



ACC

ARCHAEOLOGICAL
CONSULTANTS CANADA

Stage 1 & 2 Archaeological Assessment

Proposed Development

4067 Drummond Road, Niagara Falls Part of Lot 78, Geographic Township of
Stamford, Former County of Welland, Regional Municipality of Niagara, Ontario

Original Report

Prepared for:

Ontario Ministry of Citizenship and Multiculturalism

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PIF #: P066-0533-2025

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April 17, 2025

EXECUTIVE SUMMARY

Archaeological Consultants Canada (ACC) was contracted by the Proponent to conduct a Stage 1 & 2 archaeological assessment, including background research and property survey, for a proposed development. An archaeological assessment was conducted during the pre-approval process and was required under the *Planning Act, R.S.O 1990*. The assessed area, or the “subject property”, is located at municipal address 4067 Drummond Road, Niagara Falls Part of Lot 78, Geographic Township of Stamford, Former County of Welland, Regional Municipality of Niagara, Ontario. The subject property measures 0.05 hectares (ha).

The Stage 1 & 2 assessment was conducted under Professional Archaeological License P066, held by Kristy O’Neal. Fieldwork was conducted under the direction of Leah Peacock (R1273). The Ontario Ministry of Citizenship and Multiculturalism (MCM) assigned Project Information Form (PIF) number P066-0533-2025 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.

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

- The subject property fronts an early historical transportation route, Drummond Road
- The Niagara Regions archaeological management plan indicates that the subject property has general archaeological potential.

The subject property measures 0.05 ha. A visual property inspection determined that 0.04 ha of the subject property has been previously disturbed by modern construction activities and has low to no archaeological potential.

0.01 ha of the subject property retained archaeological potential and was recommended for Stage 2 assessment. As the subject property consisted of manicured lawn it was assessed by test pit survey at 5 m intervals. No archaeological resources were encountered during the assessment.

The following recommendation is 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.

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LIST OF ABBREVIATIONS

The following is a list of abbreviations and acronyms used throughout this report.

| | |
|------|--|
| ACC | Archaeological Consultants Canada |
| CHVI | Cultural Heritage Value or Interest |
| cm | centimetre |
| ha | hectares |
| km | kilometre |
| m | metre |
| MCM | Ministry of Citizenship and Multiculturalism |
| OASD | Ontario Archaeological Sites Database |
| PIF | Project Information Form |
| % | percent |



PROJECT PERSONNEL

| | |
|-----------------------|------------------------------|
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Stage 1 & 2 Archaeological Assessment

Proposed Development

4067 Drummond Road, Niagara Falls Part of Lot 78, Geographic Township of Stamford, Former County of Welland, 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, including background research and property survey, for a proposed development. An archaeological assessment was conducted during the pre-approval process and was required under the *Planning Act, R.S.O 1990*. The assessed area, or the “subject property”, is located at municipal address 4067 Drummond Road, Niagara Falls Part of Lot 78, Geographic Township of Stamford, Former County of Welland, Regional Municipality of Niagara, Ontario. The subject property measures 0.05 hectares (ha).

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 (CHVI). 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 CHVI, 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 P066, held by Kristy O’Neal. Fieldwork was conducted under the direction of Leah Peacock (R1273). The Ontario Ministry of Citizenship and Multiculturalism (MCM) assigned Project Information Form (PIF) number P066-0533-2025 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 April 7, 2025.



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* (OHA).

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 that were favoured by 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 graves and by the preference for light colored chert, such as Collingwood chert. The Paleoindian Period is divided into two sub-periods, Early Paleoindian, and Late Paleoindian.

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)

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.

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. 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.

While North America had been visited by Europeans on an increasing scale since the end of the 15th century, the first European to venture into what would become southern Ontario was Étienne Brûlé. Brûlé was sent by Samuel de Champlain in the summer of 1610 to consolidate an emerging friendship between the French and the First Nations, and to learn their languages and customs. Other Europeans would subsequently be sent by the French to train as interpreters. These men played an essential role in communications with the First Nations (Gervais and Rothe, 2004:182).

The late 17th and early 18th centuries saw the growth and spread of the fur trade, with the establishment and maintenance of trading posts along the Great Lakes. In 1754, hostilities over trade and the territorial ambitions of the French and the British led to the Seven Years' War, which ended when the French surrendered in 1760 (Smith, 1987:22). In addition to cementing British control over the Province of Quebec, the British victory over the French also proved pivotal in catalyzing the Euro-Canadian settlement process.

During pre-contact and early contact times, the vicinity of the subject property would have contained a mixture of deciduous trees, coniferous trees, and open areas. In the early 19th century, Euro-Canadian settlers arrived via easily accessible colonization routes and began to clear the forests for agricultural purposes. In the 19th and early 20th centuries, the subject property and surrounding land were primarily used for agricultural purposes. Mixed farming was common, with wheat crops and beef cattle dominating the landscape (Chapman and Putnam, 1984:177).

The subject property was historically located on Part of Lot 78, in the Township of Stamford County of Welland. In 1791, the provinces of Lower Canada and Upper Canada were created from the former province of Quebec by a British parliamentary act. Colonel John Graves Simcoe was appointed as the Lieutenant Governor of Upper Canada and was tasked with governing and

directing its settlement, as well as establishing a constitutional government based on Britain's model (Coyne et al, 1895:33).

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).

Stamford Township was first settled in 1784 by Colonel John Butler's Rangers and other United Empire Loyalists (Page, 1876). It was originally named Township #2 because it was the second township surveyed in Welland County. The township was first surveyed in 1787 by Philip R. Frey. Portage Road, which runs from Chippawa to Queenston was the first road constructed in the Niagara Peninsula. Its route follows a trail used by Indigenous people to portage around the Falls in the Niagara River (Mika & Mika, 1983).

The township's first settler was Philip George Bender, who settled near the falls (Mika & Mika, 1983). By the 1790s the township was well populated, largely with Loyalists and other British settlers (Mika & Mika, 1981). In 1793, Governor Simcoe changed the name of Township #2 to Mount Dorchester Township, and the name changed officially to Stamford shortly after (Carter 1984). In 1831, Drummondville was the first incorporated village in the township.

The nearest historic community was Stamford, located approximately 981 m north of the subject property. Originally settled in 1792, named after a place in Lincolnshire, England. A post office was established in 1852 (Carter, 1984). It is currently part of the City of Niagara Falls.

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 19th century. Tremaine's 1862 *Map of the County of Welland, Canada West* indicates that at that time Jacob Kilman was the owner of the northern half of Lot 78 (Figure 2). Jacob Kilman was a 44-year-old Yeoman, who lived with his wife Amoret, age 38, and their three children Emily, 14; Josiah, 10 and Alva, 8. The 1861 describes them living in 1 ½ storey frame house (Library and Archives, 1861).

No structures are depicted within the subject property. Drummond Road is depicted west of the subject property, there is a plank road depicted 99 m north, Thorold Stone Road.

H.R. Page & Co. 1876 map of Stamford Township in the *Illustrated Historical Atlas of the Counties of Lincoln & Welland, Ontario* indicates that a Mrs. Hill owned the north half of Lot 78 (Figure 3). There are no structures depicted within the subject property, however a blacksmith shop depicted in the corner of the lot, approximate 86 m north of the subject property. Drummond Road and Thorold Stone Road are located in the same location as the previous map.

It should be noted that 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 (Caston, 1977:100). Given that the subject property fronts a historic concession road there is the potential for 19th century buildings to be present, depending on the level of disturbance.

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 *Soils of Niagara Falls, Regional Municipality of Niagara* (Kingston & Presant, 1989) labels the subject property as not mapped, which includes residential, industrial and recreational land areas.

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 the Welland River, approximately 870 m west of the subject property.

1.3.2 Current Land Use

Figure 4 provides the current land use of the subject property. The subject property is currently used as a residential property, consisting of a house and asphalt driveway. The subject property is situated in a residential area of the city of Niagara Falls. Houses are north, south and west, while Drummond Road is east of the subject property.

Figure 5 shows the location of the subject property on an aerial from 1934 (Niagara Region, 2021). The area remains predominantly unchanged. Residential houses front Drummond Road. While houses have been added since 1934, most roadways remain the same.

Fieldwork for the project was conducted on April 7, 2025

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 AgGs Borden block.

According to the OASD, no archaeological sites have been registered within the subject property, no additional sites have been registered within 1 km of the subject property (MCM, 2025a). The absence of registered sites may not necessarily be an accurate indication of cultural occupation, but rather it may reflect the lack of systematic archaeological surveys in the area.

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, 2025b). There are no additional reports detailing previous fieldwork within 50 m of the subject property within the register. Reports were searched based on registered site information, historic lots and concessions, and nearby streets.

1.3.4 Archaeological Master Plans

Niagara Region has an official plan that sets out directions and policies that guide economic, environmental, and community planning decisions for the region. In 2023, Niagara Region developed an Archaeological Management Plan. The plan is to be a comprehensive approach for the conservation of archaeological resources. The plan provides policies and process recommendations for planning and developmental approvals for the conservation of archaeological resources. The recommendations and policies are consistent with the Provincial Policy statement and makes them standard clauses for Niagara Region and municipalities (Niagara Region, 2023).

The document also includes an Archaeological Potential Model for Niagara Region which highlights the lands within the Region that contain archaeological potential. The model was based on inductive and deductive approaches to determined potential. The Pre-Contact Indigenous site layer uses data from the Ontario Archaeological Site Database. While the historical site potential layer uses digitization of residential, commercial and industrial features and transportation routes from historical mapping; along with all previously discovered historical sites. The Archaeological Potential Model indicates that the subject property has genral potential for archaeological resources (Figure 6).

2.0 FIELD METHODS

The subject property measures 0.05 ha. The Stage 1 & 2 assessment was conducted concurrently on April 7, 2025, with advance permission to enter the subject property obtained from the Proponent. Weather conditions during the assessment were excellent, with clear skies and a maximum daily high temperature of 13 degrees Celsius.

The Stage 1 assessment of the subject property 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 subject property 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. No areas of steeply sloping topography or low lying and permanently wet were observed. 0.04 ha, 90% of the subject property, has been previously disturbed by intensive and extensive modern soil alterations, including for construction of a residential home, garage and a driveway.

The remainder of the subject property, totaling 0.01 ha, 10%, was determined to have archaeological potential and require Stage 2 archaeological assessment. The subject property consists of manicured lawn. As these lands could not be ploughed, Stage 2 archaeological assessment was conducted by test pit survey at 5 m intervals 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 and other areas of low archaeological potential. 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 during the test pit assessment no intensified survey was conducted.

There was 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. The ground was not snow covered and soil was not frozen or saturated during the assessment, and there were no adverse conditions created by conducting winter survey, as per requirements listed in MCM's *Winter Archaeology: A Technical Bulletin for Consultant Archaeologists in Ontario* (MCM, 2013:3).

The entirety of the subject property was assessed. The results of the Stage 1 & 2 assessment are shown in Figure 7. Images of the assessment are provided in Section 10.0.

3.0 RECORD OF FINDS

3.1 Soils

Test pits contained approximately 23 to 28 cm of medium brown sandy loam topsoil above yellow to grey, brown sandy loam subsoil. Soil disturbance was observed in areas behind the house; however, 5 m intervals were maintained throughout the survey.

3.2 Archaeological Resources

No artifacts or other archaeological resources were observed during the Stage 1 & 2 assessment of the subject property.

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 assessment and all image descriptions were recorded in a photo log.

A detailed list of field records is presented in Table 2. 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 OHA, 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 2: Inventory of Documentary and Material Records

| PROJECT INFORMATION | | |
|--------------------------|----------------|------------------------------------|
| ACC project number | 170-12-25 | |
| Licensee | Kristy O'Neal | |
| MCM PIF numbers | P066-0533-2025 | |
| DOCUMENT/MATERIAL | NUMBER | DESCRIPTION |
| field notes & photo logs | 1 | pages (paper, with digital copies) |
| maps | 1 | aerial imagery of subject property |
| photographs | 6 | digital colour photographs |



4.0 ANALYSIS AND CONCLUSIONS

4.1 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 OHA 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.

4.2 Discussion

Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (MCM, 2011) lists criteria indicative of archaeological potential. Stage 1 background research indicated that the subject property has general archaeological potential due to the following factors:

- The subject property is largely comprised of well-drained land that is suitable for human habitation and agriculture
- The subject property fronts an early historical transportation route, Drummond Road
- The Niagara Regions archaeological management plan indicates that the subject property has general archaeological potential.

Given the above criteria, 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 was required.

The subject property measures 0.05 ha. A visual property inspection determined that 0.04 ha of the subject property has been previously disturbed by modern construction activities and has low to no archaeological potential.

0.01 ha of the subject property retained archaeological potential and was recommended for Stage 2 assessment. As the subject property consisted of manicured lawn it was assessed by 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 recommendation is 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 MCM's 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the property is required.

NOTWITHSTANDING the results and recommendations presented in this study, ACC notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. If archaeological remains are found during subsequent construction activities, a licensed Professional Archaeologist, approval authority, and the Archaeology Programs Unit of the MCM should be immediately notified.

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 VI of the *Ontario Heritage Act*, R.S.O. 1990, 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 (when proclaimed in force) requires that any person discovering human remains must notify the police or coroner and the Registrar, Burials Unit, at the Ministry of Public and Business Service Delivery and Procurement.

7.0 CLOSURE

This report was prepared for the exclusive use of the Proponent, unless otherwise expressly stated in the report or contract. This report documents work that was performed in accordance with the accepted professional standards at the time and location in which the services were provided.

The report is based solely on data and information collected during the archaeological assessment as described in this report. All information received from the Proponent or third parties in the preparation of this report has been assumed by ACC to be factual and accurate. ACC assumes no responsibility for any deficiency, misstatement, or inaccuracy in information received from others. ACC disclaims any obligation to update this report for events or information that becomes available to ACC after the assessment has been completed.

Conclusions made within this report consist of ACC's professional opinion as of the time of the writing of this report and are based solely on the scope and extent of work described in the report, the limited data available, and the results of the work. The conclusions are based on the conditions encountered by ACC at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, it is possible that unforeseen and undiscovered archaeological resources may be present within the assessed area. ACC does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property. No other representations, warranties, or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

Any use of this report by any third party is prohibited. This report is not to be given over to any third party, for any purpose whatsoever, without the written permission of ACC, which shall not be unreasonably withheld. Any use which a third party makes of this report, in whole or in part, or any reliance on or decisions to be made based on any information and conclusions in the report, are the responsibility of the third party. ACC assumes no responsibility for losses, damages, liabilities or claims of any kind whatsoever, howsoever arising, from third party use of this report.

ACC makes no other representations whatsoever, including those concerning the legal significance of the report's findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein.

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9.0 IMAGES



Stage 1 & 2 Archaeological Assessment
4067 Drummond Road
Niagara Falls, R.M. of Niagara ON



Image 1: Residential house, facing west



Image 2: Subject property, facing south



Image 3: Subject property, facing east



Image 4: Subject property, facing northwest





Image 5: Typical test pit



Image 6: Test pit showing disturbance



10.0 FIGURES



Figure 1: Location of the Subject Property on a Topographic Map

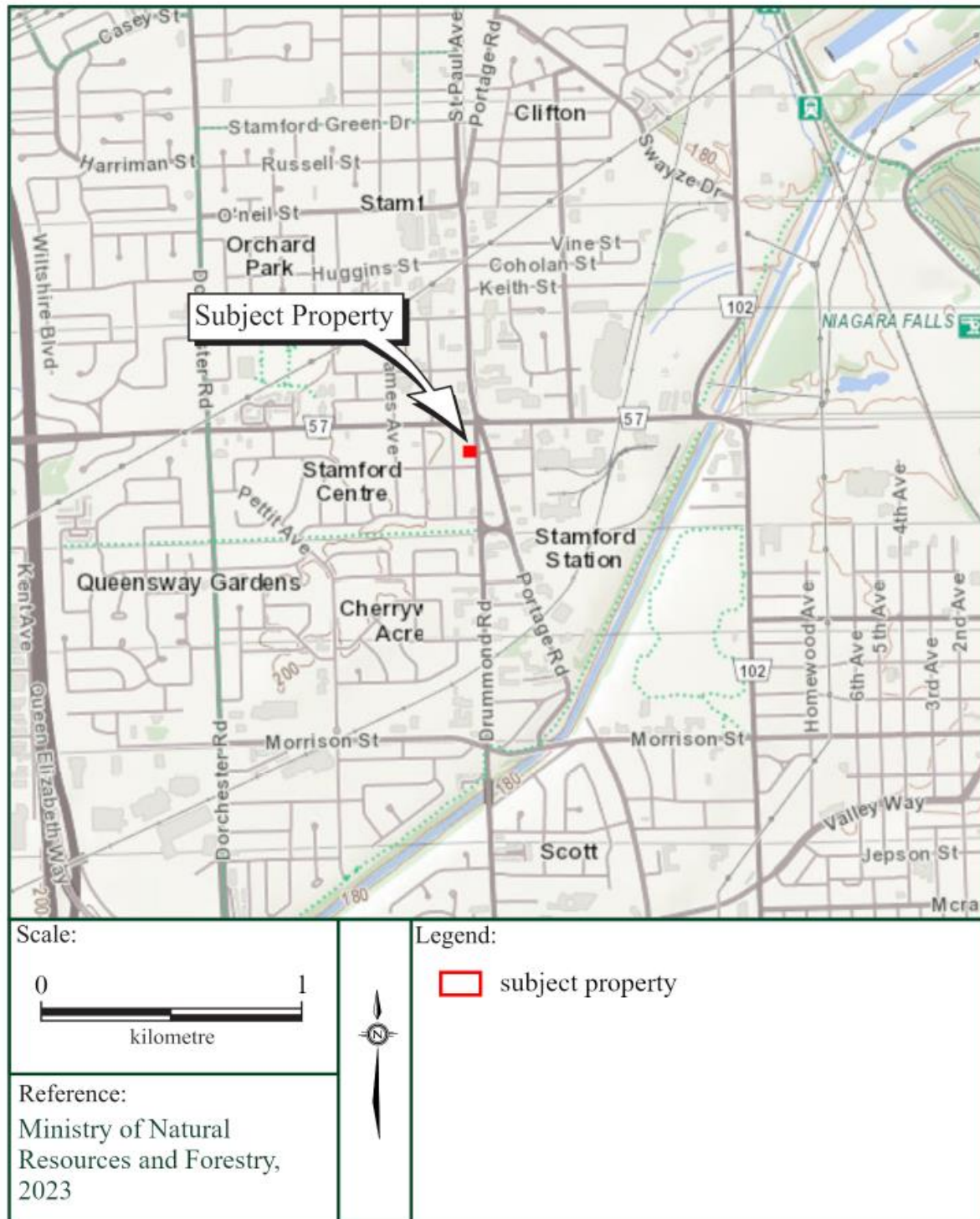


Figure 2: Location of the Subject Property on Tremaine's 1862 Map of the County of Welland, Canada West

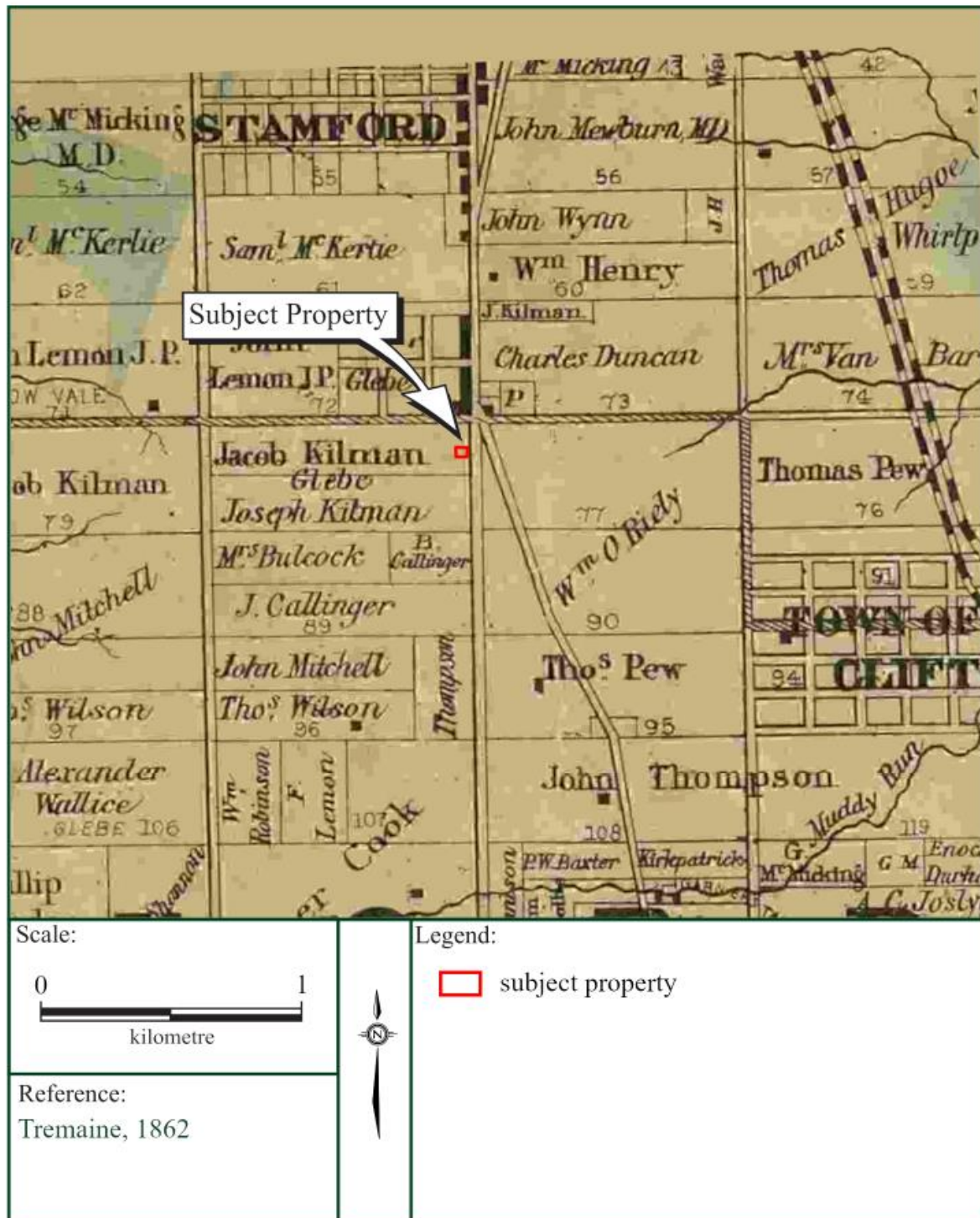


Figure 3: Location of the Subject Property on H.R. Page & Co.'s 1876 Illustrated Historical Atlas Map of the Counties of Lincoln and Welland, Stamford Township

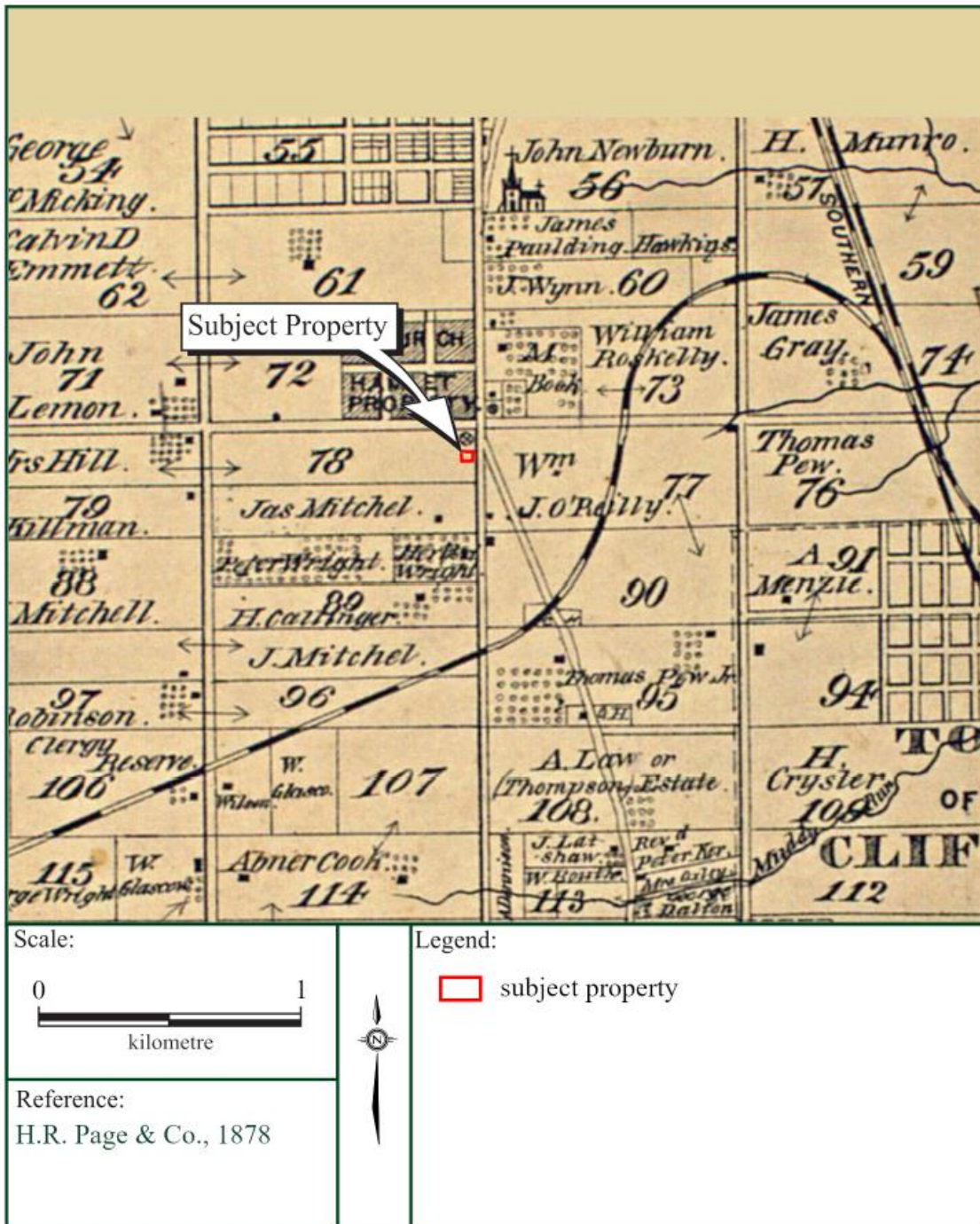


Figure 4: Current Land Use of the Subject Property



Figure 5: Location of the Subject Property on 1934 Aerial Imagery

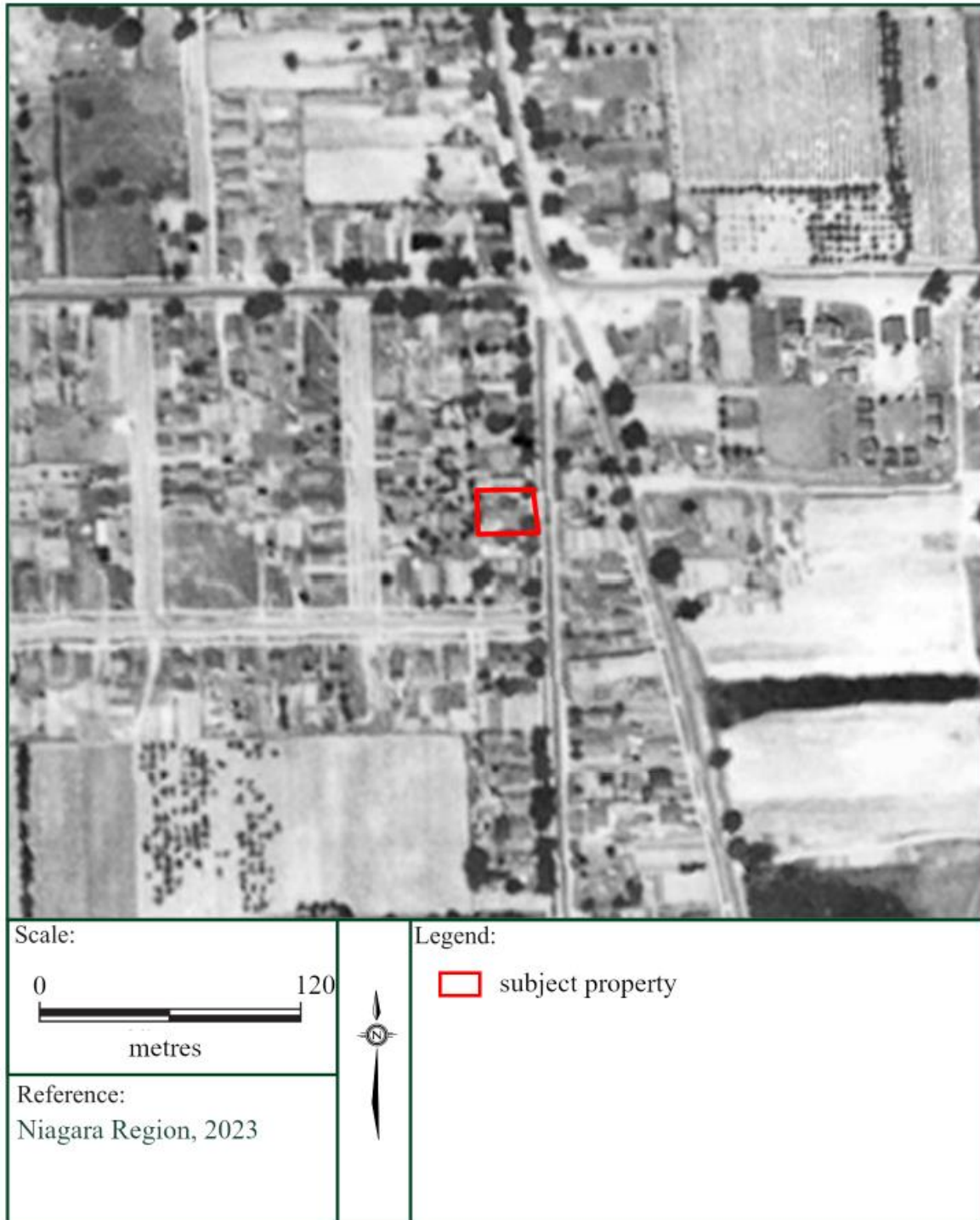


Figure 6: Location of the Subject Property on the Niagara Regions Archaeological Potential Map

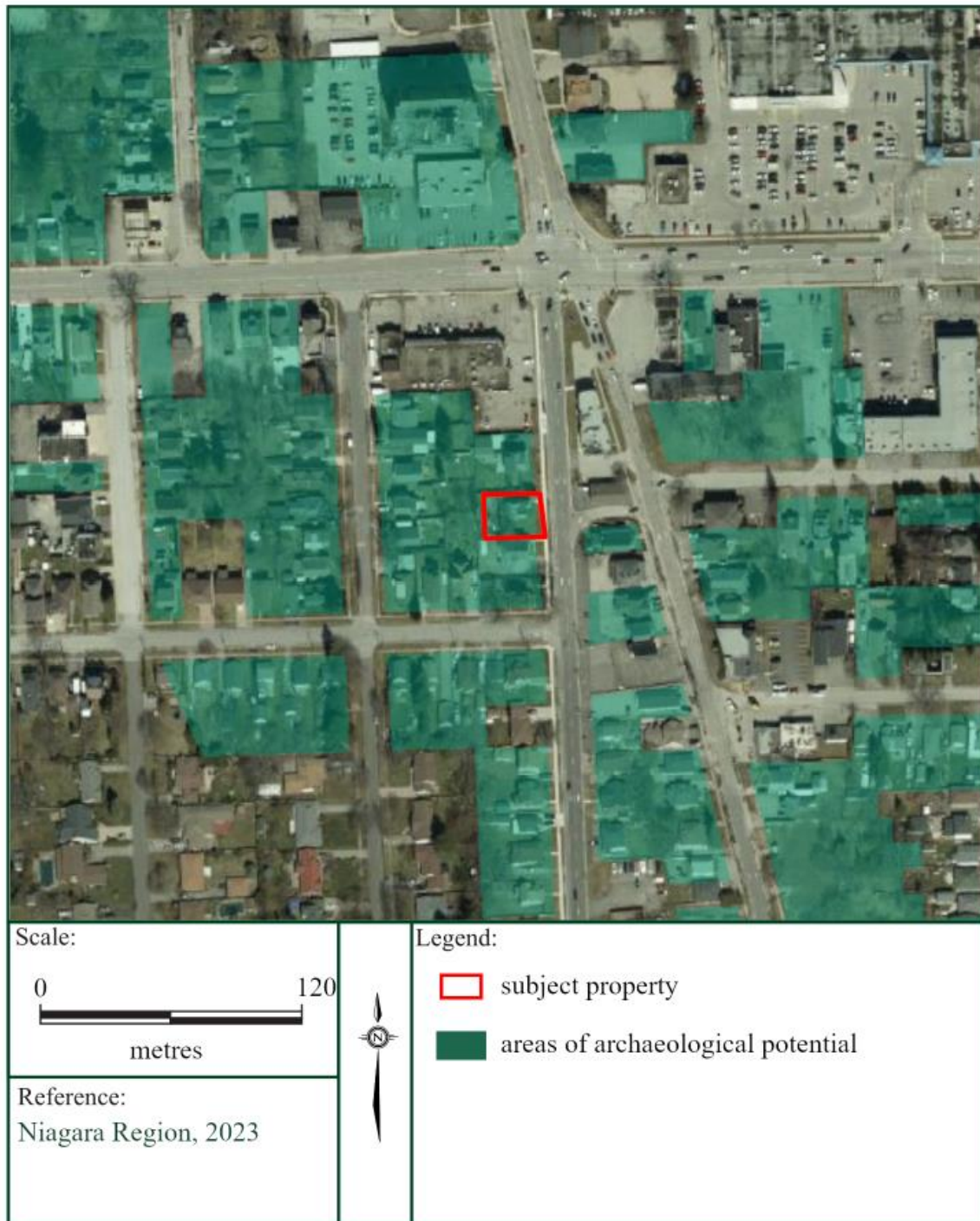


Figure 7: Aerial Imagery Showing the Results of the Stage 1 & 2 Archaeological Assessment of the Subject Property

