

Stage 1 & 2 Archaeological Assessment

5584 Fraser Street
Part of Lots 29 and 30
Registered Plan 31
Part of Lot 77
Geographic Township of Stamford
City of Niagara Falls
Regional Municipality of Niagara

Prepared for:
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Licensee: Michael Golloher PIF: P1037-0314-2024 Original Report



Earthworks Archaeological Services Inc. 2365 Watts Road, Haliburton, Ontario K0M 1SO

October 11, 2024

Executive Summary

Earthworks Archaeological Services Inc. was retained by to conduct a Stage 1 & 2 archaeological assessment of a 0.11 hectare area located at 5584 Fraser Street, legally described as part of Lots 29 and 30, Registered Plan 31, City of Niagara Falls, Regional Municipality of Niagara, historically part of Lot 77, Geographic Township of Stamford, Welland County, Ontario. The assessment was undertaken in support of an Application for a Zoning Bylaw Amendment was conducted as part of the requirements defined in Section 4.10 of the City of Niagara Falls Official Plan, which requires an archaeological assessment to be undertaken when a proposed development, site alteration, or redevelopment of lands has the potential to adversely affect archaeological resources or areas of archaeological potential

The study area contains evidence of archaeological potential. The location of the study area within 210 metres of a historic unnamed creek connected to the Niagara River indicates the potential for recovering Pre-Contact Indigenous archaeological material. In summary, a Stage 2 archaeological assessment was determined to be required in order to identify and document any archaeological material that may be present. The inaccessibility of the study area to any form of ploughing equipment precluded the possibility of ploughing for a pedestrian survey, and as a result, a test pitting survey was determined to be required.

The Stage 2 archaeological assessment of the study area was conducted on September 23, 2024 under PIF #: P1037-0314-2024, issued to Michael Golloher, M.Sc. (P1037). The weather during the survey was sunny and warm. At no time were weather or lighting conditions detrimental to the observation or recovery of archaeological material.

The study area was assessed through a test pit survey.

Test pits were spaced at maximum intervals of five metres apart. Each test pit was excavated by hand to 30 centimetres in diameter and was excavated into the first five centimetres of subsoil. Depth varied between 25 and 30 centimetres. Each test pit was examined for stratigraphy, cultural features, or evidence of fill, and all soil was screened through wire mesh of 6 millimetre width. All test pits were backfilled. The subsurface stratigraphy consisted of a dark brown sandy loam topsoil horizon overlaying a reddish orange subsoil (Image 6). No archaeological material was identified during the course of the survey.

Based on the results of the Stage 2 test pit survey the study area is considered to be free of archaeological material, and no additional archaeological assessments are required.

The Ministry of Citizenship and Multiculturalism is requested to review this report and provide a letter indicating their satisfaction that the fieldwork and reporting for this archaeological assessment are consistent with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences, and to enter this report into the Ontario Public Register of Archaeological Reports.



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Project Personnel

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1.0 Project Context

1.1 Development Context

Earthworks Archaeological Services Inc. (Earthworks) was retained by to conduct a Stage 1 & 2 archaeological assessment of a 0.11 hectare area located at 5584 Fraser Street, legally described as part of Lots 29 and 30, Registered Plan 31, City of Niagara Falls, Regional Municipality of Niagara, historically part of Lot 77, Geographic Township of Stamford, Welland County, Ontario (Map 1). The assessment was undertaken in support of an Application for a Zoning Bylaw Amendment (Map 2) was conducted as part of the requirements defined in Section 4.10 of the *City of Niagara Falls Official Plan*, which requires an archaeological assessment to be undertaken when a proposed development, site alteration, or redevelopment of lands has the potential to adversely affect archaeological resources or areas of archaeological potential (City of Niagara Falls 2019:3-25).

The objectives of the Stage 1 & 2 archaeological assessment, as outlined by the Ministry of Citizenship and Multiculturalisms' (MCM) *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), are as follows:

- To document archaeological resources located on the property
- To determine whether any identified archaeological resources require further assessment
- To recommend Stage 3 assessment strategies for any archaeological sites determined to require additional assessment.

As part of this assessment, background research was conducted in Earthworks corporate library, the OnLand Registry Database, and the Federal Canadian Census located online at Library and Archives Canada.

Permission to access the property was provided by the proponent.



1.2 Historic Context

1.2.1 Pre-Contact Indigenous History

Table 1 provides a breakdown of the general culture history of southern Ontario, as based on Ellis and Ferris (1990).

Table 1: Pre-Contact Indigenous Culture History of Southern Ontario

Culture Period	Diagnostic Artifacts	Time Span (Years B.P.)	Detail
Early Paleo- Indigenous	Fluted Projectile Points	11,000-10,400	Nomadic caribou hunters
Late Paleo- Indigenous	Hi-Lo, Holcombe, Plano Projectile Points	10,400-10,000	Gradual population increase
Early Archaic	Nettling and Bifurcate Points	10,000-8,000	More localized tool sources
Middle Archaic	Brewerton and Stanly- Neville Projectile Points	8,000-4,500	Re-purposed projectile points and greater amount of endscrapers
Narrow Point Late Archaic	Lamoka and Normanskill Projectile Points	4,000-3,800	Larger site size
Broad Point Late Archaic	Genessee, Adder Orchard Projectile Points	3,800-3,500	Large bifacial tools. First evidence of houses
Small Point Late Archaic	Crawford Knoll, Innes Projectile Points	3,500-3,100	Bow and Arrow Introduction
Terminal Archaic	Hind Projectile Points	3,100-2,950	First evidence of cemeteries
Early Woodland	Meadowood Points, Cache Blades, and pop-eyed birdstones	2,950-2,400	First evidence of Vinette I Pottery
	Pseudo-scallop shell	2,450-1550	Burial Mounds
Middle Woodland	Princess Point pottery	1550-1100	First evidence of corn horticulture
	Levanna Point	1,100-700	Early longhouses
Late Woodland	Saugeen Projectile Points	700-600	Agricultural villages
Late Woodland	Nanticoke Notched Points	600-450	Migrating villages, tribal warfare



1.2.2 Post Contact Indigenous History

The surrounding area enters the historic record in 1626, when Father Daillon, a French missionary, spent three months in the Hamilton region attempting to conclude a trading alliance with the Neutral Confederacy. These negotiations ultimately failed due to opposition from Huron allies (White 1978:409). By 1638, the Neutral had expanded east to the Niagara River in response to a void left by the Wenro migrating to Huronia and the Erie migrating southwest. By the early 1640s, the Neutrals were engaged in large scale warfare with the Assistaeronons to the west while maintaining a neutral stance between the Huron and the League of Five Nations Iroquois. The City of Niagara Falls was located within the territory of the Onguiarahronon tribe, with the village of Onguiaahra located on the east side of the Niagara River (Noble 1978). European influence in the region was generally restricted to the beaver pelt trade, and Aboriginal groups practiced a way of life that did not differ significantly from the pre-Contact period. By the late 1640's, the increasing scarcity of beaver pelts prompted the invasion of the Neutral by the League of Five Nations Iroquois. By 1651, the Neutral were destroyed and either moved west out of Ontario or were absorbed into the League of Five Nations (Trigger 1994:57).

The region appears to have been relatively unpopulated by permanent settlements in the latter half of the seventeenth century, with much of southern Ontario used as a hunting territory by the Iroquois. However, Ojibway groups previously thought to have settled along the northern shores of Georgian Bay and Lake Superior gradually migrated into southern Ontario, and by 1707 had settled in the Niagara region (Rogers 1978:761).

In 1764, British need to control the Niagara portage route in order to supply Detroit led to the forced surrender from the Seneca of a three-kilometre strip west of the Niagara River. The overlapping Mississauga claim was addressed in 1781, when increased settlement pressure from refugees of the American Revolutionary War led to the British to purchase a six and half kilometre strip of land along the full length of the west bank of the Niagara River for 300 suits of clothing, in what became known as the Niagara Purchase (Surtees 1994:97). The Mississauga eventually relocated to the Grand River at New Credit in 1847.

1.2.3 European Settlement History

The most famous early description of Niagara Falls was made by Louis Hennepin, who was part of a French expedition to discover North America and which ultimately staked a claim on the Niagara River between 1678 and 1681 (Revie 2003:21). However, French settlements were restricted to the St. Lawrence River and Maritime provinces, and settler immigration did not begin in earnest until 1783, when the Treaty of Paris was signed ending the American Revolutionary War and the British government began offering free land grants to United Empire Loyalists (Hancocks 1984)

The Township of Stamford was first surveyed in 1788, although settlement had begun approximately five years earlier (Hughes 1994). Economic activity centred around tourism and agricultural production due to the presence of fertile, easily worked soils and the proximity to the Niagara Falls. The War of 1812 impacted population growth, but immigration surged following the signing of the Treaty of Ghent in 1814. The study area is located approximately equidistant from the historic settlements of Drummondville and Clifton. The village of Drummondville was



named in honour of Sir Gordon Drummond, the leader of the British forces in the Battle of Lundy's Lane in 1814. It was incorporated as a village in 1831, and renamed to the village of Niagara Falls South in 1882 (Petrie 1967:36,44). The village of Clifton was first laid out in 1832 by Captain Ogden Creighton, and amalgamated with the village of Elgin in 1856 following the construction of Great Western Railroad which connected Hamilton to Niagara Falls, New York in 1855 (Petrie 1967:38). The Town of Elgin was renamed to the Town of Niagara Falls in 1881, and both the town and village were amalgamated into the City of Niagara Falls in 1904. In 1970, the township was merged with the City of Niagara Falls as part of the larger establishment of the Regional Municipality of Niagara.

1.2.4 Land Use History of Study Area

The study area is located in a portion of the southeast quadrant of historic Lot 77 of the Geographic Township of Stanford, which was first granted to John O'Reilly in 1797. William O'Reilly leased several parcels of Lot 77 in the 1830's and Census records from 1851 indicate that at this time John Vanevery owned 50 acres of Lot 77 with 16 acres under crop, 9 acres of orchard/gardens and 25 acres wooded; William Owen owned 4 acres with three acre under crop and one acre of orchard/garden; and John Shugg owned 25 acres with 11 acres under crop, 3 acres of orchard/garden and 11 acres wooded (Government of Canada 1853:35). The O'Reilly's held the lot until it was sold along with Lot 90 to Alex McDonald in 1861 and who then sold back to William O'Reilly the same year. William O'Reilly is listed as the owner of Lot 77 in the 1862 and 1877 maps of the region, and is the presumed owner of the lot in the 1853 map that lists six structures within the lot (Map 3).

The estate of William O'Reilly sold the Lot in 1877 to Adam Shugg who began subdividing parcels in the 1870's. Analysis of historic topographic maps and aerial imagery indicates the study was vacant land until 1934, when the current subdivision began construction (Maps 4 and 5). A residential house on the lot in the 1930's, which was demolished by 2002.

1.2.5 Historic Plagues

As per Section 1, Standard 1.1 of the *Standards and Guidelines for Consultant Archaeologists, Earthworks* consulted local historical plaques in order to inform archaeological potential and assessment strategies. No local plaques were found which related to the history of the current study area.

1.3 Archaeological Context

1.3.1 Current Conditions

The study area consists of an open residential lot with a raised lawn terrace and overgrowth in the rear of the property (Images 1 thru 5).



1.3.2 Natural Environment

The study area is situated within sand plains (Map 6) of the Haldimand Clay Plain physiographic region, a 3500 square kilometre area consisting of a series of parallel clay belts deposited during the time of glacial Lake Warren and includes dunes, cobble, clay, and sand beaches, limestone pavements, and back-shore wetland basins (Chapman and Putnam 1984: 156-157).

The surficial geology consists of glaciolacustrine nearshore deposits of sand and silt (Map 7).

The nearest water source was an unnamed creed located approximately 273 metres north of the study area on 1906 topographic mapping, which drained into the Niagara River approximately 1.5 kilometres to the northeast.

The study area is located within the Niagara District of the Lake Ontario – Lake Erie Ecoregion, which itself is situated within the Mixedwood Plains Ecozone. This region encompasses 2,185,845 hectares, and contains a diverse array of flora and fauna. It characterized by a mix of Carolinian forest remnants of tulip-tree, black gum, sycamore, Kentucky coffee-tree, pawpaw, various oaks and hickories, and common hackberry, in addition to the more widespread sugar maple, American beech, white ash, eastern hemlock, and eastern white pine:

Typical mammals inhabiting this ecoregion include white-tailed deer, northern raccoon, striped skunk, and the Virginia opossum which has increased its distribution and abundance since the latter half of the 20th century. Characteristic birds include green heron, Virginia rail, Cooper's hawk, eastern kingbird, willow flycatcher, brown thrasher, yellow warbler, common yellowthroat, northern cardinal, and savannah sparrow. Wild turkey has been re-introduced into the ecoregion. Herpetofauna, is diverse, including several provincially rare species (e.g., spiny softshell turtle), as well as more frequent species such as eastern red-backed salamander, American toad, eastern gartersnake, and Midland painted turtle. Longnose gar, channel catfish, smallmouth bass, yellow perch, walleye, northern hogsucker, banded killifish, and spottail shiner are among the fish species found in the lakes and rivers in this ecoregion.

Crins et al. 2009:52

1.3.3 Known Archaeological Sites

A search of registered archaeological sites within the MCM Archaeological Sites Database was conducted. No sites were registered within one kilometre of the study area.

1.3.4 Adjacent Archaeological Assessments

A search of the MCM archaeological reports database indicates that no archaeological assessments have been carried out within 50 metres of the study area.



1.4 Summary

As documented in Section 1.0 the study area contains evidence of archaeological potential. The location of the study area within 210 metres of a historic unnamed creek connected to the Niagara River indicates the potential for recovering Pre-Contact Indigenous archaeological material. In summary, a Stage 2 archaeological assessment was determined to be required in order to identify and document any archaeological material that may be present. The inaccessibility of the study area to any form of ploughing equipment precluded the possibility of ploughing for a pedestrian survey, and as a result, a test pitting survey was determined to be required.



2.0 Field Methods

The Stage 2 archaeological assessment of the study area was conducted on September 23, 2024 under PIF #: P1037-0314-2024, issued to Michael Golloher, M.Sc. (P1037). The weather during the survey was sunny and warm. At no time were weather or lighting conditions detrimental to the observation or recovery of archaeological material.

The study area was assessed through a test pit survey.

Test pits were spaced at maximum intervals of five metres apart. Each test pit was excavated by hand to 30 centimetres in diameter and was excavated into the first five centimetres of subsoil. Depth varied between 25 and 30 centimetres. Each test pit was examined for stratigraphy, cultural features, or evidence of fill, and all soil was screened through wire mesh of 6 millimetre width. All test pits were backfilled. The subsurface stratigraphy consisted of a dark brown sandy loam topsoil horizon overlaying a reddish orange subsoil (Image 6). No archaeological material was identified during the course of the survey.

The results of the Stage 2 archaeological survey are presented in Map 8.



3.0 Record of Finds

Table 3 provides an inventory of the documentary record generated in the field.

Table 2: Information Inventory of Documentary Record

Document	Location	Description
Field Notes	Earthworks Office Project File	1 page of notes
Photographs	Earthworks Office Project File	7 digital photographs
Field Map	Earthworks Office Project File	1 page



4.0 Analysis and Conclusions

A Stage 1 & 2 Archaeological Assessment was conducted on a 0.11 hectare area located at 5584 Fraser Street, legally described as part of Lots 29 and 30, Registered Plan 31, City of Niagara Falls, Regional Municipality of Niagara, historically part of Lot 77, Geographic Township of Stamford, Welland County, Ontario. The Stage 2 test pit survey conducted on September 23, 2024.

The Stage 2 archaeological survey did not yield any evidence of archaeological material. As a result, no additional archaeological assessments are required



5.0 Recommendations

Based on the results of the Stage 1 background investigation and the subsequent Stage 2 test pit survey the study area is considered to be free of archaeological material, and no additional a rchaeological assessments are required.

The MCM is requested to review this report and provide a letter indicating their satisfaction that the fieldwork and reporting for this archaeological assessment are consistent with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences, and to enter this report into the Ontario Public Register of Archaeological Reports



6.0 Advice on Compliance with Legislation

This report is submitted to the Ministry 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 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 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 Images



Image 1: Study Area Conditions. Facing Southeast.



Image 2: Study Area Conditions. Facing South.





Image 3: Study Area Conditions. Facing North.



Image 4: Study Area Conditions. Facing East.





Image 5: Study Area Conditions. Facing South.



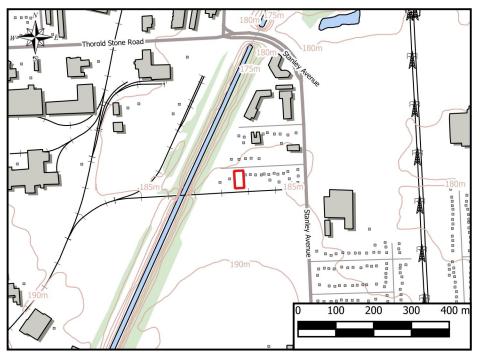
Image 6: Open Test Pit showing Subsurface Stratigraphy.



9.0 Maps







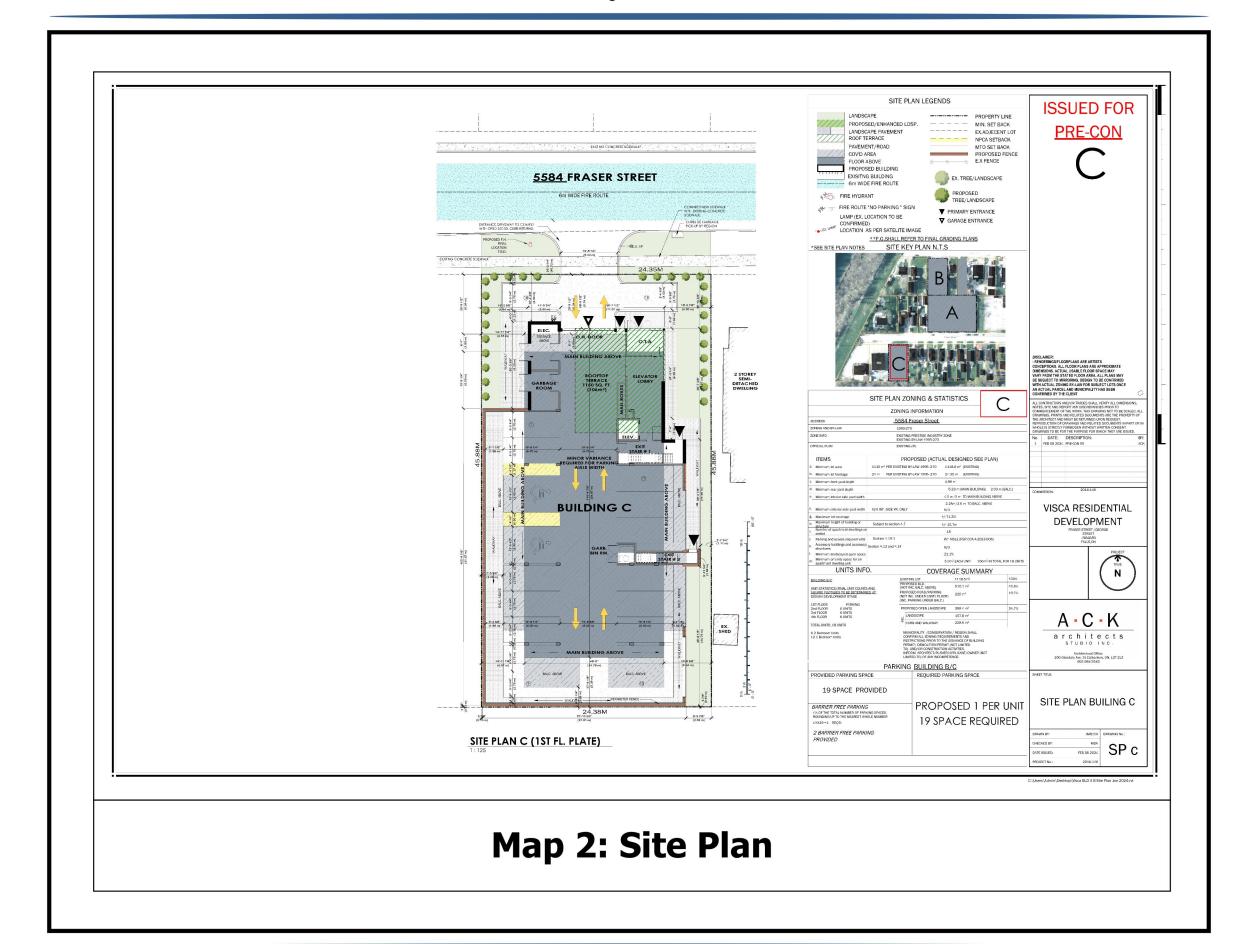


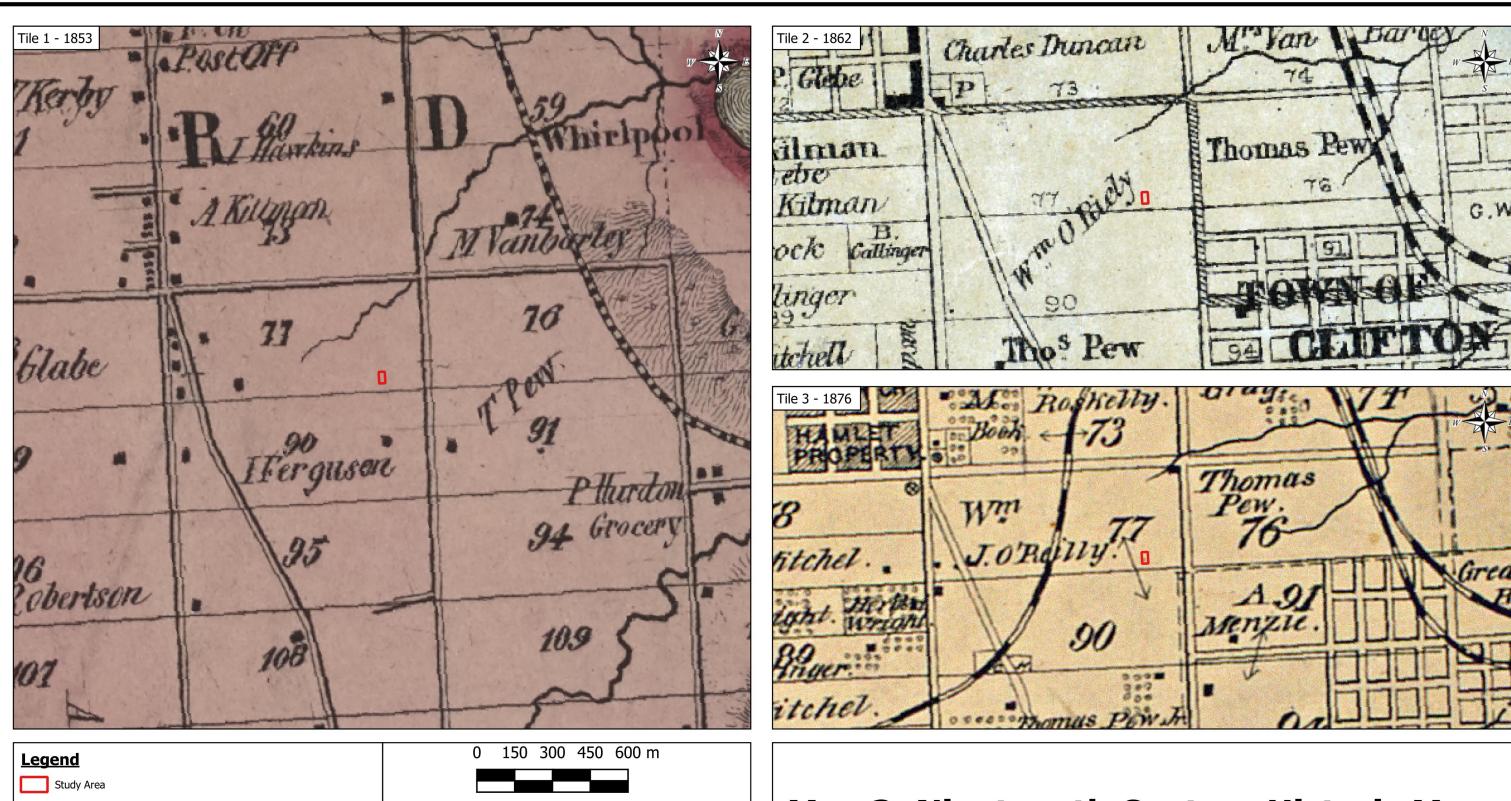
Legend

Study Area

Reference: Canvec Data. Scale 1:50000 Ontario Basic Mapping. Scale 1:10000 Niagara Region 2023 Aerial Imagery

Map 1: Regional Map



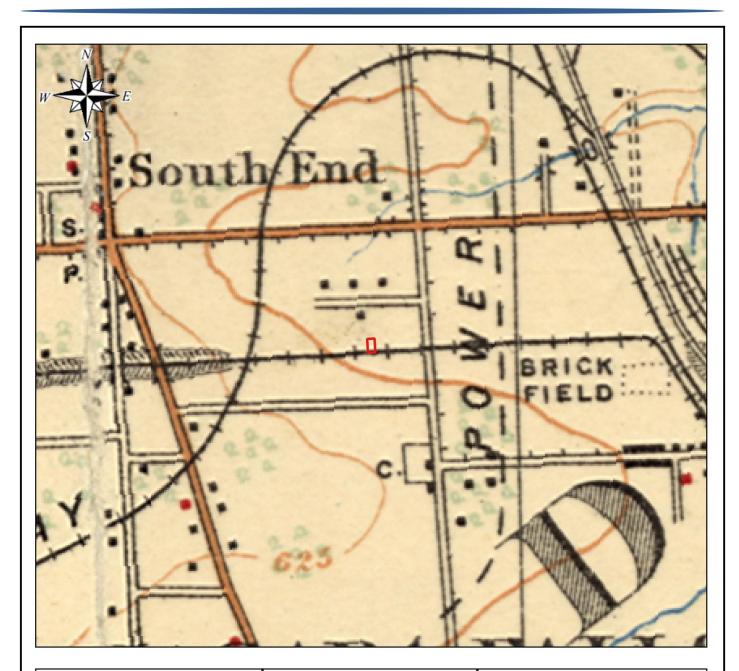


Tile 1 - Map of the Vicinity of Niagara Falls from Actual Surveys by Samuel Geil. 1853.

Tile 3 - Illustrated historical atlas of the counties of Lincoln and Welland, Ont. H.R. Page & Co. 1876.

Tile 2 - Tremaine's Map of the Counties of Lincoln and Welland, Canada West. Compiled and Drawn from actual surveys by the Publishers Geo. R. Tremaine & G.M. Tremaine. Toronto, 1862.

Map 3: Nineteenth Century Historic Maps



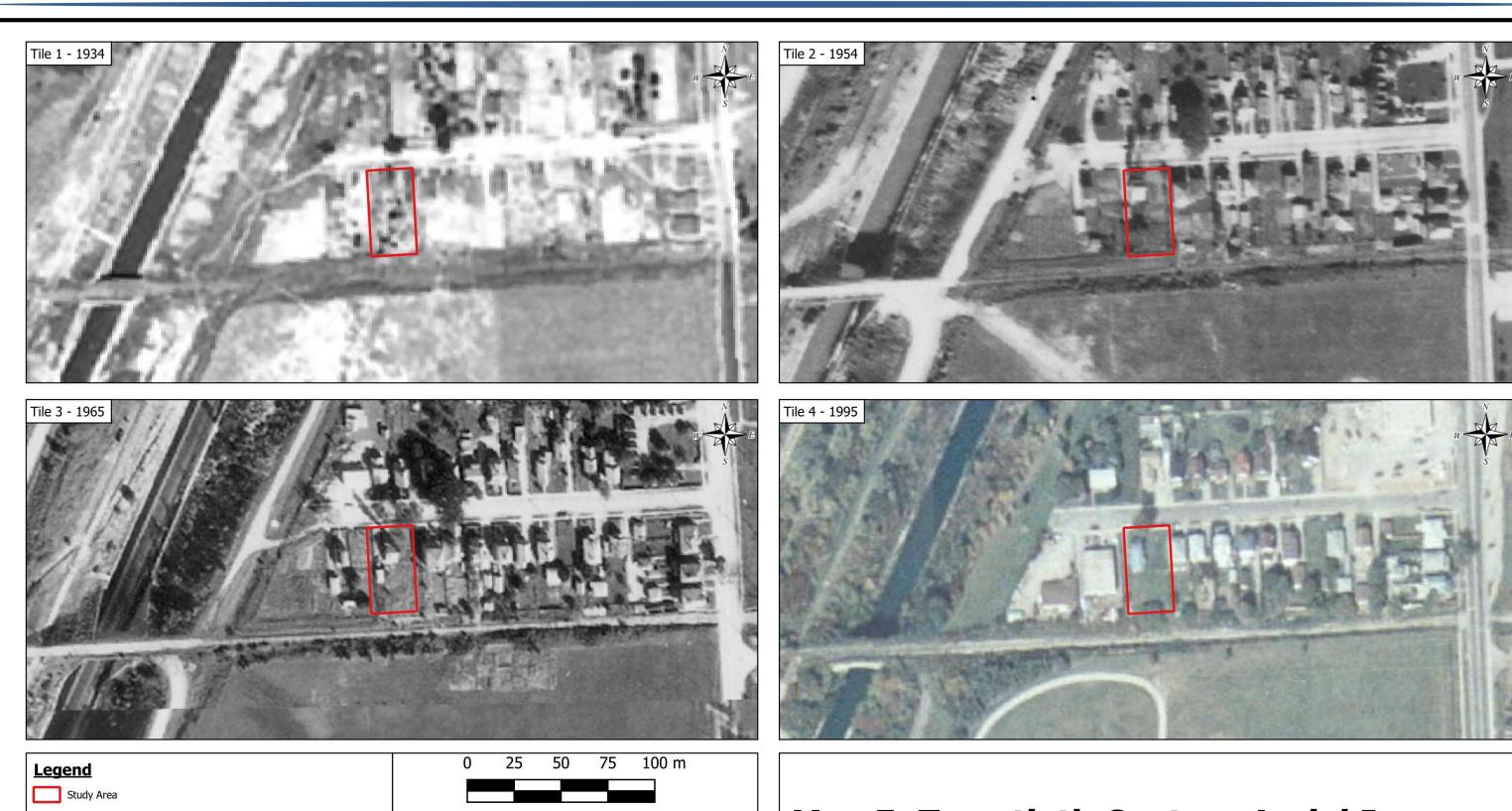
<u>Legend</u>

Study Area

Canada, Department of Militia and Defence [Department of National Defence]. Niagara, Ontario. 1:63,360. Map Sheet 030M03, [ed. 1], 1906. 0 150 300 450 600 m

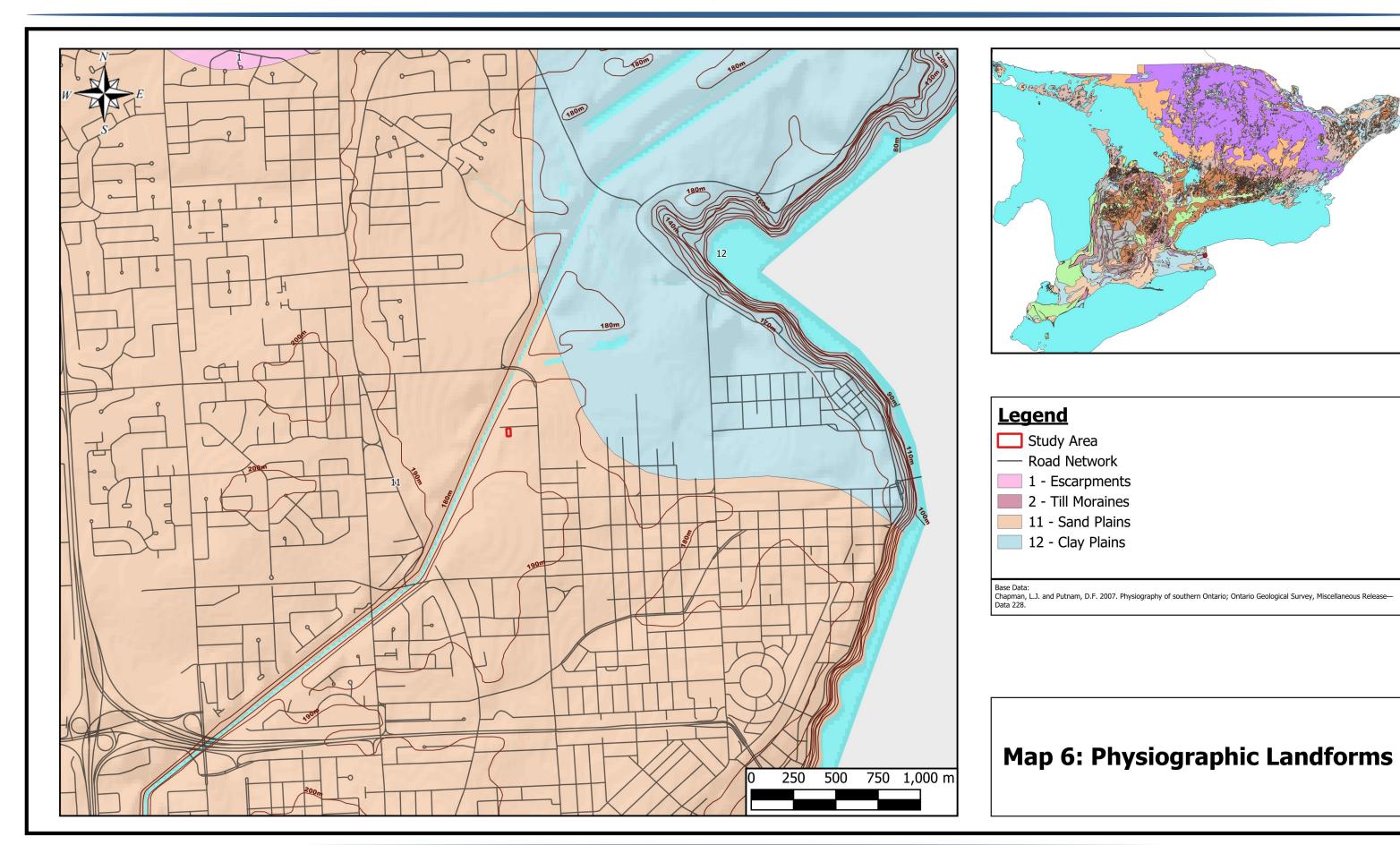
Map 4: 1906 Topographic Map of Niagara Falls

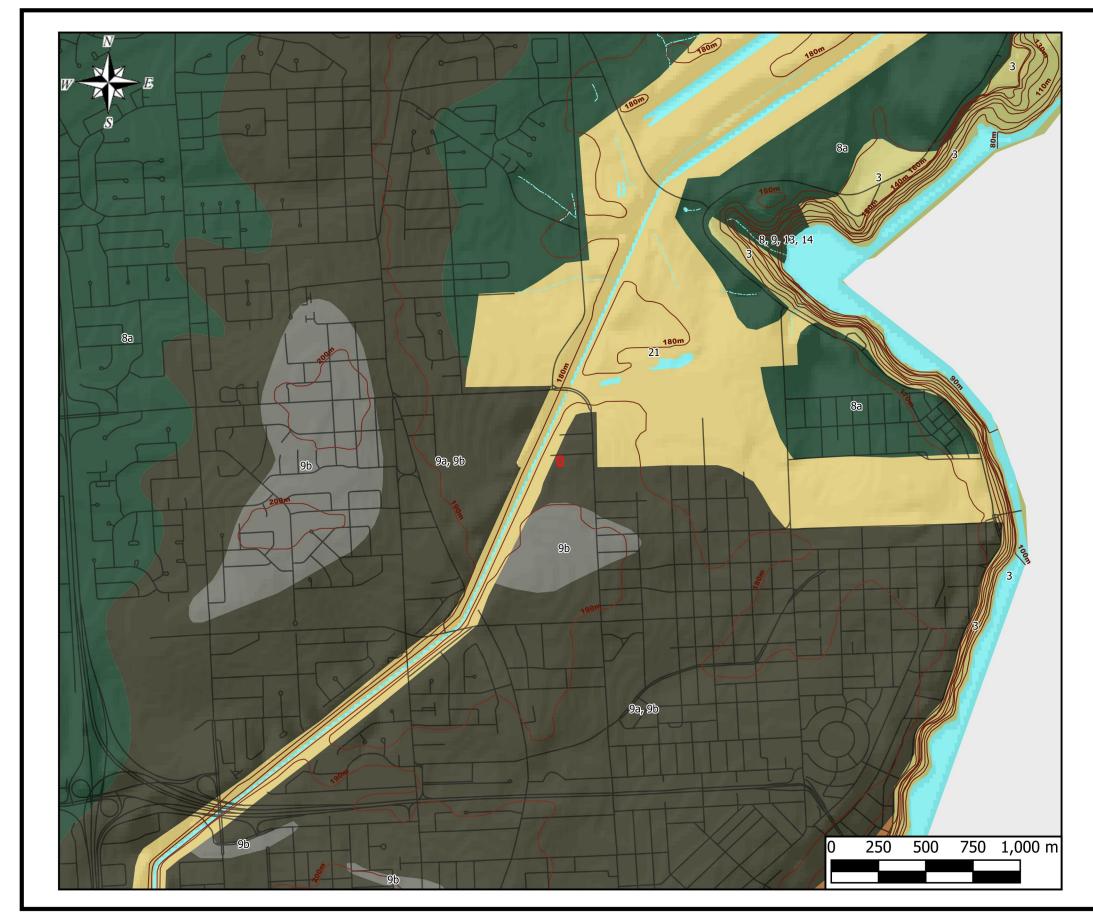


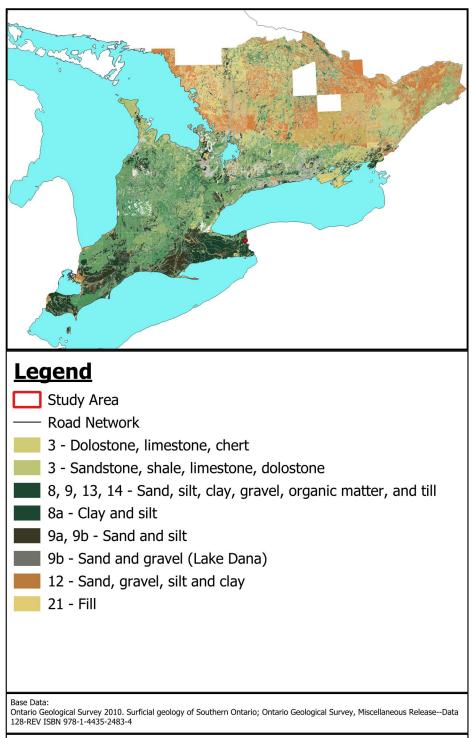


Tile 1 - Niagara Region 1934 Aerial Imagery.
Tile 2 - Niagara Region 1954 Aerial Imagery.
Tile 3 - Niagara Region 1965 Aerial Imagery.
Tile 4 - Niagara Region 1995 Aerial Imagery.

Map 5: Twentieth Century Aerial Imagery







Map 7: Surficial Geology



<u>Legend</u>

Study Area

Area Subject to Stage 2 Test Pit Survey at 5 metre intervals

Photo Location and Direction

Reference: Niagara Region 2023 Aerial Imagery

Map 8: Stage 2 **Assessment Results**