

Stage 1-2 Archaeological Assessment Vacant Lot, Rice and Quaker Road, Thorold

Part of Lot 175, Geographic Township of Thorold, Historical
County of Welland, now the Regional Municipality of Niagara

Submitted to:

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ORIGINAL REPORT

July 12th, 2024

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by John Lally of Lally Homes (the 'Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 175, in the Geographic Township of Thorold, within the Historical County of Welland, which is now the Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a residential development on the vacant lot located at the intersection of Rice Road and Quaker Road in Thorold and the development will span the entire property (the 'Study Area,' Figure 4).

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario, 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario, 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet this condition, a Stage 1-2 assessment was conducted as part of the application phase of development under archaeological consulting license P017 issued to Mr. Garth Grimes by the Ministry of Citizenship and Multiculturalism ('MCM') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario, 1990b) and the MCM's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario, 2011).

The Study Area comprises a rectangular parcel measuring 65m by 97m (0.64 hectares) located in the northwestern corner of the intersection between Rice Road and Quaker Road. At the time of assessment, the Study Area consisted entirely of an open ploughed field. Recent aerial photography showed no visible disturbances within the Study Area (Figure 3).

The Stage 1 background research indicated that portions of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources, as indicated by the *Niagara Region Archaeological Management Plan* (Niagara Region, 2023). Therefore, a Stage 2 property assessment was recommended for the Study Area.

The subsequent Stage 2 field assessment of the Study Area was conducted on June 4th, 2024. This investigation began with a property inspection, conducted according to Section 2.1.8, which is informed by Section 1.2 of the *Standards and Guidelines* (Government of Ontario, 2011). The inspection confirmed the absence of disturbances within the Study Area. The Study Area comprised the ploughed field, which was assessed by means of a typical pedestrian survey at five-metre intervals. No archaeological resources were observed.

Given the results of the Stage 2 investigation and the identification and documentation of no archaeological resources, **no further archaeological assessment of the Study Area is recommended.**

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.

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Generous contributions by Mr. John Lally of Lally Homes made this report possible.

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by John Lally of Lally Homes (the 'Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 175, in the Geographic Township of Thorold, within the Historical County of Welland, which is now the Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of a residential development on the vacant lot located at the intersection of Rice Road and Quaker Road in Thorold and the development will span the entire property (the 'Study Area,' Figure 4).

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Archaeologists ('*Standards and Guidelines*'; Government of Ontario, 2011).

The purpose of a Stage 1 Background Study is to compile all available information about the known and potential archaeological heritage resources within the Study Area and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario, 2011), the objectives of the following Stage 1 assessment are as follows:

- To provide information about the Study Area's geography, history, previous archaeological fieldwork and current land conditions;
- to evaluate in detail, the Study Area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and
- to recommend appropriate strategies for Stage 2 survey.

To meet these objectives Detritus archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the Study Area;
- a review of the land use history, including pertinent historic maps; and
- an examination of the Ontario Archaeological Sites Database ('ASDB') to determine the presence of known archaeological sites in and around the Study Area.

The purpose of a Stage 2 Property Assessment is to provide an overview of any archaeological resources within the Study Area; to determine whether any of the resources might be archaeological sites with cultural heritage value or interest ('CHVI'); and to provide specific direction for the protection, management, and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario, 2011), the objectives of the following Stage 2 assessment are as follows:

- To document all archaeological resources within the Study Area;
- to determine whether the Study Area contains archaeological resources requiring further assessment; and
- to recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

1.2 Historical Context

1.2.1 Post-Contact Aboriginal Resources

Prior to the arrival of European settlers, much of the central and southern Ontario was occupied by Iroquoian speaking linguistic groups that had united to form confederacies, including the Huron-Wendat, the Neutral (or Attawandaran), and the Petun in Ontario, as well as the Five Nations Iroquois Confederacy in Upper New York State (Warrick, 2013; Birch, 2010). Of these groups, the Huron-Wendat established themselves to the east of the Niagara escarpment and the Neutral, to the west (Warrick, 2000).

Throughout the middle of the 17th century, the Iroquois Confederacy sought to expand upon their territory and to monopolize the fur trade between the European markets and the tribes of the western Great Lakes region. A series of bloody conflicts followed known as the Beaver Wars or the French and Iroquois Wars, contested between the Iroquois Confederacy and the Algonkian speaking communities of the Great Lakes region. Many communities were destroyed including the Huron, Neutral, Susquehannock and Shawnee leaving the Iroquois as the dominant group in the region. By 1653 after repeated attacks, the Niagara peninsula and most of Southern Ontario had been vacated (Heidenreich, 1990).

At this same time, the Anishinaabeg Nation, an Algonkian-speaking community situated inland from the northern shore of Lake Huron, began to challenge the Haudenosaunee for dominance in the Lake Huron and Georgian Bay region in order to advance their own role in the fur trade (Gibson, 2006). The Algonkian-speaking groups that settled in the area bound by Lake Ontario, Lake Erie, and Lake Huron were referred to by the English as the Chippewas or Ojibwas. By 1680, the Ojibwa began expanding into the evacuated Huron-Wendat territory, and eventually into Southern Ontario. By 1701, the Haudenosaunee had been driven out of Ontario completely and were replaced by the Ojibwa (Gibson, 2006; Schmalz, 1991).

The late 17th and early 18th centuries also mark the arrival of an Ojibwa band known as the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes. 'The Mississaugas' is the name that the Jesuits had used in 1840 for the Algonquin community living near the Mississagi River on the northwestern shore of Lake Huron (Smith, 2002). The oral traditions of the Mississaugas, as recounted by Chief Robert Paudash and recorded in 1904, suggest that the Mississaugas defeated the Mohawk Nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated between the two groups (Praxis Research Associates, n.d.).

From the beginning of the 18th century until the end of the Seven Year War in 1763, the Ojibwa nation, including the Mississaugas, experienced a golden age in trade holding no alliance with either the French or the British (Schmalz, 1991). At the end of the 17th century, the Mississaugas' settled permanently in Southern Ontario (Praxis Research Associates, n.d.). Around this same time, in 1722, the Five Nation Iroquois Confederacy adopted the Tuscarora in New York becoming the Six Nations (Pendergast, 1995).

The Study Area first entered the Euro-Canadian historical record on December 7th, 1792, as part of Treaty No. 3, which included land acquired in the 'Between the Lakes Purchase' dating to May 22, 1784. According to the terms of the treaty, the Mississaugas ceded to the Crown approximately 3,000,000 acres of land between Lake Huron, Lake Erie, and Lake Ontario in return for trade goods valued at £1180.

The limits of the Treaty 3 lands are documented as comprising,

Lincoln County excepting Niagara Township; Saltfleet, Binbrook, Barton, Glanford and Ancaster Townships, in Wentworth County; Brantford, Onondaga, Tusc[a]r[o]ra, Oakland and Burford Townships in Brant County; East and West Oxford, North and South Norwich, and Dereham Townships in Oxford County; North Dorchester Township in Middlesex County; South Dorchester, Malahide and Bayham Township in Elgin County; all Norfolk and Haldimand Counties;

Pelham, Wainfleet, Thorold, Cumberland and Humberstone Townships in Welland County.

Morris, 1943, pp. 17-8

One of the stated objectives of the Between the Lakes Purchase was “to procure for that part of the Six Nation Indians coming into Canada a permanent abode” (Morris, 1943, p. 17). Shortly after the transaction had been finalised in May of 1784, Sir Frederick Haldimand, the Governor of Québec, made preparations to grant a portion of land to those Six Nations who remained loyal to the Crown during the American War of Independence. More specifically, Haldimand arranged for the purchase of approximately 550,000 acres of land adjacent to the Treaty 3 limits from the Mississaugas. This tract of land, referred to as either the Haldimand Tract or the 1795 Crown Grant to the Six Nations, was provided for in the Haldimand Proclamation of October 25th, 1784, and was intended to extend a distance of six miles on each side of the Grand River from mouth to source (Weaver, 1978). By the end of 1784, representatives from each constituent nation of the Six Nations, as well as other allies, relocated to the Haldimand Tract with Joseph Brant (Weaver, 1978; Tanner, 1987).

Throughout southern Ontario, the size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture began to shift with the establishment of European settlers. By 1834 it was accepted by the Crown that losses of portions of the Haldimand Tract to Euro-Canadian settlers were too numerous for all lands to be returned. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page, 1879; Weaver, 1978; Tanner, 1987). Following the population decline and the surrender of most of their lands along the Credit River, the Mississaugas were given 6000 acres of land on the Six Nations Reserve, establishing the Mississaugas of New Credit First Nation, now the Mississaugas of the Credit First Nation, in 1847 (Smith, 2002)

Despite the encroachment of European settlers on previously established Aboriginal territories, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought” (Ferris, 2009, p. 114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout Southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

1.2.2 Euro-Canadian Resources

The Study Area is located within Geographic Township of Thorold, Historical County of Welland, now the Regional Municipality of Niagara, Ontario.

In 1763, the Treaty of Paris brought an end to the Seven Years’ War, contested between the British, the French, and their respective allies. Under the Royal Proclamation of 1763, the large stretch of land from Labrador in the east, moving southeast through the Saint Lawrence River Valley to the Great Lakes and on to the confluence of the Ohio and Mississippi Rivers became the British Province of Québec (Niagara Historical Society and Museum, 2008).

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg, and Lunenburg (Archives of Ontario, 2012-2024). Further change came in December 1791 when the former Province of Québec was rearranged into Upper Canada and Lower Canada under the provisions of the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada; he spearheaded several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne, 1895).

In July 1792, Simcoe divided Upper Canada into 19 counties stretching from Essex in the west to Glengarry in the east. Each new county was named after a county in England or Scotland; the constituent townships were then given the names of the corresponding townships from each original British county (Powell & Coffman, 1956).

Later that year, the four districts originally established in 1788 were renamed the Western, Home, Midland, and Eastern Districts. As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study Area became part of the Niagara District, comprising Lincoln County, Haldimand County and other lands (Archives of Ontario, 2012-2024). In 1845, after years of increasing settlement that began after the War of 1812, the southern portion of Lincoln County was severed to form Welland County, of which Thorold Township was a part.

In 1845, after years of increasing settlement that began after the War of 1812, the southern portion of Lincoln County was severed to form Welland County (the two counties would be amalgamated once again in 1970 to form the Regional Municipality of Niagara). The county takes its name from the Welland River, which runs through the centre of the county and was itself named by Simcoe after a stream in Lincolnshire, England. This county was home to the Niagara Falls as well as many of the earliest settled townships in Upper Canada (Middleton & Landon, 1927).

Thorold Township is one of these early townships. It was settled by Butler's Rangers and originally called Township Number 9 but was officially formed in 1788 to provide land for United Empire Loyalist refugees and disbanded soldiers following the American Revolutionary War. It was named in honour of Sir John Thorold, Member of Parliament in the government of Upper Canada (Thompson, 1898). The early settlements of the Township of Thorold included Beaverdams, St. Johns, and Decew Falls. These fell into decline after the opening of the first Welland Canal when the canal towns of Thorold, Port Robinson, and Allanburg began to prosper (Jackson, 1997).

The *Illustrated Historical Atlas of the Counties of Lincoln and Welland* ('*Historical Atlas*'), demonstrates the extent to which Thorold Township had been settled by 1876 (Page, 1876; Figure 2). Landowners are listed for every lot within the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures and orchards are prevalent throughout the township, almost all of which front early roads and water.

The current Study Area occupies a part of Lot 175 in Thorold Township. According to the *Historical Atlas*, by 1876, all 100 acres of the lot were owned by S. Daugherty. The Study Area is located in the southeastern corner of the Lot bound by two historic roads in the east and south. These roads correspond to Rice Road along the eastern edge and Quaker Road along the southern edge of the Study Area. The Welland River and old Welland canal are located approximately 2.5km to the east, and the early town of Welland is located also about 2.5km away but to the southeast.

it should be recognized, however, that although significant and detailed landowner information is available on the historical maps discussed here, that historical county atlases were funded by subscriptions fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston, 1997, p. 100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore & Head, 1984).

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

The Study Area comprises a rectangular parcel measuring 65m by 97m (0.64 hectares) located in the northwestern corner of the intersection between Rice Road and Quaker Road. At the time of assessment, the Study Area consisted entirely of an open ploughed field. Recent aerial photography showed no visible disturbances within the Study Area (Figure 3).

The majority of the region surrounding the Study Area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the mid-19th century. Much of the region today continues to be used for agricultural purposes.

The Study Area is located within Haldimand Clay Plain physiographic region (Chapman & Putnam, 1984). During pre-contact and early contact times, this area comprised a mixture of deciduous trees and open areas. In the early 19th century, Euro-Canadian settlers began to clear the forests for agricultural purposes, which have been ongoing in the vicinity of the Study Area for over 100 years.

Haldimand Clay is slowly permeable, imperfectly drained with medium to high water-holding capacities. Surface runoff is usually rapid, but water retention of the clayey soils can cause it to be droughty during dry periods (Kingston & Presant, 1989). According to Chapman and Putnam,

...although it was all submerged in Lake Warren, the till is not all buried by stratified clay; it comes to the surface generally in low morainic ridges in the north. In fact, there is in that area a confused intermixture of stratified clay and till. The northern part has more relief than the southern part where the typically level lake plains occur.

Chapman & Putnam, 1984, p. 156

Huffman and Dumanski add that the soil within the region is suitable for corn and soybeans in rotation with cereal grains as well as alfalfa and clover (Huffman & Dumanski, 1986).

The Niagara Region as a whole is located within the Deciduous Forest Region of Canada and contains tree species which are typical of the more northern Great Lakes-St. Lawrence Biotic zone, such as beech, sugar maple, white elm, basswood, white oak, and butternut (MacDonald & Cooper, 1997). During pre-contact and early contact times, the land in the vicinity of the Study Area comprised a mixture of hardwood trees such as sugar maple, beech, oak, and cherry. This pattern of forest cover is characteristic of areas of clay soil within the Maple-Hemlock Section of the Great Lakes-St. Lawrence Forest Province-Cool Temperate Division (McAndrews & Manville, 1987). In the early 19th, Euro-Canadian settlers began to clear the forests for agricultural purposes.

The closest source of potable water are two tributaries of the Welland River located approximately 148m to the northeast and 240m to the southeast. The Welland River itself is located 2.8km to the east of the Study Area.

1.3.2 Pre-Contact Aboriginal Land Use

This portion of southern Ontario was occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter-gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Thorold Township (Ellis & Ferris, 1990).

Table 1: Cultural Chronology for Thorold Township

Time Period	Cultural Period	Comments
9500–7000 BC	Paleo Indian	first human occupation hunters of caribou and other extinct Pleistocene game nomadic, small band society

Time Period	Cultural Period	Comments
7500–1000 BC	Archaic	ceremonial burials increasing trade network hunter-gatherers
1000–400 BC	Early Woodland	large and small camps spring congregation/fall dispersal introduction of pottery
400 BC–AD 800	Middle Woodland	kinship based political system incipient horticulture long distance trade network
AD 800–1300	Early Iroquoian (Late Woodland)	limited agriculture developing hamlets and villages
AD 1300–1400	Middle Iroquoian (Late Woodland)	shift to agriculture complete increasing political complexity large, palisaded villages
AD 1400–1650	Late Iroquoian	regional warfare and political/tribal alliances destruction of Huron and Neutral

1.3.3 Previous Identified Archaeological Work

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MCM were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario, n.d.) is maintained by the MCM. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres ('km') east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The Study Area lies within block AgGt.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario, 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MCM will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

According to the ASDB, twenty-eight archaeological sites have been registered within a 1km radius of the Study Area (Table 2). Twenty-three sites are pre-contact Aboriginal sites, six of which date to the Archaic period, one to the Paleo-Indian period, and three to the Woodland period. The remaining five sites are post-contact Euro-Canadian sites.

Table 2: Registered Archaeological Sites within 1km of the Study Area

Borden Number	Site Name	Time Period	Affinity	Site Type
AgGt-262		Paleo-Indian	Aboriginal	camp / campsite
AgGt-263		Pre-Contact		Unknown
AgGt-269		Post-Contact	Euro-Canadian	residential
AgGt-288	Location 1	Archaic, Late, Pre-Contact, Woodland		Unknown, camp / campsite
AgGt-290	Location 3	Pre-Contact	Aboriginal	camp / campsite
AgGt-296		Post-Contact		Other refuse deposit
AgGt-297		Woodland, Late		findspot
AgGt-298		Woodland, Early		findspot
AgGt-300		Pre-Contact		scatter
AgGt-301		Archaic, Middle		scatter
AgGt-302	Location 1	Archaic, Late		camp / campsite
AgGt-303		Pre-Contact		scatter
AgGt-305		Archaic, Late		scatter

Borden Number	Site Name	Time Period	Affinity	Site Type
AgGt-306		Pre-Contact		scatter
AgGt-307		Pre-Contact		scatter
AgGt-311		Pre-Contact		scatter
AgGt-312		Pre-Contact		scatter
AgGt-313		Pre-Contact		Unknown
AgGt-315		Woodland, Early		findspot
AgGt-316		Archaic, Late		findspot
AgGt-317		Archaic, Middle		findspot
AgGt-318		Pre-Contact		scatter
AgGt-320		Post-Contact		residential
AgGt-321		Post-Contact		residential
AgGt-322		Post-Contact		residential
AgGt-323	Findspot 2	Pre-Contact	Aboriginal	Unknown
AgGt-324	Findspot 3	Pre-Contact	Aboriginal	Unknown
AgGt-329	Location 10	Pre-Contact		scatter

To the best of Detritus' knowledge, no other assessments have been conducted adjacent to the Study Area, and no sites are registered within 50m of the Study Area.

1.3.4 Archaeological Potential

Detritus applied archaeological potential criteria commonly used by the MCM to determine areas of archaeological potential within the Study Area. According to Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario, 2011), these variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, when considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. As per Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario, 2011), water sources may be categorized in the following manner:

- Primary water sources, lakes, rivers, streams, creeks;
- secondary water sources, intermittent streams and creeks, springs, marshes and swamps;
- past water sources, glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- accessible or inaccessible shorelines, high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As was discussed above, the closest source of potable water The Study Area comprises a rectangular parcel measuring 65m by 97m (0.64 hectares) located in the northwestern corner of the intersection between Rice Road and Quaker Road. At the time of assessment, the Study Area consisted entirely of an open ploughed field. Recent aerial photography showed no visible disturbances within the Study Area (Figure 3).

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Haldimand Clay Plain physiographic region. As was discussed earlier, the soils within this region are imperfectly drained, but suitable for pre-contact and post contact Aboriginal agricultural. Considering also the length of occupation of Thorold Township prior to the arrival of Euro-Canadian settlers, as evidenced by the twenty-three pre-contact Aboriginal sites registered within 1km, the pre-contact

and post-contact Aboriginal archaeological potential of the Study Area is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario, 1990b) or property that local histories or informants have identified with possible historical events. The Thorold Township map from the 1876 *Historical Atlas* shows the Study Area in close proximity to historical infrastructure, including the old Welland Canal. Considering the location of the Study Area near to the early town of Welland, as well as the five post-contact Euro-Canadian registered within 1km, the potential for post-contact Euro-Canadian archaeological resources is judged to be moderate to high.

Additionally, Detritus reviewed the *Niagara Region Archaeological Management Plan* (Niagara Region, 2023) which indicates that portions of the Study Area retain archaeological potential.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as outlined in Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario, 2011). As was discussed above in Section 1.3.1, recent aerial imagery of the region revealed no visible disturbances within the Study Area (Figure 3). It is recommended that this area be subject to visual inspection and documentation during a Stage 2 property inspection conducted as per Section 2.1.8 of the *Standards and Guidelines* (Government of Ontario 2011) to confirm and document the level of disturbance.

2.0 Field Methods

The Stage 2 assessment of the Study Area was conducted on June 4th, 2024, under archaeological consulting license PO17 issued to Mr. Garth Grimes by the MCM. The limits of the Study Area were established in the field using a georeferenced shapefile produced using QGIS and uploaded to a hand-held GPS device running Qfield.

During the Stage 2 assessment conditions were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material as per Section 2.1, Standard 3 of the *Standards and Guidelines* (Government of Ontario, 2011). The weather during the assessment was sunny and 30°Celsius and the soil was dry and soil visibility >80% (Photo 6). Photos 1 to 7 demonstrate the land conditions at the time of the survey throughout the Study Area, including areas that met the requirements for a Stage 2 archaeological assessment, as per Section 7.8.6, Standards 1a of the *Standards and Guidelines* (Government of Ontario, 2011). Figure 3 provides an illustration of the Stage 2 assessment methods in relation to the development plan, as well as photograph locations and directions.

The Stage 2 field assessment began with a property inspection conducted as per Section 2.1.8, of the *Standards and Guidelines* (Government of Ontario, 2011). According to the results of this inspection, the absence of disturbances, identified on the current aerial imagery (see Section 1.3.4 above), was confirmed and photo documented in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

The entire Study Area comprised an open field that was accessible to ploughing and thus met the criteria for a Stage 2 pedestrian survey, conducted as per Section 2.1.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario, 2011). This area was ploughed and allowed to weather as per Section 2.1.1, Standards 2 and 3 of the *Standards and Guidelines* (Government of Ontario, 2011). The ploughing was deep enough to provide total topsoil exposure, and to provide a minimum of 80% surface visibility as per Section 2.1.1, Standards 4 and 5 of the *Standards and Guidelines* (Government of Ontario, 2011). The ploughed area was subject to pedestrian survey at 5m intervals in accordance with Section 2.1.1, Standard 6 of the *Standards and Guidelines* (Government of Ontario, 2011; Photos 1 to 7). No artifacts were identified during the pedestrian survey.

3.0 Record of Finds

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 3 below.

Table 3: Inventory of Document Record

Document Type	Current Location	Additional Comments
1 Page of Field Notes	Detritus office	Stored digitally in project file
1 Map provided by the Proponent	Detritus office	Stored digitally in project file
1 Field Maps	Detritus office	Stored digitally in project file
7 Digital Photographs	Detritus office	Stored digitally in project file

No archaeological resources were identified within the Study Area during the Stage 2 assessment; therefore, no artifacts were collected. As a result, no storage arrangements were required.

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 1-2 archaeological assessment in advance of a residential development on the vacant lot located at the intersection of Rice Road and Quaker Road in Thorold.

The Stage 1 background research indicated that portions of the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources, as indicated by the *Niagara Region Archaeological Management Plan* (Niagara Region, 2023). Therefore, a Stage 2 property assessment was recommended for the Study Area.

The subsequent Stage 2 field assessment of the Study Area was conducted on June 4th, 2024. This investigation began with a property inspection, conducted according to Section 2.1.8, which is informed by Section 1.2 of the *Standards and Guidelines* (Government of Ontario, 2011). The inspection confirmed the absence of disturbances within the Study Area. The Study Area comprised the ploughed field, which was assessed by means of a typical pedestrian survey at five-metre intervals. No archaeological resources were observed.

5.0 Recommendations

Given the results of the Stage 2 investigation and the identification and documentation of no archaeological resources, **no further archaeological assessment of the Study Area is recommended.**

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister 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 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.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

The *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.

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8.0 Maps

Figure 1: Study Area Location

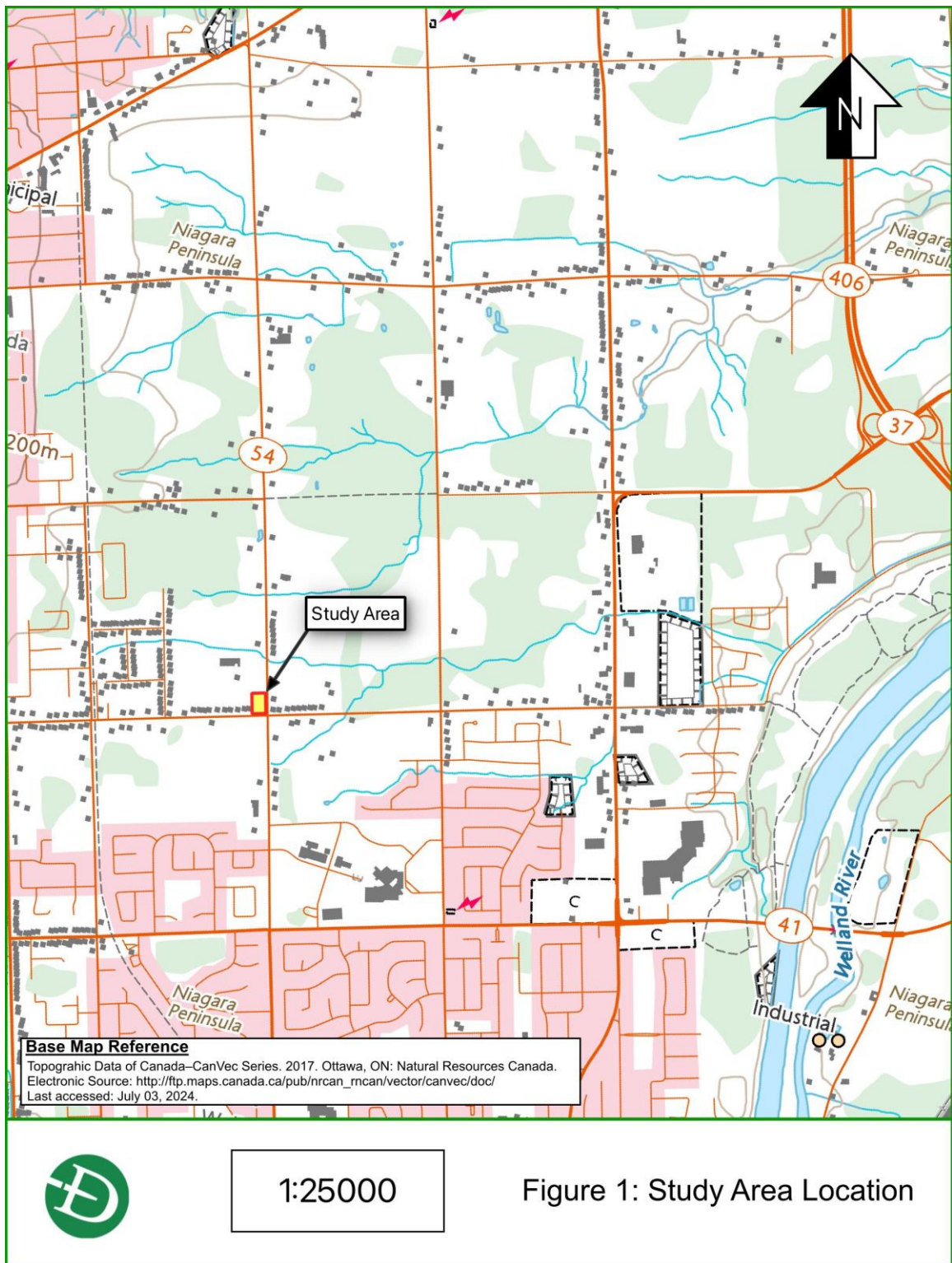


Figure 3: Stage 2 Field Methods Map

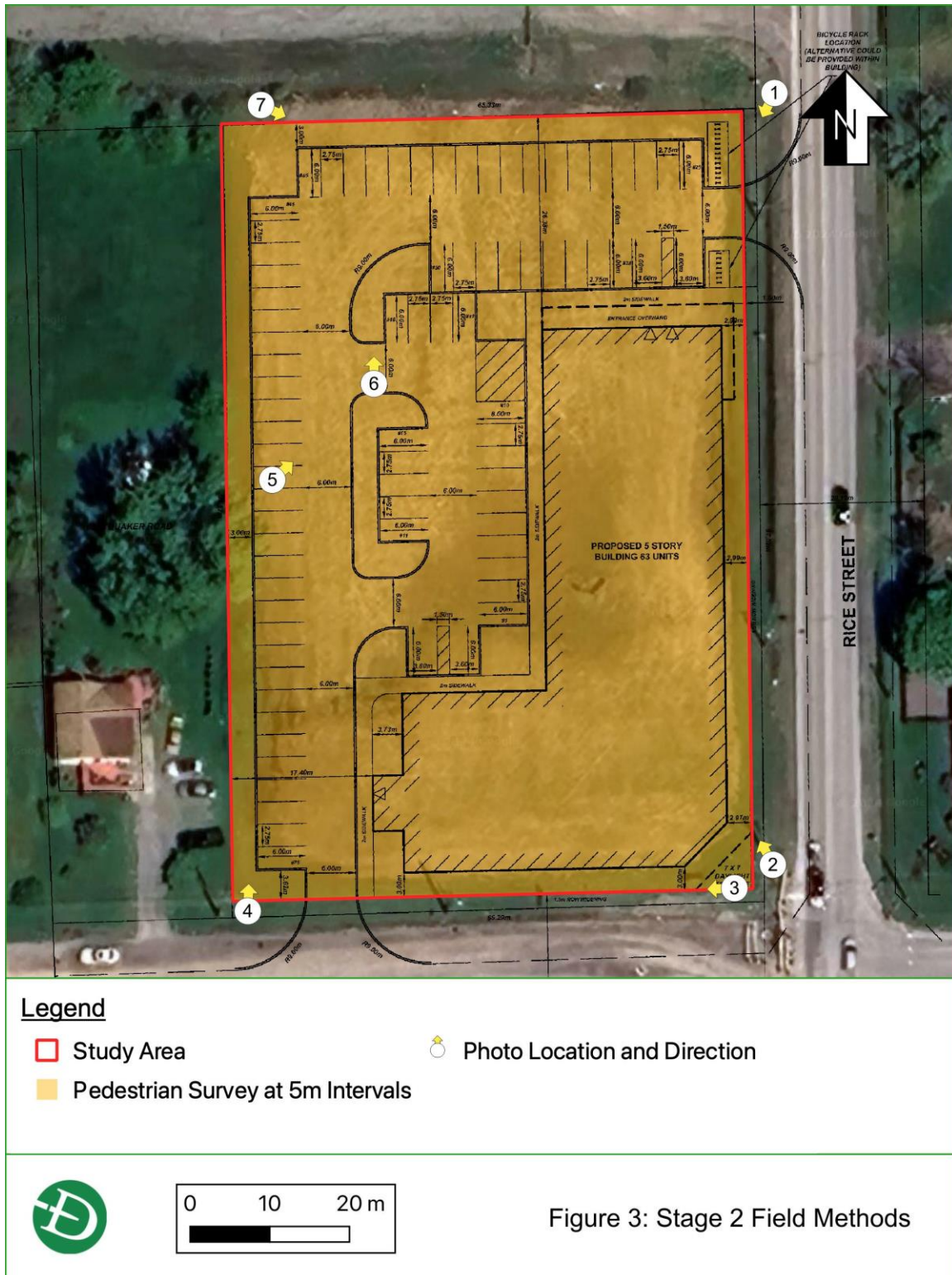
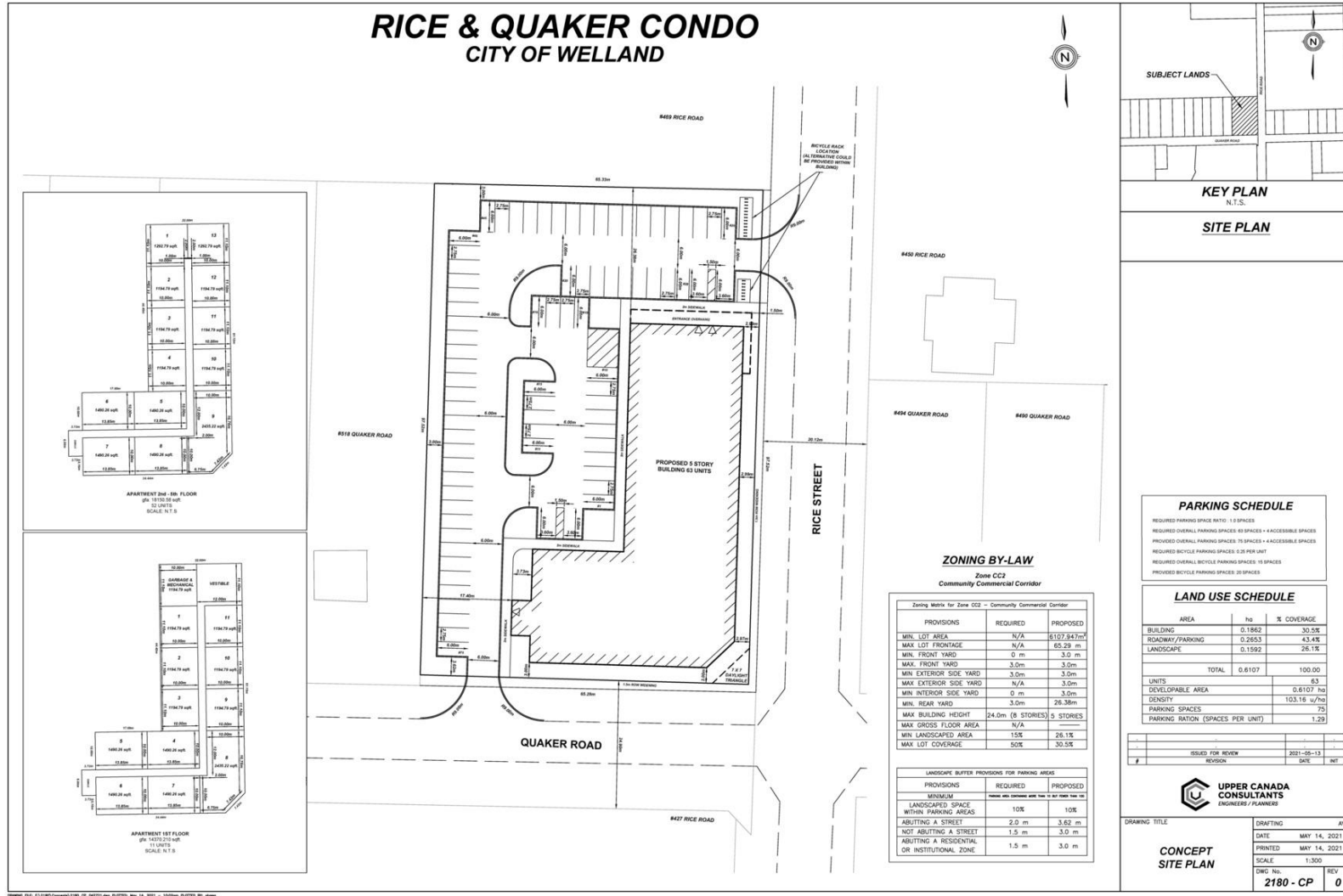


Figure 4: Development Plan



9.0 Images

9.1 Field Photos

**Photo 1: Ploughed Field, Pedestrian
Surveyed at 5m Intervals, northeast corner
looking southwest**



**Photo 2: Ploughed Field, Pedestrian
Surveyed at 5m Intervals, southeast corner
looking northwest**



**Photo 3: Ploughed Field, Pedestrian
Surveyed at 5m Intervals, southeast corner
looking west**



**Photo 4: Ploughed Field, Pedestrian
Surveyed at 5m Intervals, southwest corner
looking north**



Photo 5: Ploughed Field, Pedestrian surveyed at 5m Intervals, work photo looking northeast



Photo 6: Ploughed Field, Pedestrian surveyed at 5m Intervals, soil visibility



Photo 7: Ploughed Field, Pedestrian surveyed at 5m Intervals, northwest corner looking southeast

