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ARCHAEOLOGICAL  
CONSULTANTS CANADA

# Stage 1 & 2 Archaeological Assessment

Proposed Garage Addition

65050 Marshagan Road, Part of Lots 50 and 51, Concession 6, Township of  
Wainfleet, Regional Municipality of Niagara, Ontario

Original Report

Prepared for:

**Ontario Ministry of Citizenship and Multiculturalism**

Prepared by:

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PIF#: P1208-0344-2023  
Project No. 303-12-23  
18 October 2023

## EXECUTIVE SUMMARY

Archaeological Consultants Canada (“ACC”) was contracted by the Proponent to conduct a Stage 1 & 2 archaeological assessment for a proposed addition to an existing garage. The assessment was conducted in the pre-approval phase and was required under the *Planning Act, R.S.O. 1990*. The area of assessment, or the “subject property”, is located at 65050 Marshagan Road, on Part of Lots 50 and 51, Concession 6, in the Township of Wainfleet, Regional Municipality of Niagara, Ontario. The subject property measures 14.55 hectares (“ha”).

The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned Project Information Form (“PIF”) number P1208-0344-2023 to this project. The property was accessed on October 16, 2023.

Stage 1 background research indicated that the subject property has general archaeological potential due to the following factors:

- The subject property is directly west of Marshagan Road, an early historical transportation route.
- A farmstead and orchard are illustrated 35 m to the east of the subject property in 1876 historical atlas mapping.
- A water source is located 35 m to the east of the subject property.
- The OASD lists five registered archaeological sites within one km of the subject property.
- Niagara Region’s map of archaeological potential indicates that the subject property is located in an area identified as having archaeological potential.

Only a 1.10 ha project area was subject to Stage 2 assessment. The visual property inspection determined that 0.14 ha of the project area had been previously disturbed due to modern construction activities. The remaining 0.96 ha

The balance of the project area, 0.96 ha was determined to retain archaeological potential and was subject to Stage 2 assessment. As the project area was manicured greenspace in an area with existing infrastructure and could not be ploughed the lands were assessed by means of test pit survey at 5 m intervals.

No artifacts or other archaeological resources were identified during the Stage 2 property assessment within the project area. The remaining 13.45 ha of the 14.55 ha subject property retains archaeological potential and requires Stage 2 assessment.

The following recommendations were made as a result of the assessment. Full recommendations appear in the body of the report.

1. No artifacts or other archaeological resources were identified during the Stage 1 & 2 archaeological assessment of the 1.10 ha project area.
2. 13.45 ha of the subject property, as shown in Figure 8 of this report, retains archaeological potential and requires Stage 2 property assessment.

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## PROJECT PERSONNEL

|                       |                              |
|-----------------------|------------------------------|
| Project Manager:      | Matthew Muttart, M.A., P1208 |
| Professional Licence: | Matthew Muttart, M.A., P1208 |
| Field Director:       | Josh Garrett, M.A., P1293    |
| Report Preparation:   | Kristy O’Neal, M.A., P066    |
| Graphics:             | Kristy O’Neal, M.A., P066    |



# Stage 1 & 2 Archaeological Assessment

## Proposed Garage Addition

65050 Marshagan Road, Part of Lots 50 and 51, Concession 6,  
Township of Wainfleet, Regional Municipality of Niagara, Ontario

## 1.0 PROJECT CONTEXT

### 1.1 Development Context

Archaeological Consultants Canada (“ACC”) was contracted by the Proponent to conduct a Stage 1 & 2 archaeological assessment for a proposed addition to an existing garage. The assessment was conducted in the pre-approval phase and was required under the *Planning Act, R.S.O. 1990*. The area of assessment, or the “subject property”, is located at 65050 Marshagan Road, on Part of Lots 50 and 51, Concession 6, in the Township of Wainfleet, Regional Municipality of Niagara, Ontario. The subject property measures 14.55 hectares (“ha”) (Figure 1).

The objective of a Stage 1 background study is to provide information about the subject property’s geography, history, previous archaeological fieldwork, and current land conditions. A Stage 1 study evaluates the subject property’s archaeological potential in order to recommend appropriate strategies for the Stage 2 survey.

The objective of a Stage 2 property assessment is to document all archaeological resources present on the property and to make a determination about whether these resources, if present, have cultural heritage value or interest. Archaeological resources consist of artifacts (Indigenous stone tools, pottery and subsistence remains as well as Euro-Canadian objects), subsurface settlement patterns and cultural features (post moulds, trash pits, privies, and wells), and sites (temporary camps and special purpose activity areas, plus more permanent settlements such as villages, homesteads, grist mills and industrial structures). If any archaeological resources are present that exhibit Cultural Heritage Value or Interest, a Stage 2 survey will determine whether these resources require further assessment and, if necessary, recommend appropriate Stage 3 strategies for identified archaeological sites.

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P1208, held by Matthew Muttart. The fieldwork was completed under the direction of Josh Garrett (P1293). The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned Project Information Form (“PIF”) number P1208-0344-2023 to this project. The licensee of ACC received permission from the Proponent to access the property and to conduct all required archaeological fieldwork activities including the removal of artifacts, as necessary. The property was accessed on October 16, 2023.

All fieldwork and reporting were completed using MCM’s 2011 *Standards and Guidelines for Consultant Archaeologists*. This report documents the research, the field methods and results,

and the conclusions and recommendations based on the Stage 1 & 2 archaeological assessment. All documents and records related to this project will be curated at the offices of ACC, in accordance with subsection 66(1) of the *Ontario Heritage Act*.

## 1.2 Historical Context

### 1.2.1 Background Research

Stage 1 background research was conducted to determine the potential for finding and identifying archaeological resources including sites within the current subject property and to determine the necessity of conducting a Stage 2 survey. This is done by reviewing geographic, archaeological, and historical data for the property and the surrounding area. The background research was conducted to:

- amass all the readily available information on any previous archaeological surveys in the area.
- determine the locations of any registered and unregistered sites within and around the subject property.
- develop an historical framework for assigning levels of potential significance to any new sites discovered during fieldwork.

### 1.2.2 A Cultural Chronology for Southern Ontario

Over their thousands of years of occupation in the general region, Indigenous peoples have left behind, to a greater or lesser degree, physical evidence of their lifeway activities and settlements at many locations. Based upon a published synthesis of Indigenous cultural occupations (Wright, 1968). Table 1 is a general outline of the cultural history of southern Ontario that is applicable to the subject property. Ellis and Ferris (1990) provide greater detail of the distinctive characteristics of each time period and cultural group.

It is likely that Ontario was occupied soon after the retreat of the Ice Age glaciers. The earliest known human occupation in the area was during the Paleoindian period (between 12,000 and 9,500 years ago) wherein small groups of nomadic peoples hunted big game such as caribou in a cool sub-arctic climate. Sites are typically found near glacial features such as the shorelines of glacial lakes or kettle ponds which would have allowed access to the low-lying environments favoured by the caribou and other wildlife. These people were few and their small, temporary campsites are relatively rare. Paleoindian sites are recognized by the presence of distinctive artifacts such as fluted projectile points, beaked scrapers, and graters and by the preference for light colored cherts, such as Collingwood chert. The Paleoindian Period is divided into two sub-periods, Early Paleoindian, and Late Paleoindian.

People during the Archaic period (*circa* 10,000 to 500 years ago) were still primarily nomadic hunters, but they adapted to a more temperate climate. Groups were dispersed during winter months and converged around watercourses from the spring to fall in large fishing campsites. The Archaic period is characterized by the appearance of ground stone tools, notched, or stemmed projectile points. The Archaic Period is divided into three sub-periods, Early, Middle

and Late Archaic. During the Archaic Period, groups began to establish territorial settlements and introduce burial ceremonialism. There is a marked increase in the number and size of sites, especially during the Late Archaic period.

Table 1: General Cultural Chronology for Southern Ontario

| PERIOD      | SUBDIVISION I                             | SUBDIVISION II                                                       | YEARS BEFORE PRESENT | COMMENTS                            |
|-------------|-------------------------------------------|----------------------------------------------------------------------|----------------------|-------------------------------------|
| PALEOINDIAN | Early Paleoindian                         | Fluted Point Horizon                                                 | 12,000-10,500        | big game hunters                    |
|             | Late Paleoindian                          | Holcombe & Hi-Lo Horizons                                            | 10,500-9,500         | small nomadic groups                |
| ARCHAIC     | Early Archaic                             | Side Notched Horizon                                                 | 10,000-9,700         | nomadic hunters and gatherers       |
|             |                                           | Corner-Notched Horizon                                               | 9,700-8,900          |                                     |
|             |                                           | Bifurcate Horizon                                                    | 8,900-8,000          |                                     |
|             | Middle Archaic                            | Middle Archaic I/Stemmed Horizon                                     | 8,000-5,500          | territorial settlements             |
|             |                                           | Middle Archaic II                                                    | 5,500-4,500          | polished ground stone tools         |
|             | Late Archaic                              | Narrow Point Horizon                                                 | 4,500-3,500          |                                     |
|             |                                           | Broad Point Horizon                                                  | 4,000-3,500          |                                     |
|             |                                           | Small Point Horizon (including Haldimand and Glacial Kame Complexes) | 3,500-2,800          | burial ceremonialism                |
| WOODLAND    | Early Woodland                            | Meadowood Complex                                                    | 2,900-2,400          | introduction of pottery             |
|             |                                           | Middlesex Complex                                                    | 2,500-2,000          |                                     |
|             | Middle Woodland                           | SW Ontario: Saugeen                                                  | 2,300-1,500          | long distance trade networks        |
|             |                                           | Western Basin: Couture                                               | 2,300-1,500          |                                     |
|             | Transitional Woodland                     | SW Ontario:                                                          |                      |                                     |
|             |                                           | Princess Point                                                       | 1,500/1,400-1,200    | incipient agriculture               |
|             |                                           | Western Basin:                                                       |                      |                                     |
|             |                                           | Riviere au Vase                                                      | 1500/1400-1200/1100  |                                     |
|             | Late Woodland: Ontario Iroquois Tradition | Early: Glen Meyer                                                    | 1200/100-750/700     | transition to village life          |
|             |                                           | Middle I: Uren                                                       | 720/700-710/670      | large villages with palisades       |
|             |                                           | Middle II: Middleport                                                | 710/670-670/600      | wide distribution of ceramic styles |
|             |                                           | Late: Neutral                                                        | 600-450              |                                     |
|             | Late Woodland: Western Basin Tradition    | Younge Phase                                                         | 1200/1100-800        |                                     |
|             |                                           | Springwells Phase                                                    | 800-600              |                                     |
|             |                                           | Wolf Phase                                                           | 600-450              |                                     |
| HISTORIC    | SW Ontario Iroquois                       | Historic Neutral                                                     | 450-350              | tribal warfare                      |
|             | European Contact                          | Initial Contact                                                      | 380-300              | tribal displacement                 |
|             |                                           | European Settlement                                                  | 200 >                | European settlement                 |
|             |                                           | First Nations Resettlement                                           | 200 >                |                                     |

(Compiled from Adams, 1994, Ellis *et al.*, 1990, Wright, 1968)

The Woodland period is distinguished by the introduction of pottery vessels for storage and cooking. Sites of the Woodland period (*circa* 3000 to 400 years ago) are usually the most numerous because the population levels in southern Ontario had significantly increased, especially along the shores of Lakes Erie and Ontario. The Woodland Period is also marked by



the establishment of complex long distance trading networks. The Woodland Period is divided into three sub-periods, Early, Middle and Late Woodland. During the Late Woodland Period, there is increasing sedentarism and the establishment of horticulture, a reliance on tribal warfare, and the introduction of semi-permanent villages with large protective palisades. The Late Woodland period also envelops the emergence of Iroquoian tribes and confederacies.

The historic period (from A.D. 1650 to 1900) begins with the arrival of Euro-Canadian groups. While North America had been visited by Europeans on an increasing scale since the end of the fifteenth century, it was not until the voyages of Jacques Cartier in the 1530s that Europeans visited Ontario Iroquoians in their home territories. Sites of this period document European exploration, trade, and the displacement and devastation of native groups caused by warfare and infectious disease. The most common sites of this period include Euro-Canadian homesteads, industries, churches, schools, and cemeteries.

The subject property was historically located within Part of Lots 50 and 51, Concession 6, in the Geographic Township of Wainfleet, County of Welland. The earliest Europeans in the area were merchants and traders from France and England who set up trading posts along well-travelled river routes that had been established by Indigenous inhabitants. The earliest recorded European visitor to the area is Father Louis Hennepin, who explored the area as a missionary in 1678. He is best known for publishing an account of his travels, which include the first written description of Niagara Falls, published in 1689 (Page, 1876).

In 1800, the Niagara District separated from the Home District and became a distinct administrative district, with Lincoln and portions of Haldimand joined as a United County. In 1841, a legislative body known as the Niagara District Council was established to organize the new county to be called Welland County. Welland officially became a county in the spring of 1856 (Armstrong, 1985:152).

Welland County was formed from the southern section of Lincoln County (Mika & Mika, 1983). The county was named after the Welland River, which, in turn, was named by John Graves Simcoe after a stream in Lincolnshire, England (Middleton & Landon, 1927). The townships in this county were among the earliest settled in Upper Canada and were predominantly made up of United Empire Loyalists who came to the area after the American Revolutionary War (Carter, 1984). The building of the first Welland Canal in the 1820s also helped stimulate the growth of settlement in the area (Mika & Mika, 1983).

The land within Wainfleet Township was acquired by the British from the Mississaugas in 1784. The township was surveyed in 1791, when it was part of the District of Nassau. Lots and concessions were laid out in 1811 (Wainfleet Historical Society, 1992:339). Like the rest of Welland County, the first settlers were United Empire Loyalists.

In 1805, D'Arcy Boulton described Wainfleet Township as possessing "a most delightful situation...particularly well situated with water, having Lake Erie in front, and the Welland river to the north" (Boulton, 1805:89). The Welland Canal feeder was cut across the centre of the township, and the canal officially opened in 1829.

By the 1830s, most of the land along Chippewa Creek now the Welland River, had been settled (Wainfleet Historical Society, 1992:411). By the 1840s, the population was comprised mainly of Canadian, Irish, English, and Dutch settlers (Boulton 1805:89; Armstrong 1985:148; Rayburn 1997:359).

The nearest historic community to the subject property was the hamlet of Moulton Station, located 1.5 kilometres (“km”) to the south. Located along the Grand Trunk Railway, a post office was established here in 1887 (Carter, 1984:797). The hamlet had a population of 50 in 1892.

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the subject property. Figures 2 and 3 represent the Euro-Canadian settlement in and around the current subject property in the late 19<sup>th</sup> century. Tremaines’ 1862 *Map of the Counties of Lincoln and Welland* list Hamilton Cosby and Samuel Cosby as the owners of Lot 50 and 51, Concession 6 at that time (Figure 2). No structures are depicted within or near the subject property. The subject property is located directly adjacent to two early historical road allowances, one to the north and one to the east, now Marshagan Road. A watercourse is shown approximately 25 metres (“m”) to the east of Marshagan Road.

H.R. Page & Co.’s 1876 map of Wainfleet Township in the *Illustrated Historical Atlas of the Counties of Lincoln and Welland* lists Samuel Cosby as the owner of the subject property at that time (Figure 3). The subject property is located directly adjacent to two early historical road allowances, one to the north and one to the east, now Marshagan Road. A watercourse is shown approximately 25 m to the east of Marshagan Road. No structures are depicted within the subject property; however, a farmstead and orchard are shown to the east of Marshagan Road on lands also owned by Samuel Cosby. A farmstead and orchard are shown approximately 125 m to the south on lands owned by Hamilton Cosby. s shown to the north of the subject property on Lot 26, Concession 13.

While no structures are shown within the subject property on the historical atlas mapping, this does not necessarily mean that one or more additional structures were not present at that time, earlier or later. Not all features of interest were mapped systematically on the Ontario series of historical maps and atlases, given that they were financed by subscription, and subscribers were given preference regarding the level of detail provided on the maps. Given that the property fronts an early historical road, Marshagan Road, there is the potential of encountering 19<sup>th</sup> century historical sites within the subject property, depending on the degree of recent land disturbances.

## 1.3 Archaeological Context

### 1.3.1 Natural Environment

The subject property is located within the Haldimand Clay Plain physiographic region (Chapman and Putnam, 1984:113). Lying between the Niagara Escarpment and Lake Erie, this area is made up of a series of parallel belts that were once submerged in Lake Warren. The highest ground adjoins the Niagara Escarpment. The main part of Welland County is characterized by level topography and poor drainage and several square miles are covered in peat bogs. The drainage



in the belt is controlled by several parallel streams, such as Twenty Mile Creek, Forty Mile Creek, and the Welland River (Chapman and Putman, 1984:157). The physiographic landform is dominated by sand plains (MDNM, 2007).

The *Soils of the Regional Municipality of Niagara* (Kingston and Presant, 1989) indicates that there are two dominant surface soil types within the subject property (Figure 4). Beverly lacustrine silty clay covers most of the subject property. This soil has imperfect to poor drainage and complex topography made up of irregular, very gentle slopes and smooth basin to level topography. The eastern third of the subject property is made up of Lincoln lacustrine heavy clay. This soil is characterized as having poor drainage and smooth basin to level topography.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Primary water sources include, among others, lakes, rivers, creeks, and streams. Secondary water sources include intermittent streams, creeks, springs, marshes, and swamps. Past water sources, such as raised beach ridges, relic water channels, and glacial shorelines are also considered to have archaeological potential. Swamps and marshes are also important as resource extraction areas, and any resource areas are considered to have archaeological potential. The nearest water source is a ditch running within 35 m to the east of the subject property. This ditch was also identified in historical mapping (Tremaine, 1862; H.R. Page & Co., 1876). Welland River is located 585 m to the north of the subject property.

### 1.3.2 Current Land Use

Figure 5 shows the current land use of the subject property. The majority of the subject property consists of agricultural farmland with a treed perimeter. A residential home and a number of farm outbuildings are located within two grassed areas along Marshagan Road. A structure is currently under construction on the property. The property is surrounded by rural and agricultural land.

Fieldwork for the project was completed on October 16, 2023.

### 1.3.3 Previous Archaeological Investigations

#### 1.3.3.1 Registered Archaeological Sites

Previously registered archaeological sites can be used to indicate archaeological potential. To determine if any previous assessments have yielded archaeological sites, either within or surrounding the current subject property, two main sources were consulted. These include the *Ontario Archaeological Sites Database* (“OASD”) and the *Public Register of Archaeological Reports*, both of which are maintained by MCM.

The OASD contains archaeological sites registered within the Borden system (Borden, 1952). The Borden system divides Canada into 13 km by 18.5 km blocks based on longitude and latitude. Each Borden block is designated with a four-letter label and sites identified within the block are numbered sequentially as they are registered. The subject property is located within the AfGv Borden block.

Table 2 lists the sites within 1 km along with the current Cultural Heritage Value or Interest (“CHVI”) for each site. CHVI is a term used by MCM and consultant archaeologists to describe archaeological resources that meet one or more criteria that recommend further fieldwork in MCM’s *Standards and Guidelines for Consultant Archaeologists*. Under the *Ontario Heritage Act* and its regulations, archaeological resources that have been determined to possess CHVI are protected as archaeological sites under Section 48 of the act. Information in Table 2 is provided by MCM through the OASD (MCM, 2023a).

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information Act*. The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

According to the OASD, there are no previously registered archaeological sites within the subject property. Five sites have been registered within one km of the subject property (MCM, 2023a). The nearest of these sites is 660 m from the subject property, therefore, current Stage 2 methods should not be affected by the proximity of previously registered sites. Three registered sites are of Indigenous cultural affiliation and date to the Archaic, Woodland, and Post-Contact periods. Two sites do not have cultural affiliation listed. Sites include campsites and unknown type sites.

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

| REG. #  | NAME            | TIME PERIOD                   | CULTURAL AFFILIATION | SITE TYPE              | STATUS  |
|---------|-----------------|-------------------------------|----------------------|------------------------|---------|
| AfGv-27 | Conestoga       | unknown                       | unknown              | unknown                | unknown |
| AfGv-29 | CONNESTOGA      | Archaic                       | Indigenous           | unknown                | unknown |
| AfGv-64 | Chippewa Camp 2 | Archaic, Late                 | Indigenous           | camp/campsite          | unknown |
| AfGv-65 | Lennox          | unknown                       | unknown              | unknown                | unknown |
| AfGv-70 | Van Hell        | Woodland, Early, Post-Contact | Indigenous           | camp/campsite, hunting | unknown |

#### 1.3.3.2 Previous Archaeological Reports

A review of archaeological reports within the *Public Register of Archaeological Reports* indicated that there are no archaeological reports detailing previous archaeological fieldwork within the subject property. There are no reports documenting fieldwork conducted within 50 m of the subject property filed with the MCM at the time this report was written. Reports were searched based on registered site information, historic lots and concessions, and nearby streets.

#### 1.3.4 Archaeological Master Plans

The Regional Municipality of Niagara has developed an Archaeological Management Plan as part of a new Official Plan. This document provides information about the archaeological history of the region, supports the goals and directions of provincial planning documents, ensures



the long-term protection of archaeological resources, streamlines the planning and development review process, and provides clear direction for when archaeological assessments will be required (Niagara Region, 2023a). The plan also identifies and maps areas of archaeological potential. Mapping of archaeological potential provided by Niagara Region indicates that the entire subject property has archaeological potential (Niagara Region, 2023b; see Figure 6).

### 1.3.5 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a subject area. For planning purposes, determining archaeological potential provides a preliminary indication that significant sites might be found within the subject area, and consequently, that it may be necessary to allocate time and resources for archaeological survey and mitigation.

The framework for assigning levels of potential archaeological significance is drawn from provincial guidelines found in the *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011: Sections 1.3.1 and 1.3.2). The following are features or characteristics that can indicate archaeological potential:

- previously identified archaeological sites
- water sources (It is important to distinguish types of water and shoreline, and to distinguish natural from artificial water sources, as these features affect site locations and types to varying degrees.).
  - 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 indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches)
  - accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh)
- elevated topography (e.g., eskers, drumlins, large knolls, plateaus)
- pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground
- distinctive land formation that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings.
- resource areas, including:
  - food or medicinal plants (e.g., migratory routes, spawning areas, prairie)

- scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
- early Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining)
- areas of early Euro-Canadian settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and cemeteries. There may be commemorative markers of their history, such as local provincial, or federal monuments or heritage parks
- early historical transportation routes (e.g., trails, passes, roads, railways, portages)
- property listed on a municipal register or designated under the *Ontario Heritage Act* or that is in a federal, provincial, or municipal historic landmark site
- property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations

Archaeological potential can be determined not to be present for either the entire property or parts of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as “disturbed” or “disturbance” and may include:

- quarrying
- major landscaping involving grading below topsoil
- building footprints
- sewage and infrastructure development
- activities such as agricultural cultivation, gardening, minor grading, and landscaping do not necessarily affect archaeological potential.

Several factors can be used to assess the potential for recovery of Euro-Canadian archaeological resources on a property. The subject property is comprised of land that is suitable for human habitation and agriculture. It is located directly west of Marshagan Road, an early historical transportation route. Two farmsteads are illustrated in close proximity to the subject property on 1876 historical atlas mapping, one located 35 m to the east, and the second located 125 m to the south (H.R. Page & Co., 1876; see Figure 3).

Several factors can be used to assess the potential for recovery of Indigenous archaeological resources on a property. The subject property is comprised of land that is suitable for human habitation. A drain is located 35 m from the subject property. This drain also appears on historical atlas mapping (see Figures 2 and 3). Welland River, which would have served as a water source, transportation route, and resource extraction area, is situated 585 m to the north of the subject property. Three Indigenous archaeological sites have been registered within one km of the subject property.

Niagara Region's Archaeological Management Plan indicates that the subject property is in a zone designated as having archaeological potential (Niagara Region, 2023b; see Figure 6).

Given the above, background archival research indicates that all previously undisturbed portions of the subject property exhibit archaeological potential for the discovery of Euro-Canadian and Indigenous archaeological resources. Stage 2 archaeological assessment is required.



## 2.0 FIELD METHODS

Stage 1 visual inspection and Stage 2 property assessment were conducted concurrently on October 16, 2023, with advance permission to enter the subject property obtained from the Proponent. Weather conditions during the assessment were excellent, with variable skies and a maximum daily high temperature of 12 degrees Celsius.

The subject property measures 14.55 ha. Only a 1.10 ha portion of the subject property, referred to as the “project area”, was subject to physical Stage 1 & 2 assessment. The assessment of the project area began with an on-site property inspection to gain first-hand knowledge of the geography, topography, and current condition of the property. The entirety of the project area was accessible and was inspected. Appropriate photographic documentation was taken during the visual inspection. Coverage of the property was sufficient to identify the presence or absence of features of archaeological potential, meeting the requirements of Section 1.2 Standard 1 of the *Standards and Guidelines for Consultant Archaeologists*.

Areas of low to no archaeological potential include lands that have been previously disturbed, lands that have steeply sloping topography, and lands that are low-lying and permanently wet. Visual property inspection indicated that 0.14 ha of the project area had been previously disturbed for construction of a residential home, driveway and parking area, farm outbuildings, and a garage, which is currently under construction. There were no areas of steeply sloping topography or low-lying and permanently wet areas present in the project area.

The remainder of the project area, 0.96 ha was determined to retain archaeological potential and require Stage 2 property survey. As the project area consisted of manicured greenspace in an area of existing infrastructure, Stage 2 archaeological assessment was conducted by test pit survey in accordance with Section 2.1.2 of the *Standards and Guidelines for Consultant Archaeologists*. Each test pit was dug by hand and was 30 centimetres (“cm”) in diameter and was dug to at least five cm into the subsoil. Test pits were examined for stratigraphy, cultural features, or evidence of fill. Test pits were dug to within one m of all disturbances. All soil was screened through 6-millimetre mesh to maximize the potential for artifact recovery. Appropriate photographic documentation was taken, and all test pits were backfilled upon completion. As no artifacts were observed, no intensified survey was completed during the test pit survey.

There were no weather, ground, or lighting conditions detrimental to the recovery of artifacts. As such, it is confirmed that the assessment met Section 1.2 Standard 2 and Section 2.1 Standard 3 of the *Standards and Guidelines for Consultant Archaeologists* regarding weather and lighting.

Only a 1.10 ha portion of the subject property was subject to assessment. The remaining 13.45 ha of the 14.55 ha subject property retains archaeological potential and requires Stage 2 assessment. Results and recommendations based on the Stage 1 & 2 assessment are shown in Figures 7 and 8. Images of the assessment are provided in Section 8.0.

## 3.0 RECORD OF FINDS

### 3.1 Soils

Test pits contained approximately 15 to 30 cm of medium brown-grey silty clay above yellow-grey to grey silty clay subsoil.

### 3.2 Archaeological Resources

No artifacts or other archaeological resources were recovered during the Stage 1 & 2 archaeological assessment of the project area.

### 3.3 Documentary Record

All fieldwork-related activities were documented and kept, including field notes and observations and detailed maps. Appropriate photographic records were kept of the excavation, and all pictures were recorded in a photo log.

A detailed list of field records is presented in Table 3. All digital items have been duplicated and all paper items have been scanned and stored as digital documents. All items are housed in the corporate offices of ACC.

Under Section 6 of Regulation 881 of the *Ontario Heritage Act*, ACC will keep in safekeeping all objects of archaeological significance that are found under the authority of the license and all field records that are made in the course of the work authorized by the license, except where the objects and records are donated to His Majesty the King in right of Ontario or are directed to be deposited in a public institution under subsection 66 (1) of the Act.

Table 3: Inventory of Documentary and Material Records

| PROJECT INFORMATION      |                 |                                        |
|--------------------------|-----------------|----------------------------------------|
| ACC project number       | 303-12-23       |                                        |
| Licensee                 | Matthew Muttart |                                        |
| MCM PIF number           | P1208-0344-2023 |                                        |
| DOCUMENT/MATERIAL        | NUMBER          | DESCRIPTION                            |
| field notes & photo logs | 3               | pages (paper, with digital copies)     |
| maps                     | 1               | sketch map of the subject property     |
|                          | 1               | aerial imagery of the subject property |
| photos                   | 10              | digital format                         |

## 4.0 ANALYSIS AND CONCLUSIONS

Stage 1 background research indicated that the subject property has general archaeological potential due to the following factors:

- The subject property is directly west of Marshagan Road, an early historical transportation route.
- A farmstead and orchard are illustrated 35 m to the east of the subject property in 1876 historical atlas mapping.
- A water source is located 35 m to the east of the subject property.
- The OASD lists five registered archaeological sites within one km of the subject property.
- Niagara Region's map of archaeological potential indicates that the subject property is located in an area identified as having archaeological potential.

Only a 1.10 ha project area was subject to Stage 2 assessment. The visual property inspection determined that 0.14 ha of the project area had been previously disturbed due to modern construction activities. The remaining 0.96 ha

The balance of the project area, 0.96 ha was determined to retain archaeological potential and was subject to Stage 2 assessment. As the project area was manicured greenspace in an area with existing infrastructure and could not be ploughed the lands were assessed by means of test pit survey at 5 m intervals.

No artifacts or other archaeological resources were identified during the Stage 2 property assessment within the project area. The remaining 13.45 ha of the 14.55 ha subject property retains archaeological potential and requires Stage 2 assessment.



## 5.0 RECOMMENDATIONS

Subject to acceptance of the results and approval of the recommendations, MCM is requested to deem this report compliant with ministry requirements for archaeological fieldwork and reporting and to issue a letter accepting this report into the *Ontario Public Register of Archaeological Reports*.

The following recommendations are provided for consideration by the Proponent and by the MCM:

1. No artifacts or other archaeological resources were identified during the Stage 1 & 2 archaeological assessment of the 1.10 ha project area.
2. 13.45 ha of the subject property, as shown in Figure 8 of this report, retains archaeological potential and requires Stage 2 property assessment.

As no property inspection was undertaken during the current assessment the following specific recommendations are made for the unassessed portion of the subject property:

- a. The Stage 2 assessment should confirm the presence and extent of areas of low archaeological potential, and they should be mapped and documented by photography.
- b. Stage 2 archaeological assessment in the form of a pedestrian survey should be conducted on the agricultural fields. The land to be assessed must be recently ploughed and must be disked after ploughing if the soils are heavy clay. Direction should be provided to the contractor undertaking the ploughing that the ploughing should be deep enough to provide total topsoil exposure, but not deeper than previous ploughing. The ploughed lands must be weathered by one heavy rainfall or several light rains to improve the visibility of archaeological resources. At least 80% of the ground surface must be visible to conduct a pedestrian survey. If the fields to be assessed do not meet the above conditions, then the land may need to be reploughed prior to survey. The ploughed lands should be surveyed at 5 m intervals.

When archaeological resources are found, the survey intervals will be decreased to 1 m intervals over a minimum of 20 m radius around the archaeological find to determine if it is an isolated find or part of a larger scatter. The 1 m interval survey should continue until the full extent of the surface scatter has been identified. All formal artifact types and diagnostic categories are to be collected and enough artifacts should be left in-situ to relocate the site if it is necessary to conduct further assessment.

- c. Stage 2 archaeological assessment in the form of a test pit survey should be conducted in all areas where ploughing is not possible or viable, including wooded and lawn areas. The test pits should be excavated by hand at 5 m



intervals. Test pits should be at least 30 cm in diameter and should be dug into the first 5 cm of subsoil. Test pits should be conducted to within 1 m of any disturbances or until test pits show evidence of recent ground disturbance. Each pit should be examined for stratigraphy, cultural features, or evidence of fill. Soils should be screened through wire mesh with an aperture no greater than 6 millimetres to facilitate artifact recovery. All artifacts should be collected according to their associated test pit. All test pits should be backfilled unless otherwise instructed.

When artifacts are found, the survey grid should be continued to determine whether there are further positive test pits. This may produce sufficient archaeological resources to meet criteria for requiring a Stage 3 archaeological assessment. When insufficient archaeological resources are found through continued grid survey to meet criteria for Stage 3 assessment, survey coverage around the positive test pit should be continued, by means of eight additional test pits and one or more 1 m by 1 m square test unit placed above the positive test pit.





## 6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

The following advice on compliance with current legislation is provided for consideration:

- a. This report is submitted to the Minister of Citizenship and Multiculturalism as a condition of licensing in accordance with Part IV of the *Ontario Heritage Act*, R.S.O. 2005, c O.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection, and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- b. 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 a time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- c. 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*.
- d. The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the local police or coroner and the Registrar, Burials Unit, at the Ministry of Public and Business Service Delivery.
- e. It is an offence to destroy or alter an archaeological site without approval from the Ministry of Citizenship and Multiculturalism. Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

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## 8.0 IMAGES







Image 1: Subject property, showing existing house, facing west.



Image 2: Subject property, showing existing house, facing southeast.



Image 3: Subject property, showing existing house, facing northwest.



Image 4: Subject property, showing existing barn, facing northeast.



Image 5: Subject property, showing structure under construction, facing northwest.



Image 6: Test pit survey in progress, facing northwest.





Image 7: Test pit survey in progress, facing southeast.



Image 8: Typical test pit.



Image 9: Typical test pit.



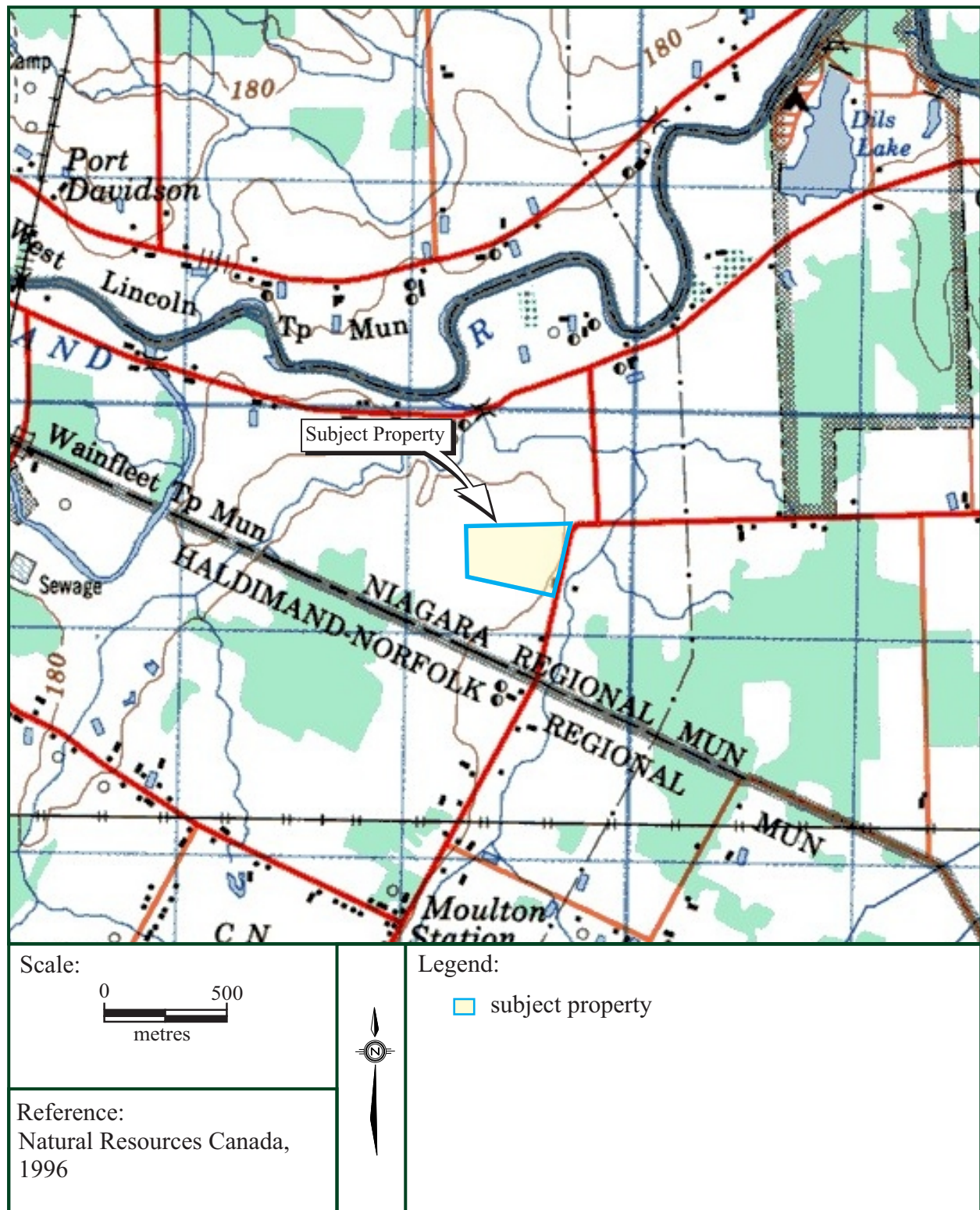
Image 10: Typical test pit.

## 9.0 FIGURES





Figure 1: Location of the Subject Property on a 1:50,000 Scale Topographic Map

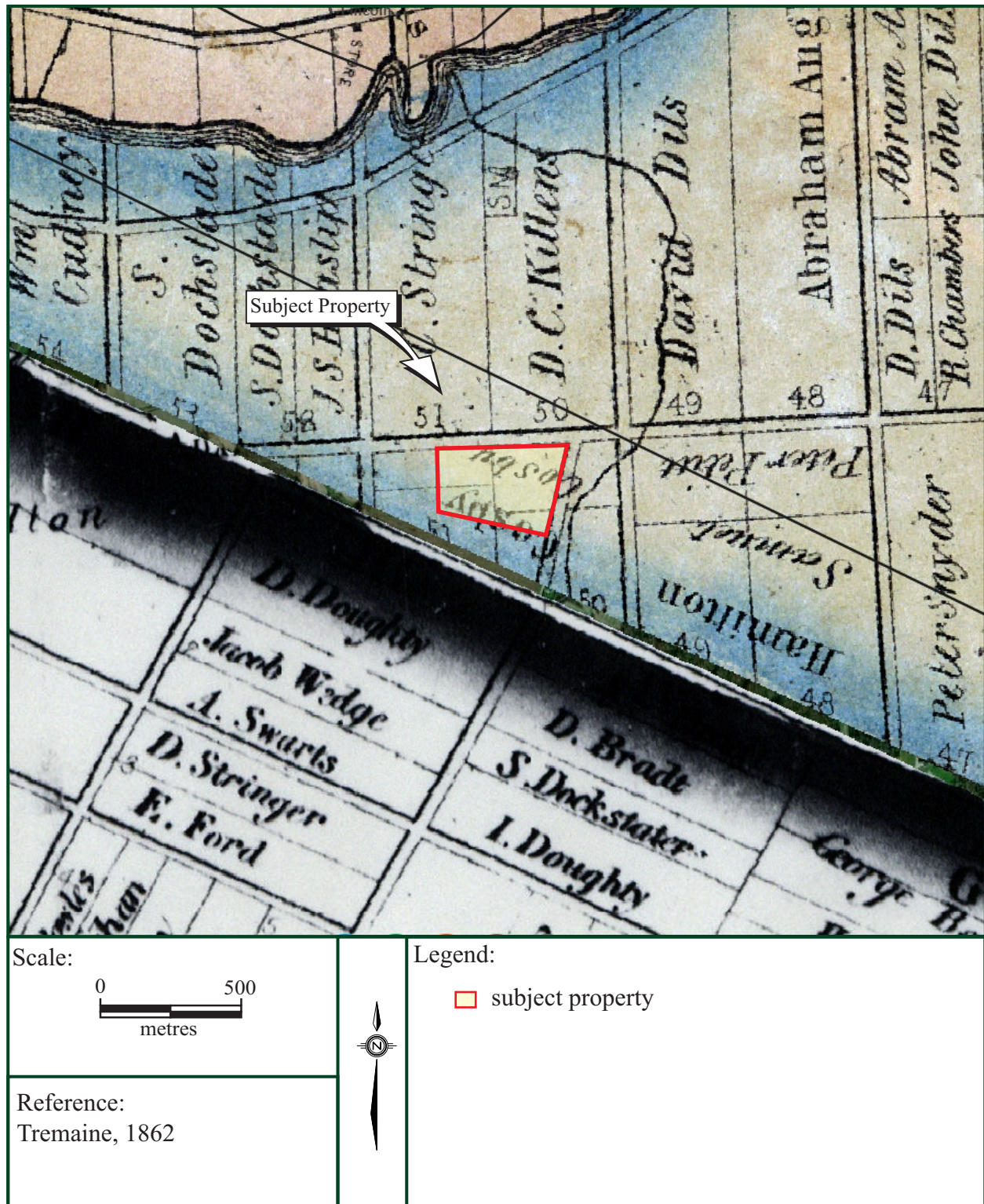


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Figure 2: Location of the Subject Property on Tremaines' 1862 Map of the Counties of Lincoln and Welland, Canada West



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Figure 3: Location of the Subject Property on H.R. Page & Co.'s 1876 Illustrated Historical Atlas Map of Wainfleet Township







Figure 5: Aerial Imagery Showing the Current Land Use of the Subject Property

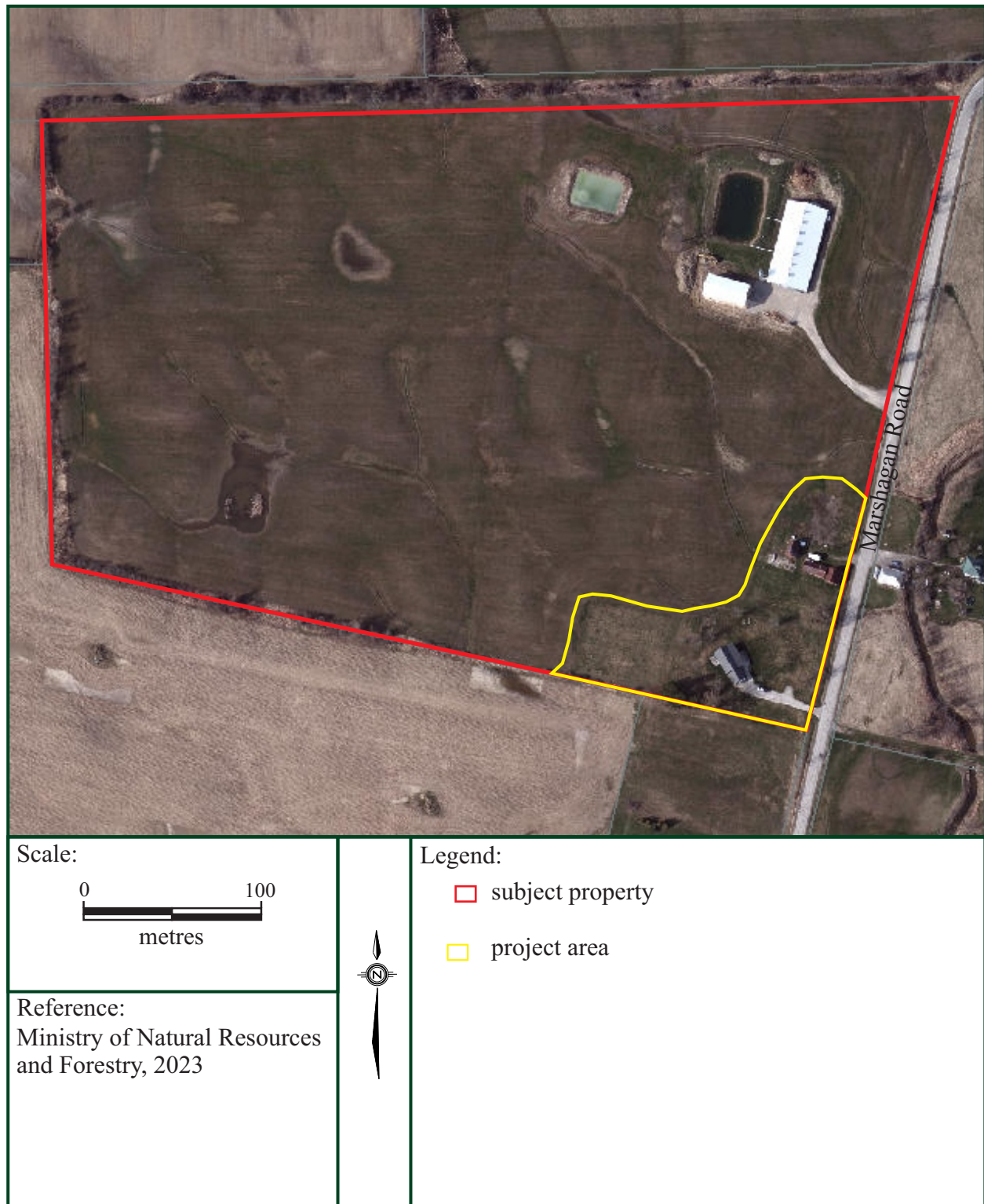


Figure 6: Location of the Subject Property on Niagara Region's Map of Archaeological Potential

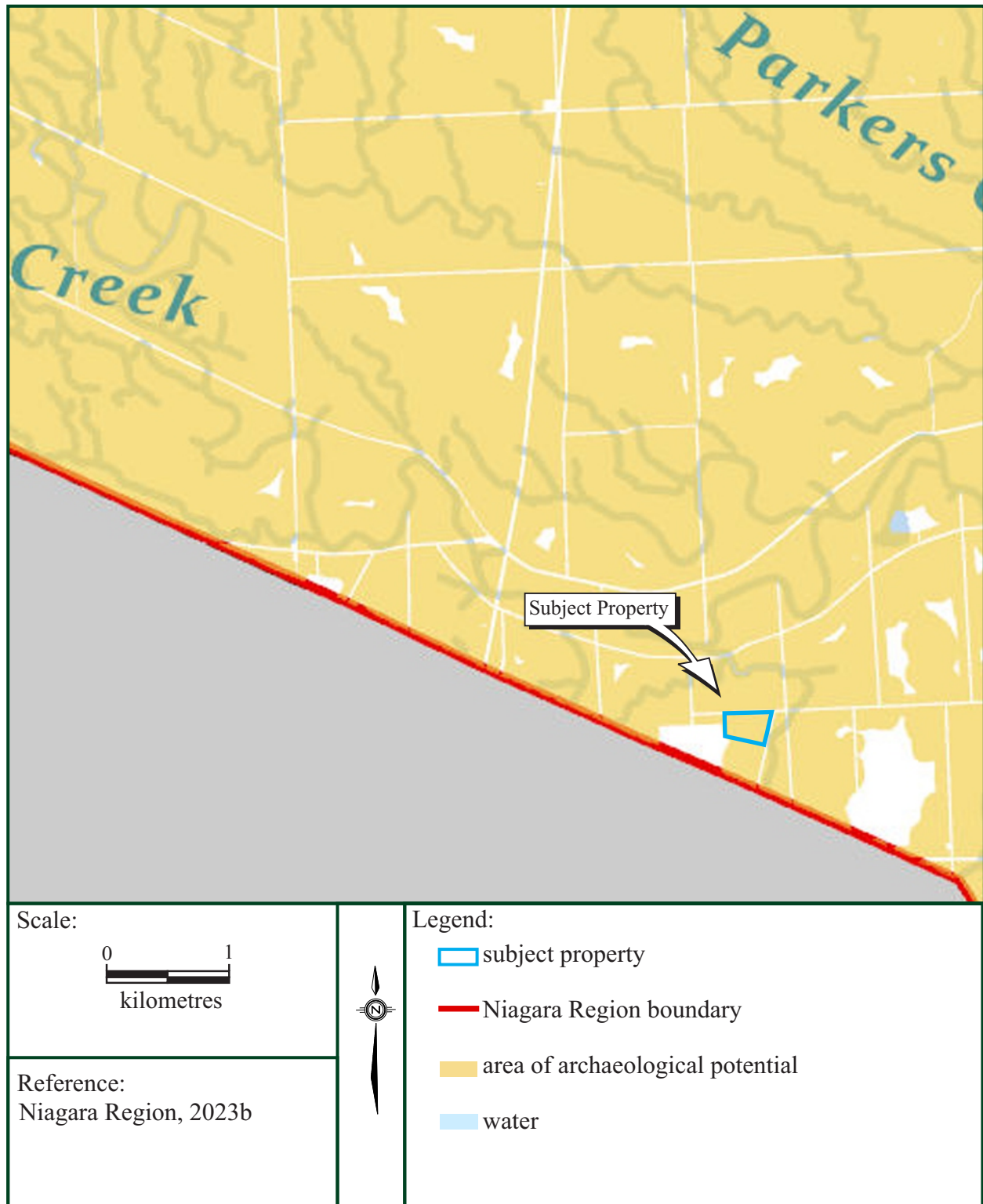
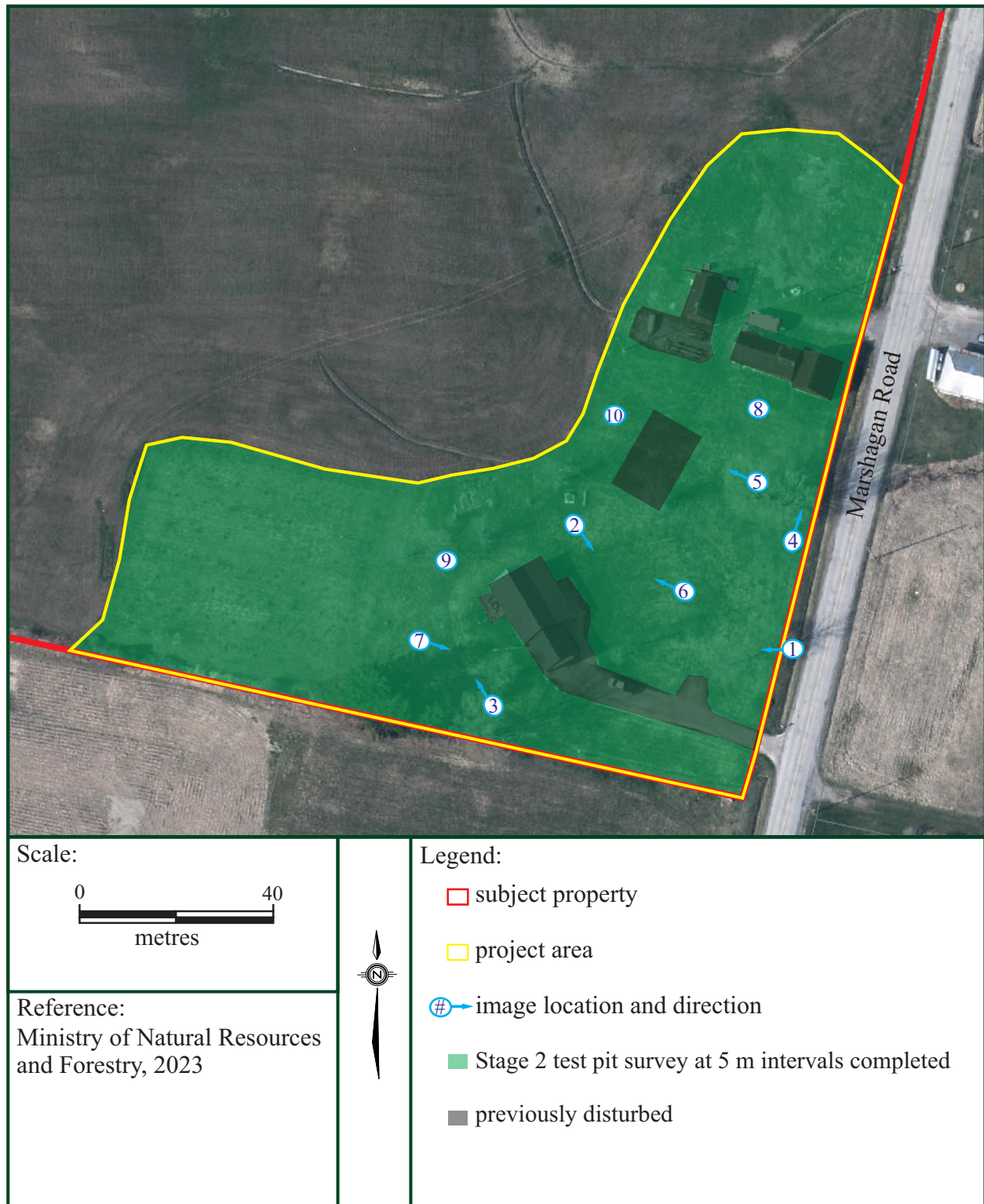




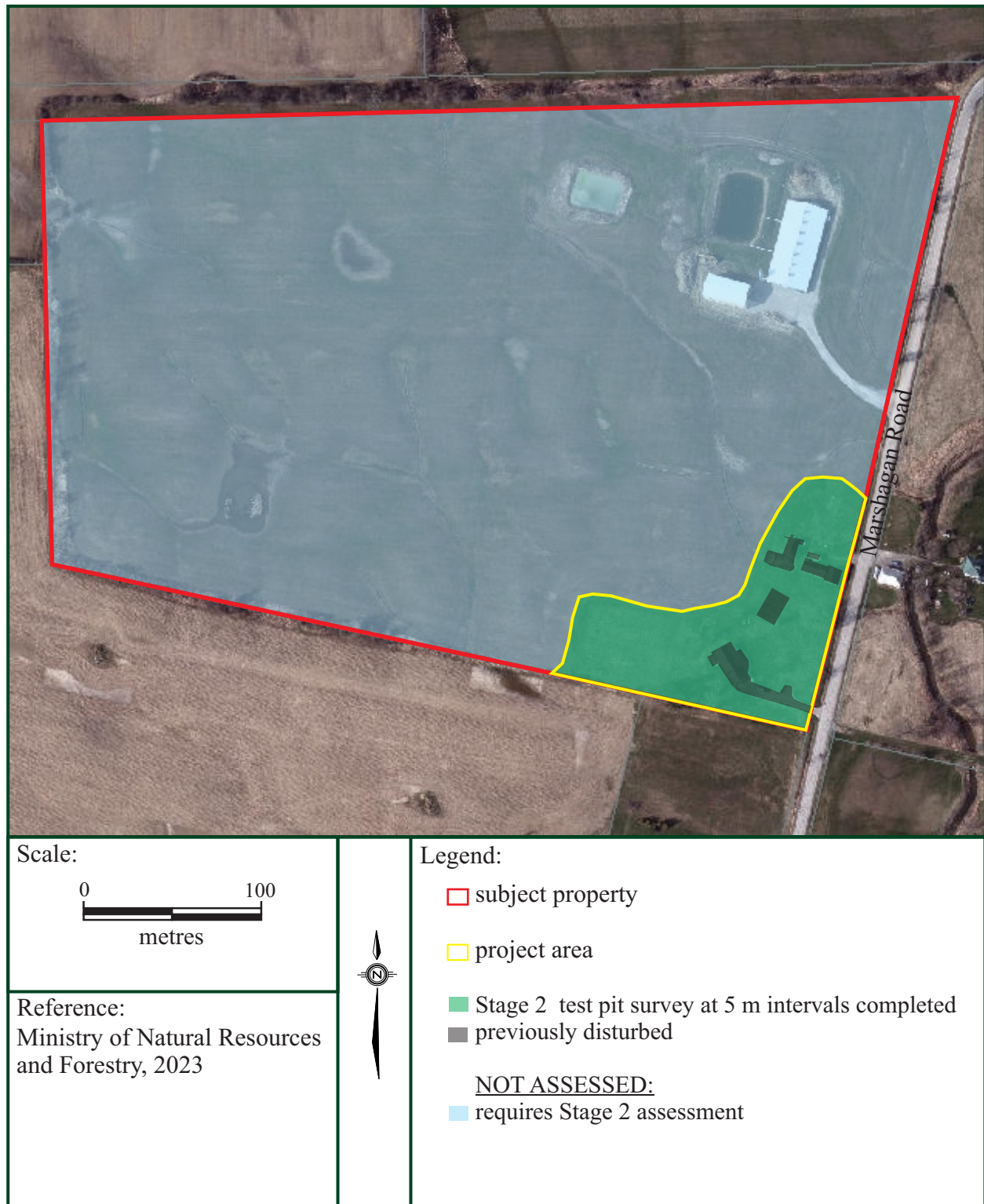
Figure 7: Aerial Photograph Showing the Results of the Stage 1 & 2 Archaeological Assessment of the Project Area, with Image Locations and Directions



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Figure 8: Results and Recommendations of the Stage 1 & 2 Archaeological Assessment of the Subject Property



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