ORIGINAL: 10 FEBRUARY 2025

STAGE 1-2 ARCHAEOLOGICAL ASSESSMENT

5969 & 5981 Dunn Street, Lot 32, Plan 34
(Geographic Township of Stamford, County of Welland),
City of Niagara Falls, Regional Municipality of Niagara, Ontario
(AMICK Corporate Project #2024-691/MCM File #P038-1558-2024)

SUBMITTED TO:

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TABLE OF CONTENTS

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EXECUTIVE SUMMARY

This report describes the results of the 2024 Stage 1-2 Archaeological Property Assessment of 5969 & 5981 Dunn Street, Lot 32, Plan 34 (Geographic Township of Stamford, County of Welland), City of Niagara Falls, Regional Municipality of Niagara, Ontario, conducted by AMICK Consultants Limited. This assessment was undertaken as a requirement under the Planning Act (RSO 1990) and was conducted under Professional Archaeologist License #P038 issued to Marilyn Cornies by the Minister of Citizenship and Multiculturalism (MCM) for the Province of Ontario. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011) and the Ontario Heritage Act (RSO 1990a).

The entirety of the study area is approximately 0.15 hectares (ha) in area and includes within it two houses, a garage, paved driveways and grass lawn area. Municipal address 5969 Dunn Street also has a paved patio area to the rear of the house and an above-ground pool. Municipal address 5981 Dunn Street has a paved patio area at the front of the house and an additional gravel driveway to the rear of the house entering the property off of Orchard Avenue to the west. The study area is bounded on the north and east by residential properties, on the south by Dunn Street and on the west by Orchard Avenue. AMICK Consultants Limited was engaged by the proponent to undertake a Stage 1-2 Archaeological Property Assessment of lands potentially affected by the proposed undertaking and was granted permission to carry out archaeological fieldwork. Following the criteria outlined by MCMS (2011) for determining archaeological potential, portions of the study area were determined as having archaeological potential for Pre-contact and Post-contact archaeological resources. Consequently, this report is being prepared in advance of the planning process for this property.

The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment which consisted of high intensity test pit methodology at a five-metre interval between individual test pits on 12 December 2024. All records, documentation, field notes, photographs, and artifacts (as applicable) related to the conduct and findings of these investigations are held at the corporate office of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the MCM on behalf of the government and citizens of Ontario.

AMICK Consultants Limited initiated communication with Haudenosaunee Development Institute and The Mississaugas of the Credit (MCFN) in October 2024 to arrange representation on the Stage 2 Archaeological Assessment of 5969 & 5981 Dunn Street and address any concerns. Haudenosaunee Development Institute and The Mississaugas of the Credit (MCFN) are the First Nations community in closest proximity to the study area who have traditionally held an interest in local development and have a history of working with local approval agencies. Arrangements were made to include representation from The Mississaugas of the Credit (MCFN), who provided monitors for the assessment addressed in this report. Samantha Williams (HDI) and Jordan Jamieson (MCFN acted as representative monitors during the assessment on 12 December 2024.

As a result of the Stage 2 Property Assessment of the study area, no archaeological resources were encountered. Consequently, the following recommendations are made:

1. *No further archaeological assessment of the study area is warranted.*
2. *The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed.*
3. *The proposed undertaking is clear of any archaeological concern.*

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

This report describes the results of the 2024 Stage 1-2 Archaeological Property Assessment of 5969 & 5981 Dunn Street, Lot 32, Plan 34 (Geographic Township of Stamford, County of Welland), City of Niagara Falls, Regional Municipality of Niagara, Ontario, conducted by AMICK Consultants Limited. This assessment was undertaken as a requirement under the Planning Act (RSO 1990) and was conducted under Professional Archaeologist License #P038 issued to Marilyn Cornies by the Minister of Citizenship and Multiculturalism (MCM) for the Province of Ontario. All work was conducted in conformity with Ontario Ministry of Tourism and Culture (MTC) Standards and Guidelines for Consultant Archaeologists (MTC 2011) and the Ontario Heritage Act (RSO 1990a).

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The entirety of the study area was subject to property inspection and photographic documentation concurrently with the Stage 2 Property Assessment which consisted of high intensity test pit methodology at a five-metre interval between individual test pits on 12 December 2024. All records, documentation, field notes, photographs, and artifacts (as applicable) related to the conduct and findings of these investigations are held at the corporate office of AMICK Consultants Limited until such time that they can be transferred to an agency or institution approved by the MCM on behalf of the government and citizens of Ontario.

The proposed development of the study area includes three (3) on street townhouse units with driveways and walkways entering from Orchard Avenue. The proposed development is to be contained entirely within the backyard portions of the two existing properties and the existing houses and garage will be retained. A preliminary concept plan of the proposed development has been submitted together with this report to MCM for review and reproduced within this report as Map 4.

1.2 HISTORICAL CONTEXT

1.2.1 PRE-CONTACT LAND-USE OUTLINE

Table 1 illustrates the chronological development of cultures within southern Ontario prior to the arrival of European cultures to the area at the beginning of the 17th century. This general cultural outline is based on archaeological data and represents a synthesis and summary of research over a long period of time. It is necessarily generalizing and is not necessarily representative of the point of view of all researchers or stakeholders. It is offered here as a rough guideline and as a very broad outline to illustrate the relationships of broad cultural groups and time periods.

TABLE 1 PRE-CONTACT CULTURAL CHRONOLOGY FOR SOUTHERN ONTARIO

Years ago	Period	Southern Ontario
250	Terminal Woodland	Ontario and St. Lawrence Iroquois Cultures
1000 2000	Initial Woodland	Princess Point, Saugeen, Point Peninsula, and Meadowood Cultures
3000 4000 5000 6000	Archaic	Laurentian Culture
7000 8000 9000 10000 11000	Palaeo-Indian	Plano and Clovis Cultures
		(Wright 1972)

What follows is an outline of Aboriginal occupation in the area during the Pre-Contact Era from the earliest known period, about 9000 B.C. up to approximately 1650 AD.

1.2.1.1 PALEO-INDIAN PERIOD (APPROXIMATELY 9000-7500 B.C.)

North of Lake Ontario, evidence suggests that early occupation began around 9000 B.C. People probably began to move into this area as the glaciers retreated and glacial lake levels began to recede. The early occupation of the area probably occurred in conjunction with environmental conditions that would be comparable to modern Sub-Arctic conditions. Due to the great antiquity of these sites, and the relatively small populations likely involved, evidence of these early inhabitants is sparse and generally limited to tools produced from stone or to by-products of the manufacture of these implements.

1.2.1.2 ARCHAIC PERIOD (APPROXIMATELY 8000-1000 B.C.)

By about 8000 B.C. the gradual transition from a post glacial tundra-like environment to an essentially modern environment was largely complete. Prior to European clearance of the landscape for timber and cultivation, the area was characterized by forest. The Archaic Period is the longest and the most apparently stable of the cultural periods identified through

archaeology. The Archaic Period is divided into the Early, Middle and Late Sub-Periods, each represented by specific styles in projectile point manufacture. Many more sites of this period are found throughout Ontario, than of the Palaeo-Indian Period. This is probably a reflection of two factors: the longer period of time reflected in these sites, and a greater population density. The greater population was likely the result of a more diversified subsistence strategy carried out in an environment offering a greater variety of abundant resources (Smith 2002:58-59).

Current interpretations suggest that the Archaic Period populations followed a seasonal cycle of resource exploitation. Although similar in concept to the practices speculated for the big game hunters of the Palaeo-Indian Period, the Archaic populations utilized a much broader range of resources, particularly with respect to plants. It is suggested that in the spring and early summer, bands would gather at the mouths of rivers and at rapids to take advantage of fish spawning runs. Later in the summer and into the fall season, smaller groups would move to areas of wetlands to harvest nuts and wild rice. During the winter, they would break into yet smaller groups probably based on the nuclear family and perhaps some additional relatives to move into the interior for hunting. The result of such practices would be to create a distribution of sites across much of the landscape (Smith 2002: 59-60).

The material culture of this period is much more extensive than that of the Palaeo-Indians. Stylistic changes between Sub-Periods and cultural groups are apparent, although the overall quality in production of chipped lithic tools seems to decline. This period sees the introduction of ground stone technology in the form of celts (axes and adzes), manos and metates for grinding nuts and fibres, and decorative items like gorgets, pendants, birdstones, and bannerstones. Bone tools are also evident from this time period. Their presence may be a result of better preservation from these more recent sites rather than a lack of such items in earlier occupations. In addition, copper and exotic chert types appear during the period and are indicative of extensive trading (Smith 2002: 58-59).

1.2.1.3 WOODLAND PERIOD (APPROXIMATELY 1000 B.C.-1650 A.D.)

The primary difference in archaeological assemblages that differentiates the beginning of the Woodland Period from the Archaic Period is the introduction of ceramics to Ontario populations. This division is probably not a reflection of any substantive cultural changes, as the earliest sites of this period seem to be in all other respects a continuation of the Archaic mode of life with ceramics added as a novel technology. The seasonally based system of resource exploitation and associated population mobility persists for at least 1500 years into the Woodland Period (Smith 2002: 61-62).

The Early Woodland Sub-Period dates from about 1000-400 B.C. Many of the artifacts from this time are similar to the late Archaic and suggest a direct cultural continuity between these two temporal divisions. The introduction of pottery represents and entirely new technology that was probably acquired through contact with more southerly populations from which it likely originates (Smith 2002:62).

The Middle Woodland Sub-Period dates from about 400 B.C.-800 A.D. Within the region including the study area, a complex emerged at this time termed "Point Peninsula." Point Peninsula pottery reflects a greater sophistication in pottery manufacture compared with the earlier industry. The paste and temper of the new pottery is finer and new decorative techniques such as dentate and pseudo-scallop stamping appear. There is a noted Hopewellian influence in southern Ontario populations at this time. Hopewell influences from south of the Great Lakes include a widespread trade in exotic materials and the presence of distinct Hopewell style artifacts such as platform pipes, copper or silver panpipe covers and shark's teeth. The populations of the Middle Woodland participated in a trade network that extended well beyond the Great Lakes Region.

The Late Woodland Sub-Period dates from about 500-1650 A.D. The Late Woodland includes four separate phases: Princess Point, Early Ontario Iroquoian, Middle Ontario Iroquoian and Late Ontario Iroquoian.

The Princess Point phase dates to approximately 500-1000 A.D. Pottery of this phase is distinguished from earlier technology in that it is produced by the paddle method instead of coil and the decoration is characterized by the cord wrapped stick technique. Ceramic smoking pipes appear at this time in noticeable quantities. Princess Point sites cluster along major stream valleys and wetland areas. Maize cultivation is introduced by these people to Ontario. These people were not fully committed to horticulture and seemed to be experimenting with maize production. They generally adhere to the seasonal pattern of occupation practiced by earlier occupations, perhaps staying at certain locales repeatedly and for a larger portion of each year (Smith 2002: 65-66).

The Early Ontario Iroquoian stage dates to approximately 950-1050 A.D. This stage marks the beginning of a cultural development that led to the historically documented Ontario Iroquoian groups that were first contacted by Europeans during the early 1600s (Petun, Neutral, and Huron). At this stage formal semi-sedentary villages emerge. The Early stage of this cultural development is divided into two cultural groups in southern Ontario. The areas occupied by each being roughly divided by the Niagara Escarpment. To the west were located the Glen Meyer populations, and to the east were situated the Pickering people (Smith 2002: 67).

The Middle Ontario Iroquoian stage dates to approximately 1300-1400 A.D. This stage is divided into two sub-stages. The first is the Uren sub-stage lasting from approximately 1300-1350 A.D. The second of the two sub-stages is known as the Middleport sub-stage lasting from roughly 1350-1400 A.D. Villages tend to be larger throughout this stage than formerly (Smith 2002: 67).

The Late Ontario Iroquoian stage dates to approximately 1400-1650 A.D. During this time the cultural divisions identified by early European explorers are under development and the geographic distribution of these groups within southern Ontario begins to be defined.

1.2.2 Post-Contact Land Use Outline

The County of Welland was formed in 1851 and was named after the Welland River. It should be noted that Welland County was one of the first major settlements within Upper Canada (Wikipedia.org 2010). Many of its first settlers were Loyalists and moved to the area as a result of the American Revolution. Due to the presence of the Welland River and to Niagara Falls, this allowed the area to develop rapidly as the River offered easy transportation and energy production. The construction of the Welland Canal began in 1824 and would connect Lake Ontario to Lake Erie. The canal was at first a wooden structure and would later be replaced with stone (Welland.ca 2010). The counties of Lincoln and Welland were amalgamated into the Regional Municipality of Niagara in 1970 (Wikipedia.org 2010).

Map 2 is a facsimile segment from Tremaine's Map of the Counties of Lincoln and Welland (Tremaine 1862). Map 2 illustrates the location of the study area and environs as of 1862. The study area is shown to belong to Land of Falls Company; no structures are shown to be within the study area. This demonstrates that the original property of which the study area is a part was settled by the time that the atlas data was compiled. Accordingly, it has been determined that there is potential for archaeological deposits related to early Post-contact settlement within the study area. In addition, this map illustrates a railway east of the study area and the Niagara River east of the study area. Recent maps no longer show the presence of this railway.

Map 3 is a facsimile segment of from The Illustrated Historical Atlas of the Counties of Lincoln and Welland (Page & Co. 1876). Map 3 illustrates the location of the study area and environs as of 1876. The study area is shown to belong to Land of Falls Company; no structures are shown to be within the study area. This map illustrates an unnamed railway situated west of the study area. Niagara River is also shown as west of the study area. Recent maps no longer show the presence of this railway.

A plan of the study area is included within this report as Map 4. Current conditions encountered during the Stage 1-2 Property Assessment are illustrated in Maps 5 & 6.

1.2.3 SUMMARY OF HISTORICAL CONTEXT

The brief overview of readily available documentary evidence indicates that the study area is situated within an area that was close to historic transportation routes and in an area well populated during the nineteenth century and therefore has potential for sites relating to early Post-contact settlement in the region. However, it also appears that while the area was moving toward urban development by the fourth quarter of the 19th century, it was still predominantly rural in character and the likelihood of locating significant Post-contact archaeological deposits of cultural heritage value or interest (CHVI) on a very small parcel of the original township lot is not likely. Background research indicates the property has potential for significant archaeological resources of Native origins based on proximity to a natural source of potable water in the past.

1.3 ARCHAEOLOGICAL CONTEXT

The study area is located in Niagara and bounded on the north and east by residential properties, on the south by Dunn Street and on the west by Orchard Avenue

The study area consists of two houses, a garage, paved driveways and grass lawn area. The study area does not contain any areas of steep slope. The study area does not contain any ploughable lands.

1.3.1 PHYSIOGRAPHIC REGION

The study area is situated within the Haldimand Clay Plain physiographic region. The Haldimand Clay Plain lies between the Niagara Escarpment and Lake Erie and consists of an intermixture of stratified clay and till. The study area falls within an area of the plain where good silt loam is prime for orchards and vineyards of grapes, pears and apples (Chapman and Putnam 1984: 156-159).

1.3.2 SURFACE WATER & VEGETATION

The study area is located approximately 1,175 metres northwest of the Niagara River, shown on historic Maps 2 and 3. There are no apparent additional waterways in close proximity to the study area although the presence of numerous Pre-contact sites in the area suggests that there were abundant sources of natural water that area now likely filled in or capped by the City of Niagara Falls.

1.3.3 LITHIC SOURCES

The study area is located approximately 20km east of the Lockport Formation, containing Ancaster chert and approximately 20km north of the Bois Blanc Formation containing Bois Blanc chert.

Ancaster chert is a member of the Middle Silurian Lockport Formation and can be found from Niagara up the escarpment to the Hamilton area (Armstrong 2018:70; Eley and von Bitter 1989:20). It is medium grey in colouration and usually includes darker carbonate mottling with light quartz grains and “rusting” from iron oxide inclusions (Armstrong 2018:71). Ancaster chert usually has white to light grey patination and lustre varies from dull to earthy to vitreous (Armstrong 2018:71).

Bois Blanc chert is a member of the Early Devonian Bois Blanc Formation and occurs in thin beds or nodules located in several areas in the vicinity of Hagersville, Innerkip and Fort Erie Ontario (Eley and von Bitter 1989:29). This material is characterized by a diversity of texture, colour, and composition (Eley and von Bitter 1989:19), ranging from light to dark grey, grey blue, or brown and sometimes exhibit mottling (Eley and von Bitter 1989:19). Types of chert within the Bois Blanc formation include Haldimand, Colbourne, and Saugeen (Armstrong 2018: 64). Bois Blanc and Onondaga cherts share similarities in their colours and

since this study relied on macroscopic analysis of lithic materials, there may be an error in representative chert frequencies.

1.3.4 REGISTERED ARCHAEOLOGICAL SITES

The Archaeological Sites Database administered by the MCMS indicates that there are twelve (12) previously documented sites within 1 kilometre of the study area. However, it must be noted that this assumes the accuracy of information compiled from numerous researchers using different methodologies over many years. AMICK Consultants Limited assumes no responsibility for the accuracy of site descriptions, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MCMS. In addition, it must also be noted that a lack of formerly documented sites does not indicate that there are no sites present as the documentation of any archaeological site is contingent upon prior research having been conducted within the study area.

1.3.4.1 PRE-CONTACT REGISTERED SITES

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MCMS. As a result, it was determined that nine (9) archaeological sites relating directly to Pre-contact habitation/activity had been formally registered within the immediate vicinity of the study area. Four (4) of these sites (AgGs-407, AgGs-406, AgGs-377 & AgGs-109) are multi-component sites listed as both Pre-contact and Post-contact sites. All previously registered Pre-contact sites are briefly described below in Table 2:

TABLE 2 PRE-CONTACT SITES WITHIN 1KM

Borden #	Site Name	Time Period	Affinity	Site Type
AgGs-459	NTS 1	Pre-Contact		camp / campsite
AgGs-414	Location 2	Pre-Contact		camp / campsite
AgGs-413	Location 2	Pre-Contact	Aboriginal	camp / campsite
AgGs-407		Archaic, Early, Post-Contact, Woodland	Aboriginal, Euro-Canadian	Other refuse, camp / campsite
AgGs-406		Archaic, Late, Post-Contact, Woodland, Late	Aboriginal, Euro-Canadian	camp / campsite, homestead
AgGs-405	Allendale Avenue	Pre-Contact	Aboriginal	Unknown, scatter
AgGs-377	Barker Lundy	Post-Contact, Pre-Contact		Unknown
AgGs-203	Roaring River	Archaic, Early, Archaic, Middle	Aboriginal	scatter
AgGs-109	Drummond Hill Cemetery	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	battle site, cemetery, findspot

These sites demonstrate archaeological potential for further archaeological resources related to Pre-contact activity and occupation with respect to the archaeological assessment of the proposed undertaking.

1.3.4.2 Post-contact Registered Sites

A summary of registered and/or known archaeological sites within a 1-kilometre radius of the study area was gathered from the Archaeological Sites Database, administered by MCMS. As a result, it was determined that seven (7) archaeological sites relating directly to Post-contact habitation/activity had been formally registered within the immediate vicinity of the study area. Four (4) of these sites (AgGs-407, AgGs-406, AgGs-377 & AgGs-109) are multi-component sites listed as both Pre-contact and Post-contact sites. All previously registered Post-contact sites are briefly described below in Table 3:

Table 3 Post-contact Sites within 1km

Borden #	Site Name	Time Period	Affinity	Site Type
AgGs-408		Post-Contact		homestead
AgGs-407		Archaic, Early, Post-Contact, Woodland	Aboriginal, Euro-Canadian	Other refuse, camp / campsite
AgGs-406		Archaic, Late, Post-Contact, Woodland, Late	Aboriginal, Euro-Canadian	camp / campsite, homestead
AgGs-377	Barker Lundy	Post-Contact, Pre-Contact		Unknown
AgGs-326	Loretto	Post-Contact		
AgGs-109	Drummond Hill Cemetery	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	battle site, cemetery, findspot
AgGs-108	Lundy's Lane	Post-Contact	Euro-Canadian	Other tavern/restaurant, battle site

These sites demonstrate archaeological potential for further archaeological resources related to Post-contact activity and occupation with respect to the archaeological assessment of the proposed undertaking.

1.3.5 Previous Archaeological Assessments

On the basis of information supplied by MCMS, no archaeological assessments have been conducted within 50 metres of the study area. AMICK Consultants Limited assumes no responsibility for the accuracy of previous assessments, interpretations such as cultural affiliation, or location information derived from the Archaeological Sites Database administered by MCMS. In addition, it must also be noted that the lack of formerly

documented previous assessments does not indicate that no assessments have been conducted.

1.3.5.2 Previous Regional Archaeological Potential Modelling

The study area is situated within an area (Niagara Region) that is in the process of creating an Archaeological Management Plan. In 2021, the Region of Niagara produced the Niagara Region Archaeological Management Plan: Phase 5 Report Draft (ASI 2021). The study involved creating areas of archaeological potential for both Pre-contact and Historical archaeological sites. Table 6 describes the modelling criteria by which the Niagara Region archaeological potential modelling for Pre-contact archaeological sites was calculated, while Table 4 describes the modelling criteria for Historical archaeological sites.

Table 4 Pre-Contact Archaeological Site Potential Modelling Criteria

Environmental or Cultural Feature	Buffer Distance (metres)	Buffer Qualifier
Rivers and streams	250	• from top of bank for former; from centreline for latter
Lakes and ponds	250	• exterior buffer from current limits
Wetlands	250	• including pre-settlement wetlands
Registered Indigenous archaeological sites	100 250	• Camps and other small settlements • Villages

TABLE 5 HISTORICAL ARCHAEOLOGICAL SITE POTENTIAL MODELLING CRITERIA

Environmental or Cultural Feature	Buffer Distance (metres)	Buffer Qualifier
Historical settlement centres	polygon as mapped	• no buffer, override integrity
Domestic sites	100	• none
Breweries and distilleries	100	• none
Hotels/taverns	100	• none
Historical schools and churches	100	• none
Historic mills, forges, extraction industries	100	• none
Early settlement roads	100	• both sides
Early railways	50	• both sides
Cemeteries	10 100	• Registered cemeteries with known limits. 10 m beyond limits of cemetery • Suspected cemetery or pioneer cemetery. 100m around point
Registered historical archaeological sites	100	• none

1.3.6 HISTORIC PLAQUES

There are no relevant plaques associated with the study area, which would suggest an activity or occupation within, or near, the study area that may indicate potential for associated archaeological resources of significant CHVI.

1.3.7 SUMMARY OF ARCHAEOLOGICAL CONTEXT

The study area consists of two residential properties: each with a house, garage and lawn areas. The study area appears to retain much of its natural topography and is relatively flat which is consistent with the surrounding landscape. The study area does not contain any areas of steep slope. The study area does not contain any ploughable lands.

Current conditions within the study area indicate that some areas of the property may have no or low archaeological potential and do not require Stage 2 Property Assessment or should be excluded from Stage 2 Property Assessment. These areas would include existing structures and paved surfaces. A significant proportion of the study area does exhibit archaeological

potential and therefore a Stage 2 Property Assessment is required. Most of the study area consists of open lawn area with minor landscape features that have little or no impact on the completion of a systematic archaeological assessment.

Background research also indicates that the study area is situated in the Haldimand Clay Plain physiographic region, which is characterized by an intermixture of stratified clay and till. In addition, the study area is located near both the Blanc Bois Formation, which has outcrops of Blanc Bois chert, and the Lockport Formation, which has outcrops of Ancaster chert.

A total of twelve (12) previously registered archaeological sites have been documented within 1km of the study area. Of these, five (5) are Pre-contact, three (3) are Post-contact and four (4) are multi-component, listed as both pre-contact and post-contact. These sites demonstrate archaeological potential for further archaeological resources of Pre-contact and/or Post-contact activity and occupation with respect to the archaeological assessment of the current study area.

The study area is situated within an area subject to an archaeological master plan or a similar regional overview study. There are no relevant plaques associated with the study area.

The study area has potential for archaeological resources of Native origins based on proximity to previously registered archaeological sites of Pre-contact origins. Background research also suggests potential for archaeological resources of Post-contact origins based on proximity to previously registered archaeological sites of Post-contact origins, proximity to a historic roadway, and proximity to areas of documented historic settlement.

2.0 FIELD WORK METHODS AND WEATHER CONDITIONS

2.1 INTRODUCTION

A property inspection was carried out in compliance with Standards and Guidelines for Consultant Archaeologists (MTC 2011) to document the existing conditions of the study area to facilitate the Stage 2 Property Assessment. All areas of the study area were visually inspected and select features were photographed as a representative sample of each area defined within Maps 5 and 6. Observations made of conditions within the study area at the time of the inspection were used to inform the requirement for Stage 2 Property Assessment for portions of the study area as well as to aid in the determination of appropriate Stage 2 Property Assessment strategies. The locations from which photographs were taken and the directions toward which the camera was aimed for each photograph are illustrated in Maps 5 & 6 of this report.

The Stage 2 Assessment of the study area was carried out on 12 December 2024 and consisted of high intensity test pit methodology at a five-metre interval between individual test pits which was conducted in compliance with the Standards and Guidelines for Consultant Archaeologists, Section 2.1.2: Test Pit Survey. Weather conditions were

appropriate for the necessary fieldwork required to complete the Stage 2 Property Assessment and to create the documentation appropriate to this study.

2.2 TEST PIT SURVEY

The study area consisted of existing residential was lawn and was subjected to test pit survey at 5m intervals per Section 2.1.2, Standard 1 (MTC 2011).

All test pits were excavated within 1m of all built structures, were at least 30cm in diameter and were excavated into the first 5cm of subsoil to examine stratigraphy, cultural features and evidence of fill. All soils were screened through mesh no greater than 6mm and all test pits were backfilled. All work was photo documented.

During the 5m test pit survey, no archaeological resources were encountered.

Maps 5 & 6 of this report illustrate the Stage 2 Assessment methodology within the study area.

3.0 RECORD OF FINDS

3.1 INTRODUCTION

As a result of the Stage 1-2 Assessment of the study area, no archaeological resources of any description were encountered.

The documentation produced during the field investigation conducted in support of this report includes: one sketch map, one page of photo log, one page of field notes, and 48 digital photographs.

4.0 ANALYSIS AND CONCLUSIONS

4.1 STAGE 1 ANALYSIS AND CONCLUSIONS

4.1.1 CHARACTERISTICS INDICATING ARCHAEOLOGICAL POTENTIAL

Section 1.3.1 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics that indicate archaeological potential (MTC 2011). Factors that indicate archaeological potential are features of the local landscape and environment that may have attracted people to either occupy the land or to conduct activities within the study area. One or more of these characteristics found to apply to a study area would necessitate a Stage 2 Property Assessment to determine if archaeological resources are present. These characteristics include:

1) Within Proximity of Previously Identified Archaeological Sites

2) Within Proximity of Primary Water Sources (e.g., lakes, rivers, streams, and creeks)

3) Within Proximity of Secondary Water Sources (e.g., intermittent streams and creeks, springs, marshes, and swamps)

4) Within 300 m of 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, and cobble beaches)

5) Within Proximity of an Accessible or Inaccessible Shoreline (e.g., high bluffs, swamp, or marsh fields by the edge of a lake, sandbars stretching into marsh)

6) Elevated Topography (e.g., eskers, drumlins, large knolls, and plateaux)

7) Pockets of Well-drained Sandy Soil, especially near areas of heavy soil or rocky ground.

8) Distinctive Land Formations 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.

9) Resource Areas, including:
   - food or medicinal plants (e.g., migratory routes, spawning areas, and prairie)
   - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
   - resources of importance to early Post-contact industry (e.g., logging, prospecting, and mining)

10) Within Proximity of Areas of Early Post-contact Settlement, including:
   - military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, and farmstead complexes)
   - early wharf or dock complexes, pioneer churches and early cemeteries

11) Within 100m of Early Historical Transportation Routes (e.g., trails, passes, roads, railways, portage routes)

12) Heritage Property – A property listed on a municipal register or designated under the Ontario Heritage Act or is a federal, provincial, or municipal historic landmark or site.

13) Documented Historical or Archaeological Sites – property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations. These are properties which have not necessarily been formally recognized or for which there is additional evidence identifying possible archaeological resources associated with historic properties in addition to the rationale for formal recognition.

The study area is situated 350 metres northwest of the Niagara River which is a primary water source and a navigable waterway. The study area is situated within 100m of a historic railway that appears on the historic atlas maps of 1862 and 1876.

4.1.2 Characteristics Indicating Removal of Archaeological Potential

Section 1.3.2 of the Standards and Guidelines for Consultant Archaeologists specifies the property characteristics which indicate no archaeological potential or for which archaeological potential has been removed (MTC 2011). These characteristics include:

1) Quarrying
2) Major Landscaping Involving Grading Below Topsoil
3) Building Footprints
4) Sewage and Infrastructure Development

The study area contains a small area that has been landscaped involving grading below topsoil.

4.1.3 Summary of Archaeological Potential

Table 8 below summarizes the evaluation criteria of the Ministry of Citizenship and Multiculturalism together with the results of the Stage 1 Background Study for the proposed undertaking. Based on the criteria, the property is deemed to have archaeological potential on the basis of proximity to known archaeological sites, the proximity to historic settlement, and the location of early historic settlement roads adjacent to the study area.

TABLE 8 EVALUATION OF ARCHAEOLOGICAL POTENTIAL

FEATURE OF ARCHAEOLOGICAL POTENTIAL		YES	NO	N/A	COMMENT
1	Known archaeological sites within 1km	**Y**			If Yes, potential determined
PHYSICAL FEATURES					
2	Is there water on or near the property?		**N**		If Yes, what kind of water?
2a	Primary water source (lakeshore, river, large creek, etc.)		**N**		If Yes, potential determined
2b	Secondary water source (stream, spring, marsh, swamp, etc.)		**N**		If Yes, potential determined
2c	Past water source (beach ridge, riverbed, relic creek, etc.)		**N**		If Yes, potential determined
2d	Accessible or Inaccessible shoreline (high bluffs, marsh, swamp, sand bar, etc.)		**N**		If Yes, potential determined
3	Elevated topography (knolls, drumlins, eskers, plateaus, etc.)		**N**		If Yes, and Yes for any of 4-9, potential determined
4	Pockets of sandy soil in a clay or rocky area		**N**		If Yes and Yes for any of 3, 5-9, potential determined
5	Distinctive land formations (mounds, caverns, waterfalls, peninsulas, etc.)		**N**		If Yes and Yes for any of 3-4, 6-9, potential determined
HISTORIC/PREHISTORIC USE FEATURES					
6	Associated with food or scarce resource harvest areas (traditional fishing locations, agricultural/berry extraction areas, etc.)		**N**		If Yes, and Yes for any of 3-5, 7-9, potential determined.
7	Early Post-contact settlement area.	**Y**			If Yes, and Yes for any of 3-6, 8-9, potential determined
8	Historic Transportation route. (historic road, trail, portage, rail corridors, etc.)	**Y**			If Yes, and Yes for any 3-7 or 9, potential determined
9	Contains property designated and/or listed under the Ontario Heritage Act (municipal heritage committee, municipal register, etc.)		**N**		If Yes and, Yes to any of 3-8, potential determined
APPLICATION-SPECIFIC INFORMATION					
10	Local knowledge (local heritage organizations, Pre-contact, etc.)		**N**		If Yes, potential determined
11	Recent disturbance not including agricultural cultivation (post-1960-confirmed extensive and intensive including industrial sites, aggregate areas, etc.)		**N**		If Yes, no potential or low potential in affected part (s) of the study area.

If **YES** to any of 1, 2a-c, or 10 Archaeological Potential is **confirmed**
If **YES** to 2 or more of 3-9, Archaeological Potential is **confirmed**
If **YES** to 11 or No to 1-10 Low Archaeological Potential is **confirmed** for at least a portion of the study area.

4.2 STAGE 2 ANALYSIS AND CONCLUSIONS

No archaeological sites or resources were found during the Stage 2 survey of the study area.

5.0 RECOMMENDATIONS

5.1 STAGE 1-2 RECOMMENDATIONS

As a result of the Stage 2 Property Assessment of the study area, no archaeological resources were encountered. Consequently, the following recommendations are made:

1. *No further archaeological assessment of the study area is warranted;*
2. *The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed;*
3. *The proposed undertaking is clear of any archaeological concern.*

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

While not part of the archaeological record, this report must include the following standard advisory statements for the benefit of the proponent and the approval authority in the land use planning and development process:

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. 0.18. The report is reviewed to ensure that it complies with the standards and guidelines 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 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 archaeologist to carry out archaeological fieldwork, in compliance with sec. 48 (1) of the Ontario Heritage Act.*

d. *The Cemeteries Act, R.S.O. 1990, c. C.4 and the Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.*

e. *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 licence.*

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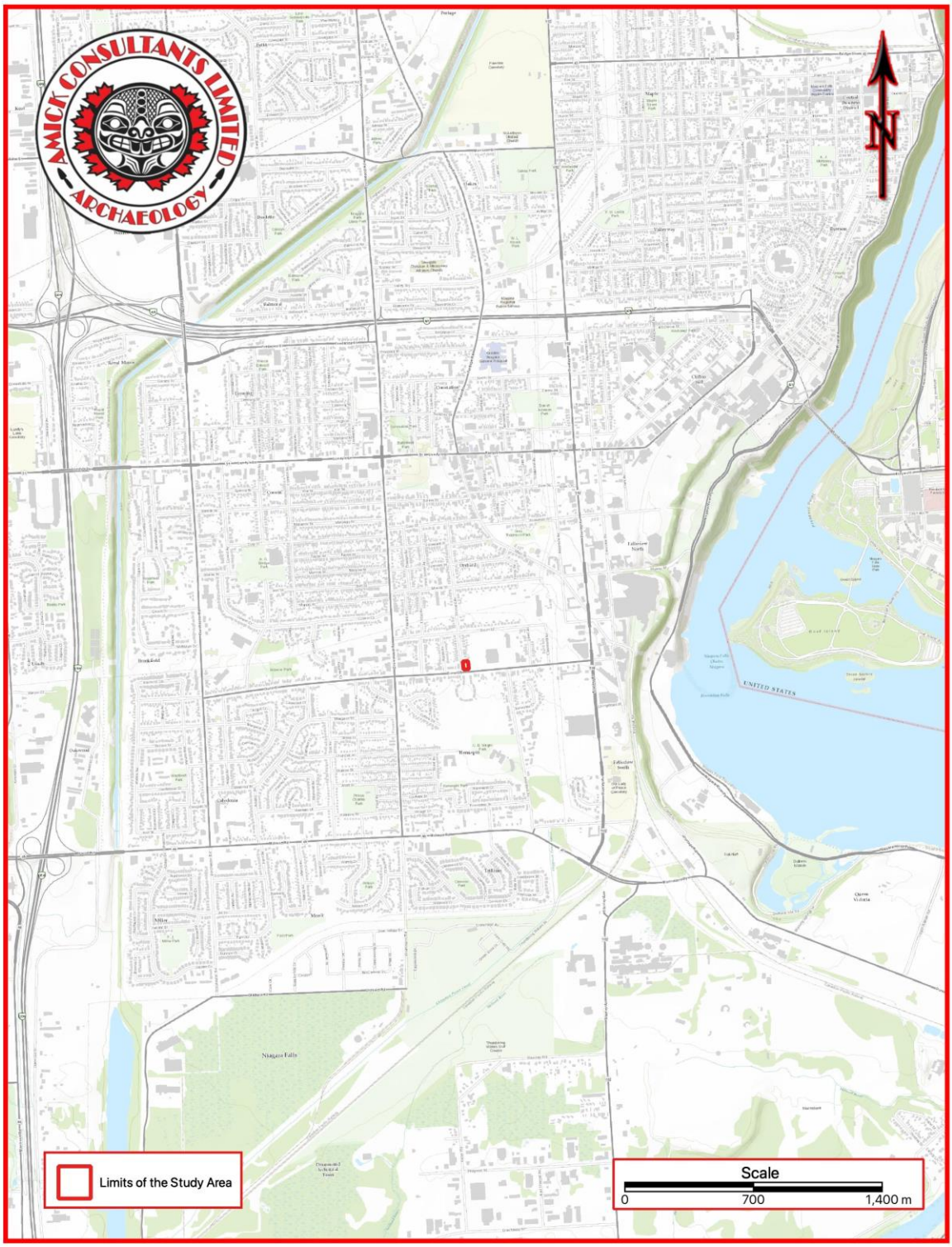
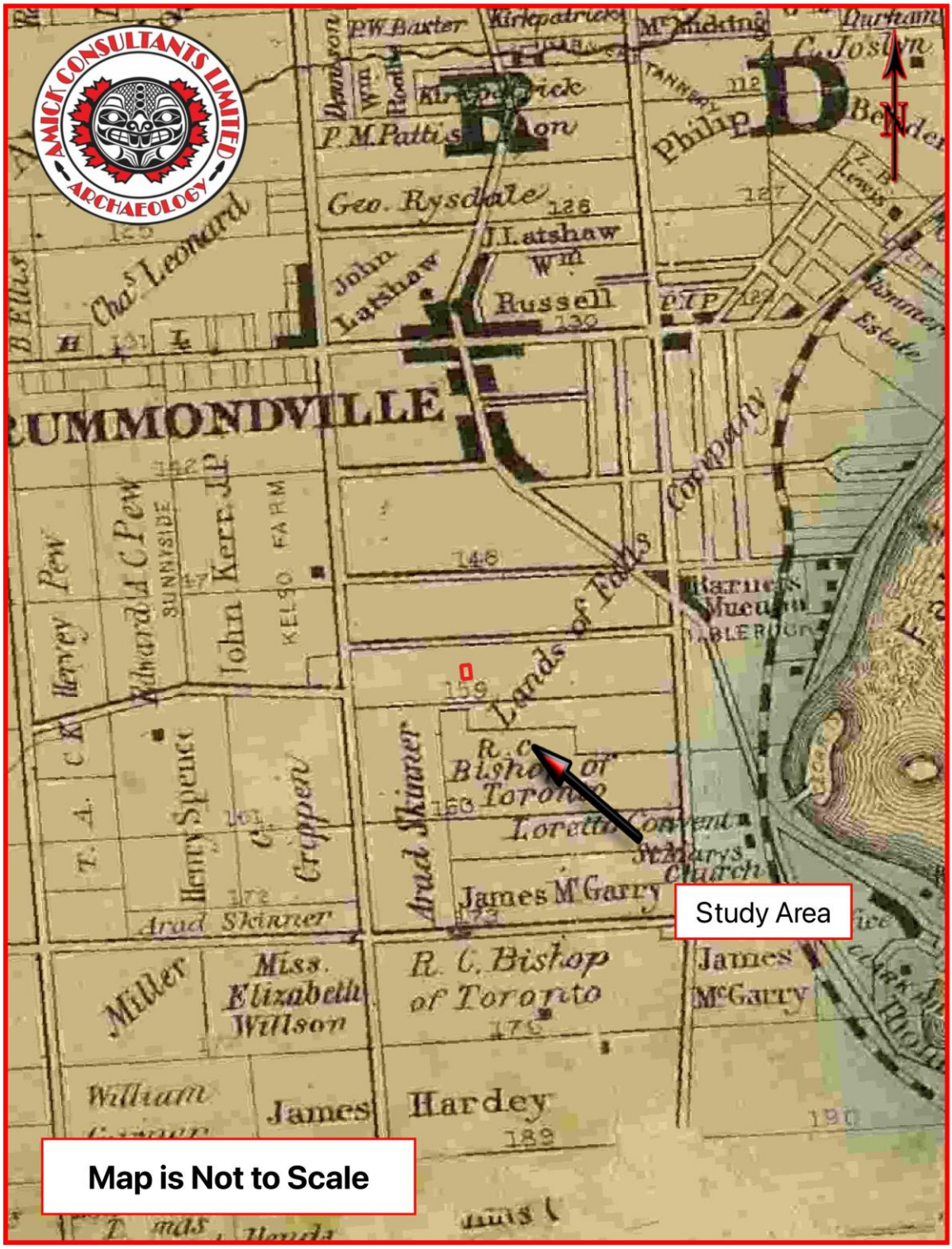
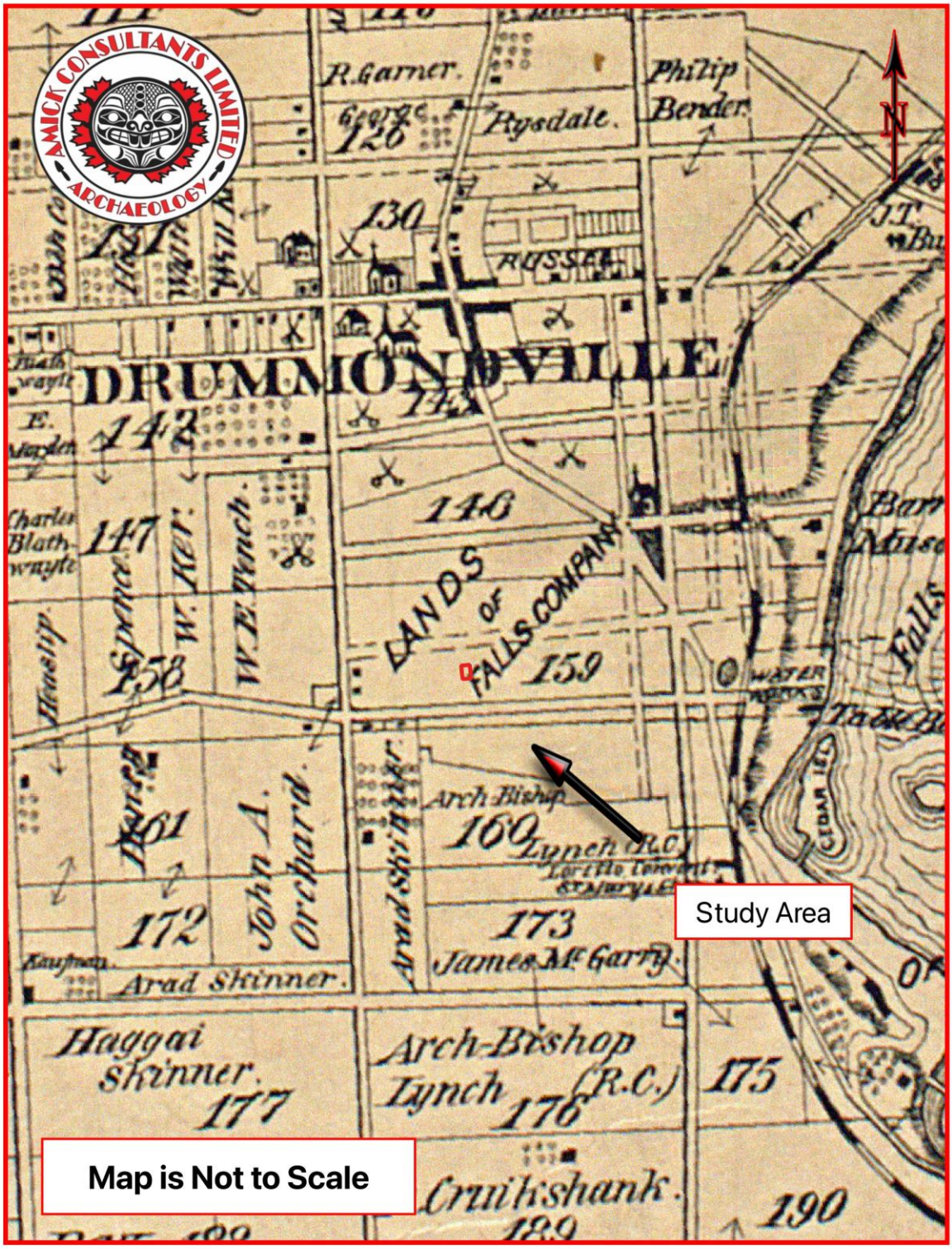
MAPS



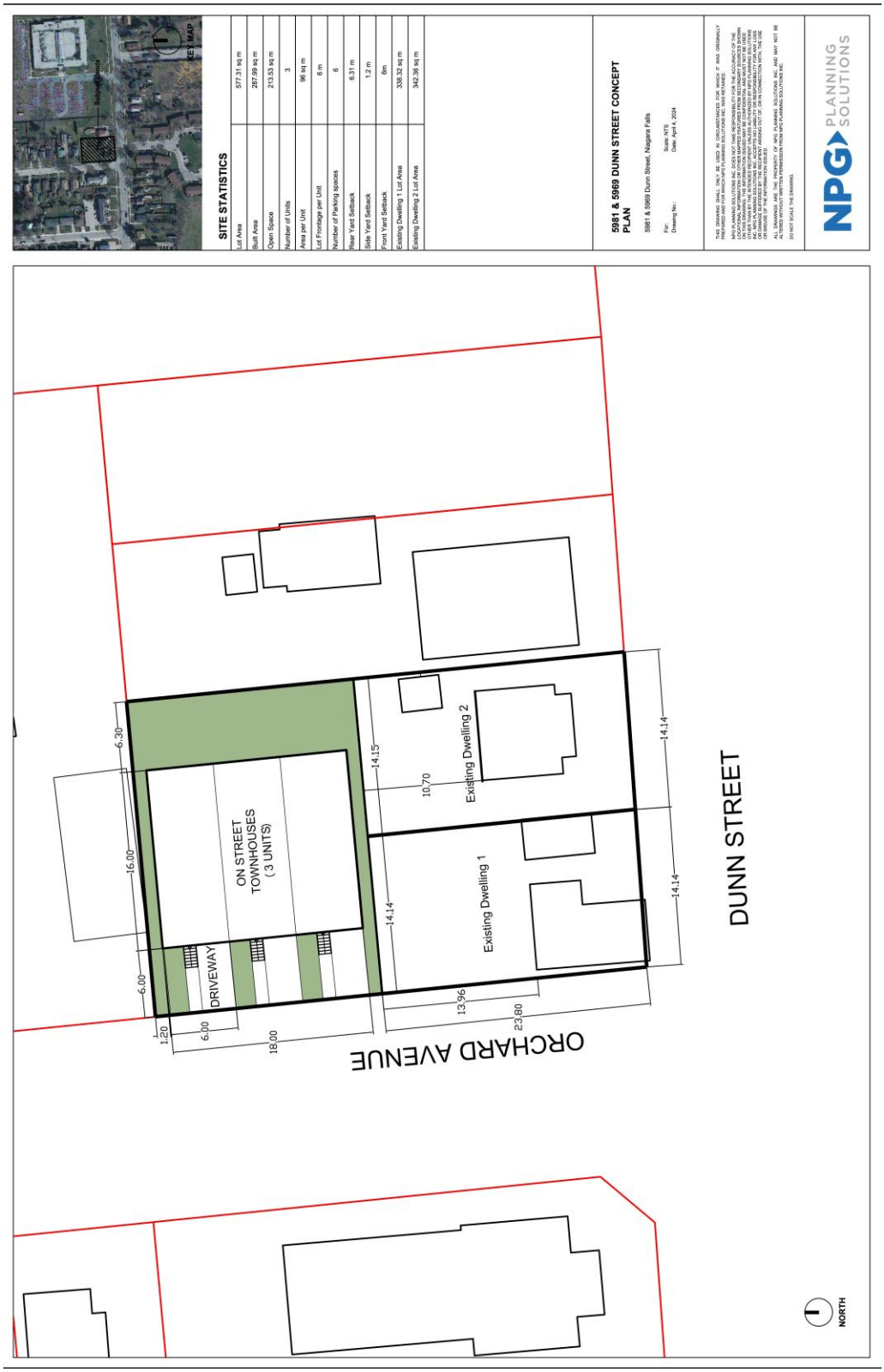
MAP 1 LOCATION OF THE STUDY AREA (ESRI 2019)



MAP 2 FACSIMILE SEGMENT OF TREMAINE'S MAP OF THE COUNTIES OF LINCOLN AND WELLAND (TREMAINE 1862)

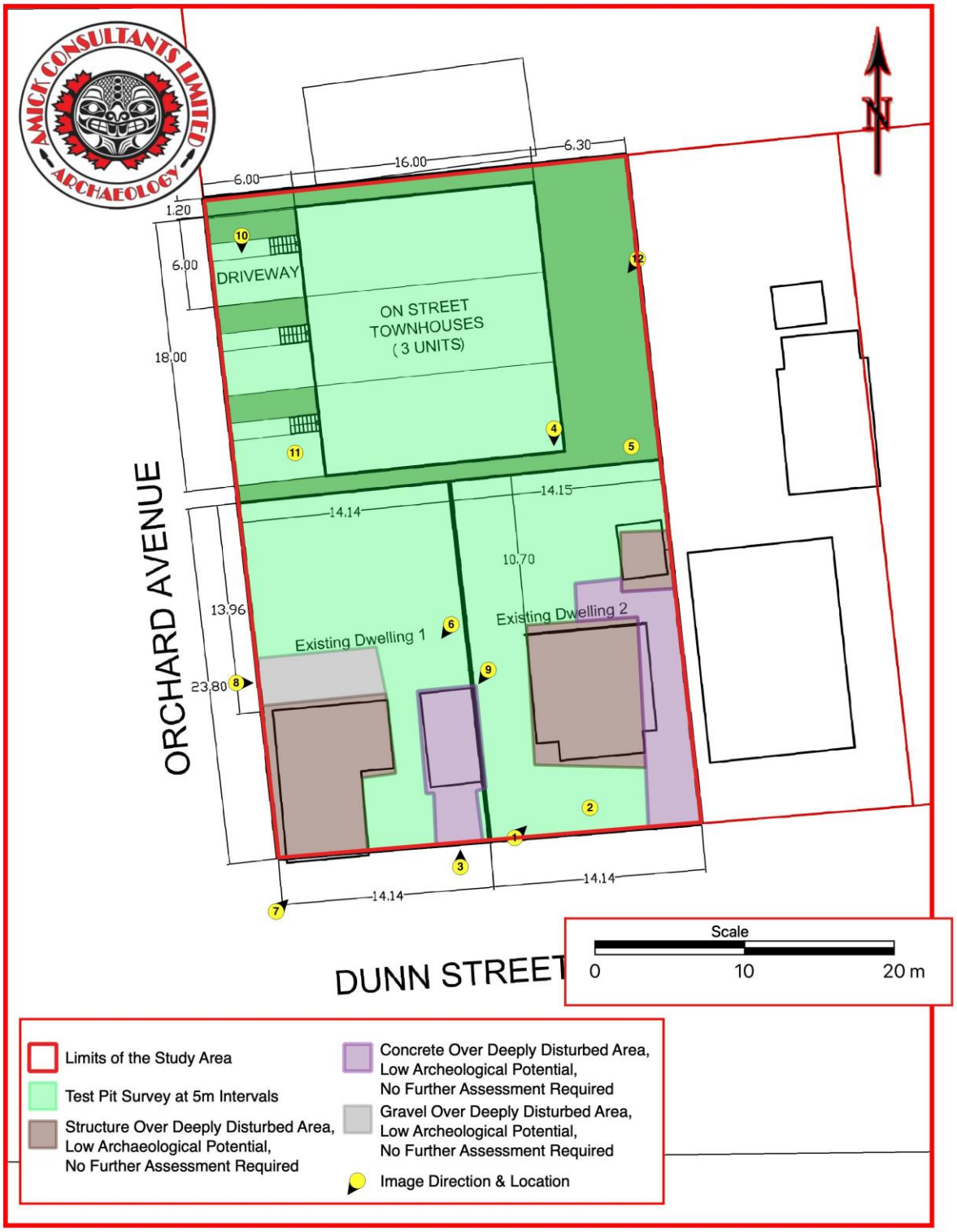


MAP 3 FACSIMILE SEGMENT OF THE HISTORIC ATLAS MAP OF THE COUNTIES OF LINCOLN AND WELLAND (PAGE & CO. 1876)



MAP 4 SITE PLAN (NPG PLANNING SOLUTIONS, 04 APRIL 2024)

MAP 5 AERIAL PHOTO OF THE STUDY AREA (GOOGLE EARTH 2016)



MAP 6 DETAILED PLAN OF THE STUDY AREA (AFTER JASON PIZZICAROLA DESIGN N.D.)

IMAGES

IMAGE 1 TEST PIT SURVEY IN PROGRESS - 5969 DUNN STREET FRONT YARD

IMAGE 2 COMPLETED TEST PIT - 5969 DUNN STREET FRONT YARD

IMAGE 3 HOUSE, DRIVEWAY AND SHED - 5969 DUNN STREET

IMAGE 4 BACKYARD WITH SHED AND ABOVE-GROUND POOL - 5969 DUNN STREET

IMAGE 5 COMPLETED TEST PIT - 5969 DUNN STREET REAR YARD

IMAGE 6 CREW CONDUCTING TEST PIT SURVEY - 5981 DUNN STREET

IMAGE 7 HOUSE AND CONCRETE PATIO - 5981 DUNN STREET

IMAGE 8 GRAVEL LANE IN REAR OF HOUSE - 5981 DUNN STREET

IMAGE 9 DRIVEWAY AND GARAGE FOOTING - 5981 DUNN STREET

IMAGE 10 BACKYARD WITH STORAGE CONTAINER - 5981 DUNN STREET

IMAGE 11 COMPLETED TEST PIT - 5981 DUNN STREET REAR YARD

IMAGE 12 REAR YARDS - 5969 & 5981 DUNN STREET