

APPENDIX B - ARCHAEOLOGICAL ASSESSMENT REPORT

**Stage I Archaeological Assessment
Schedule C Class EA
Union Water Supply System
1615 Union Avenue
Part of Lot 9, Concession I Eastern Division
Former Geographic Township of Gosfield
Now Town of Kingsville, Essex County, Ontario**

Original Report

Submitted to:
Ministry of Citizenship and Multiculturalism

Prepared for:
Associated Engineering
165 Commerce Valley Drive West
Markam, ON L3T 7V8

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



Licensee: Kelly Gostick, MA (PI 189)
PIF No: PI 189-0035-2023
Project No: 2023-292
Draft Dated: April 16, 2024



EXECUTIVE SUMMARY

In the summer of 2023, TMHC was contracted by Associated Engineering Ltd. to carry out a Stage I archaeological assessment for a Schedule C Class EA to provide peaking capacity for the Union Water Supply System (UWSS) water system at 1615 Union Avenue, Kingsville, Ontario. The subject property is roughly 23.62 ha (58.4 ac) in size and contains the existing water treatment plant, underground reservoir, open grassed areas and forested areas. The property falls within Lot 9, Concession I Eastern Division in the former Geographic Township of Gosfield, now Town of Kingsville, Essex County. In 2023, TMHC was contracted by Associated Engineering to conduct the assessment, which was conducted in accordance with the provisions of the *Environmental Assessment Act* and the *Provincial Policy Statement (PPS)*. The purpose of the assessment was to determine whether there was potential for archaeological resources to be present within the subject property.

The Stage I background study included a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area, and a consideration of topographic and physiographic features, soils and drainage. According to the map-based review and background research, potential for the discovery of archaeological sites is indicated by the presence of or proximity (within 300 m) to:

- 19th-century travel routes (Concession Road 2 East, Union Avenue and Seacliff Drive);
- a historic watercourse (1913 topographic map); and
- 19th-century settlement areas (Union and Ruthven).

The Stage I property inspection has visually confirmed that the majority of the subject property (8.6 ha; 64.0%) has been subject to extensive disturbance and no longer retains archaeological potential. These areas have been photo-documented. Grassed and treed portions of the subject property (4.8 ha; 36%) are not obviously disturbed, retain archaeological potential, and are recommended for Stage 2 assessment via test pitting at a 5 m interval.

Our recommendations are subject to the conditions laid out in Section 7.0 of this report and to the MCM' review and acceptance of this report into the provincial register.



TABLE OF CONTENTS

Executive Summary	i
Table of Contents	ii
List of Images	iii
List of Maps	iv
List of Tables	iv
Project Personnel	v
Acknowledgements	v
Territorial Acknowledgement	vi
Indigenous Participants	vii
About TMHC	viii
Key Staff Bios	ix
Statement of Qualifications and Limitations	x
Quality Information	xi
1 Project Context	1
1.1 Development Context	1
1.1.1 Introduction	1
1.1.2 Purpose and Legislative Context	2
2 Stage I Background Review	3
2.1 Research Methods and Sources	3
2.2 Project Context: Archaeological Context	5
2.2.1 Subject Property: Overview and Physical Setting	5
2.2.2 Summary of Registered or Known Archaeological Sites	5
2.2.3 Summary of Past Archaeological Investigations within 50 m	6
2.2.4 Dates of Archaeological Fieldwork	6
2.3 Project Context: Historical Context	7
2.3.1 Indigenous Settlement in Essex County	7
2.3.2 Treaty History	11
2.3.3 Nineteenth-Century and Municipal Settlement	11
2.3.4 Nineteenth Century Land Use History and Map Review	13
2.3.5 Built Heritage Environment	14
3 Stage I Property Inspection	15
4 Analysis and Conclusions	16
5 Recommendations	17
6 Summary	18
7 Advice on Compliance with Legislation	19
8 Bibliography	20
9 Images	22
10 Maps	36
SUPPLEMENTARY DOCUMENTATION	58



LIST OF IMAGES

Image 1: Grassed Area in Northern Portion of Property	23
Image 2: Subsurface Pipes in Northern Portion of Property	23
Image 3: Forested Area in Northern Portion of Property	24
Image 4: Gravel Laneway in Northern Portion of Property	24
Image 5: Drainage Ditch along Edge of Northern Portion of Property	25
Image 6: Soil Pile in Central Portion of Property	25
Image 7: Soil Pile, Gravel Laneway and Ditch in Central Portion of Property	26
Image 8: Lagoon in Central Portion of Property	26
Image 9: Gravel Laneway and Subsurface Utilities in Central Portion of Property	27
Image 10: Gravel Laneway and Subsurface Utilities in Central Portion of Property	27
Image 11: Existing Building in Eastern Portion of Property	28
Image 12: Gravel Laneway and Water Storage Tanks in Eastern Portion of Property	28
Image 13: Water Storage Tanks in Eastern Portion of Property	29
Image 14: Existing Disturbance in Eastern Portion of Property	29
Image 15: Existing Disturbance in Eastern Portion of Property	30
Image 16: Existing Building in Eastern Portion of Property	30
Image 17: Subsurface Utilities in Eastern Portion of Property	31
Image 18: Subsurface Utilities in Eastern Portion of Property	31
Image 19: Underground Reservoir in Eastern Portion of Property	32
Image 20: Underground Reservoir in Eastern Portion of Property	32
Image 21: Underground Reservoir in Eastern Portion of Property	33
Image 22: Grassed Area in Southern Portion of Property	33
Image 23: Drainage Ditch in Southern Portion of Property	34
Image 24: Drainage Ditch and Berm in Southern Portion of Property	34
Image 25: Subsurface Utility in Southern Portion of Property	35
Image 26: Pipe Bedding and Gravel Road Details	35



LIST OF MAPS

Map 1: Location of the Subject Property in Kingsville, ON.....	37
Map 2: Aerial Photograph Showing the Location of the Subject Property.....	38
Map 3: Physiography Within the Vicinity of the Subject Property	39
Map 4: Soils Within the Vicinity of the Subject Property.....	40
Map 5: Location of the Subject Property Shown on the 1877 Walling Map.....	41
Map 6: Location of the Subject Property Shown on the 1881 Historic Atlas Map	42
Map 7: Location of the Subject Property Shown on a 1954 Aerial Photograph	43
Map 8: Location of the Subject Property Shown on a 1970 Topographic Map	44
Map 9: Location of the Subject Property Shown on a 1980 Aerial Photograph	45
Map 10: Location of the Subject Property Shown on a 2006 Aerial Photograph.....	46
Map 11: Location of the Subject Property Shown on a 2008 Aerial Photograph.....	47
Map 12: Location of the Subject Property Shown on a 2013 Aerial Photograph.....	48
Map 13: Location of the Subject Property Shown on a 2017 Aerial Photograph.....	49
Map 14: Subsurface Utilities Present within Northern Portion of Subject Property.....	50
Map 15: Subsurface Utilities Present within Central Portion of Subject Property.....	51
Map 16: Subsurface Utilities Present within Central and Southern Portion of Subject Property.....	52
Map 18: Stage I Assessment Results – Northern Portion.....	53
Map 19: Stage I Assessment Results – Central and Southern Portion.....	54
Map 20: Stage I Assessment Results Shown on Proponent Mapping – Northern Portion.....	55
Map 21: Stage I Assessment Results Shown on Proponent Mapping – Central and Southern Portion.....	56
Map 22: Unaltered Proponent Mapping	57

LIST OF TABLES

Table 1: Registered Archaeological Sites within 1 km of the Subject Property.....	6
Table 2: Chronology of Indigenous Settlement in Essex County	7
Table 3: The Four Phases of the Western Basin Tradition.....	10
Table 4: Documentary Records	15



PROJECT PERSONNEL

Project Manager	Kelly Gostick, MA (PI 189)
Project Administrators	Victoria Scott, MA, MLis Kellie Theaker, CHRP
Health and Safety Coordinator	Wendi Jakob, C.Tech, CAPM
Fieldwork Coordinators	Johnathan Freeman, MA (P274) David Gostick, BA
Field Director	Arwen Johns, MA (R1330)
GIS Mapping Technicians	John Moody, PhD David Gostick, BA
Report Production	Kelly Gostick, MA (PI 189)
Senior Reviewer	Matthew Beaudoin, PhD (P324)

ACKNOWLEDGEMENTS

Danielle Holder	<i>Associated Engineering Ltd.</i>
Anna Comerton	<i>Associated Engineering Ltd.</i>



TERRITORIAL ACKNOWLEDGEMENT

The subject property 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 McKee Purchase (Treaty No. 2) of 1790 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) whom we recognize as contemporary stewards of the land and vital contributors of our society.



INDIGENOUS PARTICIPANTS

Caldwell First Nation (Caldwell)

Coordinators:

Zack Hamm

Michael McMaster

Michelle McCormack

Fieldwork Monitors

Eric Peters



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 Cultural Resource Management (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 CRM. 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/Manager – Archaeological Assessments

Matthew Beaudoin received a PhD in Anthropology from Western University in 2013 and became a Principal at TMHC in 2019. During his archaeological career, Matthew has conducted extensive field research and artifact analysis on Indigenous and Settler sites from Labrador and Ontario. In addition, Matthew has also conducted ethnographic projects in Labrador. Since joining TMHC in 2008, Matthew has been involved with several notable projects, such as the Imperial Oil's Waterdown to Finch Project, the Camp Ipperwash Project, and the Scugog Island Natural Gas Pipeline Project.

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

Kelly Gostick, MA, Archaeological Project Lead

Kelly received her Master's Degree in Anthropology from Western University in 2017, studying Late Woodland period settlement patterns. With ten years' experience in consulting archaeology, Kelly has performed numerous roles including field director, report writer, artifact analysis and lab manager. Since joining TMHC in 2016, Kelly has performed all aspects of archaeological work including lab work, archaeological field work and report writing. Kelly is a member of the Ontario Archaeological Society and the Canadian Archaeological Association.



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 section thereof should not be read out of such context;
- 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:

Kelly Gostick, MA (PI 189)

Archaeological 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

In the summer of 2023, TMHC was contracted by Associated Engineering Ltd. to carry out a Stage I archaeological assessment for a Schedule C Class EA to provide peaking capacity for the Union Water Supply System (UWSS) water system at 1615 Union Avenue, Kingsville, Ontario. The subject property is roughly 23.62 ha (58.4 ac) in size and contains the existing water treatment plant, underground reservoir, open grassed areas and forested areas. The property falls within Lot 9, Concession I Eastern Division in the former Geographic Township of Gosfield, now Town of Kingsville, Essex County. In 2023, TMHC was contracted by Associated Engineering to conduct the assessment, which was conducted in accordance with the provisions of the *Environmental Assessment Act* and the *Provincial Policy Statement (PPS)*. The purpose of the assessment was to determine whether there was potential for archaeological resources to be present within the subject property.

All archaeological assessment activities were performed under the professional archaeological license of Kelly Gostick, MA (PI 189) and in accordance with the 2011 *Standards and Guidelines for Consultant Archaeologists* (MTC 2011). Permission to commence the study was given by Danielle Holder of Associated Engineering Ltd.



1.1.2 Purpose and Legislative Context

The *Ontario Heritage Act* (R.S.O. 1990) makes provisions for the protection and conservation of heritage resources in the Province of Ontario. Heritage concerns are recognized as a matter of provincial interest in Section 2.6.2 of the *Provincial Policy Statement* (PPS 2020) which states:

development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved.

In the PPS, the term conserved means:

the identification, protection, management and use of *built heritage resources, cultural heritage landscapes and archaeological resources* in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

The *Environmental Assessment Act* provides for the protection and conservation of the environment. In this case, the environment is widely defined to cover “cultural heritage” resources. Section 5(3)(c) of the Act stipulates that heritage resources to be affected by a proposed undertaking be identified during the environmental screening process. Within the EA process, the purpose of a Stage I background study is to determine if there are known cultural resources within the proposed Project area, or potential for such resources to exist. Subsequently, it can act as a planning tool by identifying areas of concern that, where possible, could be avoided to minimize environmental impact. It is also used to determine the need for a Stage 2 field assessment involving the search for archaeological sites.



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 (MCM) PastPortal for 1 km around the subject 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' PastPortal system that compiled a list of registered archaeological sites within 1 km of the subject property (completed August 14, 2023);
- 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 also 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, in an effort 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 Settler 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 I 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 Subject Property: Overview and Physical Setting

The subject property is roughly 23.62 ha (58.4 ac) in size and contains the existing water treatment plant, underground reservoir, open grassed areas and forested areas (Maps 1 and 2). The property falls within Lot 9, Concession 1 Eastern Divisions in the former Geographic Township of Gosfield, now Town of Kingsville, Essex County. The subject property is bound to the north by Road 2 East, to the east by property boundaries and County Road 45, to the south by property boundaries and Seacliff Drive and to the west by property boundaries. The surrounding area is either agricultural and residential.

The proposed severance falls within the St. Clair Clay Plains physiographic region (Chapman and Putnam 1984:147; Map 3). The region consists of an extensive clay plain covering over 2,000 square miles east of the St. Clair River and south of the Lake Huron shoreline (Chapman and Putnam 1984:147). The plain shows very little notable relief yet minor elevation changes have a marked effect on soils and vegetation (Chapman and Putnam 1984:147). The St. Clair Clay Plain was formerly the bed of glacial lakes Whittlesey and Warren (Chapman and Putnam 1984:147) and the former shorelines of these and related glacial lake phases have been documented along the eastern edge of the plain (Map 3). Most of the St. Clair Plain has poor drainage due to its flatness, heavy soils and lack of natural watercourses.

The soil survey for Essex County indicates that the subject property has Parkhill Loam and Harrow Loam (Map 4). Parkhill Loam is poorly drained soil and is characterized by a dark grey-brown A horizon underlain by a very mottled grey G horizon (Richards et al. 1949:26). Harrow Loam is a well-draining soil and is characterized by dark grey-brown sand loam A horizon underlain by light yellow-brown sand (Richards et al. 1949:39).

The Albert Gunning Drain and Union Waer Drain runs though the subject property (Map 1). The general area is drained by small tributaries that drain into Lake Erie to the south.

2.2.2 Summary of Registered or Known Archaeological Sites

According to PastPortal (accessed August 14, 2023) there are three registered archaeological sites within 1 km of the subject property (Table 1). The H1 site is located to the west of Ruthven, and includes a 19th and 20th century artifact scatter determined not to require further archaeological assessment. The Fox and Neal site was registered by Douglas Carey in 1977 and is described as located to the east of Ruthven. No further information is available. The Fotheringham site is listed as a multicomponent Indigenous site, also registered by Carey in 1977. It was identified east of Ruthven, and is a campsite and burial occupied during the Archaic and Woodland periods. No further information is available.



Table 1: Registered Archaeological Sites within 1 km of the Subject Property

Borden Number	Site Name	Time Period	Affinity	Site Type	Status
AaHq-29	HI	19 th Century	19 th Century	Homestead	No Further CHVI
AaHp-7	Fox and Neal	n/a	n/a	n/a	n/a
AaHp-2	Fotheringham	Archaic, Woodland	Indigenous	Other-Camp/Campsite, Burial	n/a

2.2.3 Summary of Past Archaeological Investigations within 50 m

During the course of this study no record was found of any archaeological investigations within 50 m of the subject property. However, it should be noted that the MCM currently does not provide an inventory of archaeological assessments to assist in this determination.

2.2.4 Dates of Archaeological Fieldwork

The Stage I site inspection was conducted on September 8, 2023 in overcast and warm weather conditions. The field inspection was conducted by Arwen Johns, MA (R1330).



2.3 Project Context: Historical Context

2.3.1 Indigenous Settlement in Essex County

While numerous archaeological surveys have been undertaken for portions of Essex County in advance of wind and other energy projects, little systematic archaeological assessment has taken place within the immediate environs of the project area. As such, our knowledge of the Indigenous occupation in the general area is incomplete. Nevertheless, using province-wide and region-specific data, a generalized cultural chronology for Indigenous settlement in Essex County can be proposed (Table 2). A summary of the themes and temporal periods of Indigenous occupation is provided below.

Table 2: Chronology of Indigenous Settlement in Essex 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	Couture
Transitional Woodland	500-900 CE	first corn, cord-wrapped stick pottery	
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	Three Fires Confederacy, Attawandaron, Wendat, Odawa, Wenro
Contact Period - Settler	1796 CE-present	industrial goods, homesteads	pioneer life, municipal settlement



2.3.1.1 Paleo Period

The first human populations to inhabit the area came to the region between 10,000 and 12,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different then they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleoindians by archaeologists, Ontario's first 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 Paleoindian diet, supplemented by wild plants, small game and fish. Given the low density of populations on the landscape at this time and their mobile nature, Paleoindian sites are small and ephemeral. They are usually identified by the presence of distinctive fluted projectile points, usually manufactured on high quality raw materials, including Onondaga chert from the Niagara Escarpment and Fossil Hill chert from Blue Mountains. Paleoindian sites have commonly been found in association with relic glacial lakeshores throughout Ontario.

2.3.1.2 Archaic Period

Settlement and subsistence patterns change significantly during the Archaic period as both the landscape and ecosystem adjusted to the retreat of the glaciers. Building on earlier patterns, early Archaic 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. The large cold-weather mammals that formed the basis of the Paleo subsistence pattern became extinct or moved northward with the onset of warmer climate conditions. Thus, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Over time, reliance on specific food resources like fish, deer and nuts became more pronounced 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. Recent research has also demonstrated that subterranean house structures were in use during the later portion of this period.

2.3.1.3 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.

2.3.1.4 Late Woodland Period

By the Late Woodland period there was a distinctive cultural occupation of the western portion of Ontario, including Essex, Kent and Lambton counties plus some portions of neighbouring ones as well. The primary Late Woodland occupants of the Windsor area prior to European arrival are associated with the Western Basin Tradition. The populations occupying Western Basin Tradition sites had ties with people in southeastern Michigan and northwestern Ohio, and as Murphy and Ferris (1990:189) argue, the archaeological manifestation represents an *in situ* cultural development from the earlier Middle Woodland peoples. The Western Basin Tradition seems to have been centred in the territory of the eastern drainage basin of Lake Erie, Lake St. Clair, and the southern end of Lake Huron. Murphy and Ferris (1990) refute an Iroquoian affiliation of the Western Basin People, and instead favour an Algonquian designation. The Western Basin Tradition is divided up into four phases based on differences in settlement and subsistence strategies and pottery attributes. The four phases are: Riviere au Vase, Younge, Springwells, and Wolf. Table 3 below is extracted from the Windsor *Archaeological Master Plan* (CRM Group Ltd. 2005:2-13). 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. Unlike Iroquoian pottery, clay fabrics were mixed with shell temper.



Table 3: The Four Phases of the Western Basin Tradition

Phase	Date	Settlement and Subsistence	Pottery
Riviere au Vase	600-900 CE	<ul style="list-style-type: none"> - developed directly from the Middle Woodland Couture complex - seasonal mobility geared toward resource availability - summer base camps by lakeshores, fall/winter in interior - no corn or beans present 	<ul style="list-style-type: none"> - Wayne ware: small, thin walled, vertical cord-marking - later wares are tool impressed
Younge	900-1200 CE	<ul style="list-style-type: none"> - corn and beans present - settlement & subsistence continues as before with focus on warm season gathering of groups and winter dispersals 	<ul style="list-style-type: none"> - pottery is larger, more elaborately decorated - body of vessels are corded, coarsely & irregularly - multiple bands of tool impression
Springwells	1200-1400 CE	<ul style="list-style-type: none"> - larger more permanent warm season settlements - longhouses & palisades present - more intensive horticulture - locations near arable lands, and along the shorelines of marshes, river and lakes - possible use wattle & daub 	<ul style="list-style-type: none"> - ceramics large & bag-shaped - collars & castellated rims decorated with horizontal bands of incised or impressed decoration - roughened, self slip & ribbed paddle surfaces first appear
Wolf	1400-1600 CE	<ul style="list-style-type: none"> - few examples of sites known - distribution limited to around Lake St. Clair, St. Clair River - large warm weather villages, often fortified by earthworks - nature of these sites is attributed to the westward expansion of Ontario Iroquoians that resulted in abandonment by the Western Basin peoples in the early 1600 	<ul style="list-style-type: none"> - diagnostic characteristic of Wolf phase is Parker Festooned pottery - undulating bands of dentate stamped impressions or stamped applique strips on vessel necks - after A.D. 1500 most vessels with strap handles & notched lips or notched horizontal rim strips, plus shell temper

* Table information from the Windsor Archaeological Master Plan (CRM Group Ltd. et al. 2005: 2-13)



2.3.2 Treaty History

The subject property is encompassed by the McKee Purchase (Treaty No. 2). The treaty was signed May 19, 1790 between the Deputy Agent of Indian Affairs—Alexander McKee, and 27 chiefs of local Ojibwa, Odawa, Pottawatomie, and Wendat nations (Canada 1891; Surtees 1984). The treaty covered a significant area within what would become Middlesex, Elgin, Kent, and Essex counties along the north shore of Lake Erie, extending primarily north and west. At the time of signing, only two reserves were created. What became known as the Huron and the Huron Church Reserves near what would later be known as Windsor were the domain of all signatories (Surtees 1984). During the 19th century, the ownership of the reserves and islands in the Detroit River were contested between the Wendat occupants and the remaining signatories of the Three Fires Confederacy. The Chippewas and Pottawatomi argued that the Wendat were only guests having lost their original homelands and permitted to temporarily settle along the Detroit River by their Anishinaabe allies (Nin.Da.Waab.Jig 2018). Many Wendat moved further into the United States forming the contemporary Wyandot Nations. The Wendat families that remained on the Canadian side of the Detroit River experienced a series of Crown actions over the 19th century that saw the reserves gradually privatized and unilaterally sold off until the Anderdon Wendat's Canadian status was finally dissolved in 1914 (Canada 1891).

The traditional territories of several contemporary Anishinaabe First Nations encompass the subject property including Aamjiwnaang First Nation, Chippewas of the Thames First Nation and Walpole Island First Nation (Bkejwanong). The traditional territory of Caldwell First Nation, an Anishinaabe nation who were prevented from participating in Treaty No. 2, also encompasses the subject property. Caldwell First Nation settled their outstanding land claim with the federal government in 2010-11 (Canada 2020).

2.3.3 Nineteenth-Century and Municipal Settlement

The subject property falls within Lot 9, Concession I Eastern Division in the Geographic Township of Gosfield, Essex County. Some historical context is provided below, in an effort to identify features that signal archaeological potential.

By the time of European arrival in the 17th century, other Indigenous populations had established significant communities in the Windsor area and along the Detroit River. The earliest historical references to First Peoples villages in the Windsor area are drawn from the mid-17th century French explorers. According to early travelers, there was a Neutral (Attawandaron) village (*Skenchioe*) in the Windsor area, and a mixed Neutral and Wenro (Awenrehonon) settlement named "*Khioetoo*" (Lajeunesse 1960:4). In 1640, Jesuit missionaries reported First Peoples village sites and corn fields along the Detroit River. Early historic accounts also describe the village containing the Mission of St. Michael. By 1651 the Huron, Wenro and Neutral communities fled their homelands in Southern Ontario due to attacks by the Five Nations Iroquois. Some Huron families returned to the Detroit River environs in the latter portion of the 17th century, where they re-established villages as early as 1679. They were later joined by Odawa (Ottawa) and Pottawatomi groups.

Although they continued to utilize the Detroit River environs into the 18th century, these groups were often forced to temporarily relocate due to hostilities with the Fox people (CRM Group Ltd. 2005). Under British control and following a 1790 Crown purchase of lands, the area was targeted for municipal development, with two major parcels of land reserved for local Indigenous groups who were still living here. One of these was located in what would become Sandwich (now the City of Windsor). The latter reserve, named the Huron Church Reserve (Canada 1891:1), was located between French farms that fronted the Detroit River. It was



ceded to the British Crown in 1797, with the exception of a small portion in the northwest corner (Canada 1891:193-194).

2.3.3.1 Early French Settlement

French explorers and missionaries had explored the Detroit River in the late 1670s and their reports were well received in France. In 1701, Sieur de Lamonthe Cadillac, former commandant at Fort Michilimackinac, came to the Detroit River and established a fur trading post (Morgan 1991:17). Cadillac proceeded to erect a fort to protect his country's interests and named it Pontchartrain (Morgan 1991:18). Once Cadillac had established a presence, he invited the Ottawa, Pottawatomi, Huron and Chippewa to come to his fort on the north side of the river (in what is now Detroit) and he offered them protection (Lajeunesse 1960:21).

With the encouragement of the governor at Quebec, French settlement extended to the south shore of the river soon after. The long narrow lots along the river are a remnant of the early French system of landholding. Early French settlement focused on the community of Sandwich and along Turkey Creek (CRM Group et al. 2005:2-16). Settlement along the south side of the river was assisted in 1742 when Reverend Armand de la Richardie relocated the Jesuit mission to Bois Blanc (Bob-Lo) Island (Morgan 1991:18). Many of the earliest European settlers and founders of the Windsor area were men, like Bâby, Dumouchelle, Goyeau, Jannesse, Langlois, Marentette, Meloche and Ouellette, who received land grants from the French Crown (H. Belden & Co. 1881:7). Early on, much of the local economy was centered on the fur trade.

2.3.3.2 Early British Settlement

The year 1760 marked the end of French rule. At the end of the 18th century, the area saw the influx of British settlers, many of whom were United Empire Loyalists who fled the American colonies after the American Revolutionary War. To further assist settlement, legal surveys were conducted in an effort to open up lots to new settlers. As the interior lands were poorly drained and not well suited for agriculture most of the settlement was restricted to the lakeshore and along the major rivers.

The first official census to record population numbers for the County of Essex was in 1824, which placed the population of the county at 4,274 inhabitants (H. Belden & Co. 1881:3). The county experienced minor decreases in population in the years following the Rebellion, however by 1871, the population had grown to 32,697, and the inhabitants of the county were producers of vast quantities of tobacco, grains and roots, hay, and butter and cheese. The interior of the county was opened by the construction of the Canada Southern Railway, which ran from east to west, through the entirety of the county. The early success of Essex County was due in large part to its location, situated between Lake St. Clair, the Detroit River, and Lake Erie, as well as the fertile soils that comprise much of the land within the county. These features, as well as the temperate climate of the region, contributed to the early commercial advantage of the county, and allowed for a variety of fruits and vegetables to be grown, including peaches, grapes, corn, and grains.

2.3.3.3 Township of Gosfield

Gosfield Township was first surveyed in 1787 by Thomas Smith with lots laid out along the shore of Lake Erie. Gosfield was first settled by United Empire Loyalists fleeing from the United States. Settlement of the area continued throughout the 1800s drawing Black settlers from the United States, European settlers, and the relocation of some French families from other parts of Essex County (Essex 2017). Settlement of the northern interior portion of the township did not occur until after 1818 (H. Belden & Co. 1881), when Lieutenant-Colonel Mahlon Burwell initiated his survey of the Talbot Road, which ran in a northwesterly direction



through the township. By 1844, Gosfield Township was home to 1,338 inhabitants and contained an iron foundry, two steam grist mills, two steam sawmills, one water grist mill, two tanneries, one store, an ashery, and a tavern (Smith 1846). In 1852, the population of Gosfield Township had grown slightly to 1,802 (Smith 1850). During the second half of the 19th century, the Great Western Railway and Canada Southern Railways were constructed just north of the township, and local market facilities began to develop in the Village of Kingsville and the communities of Ruthven and Cottam. It appears that these developments triggered additional growth in the area. By 1861, the population of Gosfield Township had grown to 2,355. This number increased further to 3,517 in 1880 and the township was considered by local residents to be approximately 85% settled at this time. In 1887, Gosfield Township was split into Gosfield North and Gosfield South Townships. Both of these townships exhibited continued growth throughout the 20th century, and in 1999, they were merged with the Town of Kingsville to form the new expanded Town of Kingsville.

2.3.4 Nineteenth Century Land Use History and Map Review

The subject property falls within part of Lot 9, Concession 1 Eastern Division, Geographic Township of Gosfield, Town of Kingsville, Essex County, Ontario. The 1877 Walling map associates Lot 9 with a person named Fox. No structures are shown within the subject property, but a hotel and other structure are depicted within 300 m of the property. County Road 45, Road 2 East and Seacliff Drive are depicted as open at this time, with the town of Union at the crossroads of Country Road 45 and Seacliff Drive (Map 5).

No structures are depicted within or near the subject property on the *1881 Counties of Essex Illustrated Atlas*, but the community of Ruthven and the community of Union are illustrated to the north and south, respectively. County Road 45, Road 2 East and Seacliff Drive are both depicted as open at this time (Map 6).

Several aerial images were reviewed to understand the land use history of the subject property and surrounding lands. By 1954, aerial imaging indicates the subject property is agricultural land or treed at this time (Map 7). Little development is present in the general area.

A 1970 topographic map (Map 8) illustrates that the water treatment plant was present within the central portion of the subject property. A building and underground reservoir are present at this time. The underground reservoir is present north of the current reservoir.

Aerial imagery from 1980 (Map 9) illustrate that the water treatment plant on the subject property is present, while the remainder of the property is agricultural land or treed. Disturbance in the area of the underground reservoir is present in the eastern portion of the subject property. Residential development has occurred along Seacliff Drive, Country Road 45 and Road 2 East by this time.

By 2006 two large wastewater treatment lagoons are present to the west of the water treatment plant (Map 10). Two additional storage tanks have been built as well as associated gravel laneways around the water treatment plant. The remainder of the property is grassed or treed. Additional residential development has occurred in the area, and large greenhouses are now present to the west of the property.

In 2008 aerial imagery shows soil stockpiling present north of the wastewater treatment lagoons in the northern portion of the subject property (Map 11), but it is unknown if soil disturbance under the pile has occurred.



In 2013 (Map 12) the soil pile present in the 2008 aerial is in the process of being removed. By 2017 (Map 13) the majority of the soil pile is removed and it is unclear if topsoil disturbance occurred in the process. Additional greenhouses and development have occurred on the property to the west. Forested and grassed areas are still present within the subject property.

Numerous subsurface utilities are present throughout the property, including gas lines, storm sewers, hydro, telecommunication and water mains run throughout the property (Maps 14 to 16). Two underground reservoirs are also present south of the water treatment plant, which appear south of the reservoir on the 1970 mapping (Map 8).

All of the drainage ditches on the property appear to have been modified (e.g. machine cut) by excavation to aid in drainage on the property. A berm is present on the adjacent property to the west, with a drain and storm sewer running along the western portion of the property.

The as built plans for the Union Water System from 1994 provided details of the subsurface watermain that was installed on the property. The watermain is 36 inches in diameter and runs from the existing water supply system north to Road 2 East. The watermain was excavated to a depth of 2.5 m and was installed by open cut trench which was approximately 2 m wide trench based on the drawings provided by the client. Approximately 30 cm of gravel was placed on top of the trench to form the gravel roadways. A 24 m wide construction easement was used in this area. Approximately 30 cm of gravel was placed on top of the trench to form a gravel roadway (Image 26, Maps 14 and 15).

2.3.5 Built Heritage Environment

There are no heritage properties located within 300 m of the subject property.



3 STAGE I PROPERTY INSPECTION

As the subject property was in proximity to features signaling archaeological potential, a Stage I property inspection was conducted to observe the current conditions of the subject property and further confirm and evaluate its integrity. The property inspection was conducted on September 8, 2023 in overcast and warm weather. The weather conditions allowed for good visibility for the inspection of the surface features.

The north portion of the subject property consist of a narrow-grassed area with subsurface water pipes (Images 1 and 2), a forested area (Image 3) and a gravel laneway (Image 4). A drainage ditch separates the woodlot from the property to the north (Image 5).

The north portion of the subject property consist of a narrow-grassed area with subsurface water pipes and sewer (Images 1 and 2), a forested area (Image 3) and a gravel laneway (Image 4). A drainage ditch separates the woodlot from the property to the north (Image 5).

The central portion of the subject property contains a soil pile (Images 6 and 7), two wastewater treatment lagoons (Image 8) and a gravel laneway with subsurface utilities (Images 9 and 10). It is unclear if the soil beneath the soil pile was removed in this area prior to the soil stockpiling. The wastewater treatment lagoons are built-up, with sloping sides. A gravel laneway is located on top of the built-up area of the lagoon (Image 9). A drain also lies on the eastern boundary of the property (Image 7), adjacent to the gravel laneway and watermain.

The eastern most portion of the property consist of the existing water supply system including a building (Image 11), water storage tanks (Images 12 and 13), gravel laneways, small buildings (Images 14, 15 and 16), subsurface utilities (Images 17 and 18) and an underground reservoir (Images 19, 20 and 21).

The southern portion of the subject property is an open grassed area (Image 22). A small drainage ditch runs east-west through a portion of the area (Image 23), as well as a ditch and berm along the western boundary of the property (Image 24). A watermain run along the eastern boundary of the property (Image 25) and an unknown subsurface pipe cuts across the grassed area.

All files are currently being stored at the TMHC corporate office located at 1108 Dundas Street East, London, ON, N5W 3A7 (Table 4).

Table 4: Documentary Records

Date	Field Notes	Field Maps	Digital Images
Sept 8, 2023	Digital and hard copies	Digital and hard copies	155 Images



4 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. The Stage I background study included a review of current land use, historic and modern maps, registered archaeological sites and previous archaeological studies, past settlement history for the area and a consideration of topographic and physiographic features, soils and drainage. According to the background research, potential for the discovery of archaeological sites is indicated by the presence of or proximity (within 300 m) to:

- 19th century travel routes (Concession Road 2 East, Union Avenue and Seacliff Drive);
- a historic watercourse (1913 topographic map); and
- 19th century settlement areas (Union and Ruthven).

As the subject property contained several features signaling archaeological potential, a Stage I property inspection was conducted to evaluate the current conditions of the subject property and determine if any areas of archaeological potential remained intact within the subject property. The Stage I property inspection has visually confirmed that the majority of the subject property (8.6 ha) has been subject to extensive disturbance and no longer retains archaeological potential. These areas have been photo-documented. Grassed and treed portions of the subject property (4.8 ha) retain archaeological potential and these areas should be subject to Stage 2 archaeological assessment.

The results of the Stage I archaeological assessment, as well as the location and orientation of report photographs, are presented on Maps 17 and 18. Maps 19 and 20 depicts these results on the proponent mapping. The unaltered proponent map for the property is presented as Map 21.



5 RECOMMENDATIONS

A Stage I archaeological assessment for the Schedule C Class EA to provide peaking capacity for Union Water Supply System's (UWSS) water system at 1615 Union Avenue, Kingsville, Ontario. Based on the Stage I background research and property inspection, the following recommendations are made:

- The portions of the subject property that have been previously disturbed (existing building footprints and gravel laneways, and buried infrastructure) (8.6 ha; 64.0%) are considered to no longer retain archaeological potential. These areas have been photo documented and no further assessment work is recommended (Maps 17 and 18).
- The treed and grassed areas within the subject property, as shown on Maps 17 and 18 (4.8 ha; 36.0%), are not obviously disturbed, retain archaeological potential, and are recommended for Stage 2 assessment should ground disturbance and construction activities be planned for these. As these lands are non-ploughable, the Stage 2 assessment should consist of a standard test pit survey at a 5 m transect interval, in keeping with provincial standards.
 - The soil pile at the northern end of the subject property (Map 17) will need to be removed prior to Stage 2 assessment.

Our recommendations are subject to the conditions laid out in Section 7.0 of this report and to the MCM' review and acceptance of this report into the provincial registry.



6 SUMMARY

A Stage I archaeological assessment was conducted for a Schedule C Class EA to provide peaking capacity for the Union Water Supply System (UWSS) water system at 1615 Union Avenue, Kingsville, Ontario. The background research indicated that the subject property was in proximity to features signaling archaeological potential and a Stage I field inspection was undertaken. The Stage I property inspection has visually confirmed that the majority of the subject property (8.6 ha) has been subject to extensive disturbance and no longer retains archaeological potential. These areas have been photo-documented. Grassed and treed portions of the subject property (4.8 ha) are not obviously disturbed, retain archaeological potential, and are recommended for Stage 2 assessment via test pitting at a 5 m interval.



7 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 subject property 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 (i.e., unknown or deeply buried) 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 Ian Hember, Registrar of Burial Sites, Ontario Ministry of Public and Business Service Delivery. His telephone number is 416-212-7499 and e-mail address is Ian.Hember@ontario.ca.



8 BIBLIOGRAPHY

Canada

- 1891 *Indian Treaties and Surrenders. Volume 1: Treaties 1-138*. Reprinted 1992. Fifth House Publishers, Saskatoon, SK.
- 2020 Specific Claims Branch Report: Caldwell. Crown-Indigenous Relations and Northern Affairs Canada.
- Chapman L.J. and D.F. Putnam
- 1984 *The Physiography of Southern Ontario*. Third Edition. Ontario Ministry of Natural Resources: Ontario.
- CRM Group Ltd., Fisher Archaeological Consulting, Historic Horizons Inc. and Dillon Consulting Limited
- 2005 *Archaeological Master Plan Study Report for the City of Windsor*. City of Windsor: Windsor.

ESRI Canada

- 2021 Ontario Base Map. Ontario Ministry of Natural Resources Data. ESRI Canada. [Website Link](#). Accessed: April 7, 2021.

Essex

- 2017 Colchester 225: 150 Historical Facts. [Website Link](#). Accessed September 19, 2023.

Government of Ontario

- 1990 *Ontario Heritage Act, R.S.O. 1990*. (c. 0.18). Online: Publications Ontario. [Website Link](#). Accessed February 16, 2021.

H. Belden and Co.

- 1881 *Illustrated Historical Atlas of Essex County*. Reprint Edition.

Lajeunesse, Ernest

- 1960 *The Windsor Border Region: Canada's Southernmost Frontier. A Collection of Documents*. Toronto: University of Toronto Press.

Ministry of Natural Resources (MNR) & J.D. Barnes First Base Solutions

- 2010 Southwestern Orthoimagery Project – Mr. Sid Tiles for Southwestern Ontario.

Ministry of Northern Development and Mines (MNDM)

- 2007 Physiography of Southern Ontario. Chapman, L.J. and D.F. Putnam, authors. GIS map data layer distributed by the Ontario Geological Survey as Miscellaneous Release – Data (MRD) 228. Queen's Printer for Ontario.

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

- 2011 Standards and Guidelines for Consultant Archaeologists. Toronto.



- 2021 Ontario's PastPortal Online Database.
- Morgan, Carl
- 1991 *Birth of a City*. Windsor: Border Press Inc.
- Murphy, C. and N. Ferris
- 1990 The Late Woodland Western Basin Tradition in Southwestern Ontario. In Ellis, C.J. and N. Ferris (eds) *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, OAS No. 5. London, Ont: London Chapter, O.A.S. 189-278.
- Nin.Da.Waab.Jig (Walpole Island Heritage Centre)
- 2018 Statement of Respect for Three Fires Territory: Backgrounder for the University of Windsor's Land Acknowledgement. Bkejwanong Territory.
- Ontario Department of Mines and Northern Affairs
- 1972 Physiography of the Southwest Portion of Southern Ontario. Map 2225. Ontario.
- Ontario Fundamental Dataset, Ministry of Natural Resources (2012) and CanVec Geospatial Database (2012)
- 2013 Base Mapping for the Province of Ontario.
- Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)
- 2006 GIS Layers for Soils and Physiography in the Province of Ontario.
- Ontario Ministry of Municipal Affairs and Housing (OMMAH)
- 2020 Provincial Policy Statement, 2020. Queen's Printer for Ontario.
- Richards, N.R., Caldwell, A.G., and F.F. Morwick
- 1949 *Soil Survey of Essex County*. Report No. 11 of the Ontario Soil Survey. Ottawa: Experimental Farm Service, Dominion Department of Agriculture, and the Ontario Agricultural College.
- Smith, William
- 1846 *Smith's Canadian Gazetteer*. H. & W. Rowsell, Toronto.
- 1850 *Canada: Past Present and Future*. Thomas Maclear, Toronto.
- Surtees, R.J.
- 1984 *Indian Land Surrenders in Ontario 1763-1867*. Indian Affairs and Northern Development, Government of Canada, Ottawa.
- Walling, H.F.
- 1877 *Map of Essex County*. R. M. Tackabury: Toronto, Ontario.



9 IMAGES
