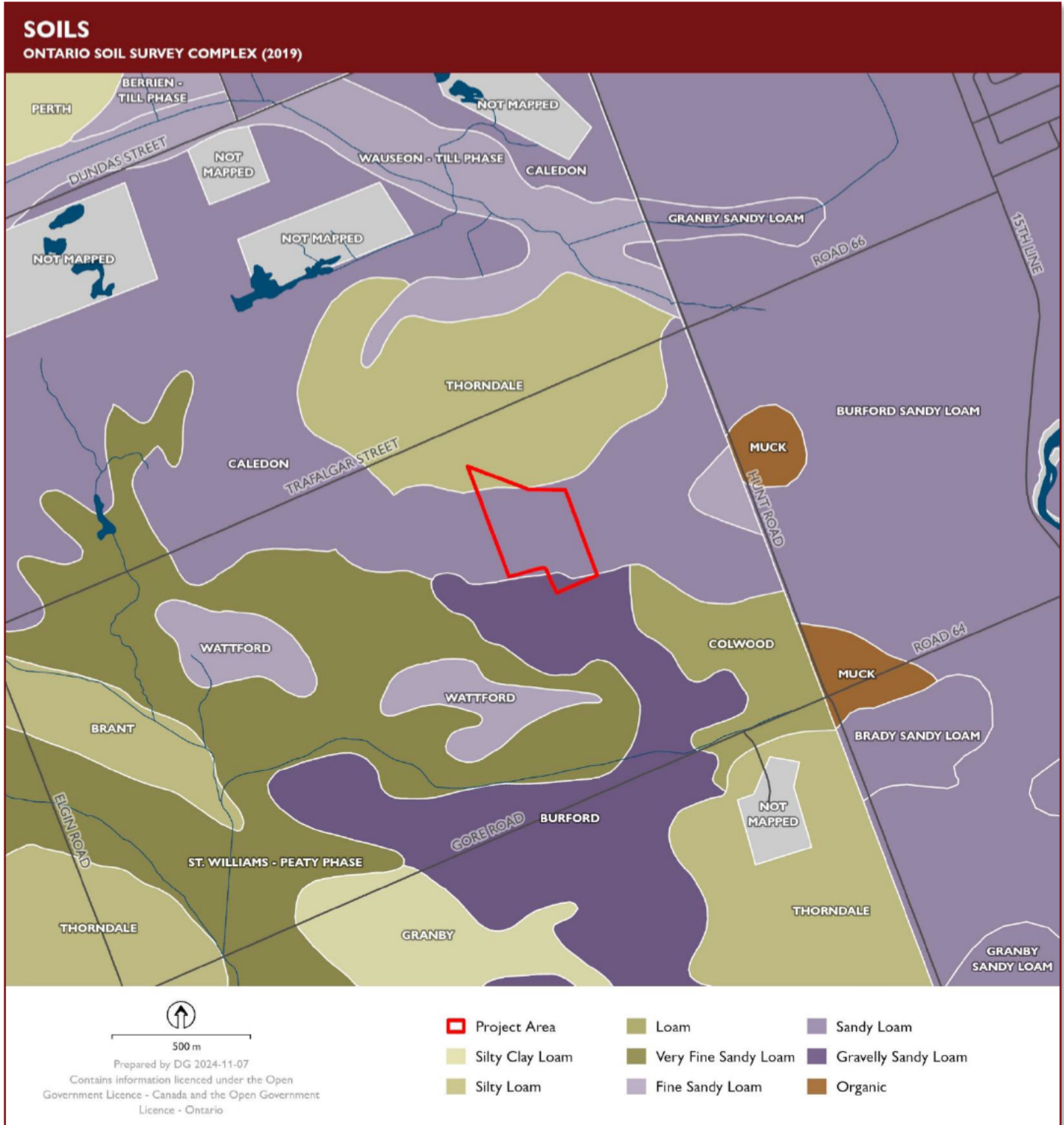
Map 1: Location of the Project Area in Middlesex County, ON



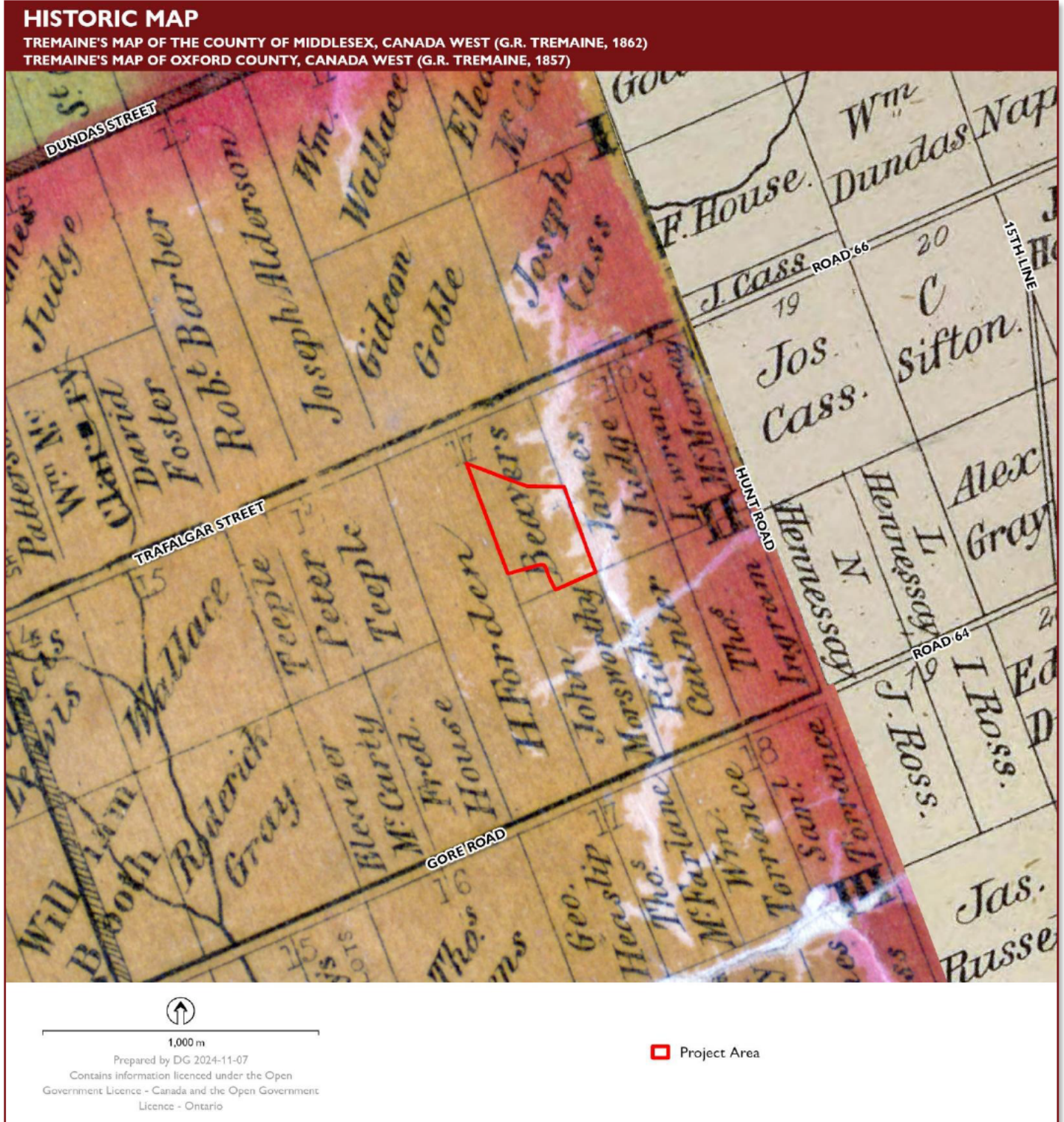
Map 2: Aerial Photograph Showing the Location of the Project Area



Map 3: Physiography Within the Vicinity of the Project Area



Map 4: Soils Within the Vicinity of the Project Area



Map 5: Location of the Project Area Shown on the 1857 Map of Oxford County and the 1862 Map of Middlesex County



Map 7: Stage 2 Field Conditions and Assessment Methods



Map 8: Stage 2 Field Conditions and Assessment Methods Shown on Proponent Mapping



Map 9: Unaltered Proponent Mapping



MATTHEW BEAUDOIN

Principal, Manager of Archaeological Assessments

Over the course of his career, Matthew has supervised over 900 archaeological assessments in Ontario, including Stages 1-4, under a variety of regulatory triggers including provincial and municipal Environmental Assessments, Green Energy projects, development projects under the *Planning Act*, and as due diligence process. Matthew has extensive experience managing large and complex archaeological projects in conjunction with other disciplines, specialists, and Indigenous communities. Matthew's speciality is finding innovative solutions for large and complex projects that have a large number of stakeholders, interest groups, and descendent communities.

During his career, Matthew has conducted extensive field research and artifact analysis on Indigenous and 19th century sites from Labrador and Ontario. Matthew's role at TMHC has involved background research, community consultation, report production, project management, and corporate management. Matthew's special interests include the policies and history of archaeology, 19th century Indigenous archaeology, early Black settlement in Ontario, and the history of beer and brewing.

CREDENTIALS

Professional MCM License, P324

EDUCATION

PhD, Western University, 2013

MA, Memorial University, 2009

BA, Memorial University, 2005

ROLE

Senior Professional

CONTACT

Phone
519-641-7222

Email
mbeaudoin@tmhc.ca

Website
www.tmhc.ca



HIGHLIGHT OF RECENT PROJECTS

Supervised over **900** archaeological assessments (Stages 1 through 4) throughout Ontario. Work completed under *Planning Act*, *Green Energy Act*, *Environmental Assessment Act* and as due diligence processes.

Municipal EA Projects

- King Edward and Bishopsgate Road Improvements, Brant County, Stages 1-4
- Simcoe County CR 21 and CR56 Roundabout, Stage 1-2
- Twenty Mile Road, Niagara Region, Stage 1 and Stage 2
- Soper's Bridge Replacement, Bruce County, Stage 1-2
- NW Sanitary Services, St. Thomas, Stage 1
- North Street Widening, Tillsonburg, Stage 1-2
- Blackbridge Road, Cambridge, Stage 1-3
- Rapids Parkway Expansion, Sarnia, Stage 1
- Cleaver Rd and Governors Rd, Brantford, Stage 1
- Riverside Dam, Cambridge, Stage 1-3
- Victoria St Pumping Station, London, Stage 1-2
- Thames Valley Parkway Richmond to Adelaide, Stage 2 and 4
- Hyde Park and Sunningdale Roundabout Stage 1-2
- London Bus Rapid Transit, Stage 2
- Blackbridge Rd Cambridge, Stage 1-2 assessment
- Southdale and Wickerson Road Improvements, Stage 2-4

RECENT WORK EXPERIENCE

Principal

TMHC Inc.
2019-present

Manager – Archaeological Assessments

TMHC Inc.
2016-present

Project Manager/Senior Archaeologist

TMHC Inc.
2010-2016

Staff Archaeologist

TMHC Inc.
2008-2010

PROFESSIONAL AFFILIATIONS

Canadian Archaeological Association (CAA)

Ontario Archaeological Society (OAS)

Society for American Archaeology (SAA)

Society for Historical Archaeology (SHA)

Ontario Historical Society (OHS)

Council for Northeast Historical Archaeology (CNEHA)

World Archaeology Congress (WAC)

Linear Infrastructure

Liquids Line 10 Stage 1-4
Scugog Island Servicing Hwy 7 Stage 1-2
Saugeen F. N. Servicing Stage 1-3
Stratford Reinforcement Stage 1
Cherry to Bathurst Replacement Stage 1
Chippewas of the Thames F.N. Servicing Stage 1-2
Metrolinx Hurontario Crossing Stage 1
Line 9 Finch Avenue West Stage 1-2
Imperial Oil Limited – Waterdown to Finch, Stage 1-4

STAKEHOLDER CONSULTATION AND COMMUNITY SERVICE

Ontario Archaeological Society

- 2017 Current Volunteer for Indigenous Community Monitor Training Programs
- 2017 Organizer, Ontario Archaeological Society Conference on Indigenous Issues: Nations United
- 2016 Director

Museum of Ontario Archaeology

2014-2016 Preservation of the Lawson Iroquoian Village Committee

Canadian Archaeological Association

- 2014 National Conference Organizing Co-Chair
- 2012-2014 Student Committee

Various

- 2014 Public Guide, War of 1812 Celebrations, Tecumseh Park, Chatham

SELECTED PUBLICATIONS

- 2021 The Struggle to Identify Nineteenth-Century Indigenous Sites in CRM. In *Unearthing Indigenous Presence*, edited by T. Schneider and L. Panich. University Press of Florida.
- 2019 *Challenging Colonial Narratives: Nineteenth-Century Great Lakes Archaeology*. University of Arizona Press.
- 2017 A Tale of Two Settlements: Consumption and the Historical Archaeology of Native and Newcomers in the 19th-Century Great Lakes Region. In *Indigenous Peoples and Foreign Things: Archaeologies of Consumption in the Americas*, edited by C. Cipolla. University of Arizona Press.
- 2016 Archaeologists Colonizing Canada: The Effects of Unquestioned Categories. *Archaeologies*, 12(1):7-37.



MATTHEW SEVERN

Archaeology Specialist

Matthew has worked as an archaeologist in Ontario for over a decade. Throughout that time, Matthew has earned extensive experience directing and participating in numerous archaeological surveys involving all stages of assessment across Ontario. These surveys have typically involved complex field methods and time-sensitive deadlines. In addition, Matthew has worked with and maintains respectful relationships among numerous Indigenous communities throughout Ontario. Currently, Matthew is managing and assisting projects with a Transportation focus. Outside of fieldwork and project management, Matthew has catalogued and analysed Indigenous artifacts and written numerous archaeological reports required by the Ministry of Citizenship and Multiculturalism. Matthew received an Honours BA in Anthropology from York University in 2012 and completed an MA at Western University in 2023. Matthew is a member of the Ontario Archaeological Society and Canadian Archaeological Association. He currently serves on the Executive Committee of the London Chapter of the Ontario Archaeological Society as Vice President.

CREDENTIALS

Archaeological Professional
License P1093

EDUCATION

MA, Western University, 2023
BA, York University, 2012

CONTACT

Phone
519-661-9028

Email
msevern@tmhc.ca

Website
www.tmhc.ca

SELECTION OF RELEVANT PROJECTS

Notable Projects

- Oxford County Road 4 and 15 Intersection Improvements, Stage 1
- Bridge Replacement of Structure D-007, Bruce County, Stage 1
- Northshore Trail Erosion Control Project, Saugeen Shores, Stage 1
- Wastewater Treatment Project, Southgate, Stage 1
- Highway 3 Widening, Leamington, Stage 1-2
- Highway 3 Widening: Bruner-Colasanti, Leamington, Stage 4
- Highway 3 Widening: Crow Site, Leamington, Stage 4
- Enbridge Mohawks of the Bay of Quinte and Shannonville Community Expansion Stage 1-2
- Tallman Drive Stage 1 and Stage 2
- Twenty Mile Road, Rosedene Road to Victoria Avenue Stage 1 and Stage 2
- Regional Road 25, Milton to Oakville, Stage 1
- Machesney Lake Camp Demolition Stage 1-2
- Enbridge Line 10, Stage 2-4
- Imperial Oil Waterdown to Finch, Stage 2-4
- HONI Tower Replacement, Stage 2-4
- Pipeline Village Excavation, Hamilton, Stage 3-4
- Tillsonburg Village Outskirts, Stage 3-4
- Kingwood Homes 620 Colbourne Street West, Brantford, Stage 3-4



RECENT WORK EXPERIENCE

Archaeology Specialist
TMHC
2023-Present

**Field Director / Report
Writer**
TMHC
2016 - 2022

Field Archaeologist
D.R. Poulton & Assoc.
2015 - 2016

Field Technician
Golder Assoc.
2013 - 2015

PROFESSIONAL AFFILIATIONS

Ontario Archaeological Society

Canadian Archaeological
Association

Ontario Association of
Professional Archaeologists

Select Archaeological Reports

Stage 4 Archaeological Assessment I (AgHn-18) Proposed
Severance Application (B12/2019) 1637 Blackwell Road.

Preliminary Stage 4 Archaeological Assessment AgHn-14
Proposed Severance Application 1996 Blackwell Road.

Preliminary Stage 4 Archaeological Assessment AgHn-17
Proposed Severance Application 1996 Blackwell Road.

Stage 4 Archaeological Assessment Pipeline Site – AiGx-12
Remaining Easement Hamilton Milton Section of the NPS 48
Dawn Parkway System Expansion.

Stage 4 Archaeological Assessment Crow Site (AaHp-52)
Highway 3 Widening Part of Lot 11, Concession 3 Eastern
Division Geographic Township of Gosfield Town of Kingsville
Essex County, Ontario

Stage 4 Archaeological Assessment Bruner-Colasanti (AaHq-8)
Proposed Highway 3 Widening 1.2 km east of Essex Road 23
to 1.1 km east of Essex Road 34 Part of Lot 8, Concession 3
Geographic Township of Gosfield Town of Kingsville Essex
County, Ontario

Stage 1 & 2 Archaeological Assessment Perth County Jail - East
Yard St. Andrew Street, City of Stratford.

Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes A Checklist for the Non-Specialist

The **purpose of the checklist** is to determine:

- if a property(ies) or project area:
 - is a recognized heritage property
 - may be of cultural heritage value
- it includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Cultural Heritage Evaluation Report (CHER)

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a qualified person(s) (see page 5 for definitions) to undertake a cultural heritage evaluation report (CHER).

The CHER will help you:

- identify, evaluate and protect cultural heritage resources on your property or project area
- reduce potential delays and risks to a project

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages for more detailed information and when completing this form.

Project or Property Name

Proposed Aggregate Pit, Paton-Sims

Project or Property Location (upper and lower or single tier municipality)

Lot 17, Concession 2 North Division Dorchester, Thames Centre, Ontario

Proponent Name

Bernie Janssen, Harrington Mcaven

Proponent Contact Information

bernie@harringtonmcaven.com

Screening Questions

	Yes	No
1. Is there a pre-approved screening checklist, methodology or process in place?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

Part A: Screening for known (or recognized) Cultural Heritage Value

	Yes	No
2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes, do **not** complete the rest of the checklist.

The proponent, property owner and/or approval authority will:

- summarize the previous evaluation and
- add this checklist to the project file, with the appropriate documents that demonstrate a cultural heritage evaluation was undertaken

The summary and appropriate documentation may be:

- submitted as part of a report requirement
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

	Yes	No
3. Is the property (or project area):		
a. identified, designated or otherwise protected under the <i>Ontario Heritage Act</i> as being of cultural heritage value?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. a National Historic Site (or part of)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. designated under the <i>Heritage Railway Stations Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. designated under the <i>Heritage Lighthouse Protection Act</i> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office (FHBRO)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to any of the above questions, you need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report, if a Statement of Cultural Heritage Value has not previously been prepared or the statement needs to be updated

If a Statement of Cultural Heritage Value has been prepared previously and if alterations or development are proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No, continue to Question 4.

Part B: Screening for Potential Cultural Heritage Value

	Yes	No
4. Does the property (or project area) contain a parcel of land that:		
a. is the subject of a municipal, provincial or federal commemorative or interpretive plaque?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has or is adjacent to a known burial site and/or cemetery?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. is in a Canadian Heritage River watershed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. contains buildings or structures that are 40 or more years old?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Part C: Other Considerations

	Yes	No
5. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area):		
a. is considered a landmark in the local community or contains any structures or sites that are important in defining the character of the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. has a special association with a community, person or historical event?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. contains or is part of a cultural heritage landscape?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

If Yes to one or more of the above questions (Part B and C), there is potential for cultural heritage resources on the property or within the project area.

You need to hire a qualified person(s) to undertake:

- a Cultural Heritage Evaluation Report (CHER)

If the property is determined to be of cultural heritage value and alterations or development is proposed, you need to hire a qualified person(s) to undertake:

- a Heritage Impact Assessment (HIA) – the report will assess and avoid, eliminate or mitigate impacts

If No to all of the above questions, there is low potential for built heritage or cultural heritage landscape on the property.

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g. under the *Environmental Assessment Act*, *Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

For more information, see the Ministry of Tourism, Culture and Sport's [Ontario Heritage Toolkit](#) or [Standards and Guidelines for Conservation of Provincial Heritage Properties](#).

In this context, the following definitions apply:

- **qualified person(s)** means individuals – professional engineers, architects, archaeologists, etc. – having relevant, recent experience in the conservation of cultural heritage resources.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may already be in place for identifying potential cultural heritage resources, including:

- one endorsed by a municipality
- an environmental assessment process e.g. screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport (MTCS) under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s.B.2.]

Part A: Screening for known (or recognized) Cultural Heritage Value

2. Has the property (or project area) been evaluated before and found not to be of cultural heritage value?

Respond 'yes' to this question, if all of the following are true:

A property can be considered not to be of cultural heritage value if:

- a Cultural Heritage Evaluation Report (CHER) - or equivalent - has been prepared for the property with the advice of a qualified person and it has been determined not to be of cultural heritage value and/or
- the municipal heritage committee has evaluated the property for its cultural heritage value or interest and determined that the property is not of cultural heritage value or interest

A property may need to be re-evaluated, if:

- there is evidence that its heritage attributes may have changed
- new information is available
- the existing Statement of Cultural Heritage Value does not provide the information necessary to manage the property
- the evaluation took place after 2005 and did not use the criteria in Regulations 9/06 and 10/06

Note: Ontario government ministries and public bodies [prescribed under Regulation 157/10] may continue to use their existing evaluation processes, until the evaluation process required under section B.2 of the Standards & Guidelines for Conservation of Provincial Heritage Properties has been developed and approved by MTCS.

To determine if your property or project area has been evaluated, contact:

- the approval authority
- the proponent
- the Ministry of Tourism, Culture and Sport

3a. Is the property (or project area) identified, designated or otherwise protected under the *Ontario Heritage Act* as being of cultural heritage value e.g.:

- i. designated under the *Ontario Heritage Act*
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)

Individual Designation – Part IV

A property that is designated:

- by a municipal by-law as being of cultural heritage value or interest [s.29 of the *Ontario Heritage Act*]
- by order of the Minister of Tourism, Culture and Sport as being of cultural heritage value or interest of provincial significance [s.34.5]. **Note:** To date, no properties have been designated by the Minister.

Heritage Conservation District – Part V

A property or project area that is located within an area designated by a municipal by-law as a heritage conservation district [s. 41 of the *Ontario Heritage Act*].

For more information on Parts IV and V, contact:

- municipal clerk
- [Ontario Heritage Trust](#)
- local land registry office (for a title search)

ii. subject of an agreement, covenant or easement entered into under Parts II or IV of the *Ontario Heritage Act*

An agreement, covenant or easement is usually between the owner of a property and a conservation body or level of government. It is usually registered on title.

The primary purpose of the agreement is to:

- preserve, conserve, and maintain a cultural heritage resource
- prevent its destruction, demolition or loss

For more information, contact:

- [Ontario Heritage Trust](#) - for an agreement, covenant or easement [clause 10 (1) (c) of the *Ontario Heritage Act*]
- municipal clerk – for a property that is the subject of an easement or a covenant [s.37 of the *Ontario Heritage Act*]
- local land registry office (for a title search)

iii. listed on a register of heritage properties maintained by the municipality

Municipal registers are the official lists - or record - of cultural heritage properties identified as being important to the community.

Registers include:

- all properties that are designated under the *Ontario Heritage Act* (Part IV or V)
- properties that have not been formally designated, but have been identified as having cultural heritage value or interest to the community

For more information, contact:

- municipal clerk
- municipal heritage planning staff
- municipal heritage committee

iv. subject to a notice of:

- intention to designate (under Part IV of the *Ontario Heritage Act*)
- a Heritage Conservation District study area bylaw (under Part V of the *Ontario Heritage Act*)

A property that is subject to a **notice of intention to designate** as a property of cultural heritage value or interest and the notice is in accordance with:

- section 29 of the *Ontario Heritage Act*
- section 34.6 of the *Ontario Heritage Act*. **Note:** To date, the only applicable property is Meldrum Bay Inn, Manitoulin Island. [s.34.6]

An area designated by a municipal by-law made under section 40.1 of the *Ontario Heritage Act* as a **heritage conservation district study area**.

For more information, contact:

- municipal clerk – for a property that is the subject of notice of intention [s. 29 and s. 40.1]
- [Ontario Heritage Trust](#)

v. included in the Ministry of Tourism, Culture and Sport's list of provincial heritage properties

Provincial heritage properties are properties the Government of Ontario owns or controls that have cultural heritage value or interest.

The Ministry of Tourism, Culture and Sport (MTCS) maintains a list of all provincial heritage properties based on information provided by ministries and prescribed public bodies. As they are identified, MTCS adds properties to the list of provincial heritage properties.

For more information, contact the MTCS Registrar at registrar@ontario.ca.

3b. Is the property (or project area) a National Historic Site (or part of)?

National Historic Sites are properties or districts of national historic significance that are designated by the Federal Minister of the Environment, under the *Canada National Parks Act*, based on the advice of the Historic Sites and Monuments Board of Canada.

For more information, see the [National Historic Sites website](#).

3c. Is the property (or project area) designated under the *Heritage Railway Stations Protection Act*?

The *Heritage Railway Stations Protection Act* protects heritage railway stations that are owned by a railway company under federal jurisdiction. Designated railway stations that pass from federal ownership may continue to have cultural heritage value.

For more information, see the [Directory of Designated Heritage Railway Stations](#).

3d. Is the property (or project area) designated under the *Heritage Lighthouse Protection Act*?

The *Heritage Lighthouse Protection Act* helps preserve historically significant Canadian lighthouses. The Act sets up a public nomination process and includes heritage building conservation standards for lighthouses which are officially designated.

For more information, see the [Heritage Lighthouses of Canada](#) website.

3e. Is the property (or project area) identified as a Federal Heritage Building by the Federal Heritage Buildings Review Office?

The role of the Federal Heritage Buildings Review Office (FHBRO) is to help the federal government protect the heritage buildings it owns. The policy applies to all federal government departments that administer real property, but not to federal Crown Corporations.

For more information, contact the [Federal Heritage Buildings Review Office](#).

See a [directory of all federal heritage designations](#).

3f. Is the property (or project area) located within a United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site?

A UNESCO World Heritage Site is a place listed by UNESCO as having outstanding universal value to humanity under the Convention Concerning the Protection of the World Cultural and Natural Heritage. In order to retain the status of a World Heritage Site, each site must maintain its character defining features.

Currently, the Rideau Canal is the only World Heritage Site in Ontario.

For more information, see Parks Canada – [World Heritage Site website](#).

Part B: Screening for potential Cultural Heritage Value

4a. Does the property (or project area) contain a parcel of land that has a municipal, provincial or federal commemorative or interpretive plaque?

Heritage resources are often recognized with formal plaques or markers.

Plaques are prepared by:

- municipalities
- provincial ministries or agencies
- federal ministries or agencies
- local non-government or non-profit organizations

For more information, contact:

- [municipal heritage committees](#) or local heritage organizations – for information on the location of plaques in their community
- Ontario Historical Society's [Heritage directory](#) – for a list of historical societies and heritage organizations
- Ontario Heritage Trust – for a [list of plaques](#) commemorating Ontario's history
- Historic Sites and Monuments Board of Canada – for a [list of plaques](#) commemorating Canada's history

4b. Does the property (or project area) contain a parcel of land that has or is adjacent to a known burial site and/or cemetery?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulations, Ontario Ministry of Consumer Services – for a [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, adjacent means contiguous or as otherwise defined in a municipal official plan.

4c. Does the property (or project area) contain a parcel of land that is in a Canadian Heritage River watershed?

The Canadian Heritage River System is a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage.

Canadian Heritage Rivers must have, and maintain, outstanding natural, cultural and/or recreational values, and a high level of public support.

For more information, contact the [Canadian Heritage River System](#).

If you have questions regarding the boundaries of a watershed, please contact:

- your conservation authority
- municipal staff

4d. Does the property (or project area) contain a parcel of land that contains buildings or structures that are 40 or more years old?

A 40 year 'rule of thumb' is typically used to indicate the potential of a site to be of cultural heritage value. The approximate age of buildings and/or structures may be estimated based on:

- history of the development of the area
- fire insurance maps
- architectural style
- building methods

Property owners may have information on the age of any buildings or structures on their property. The municipality, local land registry office or library may also have background information on the property.

Note: 40+ year old buildings or structure do not necessarily hold cultural heritage value or interest; their age simply indicates a higher potential.

A building or structure can include:

- residential structure
- farm building or outbuilding
- industrial, commercial, or institutional building
- remnant or ruin
- engineering work such as a bridge, canal, dams, etc.

For more information on researching the age of buildings or properties, see the Ontario Heritage Tool Kit Guide [Heritage Property Evaluation](#).

Part C: Other Considerations

5a. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) is considered a landmark in the local community or contains any structures or sites that are important to defining the character of the area?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has potential landmarks or defining structures and sites, for instance:

- buildings or landscape features accessible to the public or readily noticeable and widely known
- complexes of buildings
- monuments
- ruins

5b. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) has a special association with a community, person or historical event?

Local or Aboriginal knowledge may reveal that the project location is situated on a parcel of land that has a special association with a community, person or event of historic interest, for instance:

- Aboriginal sacred site
- traditional-use area
- battlefield
- birthplace of an individual of importance to the community

5c. Is there local or Aboriginal knowledge or accessible documentation suggesting that the property (or project area) contains or is part of a cultural heritage landscape?

Landscapes (which may include a combination of archaeological resources, built heritage resources and landscape elements) may be of cultural heritage value or interest to a community.

For example, an Aboriginal trail, historic road or rail corridor may have been established as a key transportation or trade route and may have been important to the early settlement of an area. Parks, designed gardens or unique landforms such as waterfalls, rock faces, caverns, or mounds are areas that may have connections to a particular event, group or belief.

For more information on Questions 5.a., 5.b. and 5.c., contact:

- Elders in Aboriginal Communities or community researchers who may have information on potential cultural heritage resources. Please note that Aboriginal traditional knowledge may be considered sensitive.
- [municipal heritage committees](#) or local heritage organizations
- Ontario Historical Society's "[Heritage Directory](#)" - for a list of historical societies and heritage organizations in the province

An internet search may find helpful resources, including:

- historical maps
- historical walking tours
- municipal heritage management plans
- cultural heritage landscape studies
- municipal cultural plans

Information specific to trails may be obtained through [Ontario Trails](#).

Ministry of Citizenship and Multiculturalism (MCM)

Archaeology Program Unit
Heritage Branch
Citizenship, Inclusion and Heritage Division
5th Floor, 400 University Ave.
Toronto ON M7A 2R9
Tel.: (249) 885-1567
Email: Paige.Campbell@ontario.ca

Ministère des Affaires civiques et du Multiculturalisme (MCM)

Unité des programme d'archéologie
Direction du patrimoine
Division de la citoyenneté, de l'inclusion et du patrimoine
5e étage, 400 ave. University
Toronto ON M7A 2R9
Tél. : (249) 885-1567
Email: Paige.Campbell@ontario.ca



Aug 15, 2025

Matthew Severn (P1093)
TMHC Inc.
105 - 1108 Dundas London ON N5W3A7

RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 1-2 Archaeological Assessment Aggregate Pit License Expansion Part of Lot 17, Concession 2 North Division Geographic Township of North Dorchester Now the Municipality of Thames Centre Middlesex County, Ontario", Dated Feb 18, 2025, Filed with MCM on Mar 15, 2025, MCM Project Information Form Number P1093-0010-2024, MCM File Number 0022883

Dear Matthew Severn (P1093):

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.¹ This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the assessment of the study area as depicted in Map 8 of the above titled report and recommends the following:

All work met provincial standards, and no archaeological material was documented during the assessment. As such, no further archaeological assessment is recommended.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Paige Campbell
Archaeology Review Officer

cc. Archaeology Licensing Officer
Bernie Jansen, HM
Bernie Janssen, Harrington McAvan Ltd
PENDING PENDING, N/A

¹*In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.*

Criteria for Evaluating Archaeological Potential A Checklist for the Non-Specialist

The purpose of the checklist is to determine:

- if a property(ies) or project area may contain archaeological resources i.e., have archaeological potential
- it includes all areas that may be impacted by project activities, including – but not limited to:
 - the main project area
 - temporary storage
 - staging and working areas
 - temporary roads and detours

Processes covered under this checklist, such as:

- *Planning Act*
- *Environmental Assessment Act*
- *Aggregates Resources Act*
- *Ontario Heritage Act* – Standards and Guidelines for Conservation of Provincial Heritage Properties

Archaeological assessment

If you are not sure how to answer one or more of the questions on the checklist, you may want to hire a licensed consultant archaeologist (see page 4 for definitions) to undertake an archaeological assessment.

The assessment will help you:

- identify, evaluate and protect archaeological resources on your property or project area
- reduce potential delays and risks to your project

Note: By law, archaeological assessments **must** be done by a licensed consultant archaeologist. Only a licensed archaeologist can assess – or alter – an archaeological site.

What to do if you:

- **find an archaeological resource**

If you find something you think may be of archaeological value during project work, you must – by law – stop all activities immediately and contact a licensed consultant archaeologist

The archaeologist will carry out the fieldwork in compliance with the *Ontario Heritage Act* [s.48(1)].

- **unearth a burial site**

If you find a burial site containing human remains, you must immediately notify the appropriate authorities (i.e., police, coroner's office, and/or Registrar of Cemeteries) and comply with the *Funeral, Burial and Cremation Services Act*.

Other checklists

Please use a separate checklist for your project, if:

- you are seeking a Renewable Energy Approval under Ontario Regulation 359/09 – [separate checklist](#)
- your Parent Class EA document has an approved screening criteria (as referenced in Question 1)

Please refer to the Instructions pages when completing this form.

Project or Property Name
Proposed Aggregate Pit, Paton-Sims

Project or Property Location (upper and lower or single tier municipality)
Lot 17, Concession 2 North Division Dorchester, Thames Centre, Ontario

Proponent Name
Bernie Janssen, Harrington Mcaven

Proponent Contact Information
bernie@harringtonmcaven.com

Screening Questions

1. Is there a pre-approved screening checklist, methodology or process in place? Yes No

If Yes, please follow the pre-approved screening checklist, methodology or process.

If No, continue to Question 2.

2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS? Yes No

If Yes, do not complete the rest of the checklist. You are expected to follow the recommendations in the archaeological assessment report(s).

The proponent, property owner and/or approval authority will:

- summarize the previous assessment
- add this checklist to the project file, with the appropriate documents that demonstrate an archaeological assessment was undertaken e.g., MTCS letter stating acceptance of archaeological assessment report

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g., environmental assessment document
- maintained by the property owner, proponent or approval authority

If No, continue to Question 3.

3. Are there known archaeological sites on or within 300 metres of the property (or the project area)? Yes No

4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property (or project area)? Yes No

5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or project area)? Yes No

6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)? Yes No

7. Has the property (or project area) been recognized for its cultural heritage value? Yes No

If Yes to any of the above questions (3 to 7), do not complete the checklist. Instead, you need to hire a licensed consultant archaeologist to undertake an archaeological assessment of your property or project area.

If No, continue to question 8.

8. Has the entire property (or project area) been subjected to recent, extensive and intensive disturbance? Yes No

If Yes to the preceding question, do not complete the checklist. Instead, please keep and maintain a summary of documentation that provides evidence of the recent disturbance.

An archaeological assessment is not required.

If No, continue to question 9.

Yes No

9. Are there present or past water sources within 300 metres of the property (or project area)?

If Yes, an archaeological assessment is required.

If No, continue to question 10.

Yes No

10. Is there evidence of two or more of the following on the property (or project area)?

- elevated topography
- pockets of well-drained sandy soil
- distinctive land formations
- resource extraction areas
- early historic settlement
- early historic transportation routes

If Yes, an archaeological assessment is required.

If No, there is low potential for archaeological resources at the property (or project area).

The proponent, property owner and/or approval authority will:

- summarize the conclusion
- add this checklist with the appropriate documentation to the project file

The summary and appropriate documentation may be:

- submitted as part of a report requirement e.g., under the *Environmental Assessment Act, Planning Act* processes
- maintained by the property owner, proponent or approval authority

Instructions

Please have the following available, when requesting information related to the screening questions below:

- a clear map showing the location and boundary of the property or project area
 - large scale and small scale showing nearby township names for context purposes
- the municipal addresses of all properties within the project area
- the lot(s), concession(s), and parcel number(s) of all properties within a project area

In this context, the following definitions apply:

- **consultant archaeologist** means, as defined in Ontario regulation as an archaeologist who enters into an agreement with a client to carry out or supervise archaeological fieldwork on behalf of the client, produce reports for or on behalf of the client and provide technical advice to the client. In Ontario, these people also are required to hold a valid professional archaeological licence issued by the Ministry of Tourism, Culture and Sport.
- **proponent** means a person, agency, group or organization that carries out or proposes to carry out an undertaking or is the owner or person having charge, management or control of an undertaking.

1. Is there a pre-approved screening checklist, methodology or process in place?

An existing checklist, methodology or process may be already in place for identifying archaeological potential, including:

- one prepared and adopted by the municipality e.g., archaeological management plan
- an environmental assessment process e.g., screening checklist for municipal bridges
- one that is approved by the Ministry of Tourism, Culture and Sport under the Ontario government's [Standards & Guidelines for Conservation of Provincial Heritage Properties](#) [s. B.2.]

2. Has an archaeological assessment been prepared for the property (or project area) and been accepted by MTCS?

Respond 'yes' to this question, if all of the following are true:

- an archaeological assessment report has been prepared and is in compliance with MTCS requirements
 - a letter has been sent by MTCS to the licensed archaeologist confirming that MTCS has added the report to the Ontario Public Register of Archaeological Reports (Register)
- the report states that there are no concerns regarding impacts to archaeological sites

Otherwise, if an assessment has been completed and deemed compliant by the MTCS, and the ministry recommends further archaeological assessment work, this work will need to be completed.

For more information about archaeological assessments, contact:

- approval authority
- proponent
- consultant archaeologist
- Ministry of Tourism, Culture and Sport at archaeology@ontario.ca

3. Are there known archaeological sites on or within 300 metres of the property (or project area)?

MTCS maintains a database of archaeological sites reported to the ministry.

For more information, contact MTCS Archaeological Data Coordinator at archaeology@ontario.ca.

4. Is there Aboriginal or local knowledge of archaeological sites on or within 300 metres of the property?

Check with:

- Aboriginal communities in your area
- local municipal staff

They may have information about archaeological sites that are not included in MTCS' database.

Other sources of local knowledge may include:

- property owner
- [local heritage organizations and historical societies](#)
- local museums
- [municipal heritage committee](#)
- published local histories

5. Is there Aboriginal knowledge or historically documented evidence of past Aboriginal use on or within 300 metres of the property (or property area)?

Check with:

- Aboriginal communities in your area
- local municipal staff

Other sources of local knowledge may include:

- property owner
- [local heritage organizations and historical societies](#)
- local museums
- [municipal heritage committee](#)
- published local histories

6. Is there a known burial site or cemetery on the property or adjacent to the property (or project area)?

For more information on known cemeteries and/or burial sites, see:

- Cemeteries Regulation Unit, Ontario Ministry of Consumer Services – for [database of registered cemeteries](#)
- Ontario Genealogical Society (OGS) – to [locate records of Ontario cemeteries](#), both currently and no longer in existence; cairns, family plots and burial registers
- Canadian County Atlas Digital Project – to [locate early cemeteries](#)

In this context, ‘adjacent’ means ‘contiguous’, or as otherwise defined in a municipal official plan.

7. Has the property (or project area) been recognized for its cultural heritage value?

There is a strong chance there may be archaeological resources on your property (or immediate area) if it has been listed, designated or otherwise identified as being of cultural heritage value by:

- your municipality
- Ontario government
- Canadian government

This includes a property that is:

- designated under *Ontario Heritage Act* (the OHA), including:
 - individual designation (Part IV)
 - part of a heritage conservation district (Part V)
 - an archaeological site (Part VI)
- subject to:
 - an agreement, covenant or easement entered into under the OHA (Parts II or IV)
 - a notice of intention to designate (Part IV)
 - a heritage conservation district study area by-law (Part V) of the OHA
- listed on:
 - a municipal register or inventory of heritage properties
 - Ontario government’s list of provincial heritage properties
 - Federal government’s list of federal heritage buildings
- part of a:
 - National Historic Site
 - UNESCO World Heritage Site
- designated under:
 - *Heritage Railway Station Protection Act*
 - *Heritage Lighthouse Protection Act*
- subject of a municipal, provincial or federal commemorative or interpretive plaque.

To determine if your property or project area is covered by any of the above, see:

- Part A of the MTCS Criteria for Evaluating Potential for Built Heritage and Cultural Heritage Landscapes

Part VI – Archaeological Sites

Includes five sites designated by the Minister under Regulation 875 of the Revised Regulation of Ontario, 1990 (Archaeological Sites) and 3 marine archaeological sites prescribed under Ontario Regulation 11/06.

For more information, check [Regulation 875](#) and [Ontario Regulation 11/06](#).

8. Has the entire property (or project area) been subjected to recent extensive and intensive ground disturbance?

Recent: after-1960

Extensive: over all or most of the area

Intensive: thorough or complete disturbance

Examples of ground disturbance include:

- quarrying
- major landscaping – involving grading below topsoil
- building footprints and associated construction area
 - where the building has deep foundations or a basement
- infrastructure development such as:
 - sewer lines
 - gas lines
 - underground hydro lines
 - roads
 - any associated trenches, ditches, interchanges. **Note:** this applies only to the excavated part of the right-of-way; the remainder of the right-of-way or corridor may not have been impacted.

A ground disturbance does **not** include:

- agricultural cultivation
- gardening
- landscaping

Site visits

You can typically get this information from a site visit. In that case, please document your visit in the process (e.g., report) with:

- photographs
- maps
- detailed descriptions

If a disturbance isn't clear from a site visit or other research, you need to hire a licensed consultant archaeologist to undertake an archaeological assessment.

9. Are there present or past water bodies within 300 metres of the property (or project area)?

Water bodies are associated with past human occupations and use of the land. About 80-90% of archaeological sites are found within 300 metres of water bodies.

Present

- Water bodies:
 - primary - lakes, rivers, streams, creeks
 - secondary - springs, marshes, swamps and intermittent streams and creeks
- accessible or inaccessible shoreline, for example:
 - high bluffs
 - swamps
 - marsh fields by the edge of a lake
 - sandbars stretching into marsh

Water bodies not included:

- man-made water bodies, for example:
 - temporary channels for surface drainage
 - rock chutes and spillways
 - temporarily ponded areas that are normally farmed
 - dugout ponds
- artificial bodies of water intended for storage, treatment or recirculation of:
 - runoff from farm animal yards
 - manure storage facilities
 - sites and outdoor confinement areas

Past

Features indicating past water bodies:

- raised sand or gravel beach ridges – can indicate glacial lake shorelines
- clear dip in the land – can indicate an old river or stream
- shorelines of drained lakes or marshes
- cobble beaches

You can get information about water bodies through:

- a site visit
- aerial photographs
- 1:10,000 scale [Ontario Base Maps](#) - or [equally detailed and scaled maps](#).

10. Is there evidence of two or more of the following on the property (or project area)?

- elevated topography
- pockets of well-drained sandy soil
- distinctive land formations
- resource extraction areas
- early historic settlement
- early historic transportation routes

• **Elevated topography**

Higher ground and elevated positions - surrounded by low or level topography - often indicate past settlement and land use.

Features such as eskers, drumlins, sizeable knolls, plateaus next to lowlands, or other such features are a strong indication of archaeological potential.

Find out if your property or project area has elevated topography, through:

- site inspection
- aerial photographs
- [topographical maps](#)

• **Pockets of well-drained sandy soil, especially within areas of heavy soil or rocky ground**

Sandy, well-drained soil - in areas characterized by heavy soil or rocky ground - may indicate archaeological potential

Find out if your property or project area has sandy soil through:

- site inspection
- [soil survey reports](#)

- **Distinctive land formations**

Distinctive land formations include – but are not limited to:

- waterfalls
- rock outcrops
- rock faces
- caverns
- mounds, etc.

They were often important to past inhabitants as special or sacred places. The following sites may be present – or close to – these formations:

- burials
- structures
- offerings
- rock paintings or carvings

Find out if your property or project areas has a distinctive land formation through:

- a site visit
- aerial photographs
- 1:10,000 scale [Ontario Base Maps](#) - or [equally detailed and scaled maps](#).

- **Resource extraction areas**

The following resources were collected in these extraction areas:

- food or medicinal plants e.g., migratory routes, spawning areas, prairie
- scarce raw materials e.g., quartz, copper, ochre or outcrops of chert
- resources associated with early historic industry e.g., fur trade, logging, prospecting, mining

Aboriginal communities may hold traditional knowledge about their past use or resources in the area.

- **Early historic settlement**

Early Euro-Canadian settlement include – but are not limited to:

- early military or pioneer settlement e.g., pioneer homesteads, isolated cabins, farmstead complexes
- early wharf or dock complexes
- pioneers churches and early cemeteries

For more information, see below – under the early historic transportation routes.

- **Early historic transportation routes** - such as trails, passes, roads, railways, portage routes, canals.

For more information, see:

- historical maps and/or historical atlases
 - for information on early settlement patterns such as trails (including Aboriginal trails), monuments, structures, fences, mills, historic roads, rail corridors, canals, etc.
 - [Archives of Ontario](#) holds a large collection of historical maps and historical atlases
 - digital versions of historic atlases are available on the [Canadian County Atlas Digital Project](#)
- commemorative markers or plaques such as local, [provincial](#) or [federal](#) agencies
- [municipal heritage committee](#) or other [local heritage organizations](#)
 - for information on early historic settlements or landscape features (e.g., fences, mill races, etc.)
 - for information on commemorative markers or plaques