



ACC

ARCHAEOLOGICAL
CONSULTANTS CANADA

Stage 1 & 2 Archaeological Assessment

Part of Lot 19, Concession 3, Geographic Township of Willoughby, in the City of Niagara Falls, Regional Municipality of Niagara, Ontario.

Original Report

Prepared for:

Ontario Ministry of Citizenship and Multiculturalism

Prepared by:

Archaeological Licensee: Matthew Muttart, M. A., P1208

Archaeological Consultants Canada

785 Mohawk Road East

Hamilton, ON L8T 2R4

PIF# P1208-0246-2023

Project No. 189-12-23

25 May 2023

EXECUTIVE SUMMARY

Archaeological Consultants Canada (“ACC”) was contracted by the Proponent to conduct a Stage 1 & 2 archaeological resource assessment, including background research and property survey, for a proposed development. An archaeological assessment was required under the *Planning Act, R.S.O 1990*. The subject property is located in part of Lot 19, Concession 3, in the Geographic Township of Willoughby, City of Niagara Falls, Regional Municipality of Niagara, Ontario. The subject property totals approximately 1.0 hectare (“ha”) (Figure 1). The Proponent provided the subject property limits and verified the project area limits as defined within this report (Figure 5).

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P1208, held by Matthew Muttart, and field directed by Leah Peacock R1273. The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned PIF number P1208-0246-2023 (Stage 1 & 2) 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 May 15th, 2023.

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

- Proximity of Lyons Creek
- Proximity of three registered archaeological sites

The subject property measures 1.0 ha. A visual property inspection determined that 0.2 ha of the project area was permanently wet and low-lying, along the edge of Lyons Creek.

The balance of the subject property, 0.98 ha, retained archaeological potential and was subject to Stage 2 archaeological assessment by means of test pit survey at 5 m intervals. No artifacts or other archaeological resources were identified during the Stage 1 & 2 archaeological assessment.

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. The subject property has now been fully assessed according to the Ontario Ministry of Citizenship and Multiculturalism’s 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the property is required.

TABLE OF CONTENTS

| | |
|--|----|
| Executive Summary | 2 |
| Project Personnel | 5 |
| 1.0 PROJECT CONTEXT | 6 |
| 1.1 Development Context | 6 |
| 1.2 Historical Context | 7 |
| 1.2.1 Background Research | 7 |
| 1.2.2 A Cultural Chronology for Southern Ontario | 7 |
| 1.3 Archaeological Context | 10 |
| 1.3.1 Natural Environment | 10 |
| 1.3.2 Current Land Use | 10 |
| 1.3.3 Previous Archaeological Investigations | 11 |
| 1.3.3.1 Registered Archaeological Sites | 11 |
| 1.3.3.2 Previous Archaeological Reports | 11 |
| 1.3.4 Potential for Archaeological Resources | 12 |
| 2.0 FIELD METHODS | 14 |
| 3.0 RECORD OF FINDS | 15 |
| 3.1 Soils | 15 |
| 3.2 Archaeological Resources | 15 |
| 3.3 Documentary Record | 15 |
| 4.0 ANALYSIS AND CONCLUSIONS | 16 |
| 5.0 RECOMMENDATIONS | 17 |
| 6.0 ADVICE ON COMPLIANCE WITH LEGISLATION | 18 |
| 7.0 BIBLIOGRAPHY AND SOURCES | 19 |
| 8.0 IMAGES | 21 |
| 9.0 FIGURES | 23 |



LIST OF TABLES

| | |
|--|----|
| 1. General Cultural Chronology for Southern Ontario | 8 |
| 2. Registered Archaeological Sites within 1 km of the Subject Property | 11 |
| 3. Inventory of Documentary and Material Record | 15 |

LIST OF FIGURES

1. Location of the Subject Property on a 1:50,000 Scale Topographic Map
2. Location of the Subject Property on Tremaine's 1862 Historical Map of the County of Welland
3. Location of the Subject Property on H.R. Page & Co.'s 1876 Historical Atlas Map of Willoughby Township, Welland County
4. Location of the Subject Property on a Map of Soils of the Regional Municipality of Niagara
5. Results of the Stage 1 & 2 Archaeological Assessment of the Project Area, with Photograph Locations and Directions



PROJECT PERSONNEL

| | |
|-----------------------|---------------------------------|
| Project Manager: | Matthew Muttart, M.A., P1208 |
| Professional Licence: | Matthew Muttart, M.A., P1208 |
| Field Director: | Leah Peacock, B.A., R1273 |
| Report Preparation: | Michelle Volpe, M.L.I.S., R1241 |
| Graphics: | Michelle Volpe, M.L.I.S., R1241 |



Stage 1 & 2 Archaeological Assessment

Part of Lot 19, Concession 3, Geographic Township of Willoughby, in
the City of Niagara Falls, 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 resource assessment, including background research and property survey, for a proposed development. An archaeological assessment was required under the *Planning Act, R.S.O 1990*. The subject property is located in part of Lot 19, Concession 3, in the Geographic Township of Willoughby, City of Niagara Falls, Regional Municipality of Niagara, Ontario. The subject property totals approximately 1.0 hectare (“ha”) (Figure 1). The Proponent provided the subject property limits and verified the project area limits as defined within this report (Figure 5).

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, and field directed by Leah Peacock R1273. The Ontario Ministry of Citizenship and Multiculturalism (“MCM”) assigned PIF number P1208-0246-2023 (Stage 1 & 2) 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 May 15th, 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

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 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 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 2,800 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 Southwestern 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: | | |
| | 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* 2,900 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 is historically located in part of Lot 19, Concession 3, in the Township of Willoughby, County of Welland. Welland County was formed in 1851, when land from the southern section of Lincoln County broke away (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 settlements in Upper Canada, 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 1820's also helped stimulate the growth of settlement in the area (Mika & Mika, 1983). The earliest recorded European visitor to the county 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).

Willoughby Township was first settled in 1784 and was surveyed in 1787 (Armstrong, 1930). These first settlers were mainly United Empire Loyalists escaping the American Revolution. More groups of pacifist Pennsylvania Dutch families arrived in the 1790s. The nineteenth century saw increasing settlement, mainly by German-speaking farmers from Switzerland, and other German regions attracted by cheap land (Page, 1876). Within Willoughby Township is the site of the Battle of Chippawa, fought between British and American forces on July 5, 1814 (Page, 1876).

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the subject property. Tremaine's 1858 *Historical Map of the County of Welland* indicates that at this time Lot 19, Concession 3 was owned by James Cummings, who owned quite a bit of the surround area as well. Cummings is listed in the 1851 Census as a 62-year-old "Gentleman" who lived with Sophia, his 60-year-old wife, and their four children: Sophia F. (aged 15), Lydia J. (13), Margaret M. (12), and Willoughby (10) (Library and Archives Canada [LAC], 1851). In the 1842 and 1861 censuses, Cummings is listed as a farmer (LAC, 1842; 1876). At this time, the subject property still abutted Lyons Creek to the north. A sawmill is illustrated approximately 500 m to the northeast. There are no structures illustrated within the subject property. The nearest community is the village of Chippewa, approximately 1.2 km to the northeast (Figure 2)

H.R. Page & Co.'s 1876 *Historic Atlas Map of the Willoughby Township, Welland County* shows that the subject property is now owned by Frederick Pirson. Pirson is listed in the 1881 census as a 38-year-old, American-born farmer. He lived with his wife, Elizabeth (aged 39) and their six children: John A. (13), George (12), William (7), Clara (5), Elizabeth (3), and Annie (4 months) (LAC, 1881). The subject property still abuts Lyons Creek to the north and no structures are depicted within the subject property. The nearby village of Chippewa has grown, and it is now approximately 1 km northeast of the subject property (Figure 3).

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 a concession road, there is the potential of encountering nineteenth-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 study area is located within the Iroquois Plain physiographic region (Chapman and Putnam 1984). This region is a lowland bordering Lake Ontario that was once inundated by a body of water known as Lake Iroquois. The area is made up of undulating till plains that once made up the shorelines of Lake Iroquois. These old shorelines and the smoothed lake bottoms are easily identifiable geographic features.

The Soils of the Regional Municipality of Niagara (Kingston & Presant, 1989) indicates that the subject property is comprised of two primary soil types, split roughly in half east to west. The northern portion of the subject property is alluvium floodplain. This is a variable soil type that occurs along the water bodies of the Niagara region. The southern half is comprised of Niagara lacustrine heavy clay soil, a reddish-hued soil with imperfect drainage.

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 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. The nearest water source is Lyons Creek, which directly abuts the subject property to the north (Figures 1 to 3).

1.3.2 Current Land Use

Currently the subject property has no structures on it and is comprised of woodlot and scrubland.

Figure 1 provides the location of the subject property on a 1:50,000-scale topographic map. Fieldwork for the project was conducted on May 15th, 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 kilometre (“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 AgGs Borden block.

Three archaeological sites have been registered within 1 km of the subject property. All three sites are Indigenous. There are no sites within 250 metres of the subject property (MCM, 2023a).

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

| REG. # | NAME | TIME PERIOD | CULTURAL AFFILIATION | SITE TYPE | STATUS |
|----------|----------|----------------|----------------------|----------------|-----------------|
| AgGs-46 | Brindle | Middle Archaic | Indigenous | Other/campsite | Unknown |
| AgGs-433 | - | Late Woodland | Indigenous | Short term | No further CHVI |
| AgGs-1 | Chippawa | Archaic | Indigenous | Unknown | Unknown |

1.3.3.2 Previous Archaeological Reports

A review of archaeological reports within the *Public Register of Archaeological Reports* indicated that no archaeological reports detailing previous archaeological fieldwork within the subject property have been entered into MCM’s register at the time this report was written (MCM, 2023b). There is one report detailing previous fieldwork within 50 m of the subject property. Reports were searched based on registered site information, historic lots and concessions, and nearby streets.

Proposed Severance at 4949 Lyon’s Parkway RP59R9198 Part 1, Part of Lot 19, Concession 3 Former Willoughby Township Niagara Falls, Regional Municipality of Niagara, Ontario. Archaeological Stage 1-2: Background Study and Assessment.
Fisher Archaeological Consulting, report dated April 20, 2022. PIF P042-0464-2022.

Fisher Archaeological Consulting carried out a Stage 1 & 2 archaeological assessment of 4949 Lyon’s Parkway, directly south of the current subject property, in support of a proposed severance of the 0.11 ha property. The Stage 1 assessment recommended the entire property for further assessment, primarily based on environmental factors. The Stage 2 assessment concluded

that some natural soils remained in the property with pockets of disturbance throughout. No artifacts or features were uncovered.

1.3.4 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a subject property. For planning purposes, determining archaeological potential provides a preliminary indication that significant sites might be found within the subject property, 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 soils of the subject property are suitable for human habitation, and it is located in close proximity to Lyons Creek, a significant watercourse.

Several factors can be used to assess the potential for recovery of Indigenous archaeological resources on a property. The soils of the subject property are suitable for human habitation, and it is located in close proximity to Lyons Creek, a significant watercourse. There are three registered Indigenous archaeological sites located within one kilometre of the subject property.

Given the above, background archival research indicates that the subject property exhibits general archaeological potential for the discovery of both pre/post-contact Indigenous and Euro-Canadian archaeological resources. Therefore, a Stage 2 archaeological assessment is required.

2.0 FIELD METHODS

The subject property measures 1.0 ha. The Stage 1 and 2 assessment was conducted on May 15th, 2023, with advance permission to enter the subject property obtained from the Proponent. Weather conditions during the assessment were excellent, with partly cloudy skies and a maximum daily temperature of 21 degrees Celsius. The ground was bare and dry at the time of inspection. As such, it is confirmed that the assessment met Section 1.2 Standard 2 of the *Standards and Guidelines for Consultant Archaeologists* regarding weather and lighting.

The Stage 1 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. The northern edge of the subject property is covered by Lyons Creek. This area is approximately 0.2 ha. There are no areas of disturbance apparent from the property inspection.

The remainder of the 1.0 ha project area, totaling 0.98 ha, retained archaeological potential and was recommended for Stage 2 archaeological assessment. The project area is comprised of woodlot and scrubland, and as such it meets the requirements of Section 2.1.2 1a of the *Standards and Guidelines for Consultant Archaeologists*, that ploughing, or cultivation is not viable. Therefore, Stage 2 archaeological assessment was conducted by test pit survey at 5 m intervals. Each test pit dug by hand and was 30 centimetres in diameter and was dug to at least five centimetres into the subsoil. Test pits were examined for stratigraphy, cultural features, or evidence of fill. Test pits placed to within 1 m of all disturbances and other areas of low to no archaeological potential. No soil disturbance was observed throughout the project area, 5 m grid intervals were maintained during the survey. 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. No artifact bearing, or “positive”, test pits were encountered, therefore no intensified survey was conducted.

The entirety of the subject property was assessed. Results of the Stage 1 & 2 assessment are shown on Figure 5. Images of the assessment are provided in Section 8.0.

3.0 RECORD OF FINDS

3.1 Soils

Soils encountered during the assessment consisted of approximately 25 to 40 centimetres of medium brown clay topsoil over a red clay subsoil. Test pits in the northern portion of the subject property displayed higher groundwater levels closer to Lyons Creek (Image 6). Test pits in the central and southern portions of the subject property were dry (Image 7).

3.2 Archaeological Resources

No artifacts or other archaeological resources were recovered during the Stage 1 & 2 assessment of the 1.0 ha 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 | 189-12-23 | |
| Licensee | Matthew Muttart | |
| MCM PIF number | P1208-0246-2023 | |
| DOCUMENT/MATERIAL | NUMBER | DESCRIPTION |
| field notes & photo logs | 1 | pages (paper, with digital copies) |
| maps | 1 | aerial photograph of subject property |
| | 1 | constraints/opportunities to development mapping of the subject property |
| photographs | 7 | digital colour photographs |



4.0 ANALYSIS AND CONCLUSIONS

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

- Proximity of Lyons Creek
- Proximity of three registered archaeological sites

The subject property measures 1.0 ha. A visual property inspection determined that 0.2 ha of the project area was permanently wet and low-lying, along the edge of Lyons Creek.

The balance of the subject property, 0.98 ha, retained archaeological potential and was subject to Stage 2 archaeological assessment by means of test pit survey at 5 m intervals. No artifacts or other archaeological resources were identified during the Stage 1 & 2 archaeological 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. The subject property has now been fully assessed according to the Ontario Ministry of Citizenship and Multiculturalism's 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the property is required.



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 of Cemeteries at the Ministry of Government and Consumer Services.
- 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.

7.0 BIBLIOGRAPHY AND SOURCES

Adams, Nick

1994 *Field Manual for Avocational Archaeologists in Ontario*. Publication No.16,
Ontario Archaeological Society Inc.

Armstrong, G.H.

1930 *The Origin and Meaning of Place Names in Canada*. MacMillan: Toronto.

Borden, Charles E.

1952 A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia*, No.
3, 44-48.

Carter, Floreen Ellen

1984 *Place Names of Ontario, Volume 2*. Phelps Publishing, London.

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

1984 *The Physiography of Southern Ontario*. 3rd ed. Ministry of Natural Resources

Ellis, Chris & Neal Ferris

1990 *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication No.
5. London Chapter, Ontario Archaeological Society Inc.

Kingston, M.S. and E.W. Present

1989 *The Soils of the Regional Municipality of Niagara*. Report No. 60 of the Ontario Soil
Survey. Experimental Farms Service, Canada Department of Agriculture, and the
Ontario Agricultural College, Guelph.

Library and Archives Canada

1842 Census of 1842, Canada West (Heads of households)

<https://www.bac-lac.gc.ca/eng/census/1842-canada-west/>

[Accessed 24 May 2023]

1851 Census of 1851 (Heads of households, Nominal)

<https://www.bac-lac.gc.ca/eng/census/1851/>

[Accessed 24 May 2023]

1861 Census of 1861 (Heads of households, Nominal)

<https://www.bac-lac.gc.ca/eng/census/1861/>

[Accessed 24 May 2023]

1881 Census of 1881 (Nominal)

<https://www.bac-lac.gc.ca/eng/census/1881/>

[Accessed 24 May 2023]



Middleton, Jesse Edgar & Fred Landon

1927 *Province of Ontario -- A History 1615 to 1927*. Dominion Publishing Company, Toronto

Mika, Nick and Helma Mika

1983 *Places in Ontario: Their Name Origins and History, Part III N-Z*. Mika Publishing, Belleville.

Ministry of Citizenship and Multiculturalism (“MCM”)

2005 *The Heritage Act, R.S.O. 2005*. Queen's Printer, Toronto.

2011 *Standards and Guidelines for Consultant Archaeologists*. Toronto.

2023a Sites within a 1 km radius of the subject property. Provided from the *Ontario Archaeological Sites Database*.

2023b Archaeological assessments completed within the subject property or within 50 m of the subject property. Provided from the *Ontario Public Register of Archaeological Reports*.

Ministry of Natural Resources and Forestry (“MNR”) (“MNR”)

2022 *Ontario Topographic Map*

https://www.lioapplications.lrc.gov.on.ca/MakeATopographicMap/index.html?viewer=Make_A_Topographic_Map.MATM&locale=en-CA

[Accessed 19 May 2023]

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.

<http://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearch>.

[Accessed 19 May 2023].

Ontario Ministry of Agriculture, Food and Rural Affairs (“OMAFRA”)

2012 *GIS Layers for Soils and Physiography in the Province of Ontario*.

<http://sis.agr.gc.ca/cansis/publications/surveys/on/index.html>

[Accessed 19 May 2023].

Page, H. R. & Co.

1876 *Illustrated Historical Atlas of Lincoln and Welland Counties, Ontario*. Toronto.

Tremaine

1862 *Historical County Map of Welland County, Canada West*. Geo. C. Tremaine.

Wright James V.

1968 *Ontario Prehistory: an eleven thousand-year archaeological outline*.

Archaeological Survey of Canada, National Museums of Canada, Ottawa.



8.0 IMAGES



Image 1: Subject property, facing southwest from southeast corner.



Image 2: Subject property, facing northwest from near southeast corner.



Image 3: Subject property, facing northeast from southwest corner.



Image 4: Subject property, facing north from near western edge.





Image 5: Subject property, facing north from centre.



Image 6: Typical test pit in northern portion of subject property.



Image 7: Typical test pit in central and southern portions of subject property.

9.0 FIGURES



Stage 1 & 2 Archaeological Assessment
Part of Lot 19, Concession 3
City of Niagara Falls, R.M. of Niagara, ON

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



Figure 2: Location of the Subject Property on Tremaine's 1858 Historical Map of the County of Welland

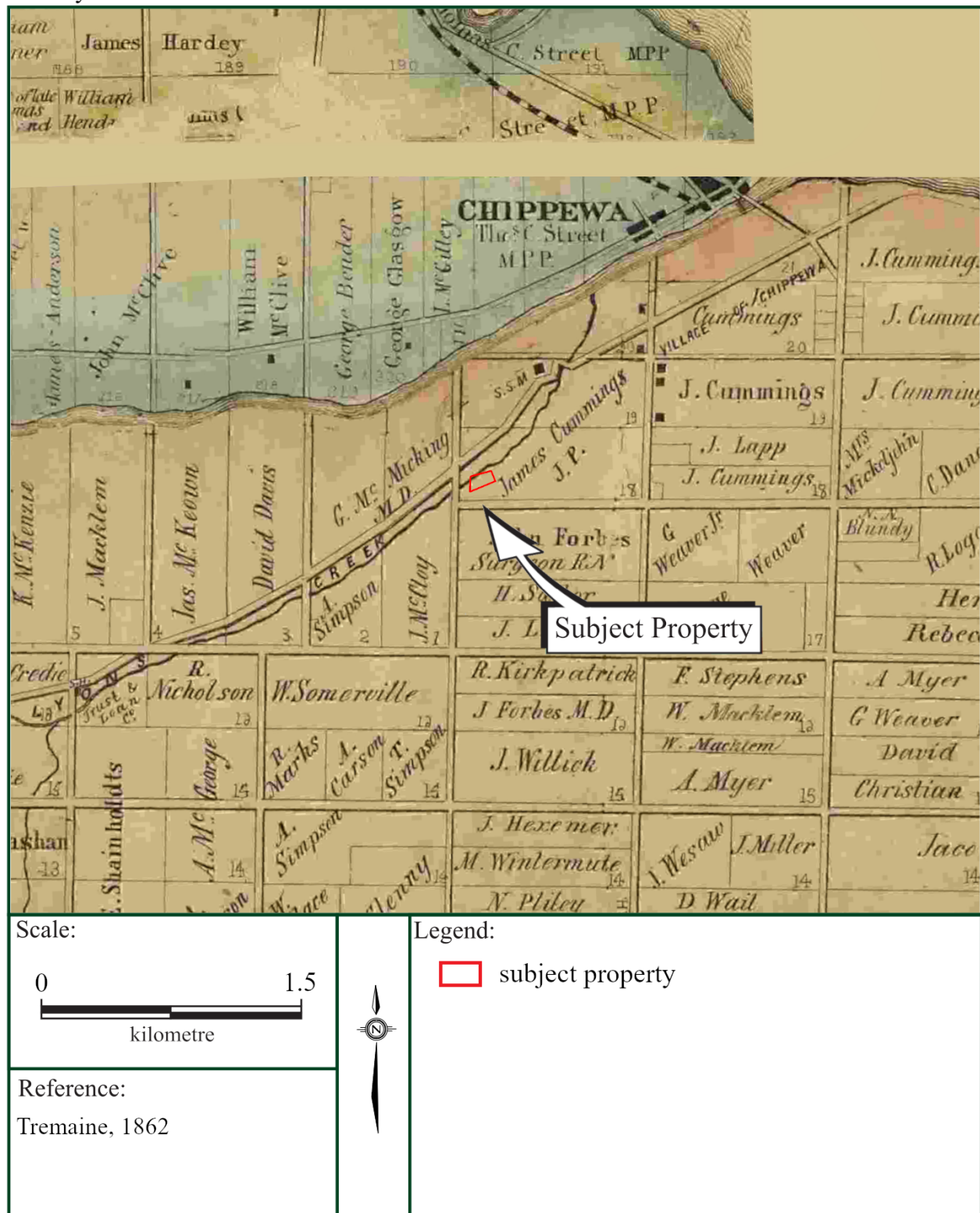
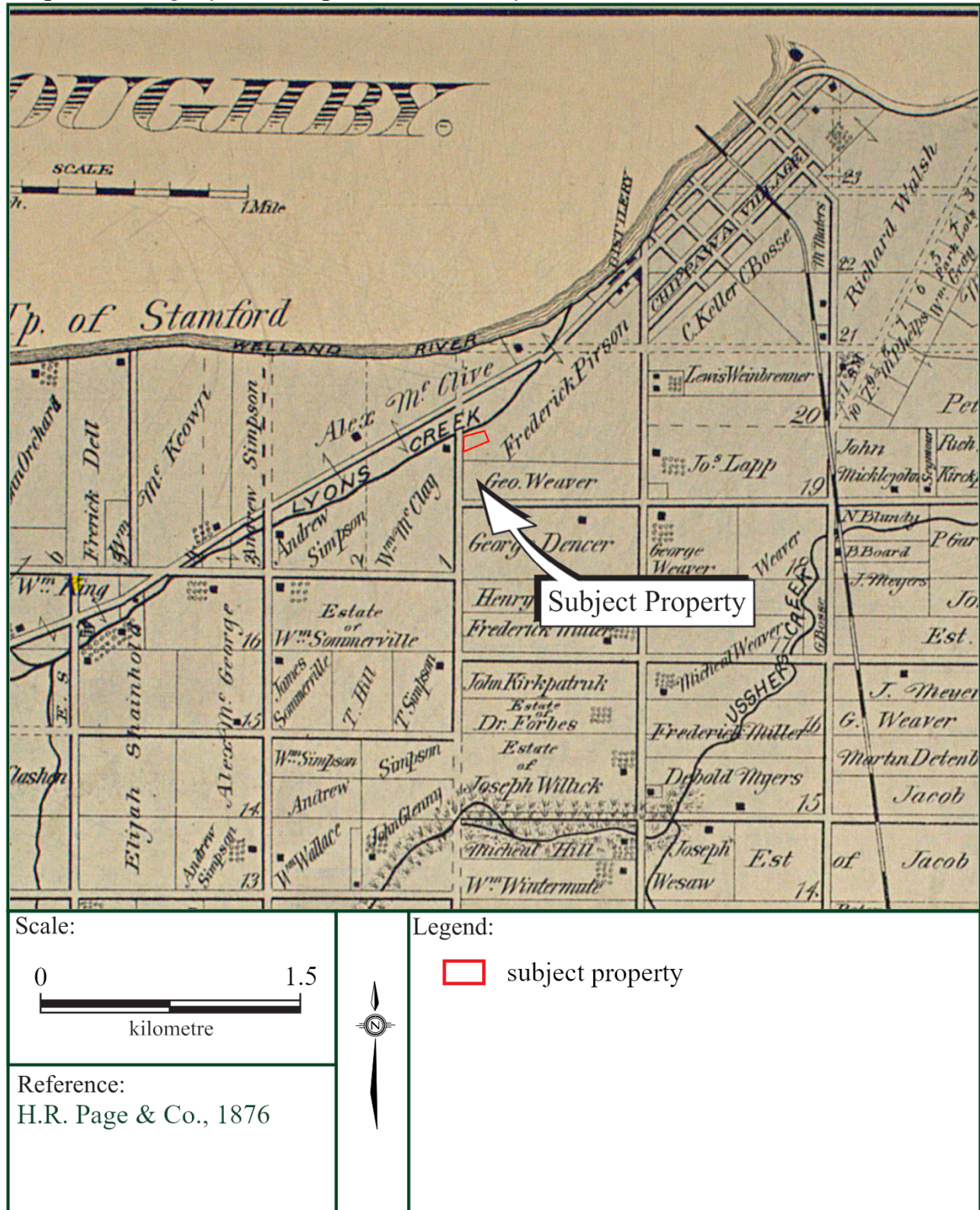
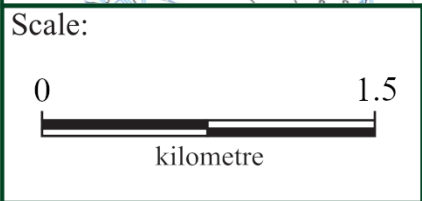


Figure 3: Location of the Subject Property on H.R. Page & Co.'s 1876 Historical Atlas Map of Willoughby Township, Welland County



Location 4: Location of the Subject Property on a Map of Soils of the Regional Municipality of Niagara



Reference:
 OMAFRA, 2012

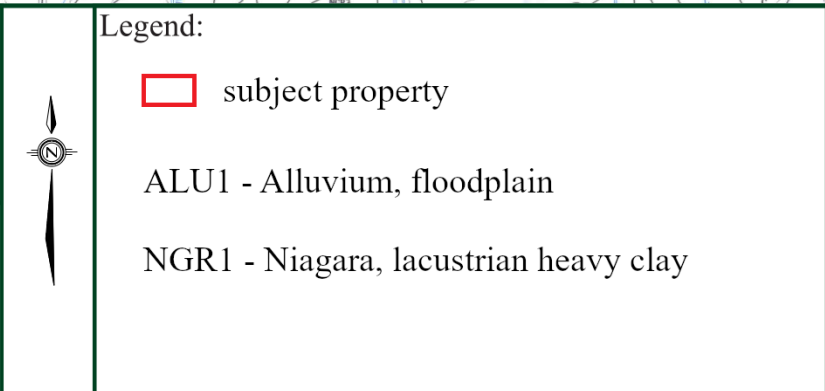


Figure 5: Aerial Photograph Showing the Results of the Stage 1 & 2 Archaeological Assessment of the Subject Property with Image Locations

