

Stage 1-2 Archaeological Assessment of Proposed Ferry Street Parking Lot, Niagara Falls

Part of Lot 143,
Geographic Township of Stamford,
Historical County of Welland, City of Niagara Falls,
Regional Municipality of Niagara, Ontario

Submitted to:
ACK Architects
c/o Connor Hill
1822 Danforth Avenue
Toronto, ON
M4C 1H8

and

Ontario's Ministry of Heritage, Sport, Tourism and Culture
Industries

Submitted by:



69 Claremont Avenue, Kitchener Ontario, N2M 2P5
Mobile/Office: 519-744-7018
e-mail: garth@golden.net www.detcon.net

Licensee: Michael Pitul
License Number: P462
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ORIGINAL REPORT

July 20, 2021

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Connor Hill of ACK Architects ('the Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 143, within the Geographic Township of Stamford in the Historical County of Welland, now in the City of Niagara Falls within the Region of Niagara, Ontario (Figure 1). This assessment was undertaken prior to the construction of a proposed parking lot development (the 'Study Area'; Figure 3).

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 assessment was conducted as part of the pre-approval stage of the development under archaeological consulting license P462 issued to Mr. Michael Pitul by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011).

The Study Area is a rectangular parcel measuring approximately 1.37 hectares ('ha'). It is bound to the north by Ferry Street, to the east by Allendale Avenue, to the south by Peer Street and to the west by Gladstone Avenue. At the time of assessment, the Study area comprised an unused paved parking lot in its northwest corner and six hydro towers; two along the center line and four in the eastern part of the property. The remainder of the Study Area is made up of green space with mature trees along its edges.

According to the Stage 1 background research presented below, the Study Area is located to the east of the early Village of Drummondville on part of Lot 143. No landowner information was given for Lot 143, but a subdivision into at least two separate parcels is visible. Based on the results of the Stage 1 assessment, the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources and was recommended for Stage 2 assessment.

The Stage 2 assessment took place on June 7, 2021 and consisted of a typical test pit survey at a five-metre interval across the green space with mature trees observed along the edge of the Study Area, conducted according to Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011). The main disturbances impacting the Study Area were the paved parking lot in its northwest corner and the six hydro towers which were evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011).

These previously disturbed areas, as confirmed during a Stage 2 property inspection, were mapped and photo documented in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standards 1a and 1b of the *Standards and Guidelines* (Government of Ontario 2011). This investigation resulted in the identification and documentation of no archaeological resources; therefore, **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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Project Personnel

Project Manager:	Garth Grimes, P017
Field Director:	Michael Pitul, P462
Field Technician:	Maria Cecchini; Alysha Gullion
Report Preparation:	Uwe Maihoefer, R1260
Mapping and GIS:	Uwe Maihoefer, R1260
Licensee Review:	Michael Pitul, P462

Acknowledgments

Generous contributions by the following individuals made this report possible.

- Mr. Connor Hill, ACK Architects

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Connor Hill of ACK Architects ('the Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 143, within the Geographic Township of Stamford in the Historical County of Welland, now in the City of Niagara Falls within the Region of Niagara, Ontario (Figure 1). This assessment was undertaken prior to the construction of a proposed parking lot development (the 'Study Area'; Figure 3).

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 assessment was conducted as part of the pre-approval stage of the development under archaeological consulting license P462 issued to Mr. Michael Pitul by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant 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 licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities.

1.2 Historical Context

1.2.1 Post-Contact Aboriginal Resources

Prior to the arrival of European settlers, much of Southern Ontario was occupied by the Neutral, or Attawandaron tribe. The earliest recorded visit was undertaken by Étienne Brûlé, an interpreter and guide for Samuel de Champlain. In June 1610, Brûlé requested permission to live among the Algonquin people and to learn their language and customs. In return, Champlain agreed to take on a young Huron named Savignon and to teach him the language and customs of the French. The purpose of this endeavour was to establish good relations with Aboriginal communities in advance of future military and colonial enterprises in the area. In 1615, Brûlé joined twelve Huron warriors on a mission to cross enemy territory and seek out the Andaste

people, allies of the Huron, to ask for their assistance in an expedition being planned by Champlain. The mission was a success but took much longer than anticipated. Brûlé returned with the Andaste two days too late to help Champlain and the Hurons, who had already been defeated by the Iroquois (Heidenreich 1990).

Throughout the middle of the 17th century, the Iroquois of the Five Nations sought to expand upon their territory and to monopolise the local fur trade as well as trade between the European markets and the tribes of the western Great Lakes. A series of bloody conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, were contested between the Iroquois and the French with their Huron and other Algonquian speaking allies of the Great Lakes region. Many communities were destroyed including the Huron, Neutral, Erie, 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. By 1667, all members of the Five Nations had signed a peace treaty with the French and allowed their missionaries to visit their villages (Heidenreich 1990).

Ten years later, hostilities between the French and the Iroquois resumed after the latter formed an alliance with the British through an agreement known as the Covenant Chain (Heidenreich 1990). In 1696, an aging Louis de Buade, Comte de Frontenac et de Palluau, the Governor General of New France, rallied the Algonquin forces and drove the Iroquois out of the territories north of Lake Erie, as well as those to the west of present-day Cleveland, Ohio. A second treaty was concluded between the French and the Iroquois in 1701, after which the Iroquois remained mostly neutral (Jamieson 1992; Noble 1978).

Throughout the late 17th and early 18th centuries, various Iroquoian-speaking communities had been migrating into southern Ontario from New York State. In 1722, the Five Nations adopted the Tuscarora in New York becoming the Six Nations (Pendergast 1995). This period also marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes (Konrad 1981; Schmalz 1991). The oral traditions of the Mississaugas, as told by Chief Robert Paudash 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 and, at the end of the 17th century, the Mississaugas settled permanently in Southern Ontario (Praxis Research Associates n.d.). Around this same time, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southwestern Ontario (Feest and Feest 1978).

The Study Area first enters the Euro-Canadian historic record on May 9th 1781 as part of the Niagara Treaty No. 381 with the Mississauga and Chippewa. This treaty involved the surrender of...

...all that certain tract of land situated on the west side of the said strait or river, leading from Lake Erie to Lake Ontario, beginning at a large white oak tree, forked six feet from the ground, on the bank of the said Lake Ontario, at the distance of four English miles measured in a straight line, from the West side of the bank of the said strait, opposite to the Fort Niagara and extending from thence by a southerly course to the Chipeweigh River, at the distance of four miles on a direct line from where the said river falls into the said strait about the great Fall of Niagara or such a line as will pass at four miles west of the said Fall in its course to the said river and running from thence by a southeasterly course to the northern bank of Lake Erie at the distance of four miles on a straight line, westerly from the Post called Fort Erie, thence easterly along the said Lake by the said Post, and northerly up the west side of the said strait to the said lake Ontario, thence westerly to the place of beginning.

Morris 1943: 15-16

The size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture in Southern Ontario began to shift with the establishment of European settlers. 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, H.R. & Co. 1879;

Tanner 1987; Weaver 1978). Despite the inevitable 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 2009:114). 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 Land Use

The Study Area is located within the Geographic Township of Stamford in the historical County of Lincoln, now the City of Niagara Falls within the Region of Niagara, Ontario.

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 2012-2015). Further change came in December 1791 when the former Province of Québec was rearranged into Upper Canada and Lower Canada under the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada and he initiated several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne 1895:33).

In July 1792, Simcoe divided Upper Canada into 19 counties, including Welland County, stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed as 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, Stamford Township became part of Lincoln County in the Niagara District (Archives of Ontario 2012-2015).

The Township of Stamford was first surveyed in 1776 and was the second township to be surveyed within Welland County. It was originally referred to as Township #2 or Mount Dorchester, after Sir Guy Dorchester, the Governor for the Province of Québec from 1768 to 1778 and again between 1785 and 1795. The initial survey covered a portion of the county adjacent to the west side of the Niagara River for a distance of 12 miles (Page, H.R. & Co. 1876). This area was initially granted to United Empire Loyalists, primarily from New York State, as compensation for losses suffered during the American Revolutionary War. Stamford Village was founded in 1783 and was the largest community within the township, although it received no official status. The name derived from Stamford Village in Delaware County, New York State, from which many of the settlers had arrived (Berketa 2017).

A second survey was completed in 1787, following the Revolutionary War, at which time the township was renamed Stamford Township by John Graves Simcoe, the first Lieutenant Governor of Upper Canada. As part of this survey, the first meeting house was constructed in Stamford Village next to a local cemetery referred to by the locals as God’s Half Acre. In 1844, this meeting house would become the Stamford Presbyterian Church, the first Presbyterian Church in Upper Canada. Lots along the river were among the first to be granted in the 1780s and 1790s as Governor Simcoe sought to develop the area quickly in the tense atmosphere between the Revolutionary War and the War of 1812. After the land near the Niagara River and Niagara Falls was divided up, farmsteads were situated as far from the river as possible (Berketa 2017).

The first railway constructed in what is now called the City of Niagara Falls was the Erie & Ontario Railway, which was constructed in 1839. The Erie & Ontario Railway was a horse-drawn railway that would continue to operate as such until 1854 when Samuel Zimmerman purchased the rights to construct the Great Western Railroad. At that time Zimmerman also purchased the Erie & Ontario Railway and upgraded the trains to steam engines and the rails from wood with iron strips to full iron tracks (Milner 2016).

The *Illustrated Historical Atlas of the Counties of Lincoln and Welland* ('Historical Atlas'), demonstrates the extent to which Stamford Township had been settled by 1876 (Page, H.R. & Co 1876; Figure 2). Landowners are listed for most of the lots 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 waterways, especially the Niagara River.

The Study Area is located to the east of the early Village of Drummondville on part of Lot 143. No Landowner information was given for Lot 143, but a subdivision into at least two separate parcels is visible.

As mentioned above, the Village of Drummondville is located to the west of the Study Area on Lot 143 and Lot 130. The village grew following the War of 1812 and the Battle of Lundy's Lane. Between 1814 and 1861 various observation towers were built as tourist attractions, to overlook the battlefield. In 1831, Niagara saw its first settlement with a dozen houses built at what is now the intersection of Lundy's Lane/Ferry Street and Main Street. Drummondville was named after Sir Gordon Drummond, a Major in the British Army at the Battle of Lundy's Lane. The initial population was approximately 150 citizens, which grew to 500 by 1850. At that time the village included a hotel, a tannery and four churches. On March 13th 1882 the Village of Drummondville was incorporated and became known as the Village of Niagara Falls. In October of 1881 the former Town of Clifton received permission from the government to change its name to the Town of Niagara Falls (Niagara Falls Info 2019).

The Battle of Lundy's Lane was fought on the night of July 25-26. Major General Riall's British and Canadian troops were positioned along Lundy's Lane in a line stretching east from the hill centred on Drummond Road and Lundy's Lane where they had positioned their artillery - east almost to the Niagara River. American General Winfield Scott's troops were drawn up in front of a wooded area probably between Culp Street and Murray Street. The main action of the battle was fought approximately 380m northwest of the Study Area though a detachment of Scott's troops advanced to the northeast close to the Study Area in a partly successful attempt to outflank the British and Canadians (Purcell and Purcell 2000). It is possible, though undocumented, that some fighting may have occurred at the Study Area.

Significant and detailed landowner information is available on the current *Historical Atlas* map of Stamford Township; however, it must be recognized 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). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

The Study Area is a rectangular parcel measuring approximately 1.37 hectares ('ha'). It is bound to the north by Ferry Street, to the east by Allendale Avenue, to the south by Peer Street and in the west by Gladstone Avenue. At the time of assessment, the Study area comprised an unused paved parking lot in its northwest corner and six hydro towers, two along the center line and four in the east of the property. The remainder of the Study Area is made up of green space with mature trees alongside its edges.

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 the Haldimand Clay Plain. 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 and Putnam 1984:156

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 and Presant 1989). The soil is suitable for corn and soy beans in rotation with cereal grains as well as alfalfa and clover (Huffman and 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 and Manville 1987). In the early 19th, Euro-Canadian settlers began to clear the forests for agricultural purposes.

The closest source of potable water is the Niagara River, which is located about 945 metres (‘m’) to the southeast 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 Stamford Township (Ellis and Ferris 1990).

Table 1: Cultural Chronology for Stamford 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
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 known archaeological resources in the vicinity of the Study Area, Detritus consulted the ASDB. The ASDB, which is maintained by the MHSTCI (Government of Ontario n.d.), contains information concerning archaeological sites that have been 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 AgGs.

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 MHSTCI 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, 11 archaeological sites have been registered within 1km of the Study Area including five pre-contact Aboriginal sites, dating from the Archaic and Woodland periods, three multi-component sites, and three post-contact Euro-Canadian sites. For further information see Table 2, below.

Table 2: Archaeological Sites Database Records

Borden Number	Site Name	Time Period	Affinity	Site Type
AgGs-108	Lundy's Lane	Post-Contact	Euro-Canadian	tavern/restaurant, battlesite
AgGs-109	Drummond Hill Cemetery	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	battlesite, cemetery, findspot
AgGs-203	Roaring River	Archaic, Early, Archaic, Middle	Aboriginal	scatter
AgGs-326	Loretto	Post-Contact	Euro-Canadian	
AgGs-377	Barker Lundy	Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	unknown
AgGs-405	Allendale Avenue	Pre-Contact	Aboriginal	unknown, scatter
AgGs-406		Archaic, Late, Woodland	Aboriginal	camp / campsite
AgGs-407		Post-Contact, Pre-Contact	Aboriginal, Euro-Canadian	debris accumulation, camp / campsite
AgGs-408		Post-Contact	Euro-Canadian	homestead
AgGs-413	Location 2	Pre-Contact	Aboriginal	camp / campsite
AgGs-414	Location 2	Pre-Contact	Aboriginal	camp / campsite

Allendale Avenue (AgGs-405) is located on the adjacent property to the south of the current Study Area. The site was discovered in 2017 by Thomas G Arnold and Associates during a Stage 3 metal detector assessment conducted in 2017 and excavated in a Stage 3 Archaeological Assessment in 2017 by Thomas G Arnold and Associates.

A previous Stage 2 Archaeological Assessment was conducted by AMICK Consultants in 2015 (AMICK 2015, PIF# P1024-0003-2015). The assessment consisted of a typical shovel test pit assessment at 5 m intervals across the subject property. During the Stage 2 Archaeological Assessment no archaeological resources were identified but due to its proximity to the Lundy's Lane Battlefield. AMICK Consultants recommended a Stage 3 Metal Detector Archaeological Assessment.

The MCTS (now MHSTCI) accepted this recommendation, and a Stage 3 Metal Detector Assessment was conducted between July 10 and July 28, 2017, by Thomas G Arnold and Associates (Arnold 2017a, PIF# PO06-0044-2017). During this assessment, no artifacts related to the 1814 battle were recovered, instead a small Pre-Contact site consisting of six artifacts (five pieces of chipping detritus and one utilized flake) was identified. This scatter was registered as AgGs-405.

The following Stage 3 Archaeological Assessment conducted by Thomas G Arnold and Associates in 2017 (Arnold 2017b, PIF# PO06-0045-2017) involved the excavation of a total of ten 1 x 1m test units on a 5m grid across the previously identified site. During this assessment, an additional twelve Pre-Contact artifacts were recovered as well as a small number of 19th century material.

Based on the mixed context of Pre-Contact and 20th century artifacts Thomas G Arnold and Associates determined that AgGs-405 has no further cultural historical value or interest and therefore no further archaeological assessment is recommended.

To the best of Detritus' knowledge, no additional assessments have been conducted on adjacent properties nor have sites been found within 50m of the Study Area.

1.3.4 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MHSTCI to determine areas of archaeological potential within 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 is Niagara River, which is located about 945 metres to the southeast of the Study Area.

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 Stamford Township prior to the arrival of Euro-Canadian settlers, as evidenced by five pre-contact Aboriginal sites and three multi-component sites registered within 1km of the Study area, 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 *Historical Atlas* (Page & Co. 1876; Figure 2) map of Stamford Township shows the Study Area in close proximity to historical roads, and the early community of Drummondville. Also considering the presence of three Euro-Canadian and three multi-component sites within 1km of the Study Area, the potential for post-contact Euro-Canadian archaeological resources is judged to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential, as per Section 1.3.2 of the *Standards and Guidelines* (Government of

Ontario 2011). Current aerial imagery of the Study Area identified a number of potential disturbance areas within the Study Area, including a paved parking lot and six hydro towers. It is recommended that these areas be subject to a Stage 2 property inspection, conducted according Section 2.1.8, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011), Section 1.2 of the *Standards and Guidelines* (Government of Ontario 2011), to confirm and document the level of disturbance.

Given an absence of additional disturbance areas, the remaining green space throughout the Study Area was determined to demonstrate the potential for the recovery of pre-contact Aboriginal, post-contact Aboriginal, and Euro-Canadian archaeological resources, and are recommended for a Stage 2 field assessment.

2.0 Field Methods

The Stage 2 assessment of the Study Area was conducted on June 7, 2021 under archaeological consulting license P462 issued to Michael Pitul by the MHSTCI. The Study Area is bound on all sides by streets mentioned in Section 1.3.1. The limits of the Study Area were identified in the field based on the development mapping provided and shapefiles uploaded to Detritus' handheld GPS.

Assessment conditions during the Stage 2 field work were excellent and at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. The weather was sunny, and the temperature was 28°C. Photos 1 to 12 demonstrate the land conditions at the time of the survey throughout the Study Area, including areas that met the requirements for a Stage 2 field assessment, as per Section 7.8.6, Standards 1a, 1b, and 1c of the *Standards and Guidelines* (Government of Ontario 2011). Figure 3 provides an illustration of the Stage 2 assessment methods, as well as all photograph locations and directions.

Approximately 91% of the Study Area comprised a green space with mature trees observed along its edge. These areas were considered to be inaccessible to ploughing and were subject to a typical Stage 2 test pit survey, conducted at 5m intervals in accordance with Section 2.1.2, Standards 1 and 2 of the *Standards and Guidelines* (Government of Ontario 2011). The test pits were excavated to within 1m of all built structures or until they showed evidence of recent ground disturbance as per Section 2.1.2, Standard 4 of the *Standards and Guidelines* (Government of Ontario 2011). Each test pit was at least 30 centimetres ('cm') in diameter and excavated 5cm into sterile subsoil as per Section 2.1.2, Standards 5 and 6 of the *Standards and Guidelines* (Government of Ontario 2011). The soils were examined for stratigraphy, cultural features, or evidence of fill.

All soil was screened through six-millimetre mesh hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit as per Section 2.1.2, Standards 7 and 9 of the *Standards and Guidelines* (Government of Ontario 2011). A single layer of a dark clay topsoil above an orange clay subsoil was identified throughout the Study Area. No material culture was encountered during the test pit survey; therefore, no additional assessment methods were employed.

Approximately 9% of the Study Area comprised the possible disturbance areas identified on the current aerial imagery of the Study Area (see Section 1.3.4 above). Following a Stage 2 property inspection, conducted according to Section 2.1.8, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011), the main disturbances impacting the Study Area were the paved parking lot in its northwest corner and the six hydro towers. These areas were evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). All the visibly disturbed areas within the Study Area were mapped and photo-documented as per Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

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 3 below.

Table 3: Inventory of Document Record

Document Type	Current Location of Document Type	Additional Comments
1 Pages 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
32 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 proposed parking lot development located at Ferry Street.

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources and was recommended for a Stage 2 assessment. The Stage 2 fieldwork took place on June 7, 2021 and consisted of a typical test pit survey at a five-metre interval across the green space and treed components of the Study Area, conducted according to Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario 2011). This investigation resulted in the identification and documentation of no archaeological resources.

The existing unused paved parking lot and the area within 1m of the six hydro towers on the property were evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources. These previously disturbed areas, as confirmed during a Stage 2 property inspection, were mapped and photo documented only.

5.0 Recommendations

The Stage 2 assessment of the Study Area resulted in the identification of no archaeological resources; therefore, **no additional archaeological assessment of the Study Area is recommended.**

6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries 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 Heritage, Sport, Tourism and Culture Industries, 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*.

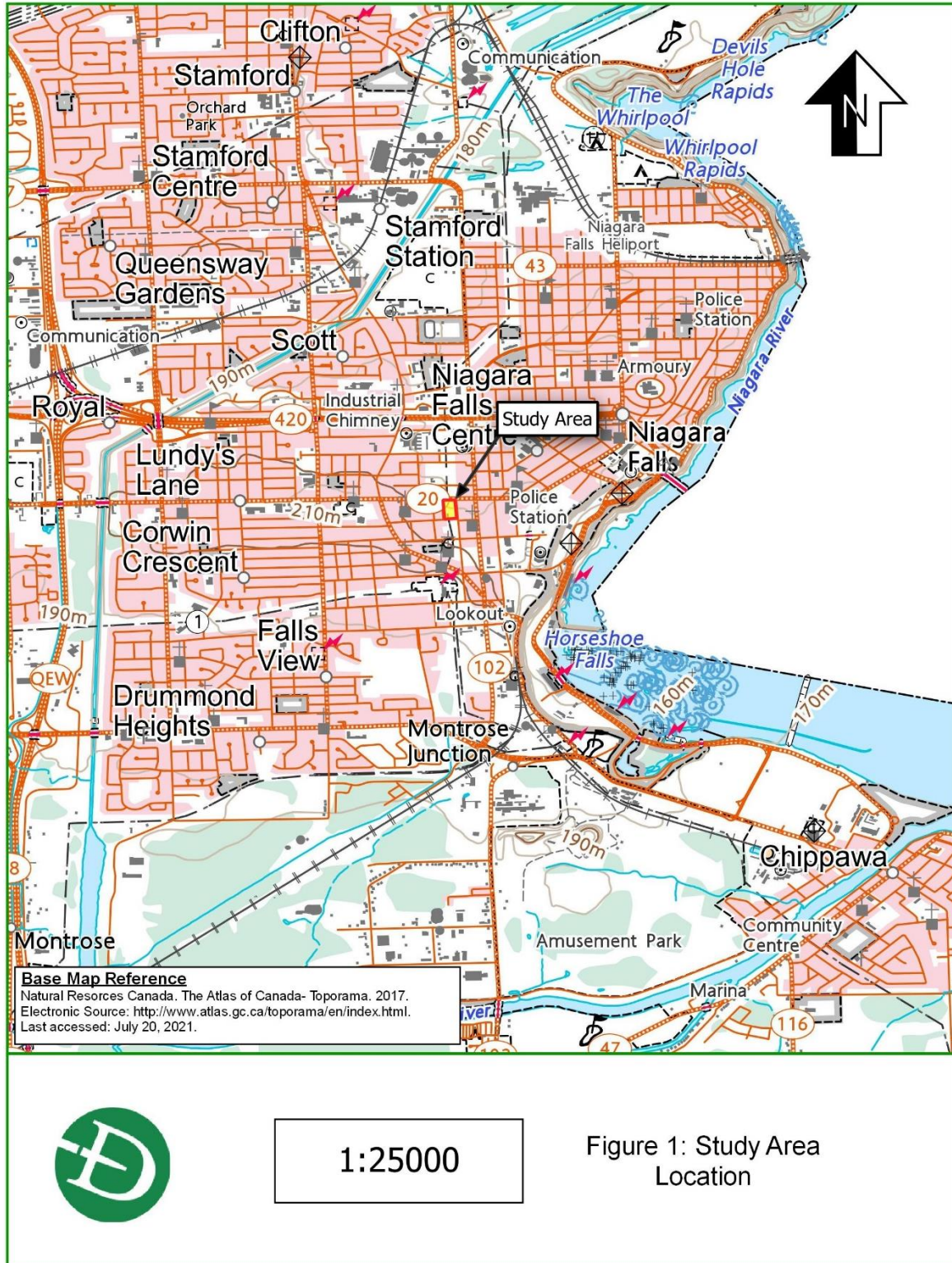
The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

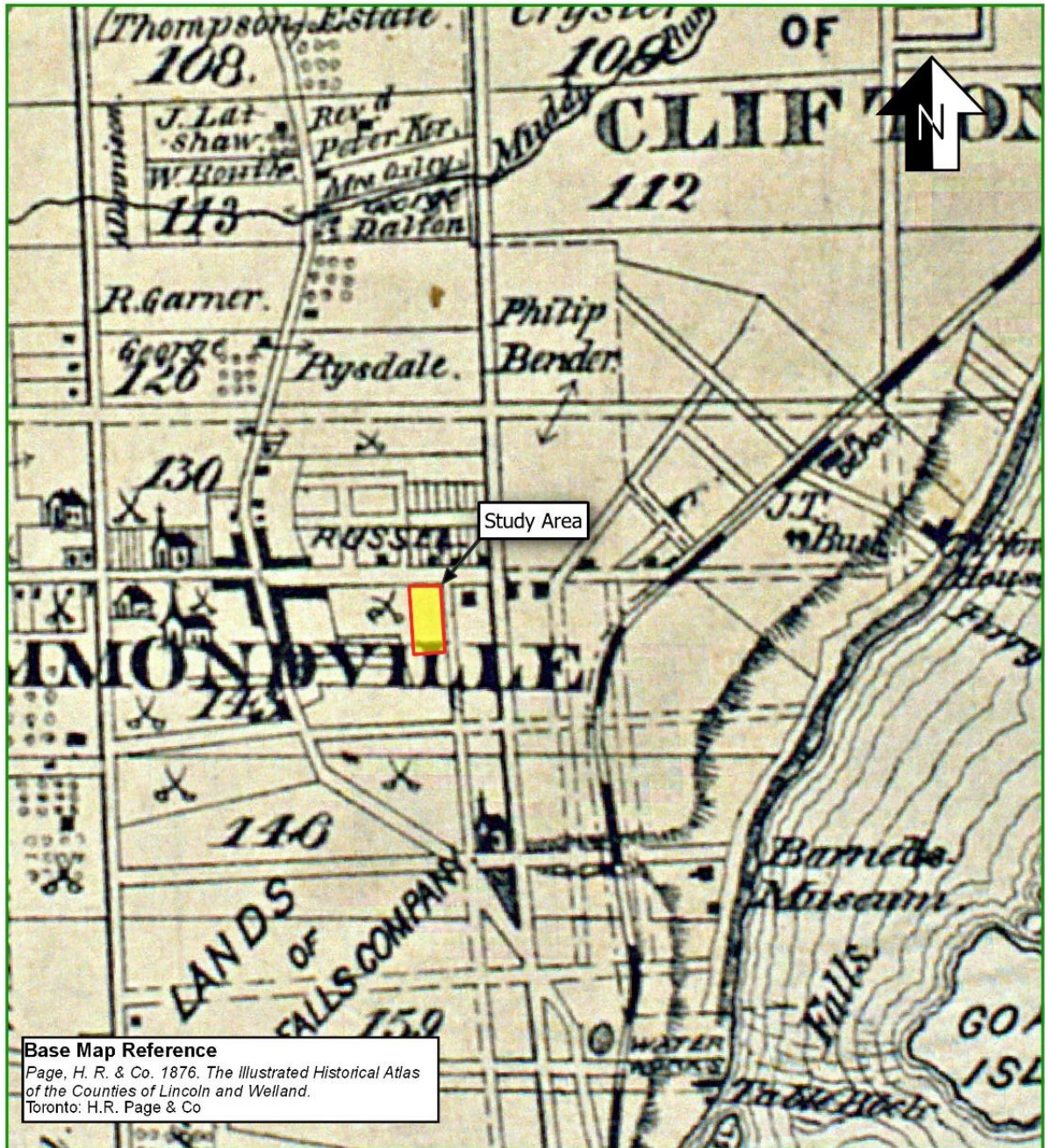
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8.0 Maps



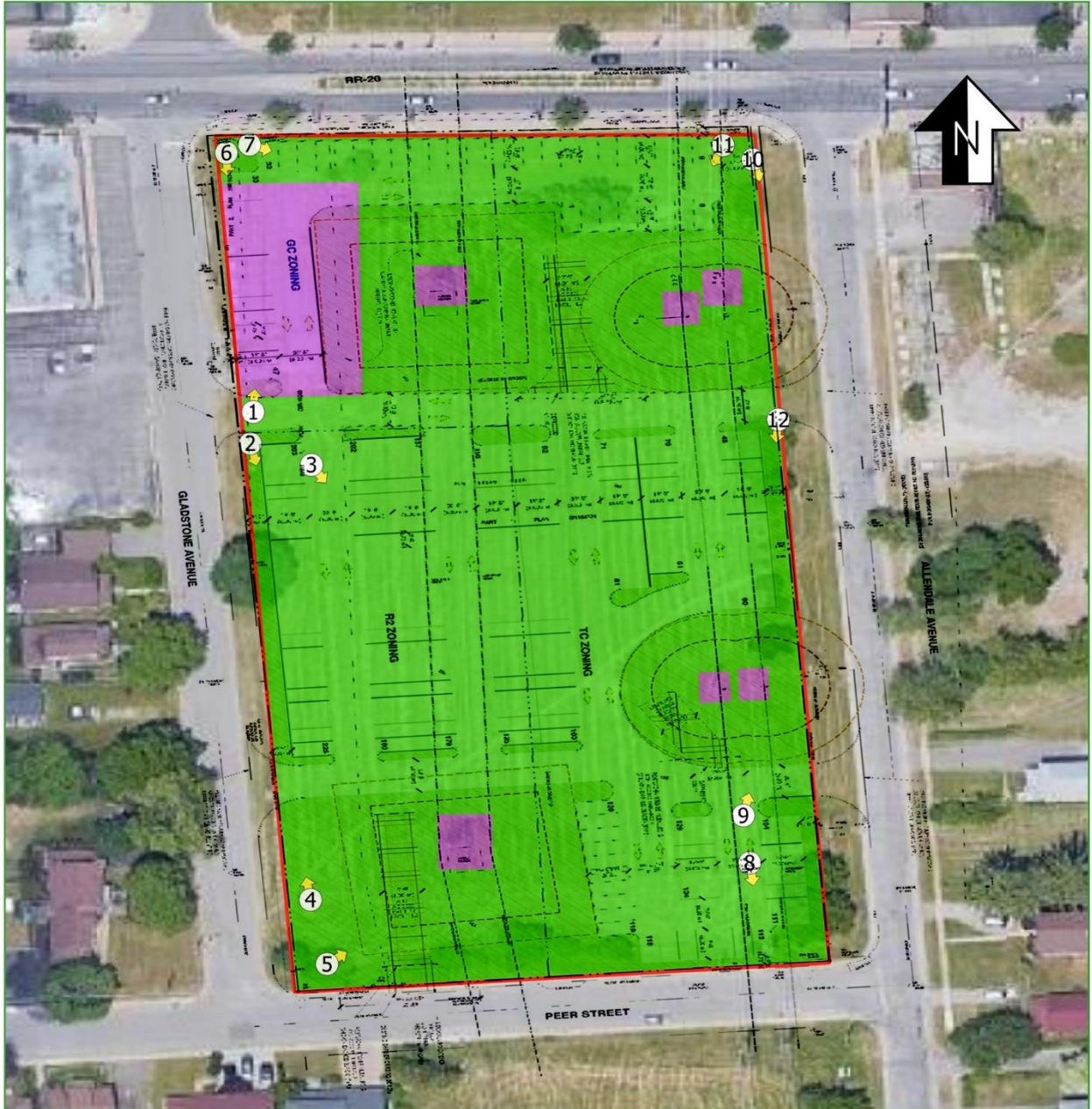


Base Map Reference
Page, H. R. & Co. 1876. *The Illustrated Historical Atlas of the Counties of Lincoln and Welland.*
Toronto: H.R. Page & Co



Not to Scale

Figure 2: Portion of H. R. Page & Co. 1876 Historical Atlas of Lincoln and Welland Counties



Legend

- Study Area
- Previously Disturbed - Not Assessed
- Photo Locations and Directions
- Test Pit Survey at 5m Intervals

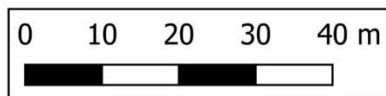
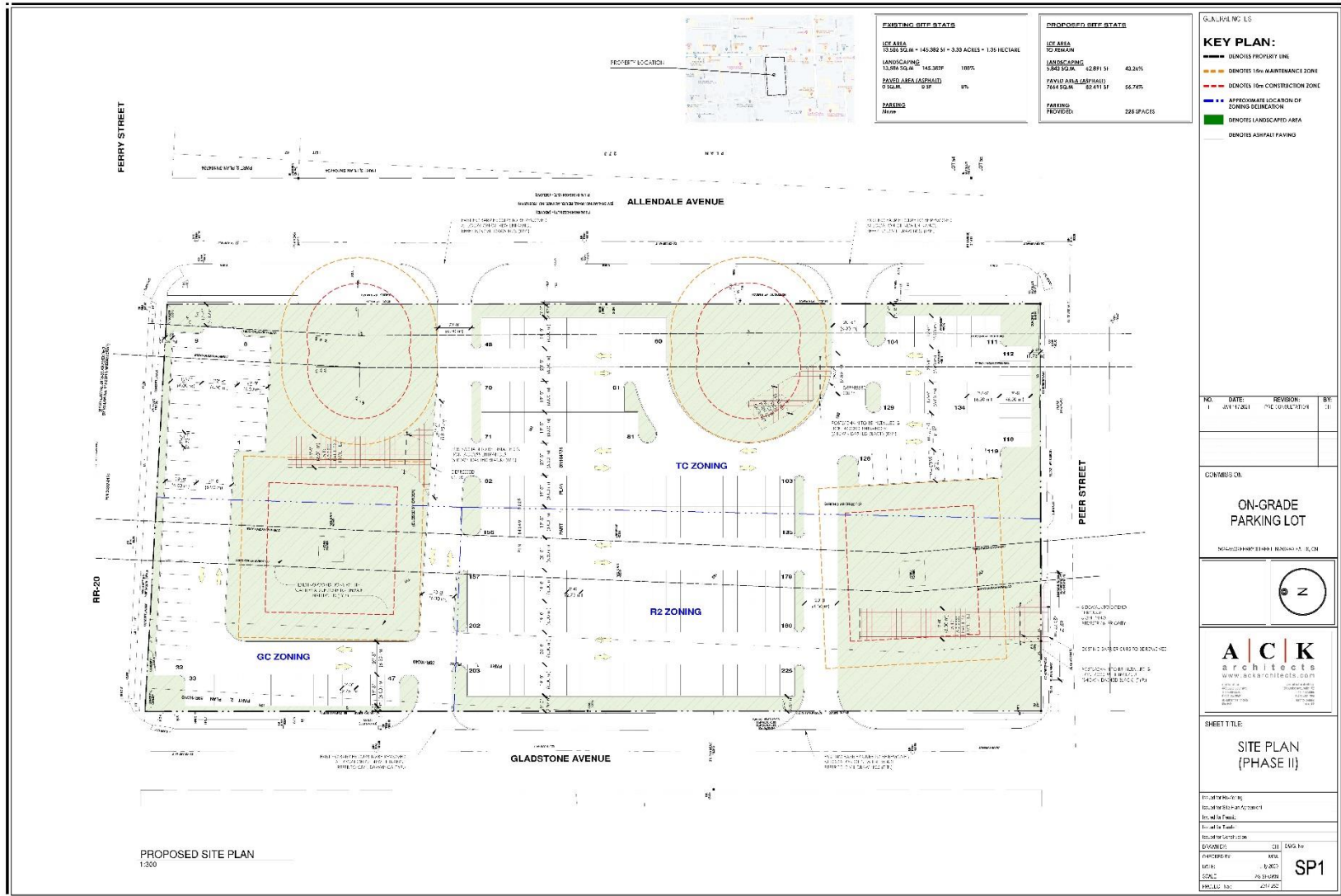


Figure 3: Stage 2 Field Methods

Stage 1-2 Archaeological Assessment, Ferry Street, Niagara Falls

Figure 4: Development Plan



9.0 Images

9.1 Photos

Photo 1: Unused Parking Lot, Previously Disturbed – Not Assessed; facing north



Photo 2: Green Space, Test pit Surveyed at 5m Intervals, facing south



Photo 3: Green Space, Test pit Surveyed at 5m Intervals, facing southeast



Photo 4: Green Space, Test pit Surveyed at 5m Intervals, facing north



Photo 5: Green Space, Test pit Surveyed at 5m Intervals; Hydro Tower in the back, Previously Disturbed – Not Assessed, facing northeast



Photo 6: Green Space, Test pit Surveyed at 5m Intervals and unused Parking Lot, Previously Disturbed – Not Assessed, facing south



Photo 7: Green Space, Test pit Surveyed at 5m Intervals, facing east



Photo 8: Green Space, Test pit Surveyed at 5m Intervals, facing south



Photo 9: Green Space and Hydro Poles, Test pit Surveyed at 5m Intervals, facing north



Photo 10: Green Space, Test pit Surveyed at 5m Intervals, facing south



Photo 11: Green Space, Test pit Surveyed at 5m Intervals, facing southwest



Photo 12: Green Space, Test pit Surveyed at 5m Intervals, facing south

