

**Stage 1-2 Archaeological Assessment
4965, 4971, and 4981 Stanley Avenue & 5516
Morden Drive, Niagara Falls**

Part of Lot 108, Geographic Township of Stamford, Historical
County of Welland, now the Regional Municipality of Niagara

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ORIGINAL REPORT

October 17, 2024

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Jessica Cooley from ACK Architects STUDIO Inc. (the 'Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 108, in the Geographic Township of Stamford, within the Historical County of Welland, now the Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of future development on the property at 4965, 4971, and 4981 Stanley Avenue & 5516 Morden Drive, Niagara Falls and the development will span the entire property (the 'Study Area,' Figure 6).

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 P462 issued to Mr. Mike Pitul 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 four separate properties that create an irregular L-shaped parcel measuring approximately 0.45 hectares ('ha'). The Study Area is bound by Stanley Avenue to the east, Morden Drive to the north, residential properties to the west, and Arthur Street to the south. At the time of assessment, each property comprised a combination of asphalt driveway, house, and manicured lawn. The property located at 5516 Morden Drive, in the northwest corner of the Study Area, comprises a house with large asphalt driveway and manicured front, back and side yards. The driveway is connected to the parking area of 4965 Stanley Avenue. The property located at 4965 Stanley Avenue, along the northeast edge of the Study Area, comprised two large asphalt parking areas, a house, and very small manicured lawns with cement pathways running through them. The parking area to the east of the house is connected to the parking area within the property at 4971 Stanley Avenue to the south. The property located at 4971 Stanley Avenue, in the centre of the Study Area, is the largest of the four properties and comprises one large asphalt parking area and cement patio, one house, and a large L-shaped area of manicured lawn separated from the property at 4981 Stanley Avenue by a hedgerow. The property located at 4981 Stanley Avenue, in the southern portion of the Study Area, is completely separate from the other properties and comprises an asphalt driveway, a house, and manicured lawn with a few trees throughout (Figure 4).

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. This research also indicated that the Study Area is located within an area of archaeological potential, 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 August 18th, 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 revealed that the four houses, three asphalt driveways and parking areas, cement pathways and patio retained no, or low, archaeological 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). The previously disturbed areas, as confirmed during a Stage 2 property inspection, were mapped and photo documented only 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).

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The remainder of the Study Area comprised the manicured lawns throughout the Study Area, which were assessed by means of a typical test pit survey at 5m 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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1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Jessica Cooley, a Technologist from ACK Architects STUDIO Inc. (the 'Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 108, in the Geographic Township of Stamford, within the Historical County of Welland, now the Regional Municipality of Niagara, Ontario (Figure 1). This assessment was undertaken in advance of future development on the property at 4965, 4971, and 4981 Stanley Avenue & 5516 Morden Drive, Niagara Falls and the development will span the entire property (the 'Study Area,' Figure 6).

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 P462 issued to Mr. Mike Pitul 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 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 Indigenous Resources

The earliest documented pre-European settlers arrived to the Niagara Peninsula from southwestern Ontario during the 14th century AD, at the peak of Iroquois culture. By 1400, the majority of the region was occupied by an Iroquoian-speaking tribe referred to as the Attawandaran (aka the Atiquandaronk or Attouanderonks), who exploited the fertile land and abundant water sources throughout the region for fishing, hunting and agriculture (Niagara Falls Info, 2022). This moniker was given to the community by the neighbouring Wendat as a slur against their unusual dialect. Those Attawandaran tribes who settled along the Niagara River were referred to as the Onguiaahra (later the Ongiara), which has been loosely translated as one of “the Straight,” “the Throat,” or “the Thunder of Waters” (Niagara-on-the-Lake, 2016; Niagara-on-the-Lake Realty, 2022). The name ‘Neutral’ was given to the Attawandaran by French explorers who began arriving in the 17th century. This new designation referred to the community’s status as peacekeepers between the warring Huron and Iroquois tribes (Niagara Falls Info, 2022).

The earliest recorded European visit to the Niagara region 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 Indigenous 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 (Heidenreich, 1978). It is believed that Brûlé first visited the future site of Niagara-on-the-Lake during this excursion (Niagara-on-the-Lake, 2016). 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, 1978).

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 during this protracted conflict 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, 1978).

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, 1978). 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 (the Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southwestern Ontario (Feest & 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 (Morris, 1943). 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 straight, opposite to the Fort Niagara and extending from thence by a southerly course to the Chipewiegh 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, pp. 15-16

Throughout southern Ontario, the size and nature of the pre-contact settlements and the subsequent spread and distribution of Indigenous 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; Tanner, 1987; Weaver, 1978). 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, 2022).

Despite the encroachment of European settlers on previously established Indigenous 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 current Study Area is located on part of Lot 108, in the Geographic Township of Stamford, within the 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-

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Governor of Upper Canada and 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, including Welland County, 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 (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 Stamford Township was a part. The two counties would be amalgamated once again in 1970 to form the Regional Municipality of Niagara.

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, 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 Town of Clifton was one of the earliest settlements in Stamford Township. In 1782, Phillip Bender and his family settled near to the crest of Niagara Falls after having been granted land in the area as a United Empire Loyalist. In 1832, Captain Ogden Creighton purchased land from Bender and settled in what would become the village of Clifton. Following his death, Samuel Zimmerman acquired most of his land and, being an ambitious salesman, became the driving force between the growth of Clifton, including building the suspension bridge across the Niagara River connecting Canada with the U.S.A and for extending the Great Western Railway into Clifton making it a major rail hub (Brock University, n.d.). In 1856 the town of Elgin and the Village of Clifton merged to form the Town of Clifton. In October of 1881 the former Town of Clifton received permission from the government to change its name to the Town of Niagara Falls.

On March 13th, 1882, the Village of Drummondville was incorporated and became known as the Village of Niagara Falls. For the next twenty-four years the Town of Niagara Falls and the Village of Niagara Falls coexisted and shared a common municipal border until the two were amalgamated and incorporated into the City of Niagara Falls in 1904 (Niagara Falls Info, 2022). Within two years, three large hydroelectric generating plants began operating in the area around the Horseshoe Falls. Inexpensive and plentiful electricity, along with excellent rail transportation and close proximity to the U.S. market soon attracted many manufacturing industries to Niagara Falls, thus ensuring the new city's growth and prosperity (Zavitz, n.d.)

George Tremaine's Map of the Counties of Lincoln and Welland, Canada West ('Tremaine Map') demonstrates the extent to which the region had been settled by 1862 (Tremaine, 1862). Landowners are listed for most of the lots throughout the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the second half of the 19th century. The Study Area occupies part of the eastern end of Lot 108, which, according to the *Tremaine Map*, was owned in its entirety by John Thompson. John Thompson also owns the adjacent lot to the east, Lot 109, which is incorrectly labelled as Lot 119 on the map (Figure 2). A road running north to south, now known as Portage Road, divides Lot 108 into two roughly equal parts. Within Lot 108, a structure is depicted to the west of this road, located approximately 450 metres ('m') west of the Study Area. Muddy Run, a tributary of the Niagara River, runs approximately 275m south of the Study Area. The Town of Clifton is located 210m to the northeast of the Study Area. Two unnamed railway lines are located approximately 1.2 kilometres ('km') to the northeast, past the Town of Clifton.

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, 1876). 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.

According to the *Historical Atlas* map of Stamford Township, by 1876 Lot 108, containing the Study Area, was owned in its entirety by A. Law or (Thompson) Estate, while the previously mentioned Lot 109 was now owned by H. Crysler (Figure 3). On this map, the previously mentioned railways are still depicted and now labelled as the Great Western and Air Line Railway and the Canada Southern Railway. According to this map, the Town of Clifton is 610m to the northeast, bordered to the east by the Niagara River, as of 1876.

Although significant and detailed landowner information is available on the historical maps discussed here, it should 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, 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 four separate properties that create an irregular L-shaped parcel measuring approximately 0.45 hectares ('ha'). The Study Area is bound by Stanley Avenue to the east, Morden Drive to the north, residential properties to the west, and Arthur Street to the south. At the time of assessment, each property comprised a combination of asphalt driveway, house, and manicured lawn. The property located at 5516 Morden Drive, in the northwest corner of the Study Area, comprises a house with large asphalt driveway and manicured front, back and side yards. The driveway is connected to the parking area of 4965 Stanley Avenue. The property located at 4965 Stanley Avenue, along the northeast edge of the Study Area, comprised two large asphalt parking areas, a house, and very small manicured lawns with cement pathways running through them. The parking area to the east of the house is connected to the parking area within the property at 4971 Stanley Avenue to the south. The property located at 4971 Stanley Avenue, in the centre of the Study Area, is the largest of the four properties and comprises one large asphalt parking area and cement patio, one house, and a large L-shaped area of manicured lawn separated from the property at 4981 Stanley Avenue by a hedgerow. The property located at 4981 Stanley Avenue, in the southern portion of the Study Area, is completely separate from the other properties and comprises an asphalt driveway, a house, and manicured lawn with a few trees throughout (Figure 4).

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 historical source of potable water was a tributary of the Niagara River known as Muddy Run. It is located approximately 275m south of the Study Area.

1.3.2 Pre-Contact Indigenous 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 & 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

Time Period	Cultural Period	Comments
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 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 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, no archaeological sites have been registered within a 1km radius of the Study Area. 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 historical source of potable water was a tributary of the Niagara River known as Muddy Run. It is located approximately 275m south 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 Indigenous agricultural. Considering also the length of occupation of Stamford Township prior to the arrival of Euro-Canadian settlers, the

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pre-contact and post-contact Indigenous 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 *Tremaine Map* of Niagara Township from 1862 and the *Historical Atlas* from 1876 show the Study Area in close proximity to historical infrastructure, including the Great Western, Air Line, and Canada Southern Railways. Considering the location of the Study Area near to the early Town of Clifton, 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). Aerial imagery identified a possible disturbance area within the Study Area in the form of four houses, three asphalt driveways and parking areas, cement pathways and patio. It is recommended that these potential disturbances be subject to a Stage 2 property inspection to confirm the limits of the disturbance. Detritus determined that the remainder of the Study Area, including the manicured lawns, demonstrated the potential for the recovery of pre-contact Indigenous, post-contact Indigenous, and Euro-Canadian archaeological resources, and were recommended for Stage 2 assessment.

2.0 Field Methods

The Stage 2 assessment of the Study Area was conducted on August 18th, 2024, under archaeological consulting license P462 issued to Mr. Mike Pitul 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. Buried utility locates were obtained prior to initiating fieldwork.

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 a light rain with temperatures of 23°Celsius and the soil was dry and screened easily. Photos 1 to 17 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 5 illustrates the Stage 2 assessment methods, as well as photograph locations and directions all in relation to the proposed development of the Study Area.

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, approximately 37.8% of the Study Area comprised the possible disturbance areas identified on the current aerial imagery (see Section 1.3.4 above). The disturbed areas, which includes the four houses, three asphalt driveways and parking areas, cement pathways and patio, 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). The areas of previous disturbance observed within the Study Area were mapped 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).

Approximately 62.2% (0.28ha) of the Study Area comprised the manicured lawns that were deemed inaccessible to ploughing. These areas were subject to a typical test pit survey at five-metre intervals in accordance with Section 2.1.2 of the *Standards and Guidelines* (Government of Ontario, 2011; Photos 1 to 7, 9, 12, and 14 to 16). The test pit survey was conducted to within 1m of the built structures or until test pits show 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 then examined for stratigraphy, cultural features, or evidence of fill.

The test pits ranged in total depth from 20cm to 35cm and featured a single dark brown clay loam soil layer (topsoil) above the light brown loam subsoil (Photos 18 and 19). Considering that each test pit was excavated 5cm into sterile subsoil, the observed topsoil layer ranged in depth from 15cm to 30cm. All soil was checked for stratigraphy and screened through six-millimetre mesh hardware cloth to facilitate the recovery of small artifacts, and then the screened material used to backfill the pit as per Section 2.1.2, Standards 7 and 9 of the *Standards and Guidelines* (Government of Ontario, 2011).

No artifacts were encountered during the test pit survey; therefore, no further survey methods were employed.

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 2 below.

Table 2: 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
21 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 future development on the property at 4965, 4971, and 4981 Stanley Avenue & 5516 Morden Drive, Niagara Falls.

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. This research also indicated that the Study Area is located within an area of archaeological potential, 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 August 18th, 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 revealed that the four houses, three asphalt driveways and parking areas, cement pathways and patio retained no, or low, archaeological 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). The previously disturbed areas, as confirmed during a Stage 2 property inspection, were mapped and photo documented only 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).

The remainder of the Study Area comprised the manicured lawns throughout the Study Area, which were assessed by means of a typical test pit survey at 5m 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

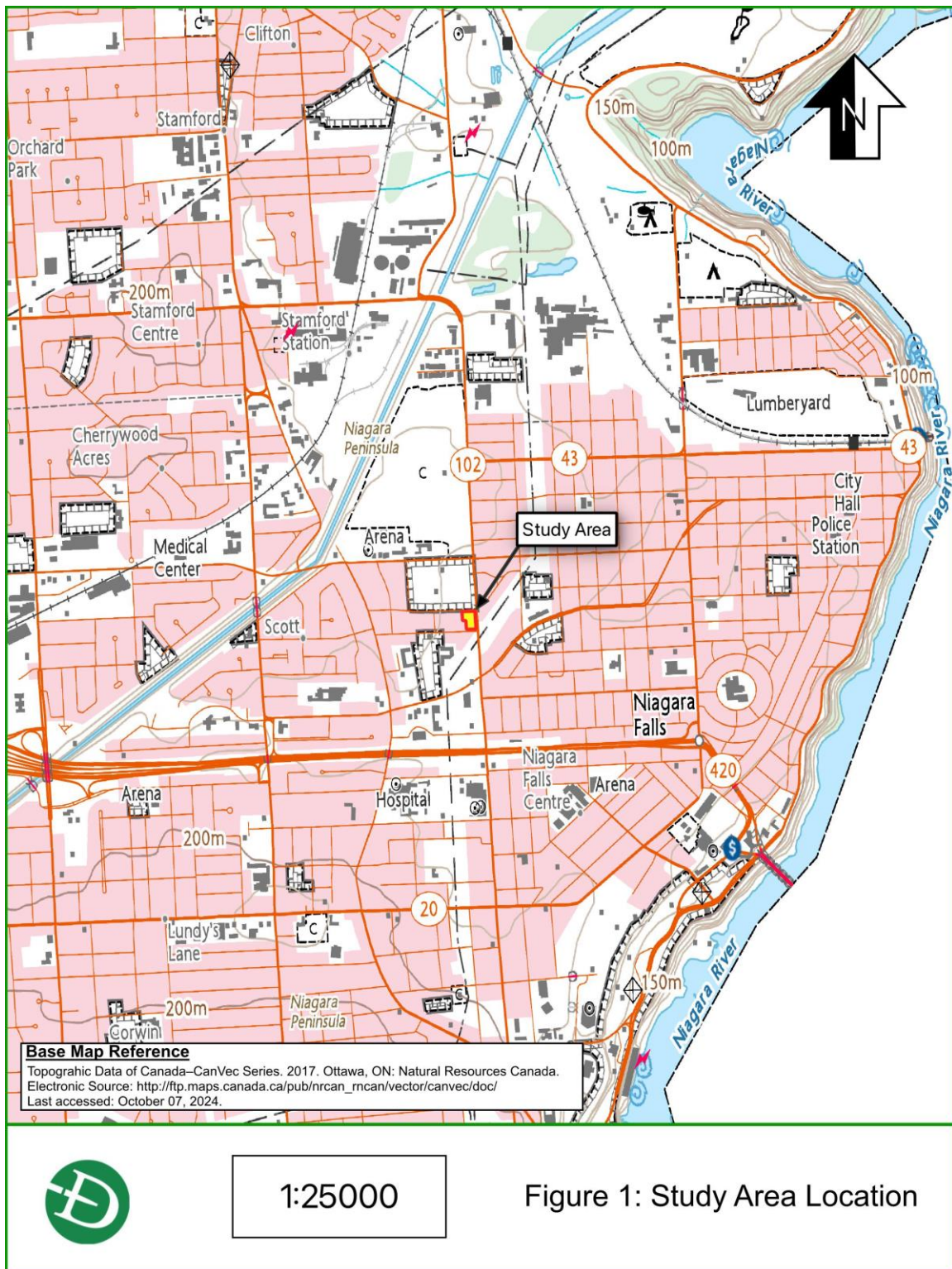
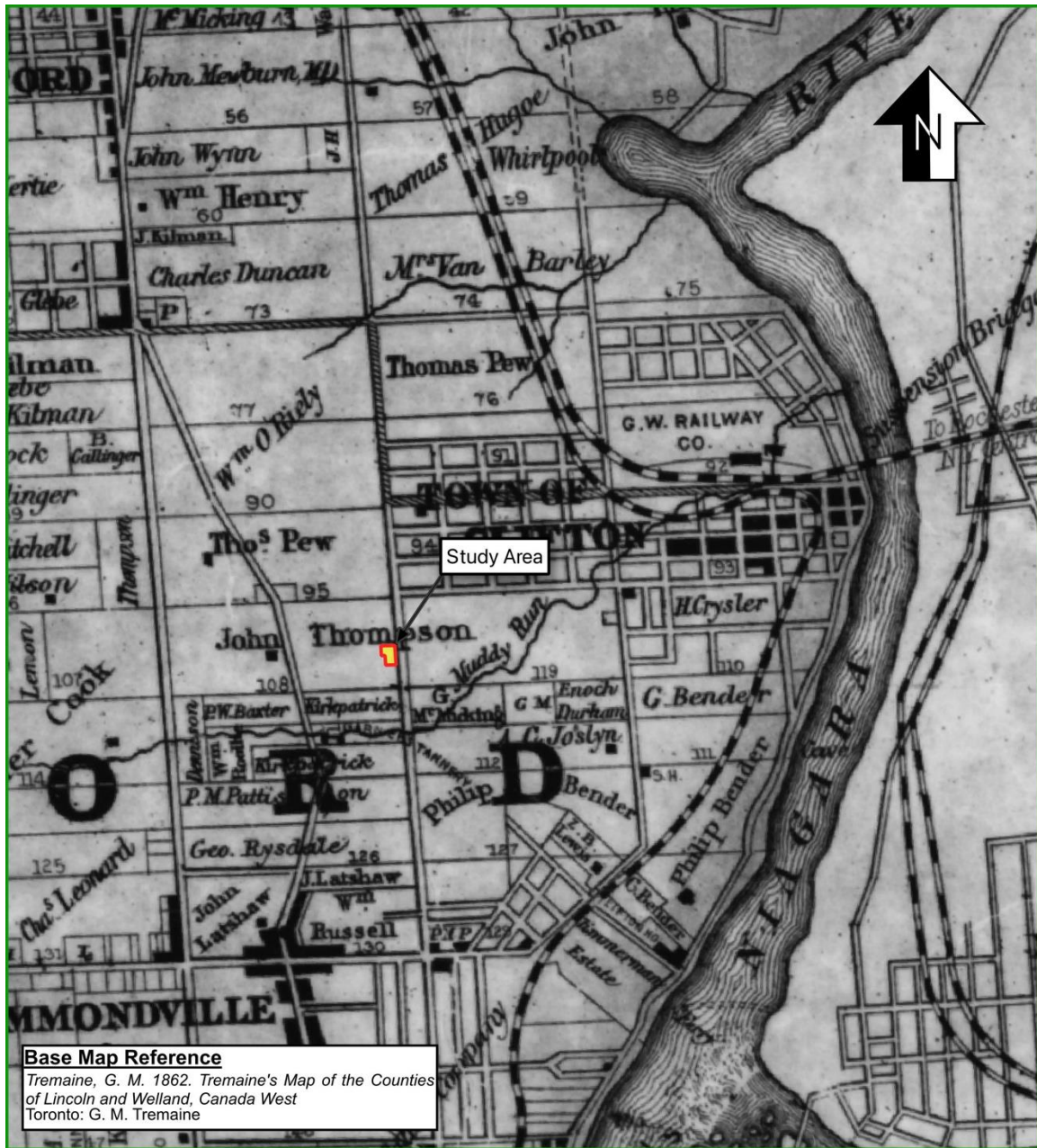


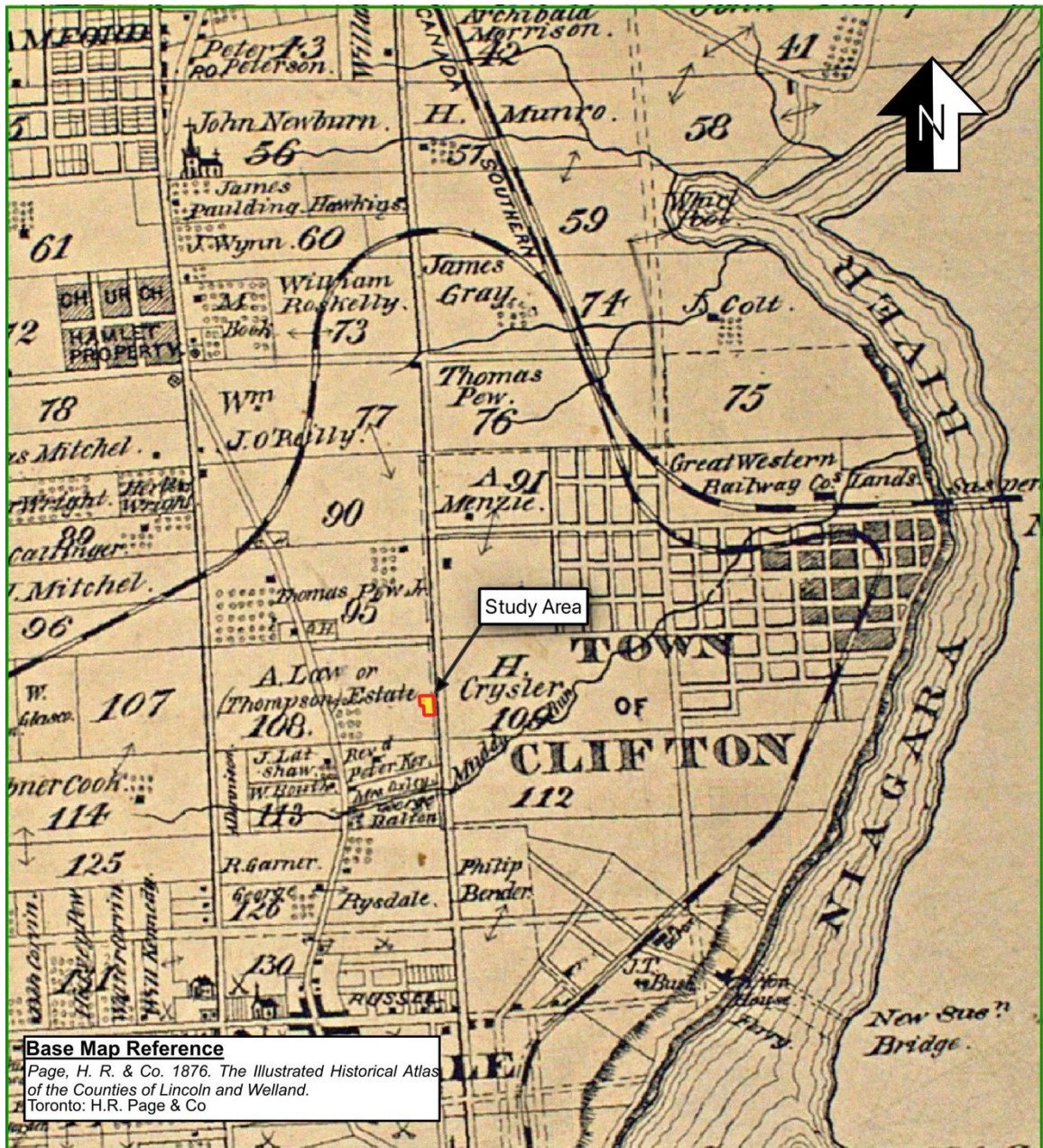
Figure 2: Historic Map Showing Study Area Location



Not to Scale

Figure 2: Portion of Tremaine's Map of the Counties of Lincoln and Welland, Canada West

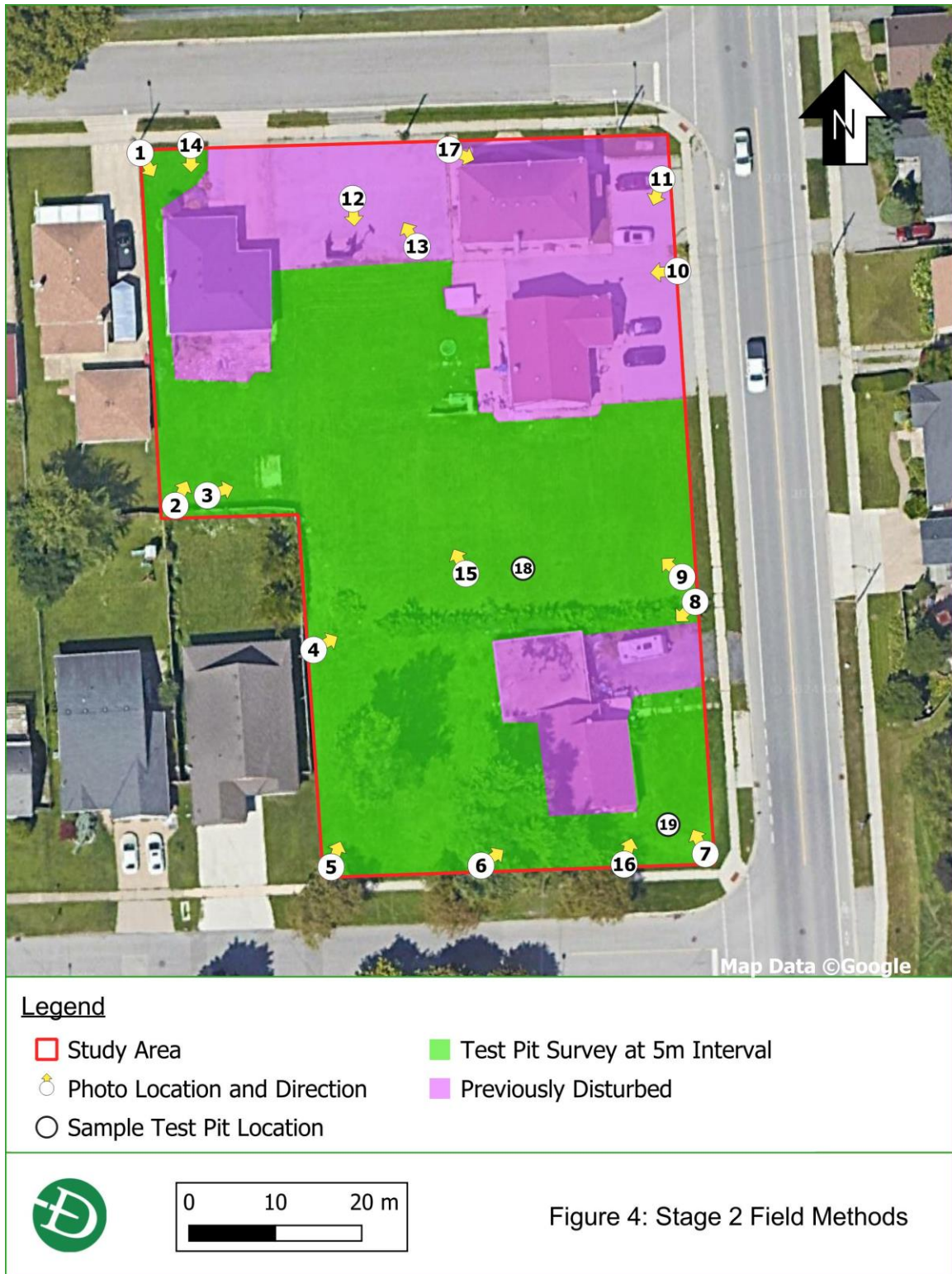
Figure 3: Additional Historic Map Showing Study Area Location



Not to Scale

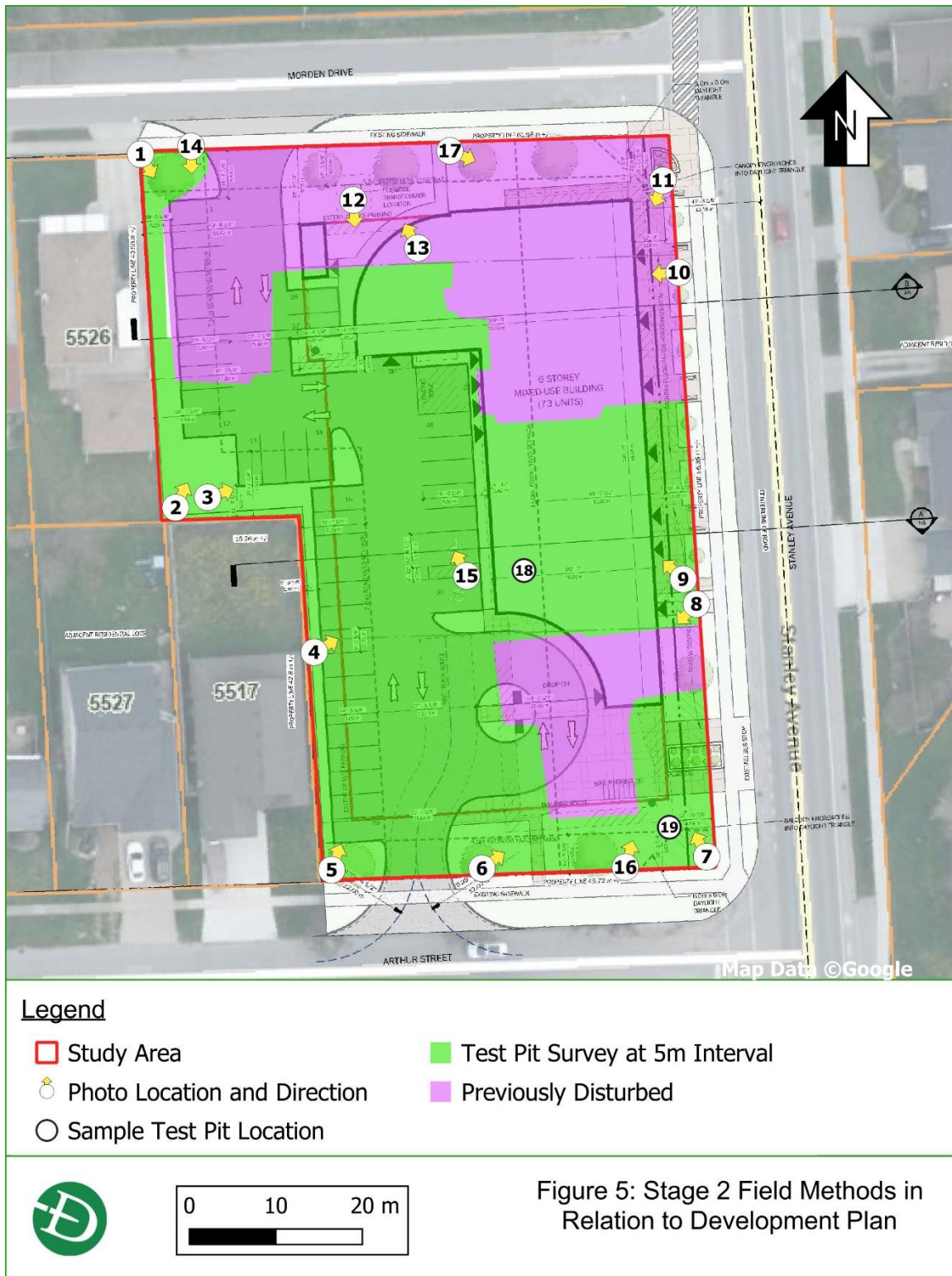
Figure3: Portion of H. R. Page & Co. 1876 Historical Atlas Map of Stamford Township

Figure 4: Stage 2 Field Methods Map



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Figure 5: Stage 2 Field Methods in Relation to Development Plan



9.0 Images

9.1 Field Photos

Photo 1: Manicured lawn with trees and shrubs, Test Pit Surveyed at 5m Intervals, and house, Previously Disturbed, northwest corner looking southeast



Photo 2: Manicured lawn with trees and shrubs, Test Pit Surveyed at 5m Intervals, and house, Previously Disturbed, furthest west southwest corner looking northeast



Photo 3: Manicured lawn, Test Pit Surveyed at 5m Intervals, and two houses, Previously Disturbed, furthest west southwest corner looking east



Photo 4: Manicured lawn with hedgerow, Test Pit Surveyed at 5m Intervals, two houses, Previously Disturbed, looking east



Photo 5: Manicured lawn, Test Pit Surveyed at 5m Intervals, furthest south southwest corner looking northeast



Photo 6: Manicured lawn, Test Pit Surveyed at 5m Intervals, and house, Previously Disturbed, looking northeast



Photo 7: Manicured lawn, Test Pit Surveyed at 5m Intervals, and house, Previously Disturbed, southeast corner looking northwest



Photo 8: House and asphalt driveway, Previously Disturbed, looking southwest



Photo 9: Manicured lawn, Test Pit Surveyed at 5m Intervals, looking northwest



Photo 10: Two houses and asphalt driveway and parking area, Previously Disturbed, looking west



Photo 11: House and asphalt driveway and parking area, Previously Disturbed, northeast corner looking southwest



Photo 12: Manicured lawn, Test Pit Surveyed at 5m Intervals, and asphalt parking area, Previously Disturbed, looking south



Photo 13: Asphalt driveway and parking area, Previously Disturbed, looking northeast



Photo 14: Manicured lawn, Test Pit Surveyed at 5m Intervals, and house, Previously Disturbed, looking south



Photo 15: Manicured lawn, Test Pit Surveyed at 5m Intervals, and house, Previously Disturbed, looking north



Photo 16: Manicured lawn, Test Pit Surveyed at 5m Intervals, looking northeast



**Photo 17: Manicured lawn, Test Pit
Surveyed at 5m Intervals, and house and
cement pathways, Previously Disturbed,
looking east**



Photo 18: Sample Test Pit



Photo 19: Sample Test Pit

