

Appendix B

DRAFT Stage 1 Archaeological Assessment

Stage 1 Archaeological Assessment Beach Boulevard – Baseline Conditions Lots 31-32, Broken Front Concession (Former Saltfleet Township, County of Wentworth) City of Hamilton, Regional Municipality of Hamilton-Wentworth, Ontario

Draft Report

Prepared for:

IBI Group

55 St. Clair Avenue West; 7th Floor Toronto ON M4V 2Y7

Archaeological Licence: TBD

PIF TBD

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Executive Summary

Archaeological Services Inc. was contracted by IBI Group to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Beach Boulevard project in the City of Hamilton. This project involves the development of flood remediation measures, which may include but are not limited to enhanced operations and maintenance, maintenance, land transfers, amendments to legislation/programs, lot level works, and infrastructure upgrades, as well as four new pumping stations.

Once the locations for the preferred alternative(s) have been identified a property inspection will be completed and the Stage 1 will be finalized.

The Stage 1 background study determined that five sites are within one kilometre of the Study Area, one of which is within the Study Area. Background research determined the Study Area requires archaeological assessment.

The Project will require a complete Stage 1 archaeological assessment, including a property inspection, once preferred alternatives have been determined to further assess archaeological potential, as per the Standards and Guidelines for Consultant Archaeologists.



Project Personnel

- **Senior Project Manager:** Lisa Merritt, MSc. (P094) Partner, Director, Environmental Assessment Division
- **Project Coordinator:** Katrina Thach, Hon. BA (R1225), Archaeologist, Project Coordinator, Environmental Assessment Division
- **Project Administrator:** Hannah Brouwers, Hon. BA (R1270), Archaeologist, Project Administrator, Environmental Assessment Division
- **Project Director:** TBD
- **Project Manager:** Eliza Brandy, MA (R1109), Associate Archaeologist, Project Manager, Environmental Assessment Division
- **Field Director:** Caitlin Lacy
- **Report Preparation:** Danielle Bella, Hon. BA, Archaeologist, Technical Writer, Environmental Assessment Division
- **Graphics:** Carolyn Nettleton, BA, Archaeologist, GIS Technician, Operation Division
- **Report Reviewer:** Eliza Brandy; Lisa Merritt



Table of Contents

Executive Summary	1
Project Personnel	2
1.0 Project Context	5
1.1 Development Context	5
1.1.1 Treaties	6
1.2 Historical Context	6
1.2.1 Indigenous Land Use and Settlement	6
1.2.2 Post-Contact Settlement	8
1.2.3 Map Review	13
1.2.4 Aerial and Orthoimagery Review	14
1.3 Archaeological Context	15
1.3.1 Current Land Use and Field Conditions	15
1.3.2 Geography	16
1.3.3 Previously Registered Archaeological Sites	17
1.3.4 Previous Archaeological Assessments	19
2.0 Field Methods	24
3.0 Analysis and Conclusions	25
3.1 Analysis of Archaeological Potential	25
4.0 Existing Conditions: Summary	27
5.0 Legislation Compliance Advice	28
6.0 Bibliography and Sources	30
7.0 Maps	36

List of Tables

Table 1: Registered Sites within One Kilometre of the Study Area	18
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List of Figures

Figure 1: Beach Boulevard Study Area	36
Figure 2: Study Area (Approximate Location) Overlaid on the 1815 Map of Niagara District in Upper Canada	37
Figure 3: Study Area (Approximate Location) Overlaid on the 1859 Map of Wentworth County	38
Figure 4: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton	39
Figure 5: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton	40
Figure 6: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton	41
Figure 7: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton	42
Figure 8: Study Area (Approximate Location) Overlaid on the 1909 Topographic Map Burlington sheet	43
Figure 9: Study Area (Approximate Location) Overlaid on the 1934 Aerial Photography of Hamilton	44
Figure 10: Study Area (Approximate Location) Overlaid on the 1999 Orthoimagery of Hamilton	45
Figure 11: Study Area – Surficial Geology	46
Figure 12: Beach Boulevard – Archaeological Potential Model	47

1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by IBI Group to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Beach Boulevard project in the City of Hamilton (Figure 1). This project involves the development of flood remediation measures, which may include but are not limited to enhanced operations and maintenance, maintenance, land transfers, amendments to legislation/programs, lot level works, and infrastructure upgrades, as well as four new pumping stations.

Once the locations for the preferred alternative(s) have been identified a property inspection will be completed and the Stage 1 will be finalized.

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (Ontario Heritage Act, R.S.O. c. O.18, 1990, as amended in 2019) and the 2011 *Standards and Guidelines for Consultant Archaeologists (S & G)*, administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act, RSO* (Environmental Assessment Act, R.S.O., 1990 as amended 2020) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (Municipal Class Environmental Assessment, 2000, as amended 2015).

The *City of Hamilton Archaeology Management Plan 2016* (Warrick et al., 2016) was also consulted.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted by IBI Group on January 12, 2021.



1.1.1 Treaties

The Study Area is within Treaty 3, the Between the Lakes Purchase. Following the 1764 Niagara Peace Treaty and the follow-up treaties with Pontiac, the English colonial government considered the Mississaugas to be their allies since they had accepted the Covenant Chain. The English administrators followed the terms of the Royal Proclamation and insured that no settlements were made in the hunting grounds that had been reserved for their use (Johnston, 1964; Lytwyn, 2005). In 1784, under the terms of the “Between the Lakes Purchase” signed by Sir Frederick Haldimand and the Mississaugas, the Crown acquired over one million acres of land in-part spanning westward from near modern day Niagara-on-the-Lake along the south shore of Lake Ontario to modern day Burlington (Aboriginal Affairs and Northern Development Canada, 2016).

1.2 Historical Context

The purpose of this section, according to the S & G, Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information pertaining to the Study Area. A summary is first presented of the current understanding of the Indigenous land use of the Study Area. This is then followed by a review of the historical Euro-Canadian settlement history.

1.2.1 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (B.P.) (Ferris, 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 B.P., the environment had progressively warmed (Edwards & Fritz, 1988) and populations now occupied less extensive territories (Ellis & Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling



trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 B.P.; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Brown, 1995, p. 13; Ellis et al., 1990, 2009).

Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 B.P. and exchange and interaction networks broaden at this time (Spence et al., 1990, pp. 136, 138) and by approximately 2,000 B.P., evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al., 1990, pp. 155, 164). By 1,500 B.P. there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolith evidence for maize in central New York State by 2,300 B.P. - it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch & Williamson, 2013, pp. 13–15). As is evident in detailed Anishinaabek ethnographies, winter was a period during which some families would depart from the larger group as it was easier to sustain smaller populations (Rogers, 1962). It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 B.P., lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (C.E.), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson, 1990, p. 317). By 1300-1450 C.E., this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al., 1990, p. 343). By the mid-sixteenth century these small villages had coalesced into larger communities



(Birch et al., 2021). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

By 1600 C.E., the Huron-Wendat communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. Samuel de Champlain in 1615 reported that a group of Iroquoian-speaking people situated between the Haudenosaunee and the Huron-Wendat were at peace and remained “la nation neutre”. Like the Huron-Wendat, Petun, and Haudenosaunee, the Neutral or Attawandaron people were settled village agriculturalists. In the 1640s, the Attawandaron and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) were decimated by epidemics and ultimately dispersed by the Haudenosaunee. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. By the 1690s however, the Anishinaabeg were the only communities with a permanent presence in southern Ontario. From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there was no interruption to Anishinaabeg control and use of southern Ontario.

1.2.2 Post-Contact Settlement

Historically, the Study Area is located in the Former Saltfleet Township, County of Wentworth in Lots 31-32 & Broken Front Concession.

The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to



be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).

Saltfleet Township

The first township survey was undertaken in 1788 by Augustus Jones, and the first legal settlers occupied their land holdings in the same year. The township was named for several saline springs which existed in the bed of the Big Creek and produced salt. Saltfleet was initially settled by disbanded soldiers, mainly Butler's Rangers, and other Loyalists following the end of the American Revolutionary War. Among the first settlers were Levi Lewis, John Pettit, Gershom Carpenter, Augustus Jones, John Biggar, John Wilson, Samuel Dean, who took up land west of the 50 Mile Creek. In 1815 the first assessment rolls counted 102 householders. By the 1840s, the township was noted for its excellent land and well-cultivated farms (Boulton 1805:87; Smith 1846:163; Armstrong 1985:147; Rayburn 1997:305; W. H. Irwin & Co. 1905).

The Beach Bar

The beach bar shaped early Euro-Canadian settlement activity and travel, just as it had done in precontact times. The very narrow band of dry land across the lake confined and concentrated travel routes. John Graves Simcoe's 1790s military road, the 1820s Beach Road, the 1876 rail lines and 1896 electric radial lines, the 1930s Queen Elizabeth Way and hydro transmission lines, circa 1910, all occupied and vied for space. In addition, the construction and opening of the Burlington



Canal in 1832, together with the installation of a bridge and construction of wharves resulted in a booming beach economy and the birth of a small but thriving port community.

The strategic importance of the head of the lake attracted the attention of American forces during the War of 1812. In the summer of 1813 two American schooners landed a contingent of 200 troops. After a brief skirmish with a small British garrison stationed at the Kings Head Inn, they razed the buildings there, as well as destroying a redoubt at the outlet on the north end of the beach strip.

After the war, the importance of the area as a transportation hub continued to grow apace. Ships off-loaded their cargo on the beach and these goods were then taken across the bar on log roads to be loaded on to barges that crossed the bay to Hamilton. A tavern, storehouses and some residences were built along the beach in support of these activities. In order to improve the movement of goods, a canal was constructed through the bar in the early 1820s. Officially opened in 1832, the Burlington Bay Canal, underwent numerous modifications in order to expand its capacity and to repair damage to its associated facilities such as the swing bridge, ferry, lighthouse, and piers as well as the store and staff houses, which were prone to damage, both from ice and wind off the lake and fire due to sparks from the engines of the steamers that passed through. The evolution of the canal continued into the modern era and has entailed multiple reconstructions on massive scales.

The arrival of the railway line spurred on a different and sustained form of development: a late-nineteenth and early-twentieth century recreational community of cottages and ornate summer residences that accommodated some of Hamilton's most prosperous families. The Hamilton Electric Railway line ran from the terminal at King and Catherine Streets in Hamilton, east to the beach strip then over the canal and on through to Burlington and Oakville. Throughout the 1920s to the 1950s, Hamilton Beach slowly declined as a holiday venue. A housing shortage caused by two World Wars assured its survival, if not revival. With an affordable and modest range of housing, the beach strip continued to function as a unique residential enclave. Despite attempts to remove houses and establish a publicly owned system of parks and open space, the Beach community continued to survive and by the 1990s had consolidated itself as a viable and sustainable community.



The Burlington Skyway Bridge

The first bridge designed for automobile traffic at this location was built in 1922. It was replaced by the Burlington Bay Skyway bridge which was constructed in the mid-1950s. The Burlington Bay Skyway Bridge was necessitated by growing traffic along the beach corridor, in part the result of the completion of a divided highway across the Burlington Beach in 1937. This highway was a segment of what would become the Queen Elizabeth Way in 1939. The traffic problem was brought to a head in 1952 when the bascule bridge malfunctioned and was destroyed by a 7000 ton vessel which couldn't avoid it and toppled it into the canal. It was temporarily replaced by a fixed trestle bridge until 1962 when the current lift bridge was completed (ASI, 2005).

It took two and a half years from the demolition of the earlier bridge to come up with any concrete announcement on its replacement. Most of the discussion centred on the cost sharing. The cost of the skyway bridge was estimated at \$13,300,000 in 1954 with the estimated cost of the entire project placed at \$16 million. Ultimately, the province assumed two-thirds of the cost and the federal government assumed one-third of the cost on the understanding that the province would assume full responsibility for traffic over the canal. Eventually, Arthur Sedgwick was announced as the coordinator of the project. He had been a bridge designer for the Ontario Department of Highways for forty-five years and was the chief bridge engineer for the province from 1929 until his retirement in May of 1954 (ASI, 2005).

Construction started in 1954 and tenders were awarded to Pigott Construction Company for the northern and central sections of the substructure and to S. McNally and Sons for the southern section of the substructure. This work commenced in March of 1955. The earth works were completed by September and at that time the province announced the anticipated completion date for the project as December 31, 1957. The steel work approaching spans contract was awarded to Runnymede Construction Company of Toronto. Opening ceremonies for the bridge were held on October 30, 1958 and the Burlington Bay Skyway Bridge was twinned in 1985 (ASI, 2005).



The Burlington Canal

At the northern end of the Study Area is the Burlington Canal. Ships had begun to travel through the Burlington Canal in the early 1820's, however, the narrow and shallow channel restricted the movement of larger vessels. Private citizens appealed to the provincial government in 1824 for a wider and deeper canal. The Burlington Bay Canal was to be one of a series of waterways that would provide uninterrupted navigation from Lake Erie to the Atlantic Ocean and construction began in 1825. The canal was open for larger vessels by 1830, although it was not completed as planned until 1832. During this period, a toll system was employed and in the first year of toll collection almost the full cost of the canal improvements was recovered (ASI, 2005).

The canal, has been dredged and modified over the years, was originally maintained by the Department of Railways and Canals and was called the Burlington Channel, Wentworth County. Control of the canal was reallocated to the Department of Public Works in 1885 and renamed to the Burlington Bay Channel. The canal has been credited with opening Hamilton up to international trade and providing the foundation for the city's industrialization and development. As part of the construction of the canal, a lighthouse and keeper's cottage were also built. The first of this pair of structures were erected in 1837. Both the lighthouse and cottage were destroyed by a fire in 1856. In 1857-1858, the present stone and brick structures were constructed. The lighthouse was maintained without major repairs until 1958 when it was damaged in a storm. It was repaired after the storm and removed from service in 1961 when it was superseded by a modern light erected on the new lift bridge. The lighthouse officially ceased operations in 1968. The associated keeper's cottage was moved a short distance in the late 1890's to its present location and was continuously occupied until 1991 by lightkeepers (ASI, 2005).

The Hamilton Harbour

Hamilton Harbour has always been a place of both recreation and commerce. After the canal was cut through the Beach Strip in the 1820s, Hamilton became an important port bringing passengers and raw materials for industry and exporting agricultural and industrial products (Freeman, 2001:164). Until the 1920s the bay



was used extensively for recreation with swimming spots dotting the full length of the shoreline. The presence of numerous inlets, such as the Sherman Inlet, provided space for recreation as well as habitats for plant and animal life (ASI, 2013).

The face of Hamilton Harbour changed dramatically in the 1920s when swimming areas were closed due to extensive pollution caused by the industry located along and in proximity to the waterfront. During this period docking facilities were built to facilitate commercial and industrial shipping and large-scale landfill projects in Hamilton Harbour were approved (Freeman 2001:165). The biggest of these projects were located in the east end of Hamilton Harbour where steel companies such as Dofasco and Stelco filled portions of the waterfront with slag, a waste product of the steel making process, to create new land that was used to expand their plants and docking facilities (Freeman 2001:165). The cumulative effect of this filling was that the original shoreline of Hamilton Harbour was completely altered during the beginning of the twentieth century (ASI, 2013).

1.2.3 Map Review

The 1815 *Map of Niagara District in Upper Canada* (Nesfield, 1815), 1859 *Map of Wentworth County* (Surtees, 1859), 1900 *Fire Insurance Plans of Hamilton* (Goad, 1900), and the 1909 *Topographic Map Burlington Sheet* (Department of Militia and Defence, 1909) were examined to determine the presence of historic features within the Study Area during the nineteenth century (Figures 2-5).

The 1815 map (Figure 2) shows the strip of land with a main historical road connecting early settler homes, such as Mrs. Brank in the township of Nelson labelled to the north and the Jones family in the township of Saltfleet to the south. Three channels are shown along the strip of land allowing passage between Burlington Bay and Lake Ontario. A small island is shown west of the strip of land.

The 1859 map (Figure 3) labels the road “Beach Road”. Baldry’s Hotel is shown in the north portion of the Study Area adjacent the canal. Snooks Hotel is in the middle of the Study Area fronting Beach Road. A filtering basin is depicted within the southern portion. A strip of land is shown branching from the main beach in



the centre of the Study Area. A wharf is illustrated connecting the two pieces of land.

The 1900 Fire Insurance Plans show a stone lighthouse and wooden yacht club building adjacent the canal and pier in the north end of the Study Area (Figure 4a). Two hotels, the Ocean House Hotel and Arlington Hotel are shown adjacent Beach Road (Figures 4a, 4b). First Avenue, Second Avenue, Third Avenue, Fourth Avenue, Fifth Avenue, and Sixth Avenue are labeled as west-east oriented roads off Beach Road (Figures 4a, 4b, 4c, 4d). Wooden buildings with sheds are shown throughout the plans, with only two brick buildings. There are large areas of land available for future buildings. The Grand Trunk Railway Hamilton and Allandale Branch is shown running through the eastern portion of the Study Area.

The 1909 map (Figure 5) shows Hamilton Beach, with the Toronto and Niagara Power line, the Grand Trunk Hamilton Radial Electric Railway, and the metalled Beach Road. There has been an increase in structures, again shown fronting Beach Road. Marsh areas are shown along the western limits of the sand bar at the south and middle portions of the Study Area.

1.2.4 Aerial and Orthoimagery Review

Examination of the 1934 aerial photography of Hamilton (Ministry of Natural Resources, 1934) and 1999 orthoimagery of Hamilton (McMaster University, 1999) shows that the shape of Hamilton Beach had been altered between the two dates (Figures 6-7). The 1934 aerial photograph (Figure 6) shows additional streets off Beach Road, with houses built along each. The north and southwest portions of the Study Area are shown to be sparser. The 1934 aerial photograph also shows the shape of the strip of land branching from the main beach in the centre, visible on the 1859 map (Figure 3). The 1999 orthoimagery (Figure 7) shows that land has expanded from the western main beach westwards. Earthmoving activities and industrial use can be seen this new portion of land. The Queen Elizabeth Way (QEW) and Eastport Drive follow the length of Hamilton Beach splitting the new western portion of land and the residential neighbourhoods to the east. The residential areas show increased growth by 1999.



A review of available Google satellite imagery shows:

- Earth moving activities within the industrial areas along the western portion of the Study Area in 2004-2005, 2009, and 2012;
- Construction of the 337 Beach Boulevard condos in 2005 and 2009;
- Earth moving activities within 328-358 Beach Boulevard in 2018;
- Construction of 2 and 4 Lagoon Avenue in 2016;
- Construction of 3, 5 and 9 Rembe Avenue in 2015;
- Earth moving activities on the properties of 962, 966 and 970 Beach Boulevard in 2016-2017, and construction of 962 Beach Boulevard in 2016

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MHSTCI through “Ontario’s Past Portal”; published and unpublished documentary sources; and the files of ASI.

1.3.1 Current Land Use and Field Conditions

The Study Area is located along Hamilton Beach. It is surrounded by the Burlington Bay Canal, Hamilton Harbour (also known as Burlington Bay), and Lake Ontario, connecting to mainland Hamilton at the south end. The paved Waterfront Trail runs parallel the beach from north to south along the eastern limits of the Study Area with a grassed strip between. A hydro corridor runs along with towers in the grassed and beached areas. Residential homes line both sides of Beach Boulevard, with few commercial buildings. Many parks are within the Study Area. The Queen Elizabeth Way (QEW) runs north to south through the Study Area, separating these areas from the industrial businesses along the western limits.



1.3.2 Geography

In addition to the known archaeological sites, the state of the natural environment is a helpful indicator of archaeological potential. Accordingly, a description of the physiography and soils are briefly discussed for the Study Area.

The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 BP (Karrow & Warner, 1990, p. Figure 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Other geographic characteristics that can indicate archaeological potential include elevated topography (eskers, drumlins, large knolls, and plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

The Study Area is located within the beaches of the Iroquois Plain physiographic region of southern Ontario (Chapman & Putnam, 1984).



The Iroquois Plain physiographic region of southern Ontario is a lowland region bordering Lake Ontario. This region is characteristically flat and formed by lacustrine deposits laid down by the inundation of Lake Iroquois, a body of water that existed during the late Pleistocene. This region extends from the Trent River, around the western part of Lake Ontario, to the Niagara River, spanning a distance of 300 kilometres (Chapman and Putnam 1984:190). The old shorelines of Lake Iroquois include cliffs, bars, beaches and boulder pavements. The old sandbars in this region are good aquifers that supply water to farms and villages. The gravel bars are quarried for road and building material, while the clays of the old lake bed have been used for the manufacture of bricks (Chapman and Putnam 1984:196).

Figure 8 depicts surficial geology for the Study Area. The surficial geology mapping demonstrates that the Study Area is underlain by coarse-texture lacustrine deposits of sand, gravel, minor silt and clay, Littoral deposits, and modern alluvial deposits of clay, silt, sand, gravel, and organic remains (Ontario Geological Survey, 2010). Soil information is not available for the Beach Boulevard Study Area due to the early urban development of the City of Hamilton and industrialization of the Hamilton Harbour Shoreline, with the exception of the south end which is indicated to be very poorly drained muck (Presant et al., 1965).

Hamilton Harbour, also known as Burlington Bay, is located at the western tip of Lake Ontario and is separated from the Lake by a sandbar. The harbour is a 2,150 hectares embayment of Lake Ontario draining a watershed of 49,400 hectares. It is surrounded on three sides by the Niagara Escarpment. The harbour's watershed is drained by three major tributaries, the Grindstone, Spencer, and Red Hill creeks. The Red Hill Creek being closest to the Study Area. In the nineteenth century, the watershed was heavily forested, and Hamilton Harbour had vast marshes, and abundant fish and wildlife.

1.3.3 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MHSTCI. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude.



A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres 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 under review is located in Borden block *AhGw*.

According to the Ontario Archaeological Sites Database, five previously registered archaeological sites are located within one kilometre of the Study Area (Ministry of Heritage, Sport, Tourism and Culture Industries, 2021). The Dynes Site (*AhGw-264*) is located within the Study Area (Table 1: site in bold) and does not retain Cultural Heritage Value or Interest (see Section 1.3.4 for details). A summary of the sites is provided below.

Table 1: Registered Sites within One Kilometre of the Study Area

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AhGw-76	Watson	Pre-Contact Indigenous; Euro- Canadian	Unknown; Inn	Ferris 1987
AhGw-77	Mint Julip	Late Woodland	Campsite	Warrick 1989
AhGw-126	Hamilton Waterworks	Euro- Canadian	Building, museum	Golder 1997; ASI 1997; AMICK 2010
AhGw-264	Dynes	Euro- Canadian	Tavern/rest aurant, inn	Cornies 2008
AhGw-278	Skyway Site	Pre-Contact Indigenous	Campsite	Archeoworks 2009; AMEC Environment



Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
				& Infrastructure 2011

1.3.4 Previous Archaeological Assessments

According to the background research, 15 previous reports detail fieldwork within 50 metres of the Study Area:

(AMICK Consultants Ltd., 2007) Report on the 2007 Stage 1-2 Archaeological Assessment of 887 Beach Boulevard, Lot 30 Registered Plan 452(Former Township of Saltfleet, Former County of Wentworth) City of Hamilton [P058-208-2007]

AMICK Consultants Ltd. conducted the Stage 1-2 Archaeological Assessments of 887 Beach Boulevard within the current Study Area. Test pit survey was conducted at five metre intervals. No archaeological materials were encountered, and no further archaeological assessment was recommended.

(AMICK Consultants Ltd., 2008a) Report on the 2008 Stage 1-3 Archaeological Assessments of 315, 337 and 351 Beach Boulevard, Lot 6 (Former Township of Saltfleet, Former County of Wentworth) City of Hamilton, Regional Municipality of Hamilton-Wentworth [P038-286-2008]

AMICK Consultants Ltd. conducted the Stage 1-3 Archaeological Assessments of 315, 337 and 351 Beach Boulevard within the current Study Area. Stage 2 excavations consisted of test pit survey, conducted at five metre intervals. A total of 18 positive test pits were documented, and the site was designated as the Dynes Site (AhGw-264). During the stage 3 excavation 16 one metre test units were excavated and topsoil stripping occurred in the tavern area in which 12 features were documented. Stage 4 excavation was recommended for the



nineteenth century cultural deposits related to the early period of the Dynes Tavern.

(AMICK Consultants Ltd., 2008b) Report on the 2008 Stage 4 Archaeological Mitigative Excavations of the Dynes Tavern Site (AhGw-264) within 337 Beach Boulevard, Lot 6 (Former Township of Saltfleet, Former County of Wentworth) City of Hamilton, Regional Municipality of Hamilton-Wentworth [P058-370-2008]

AMICK Consultants Ltd. conducted the Stage 4 Excavations of the Dynes Site (AhGw-264) within 337 Beach Boulevard. The twelve features from the Stage 3 excavations were drawn and photographed in plan view before sectioning and their profiles being drawn and photographed. It was recommended that no further archaeological investigations be necessary.

(Archaeological Research Associates Ltd., 2008) Stage 1-2 Archaeological Assessment 1081-1105 Beach Boulevard Part of Registered Plan 321, and Part of Burlington Beach, East Side of Beach Boulevard City of Hamilton, Ontario [P007-130-2007]

Archaeological Research Associates Ltd. conducted a Stage 1-2 Archaeological Assessment of 1081-1105 Beach Boulevard, within the current Study Area. Test pit survey was conducted to within one metre of all built structures or until test pits exhibited evidence of ground disturbance. All test pits were determined to be disturbed, and the survey was undertaken at intervals subject to professional judgement. It was recommended that no further archaeological assessment would be required, however it was also recommended that a licensed archaeologist be on site to monitor the development excavations.



**(Archaeological Research Associates Ltd., 2020) Stage 1 and 2
Archaeological Assessments OCSC Parking Lot Expansion, Building A
467 Beach Boulevard Project No. 1078576-272445 City of Hamilton
Geographic Township of Saltfleet Former Wentworth County, Ontario
[P007-1142-2020, P007-1143-2020]**

Archaeological Research Associates Ltd. conducted a Stage 1-2 Archaeological Assessment of 467 Beach Boulevard, within the current Study Area. Test pit survey was undertaken at intervals subject to professional judgement, due to encountering disturbance. Test pit survey was conducted to within one metre of all built structures. The Stage 2 assessment did not result in the identification of archaeological materials, and no further archaeological assessment was recommended.

**(ASI, 2005) Phase 2 Cultural Heritage Resource Assessment
Fisherman's Pier Development Plan City of Hamilton and City of
Burlington (Regional Municipality of Halton) Ontario [P117-107]**

ASI conducted a Stage 1 Archaeological Assessment of the Fisherman's Pier, within the current Study Area. Background research determined the project area would require Stage 2 Archaeological Assessment.

**(ASI, 2007) Stage 1 Archaeological Assessment Windermere Basin
Class Environmental Assessment, City of Hamilton, Ontario [P057-418-
2007]**

ASI conducted a Stage 1 Archaeological Assessment of Windermere Basin, within the current Study Area. Background research determined the project area was once almost entirely under the waters of Hamilton Harbour. A property inspection determined the land portion of the project area to consist of landfill. It was recommended the project area be free of further archaeological concern.



(ASI, 2019) Stage 1 Archaeological Assessment Mobility Hub Planning Consulting Services: Downtown Part of Brant’s Block and Lot 18, Broken Front Concession (Former Township of Nelson, County of Halton) City of Burlington Regional Municipality of Halton, Ontario [P094-0270-2018]

ASI conducted a Stage 1 Archaeological Assessment of the Downtown Mobility Hub Planning Consulting Services, within 50 metres of the current Study Area. Background research determined the project area to possess archaeological potential and for Stage 2 Archaeological Assessment to be required.

(Earthworks Archaeological Services Inc., 2019) Stage 1-2 Archaeological Assessment 358 Beach Boulevard Part of Lot 12, Registered Plan 364 Geographic Township of Saltfleet City of Hamilton [P321-0038-2019]

Earthworks Archaeological Services Inc conducted a Stage 1-2 Archaeological Assessment of 358 Beach Boulevard, within the current Study Area. Test pit survey was conducted at five metre intervals, and no archaeological resources were encountered. No further archaeological assessment was recommended.

(Earthworks Archaeological Services Inc., 2020) Stage 1 & 2 Archaeological Assessment 352 Beach Boulevard Part 3 of Lot 12, Registered Plan 364 Geographic Township of Saltfleet City of Hamilton [P321-0219-2020]

Earthworks Archaeological Services Inc. conducted a Stage 1 and 2 Archaeological Assessment of 352 Beach Boulevard, within the current Study Area. Test pit survey was conducted at five metre intervals. No archaeological material or features were encountered, and no further work was recommended.



(The Archaeologists Inc., 2015) Stage 1 Background Study 271 Beach Boulevard, Part of Lots 7 and 8, Registered Plan 385, Part of Lot 8, Registered Plan 364 City of Hamilton, Ontario [P052-0603-2015]

The Archaeologists Inc. conducted a Stage 1 Archaeological Assessment of 271 Beach Boulevard, within the current Study Area. Background research and property inspection determined that Stage 2 Archaeological Assessment would be required.

(The Archaeologists Inc., 2016) Stage 2 Archaeological Assessment 271 Beach Boulevard, Part of Lots 7 and 8, Registered Plan 385, Part of Lot 8, Registered Plan 364 City of Hamilton, Ontario [P052-0642-2015]

The Archaeologists Inc. conducted a Stage 2 Archaeological Assessment of 271 Beach Boulevard, within the current Study Area. Test pit survey was conducted at five metre intervals, other than areas of disturbance which were judgementally test pitted. No archaeological resources were identified. No further archaeological assessment was recommended.

(Thomas G. Arnold & Associates, 2012) Stage 2 Monitoring Archaeological Assessment of Phase 1, 1081-1105 Beach Boulevard, City of Hamilton, ON [P006-018-2012]

Thomas G. Arnold & Associates conducted the Stage 2 Construction Monitoring of 1081-1105 Beach Boulevard, within the current Study Area. This occurred after the excavation of the footings, and assessment involved visual inspection of the spoil piles of earth and the profiles that could be observed. No archaeological remains were recovered during this inspection, and the Phase 1 area was recommended to have no further archaeological concerns.



(Timmins Martelle Heritage Consultants Inc., 2010) Stage 1 & 2 Archaeological Assessment Beach Boulevard Park Developments Three Sites 0, 80 and 189 Beach Boulevard City of Hamilton [P083- 044-2010]

Timmins Martelle Heritage Consultants Inc. conducted a Stage 1-2 Archaeological Assessment for three park development areas, within the current Study Area, at 0, 80 and 189 Beach Boulevard. Test pit survey was conducted at five metre intervals. No archaeological materials were encountered. Due to the potential for deeply buried archaeological deposits, archaeological monitoring of construction activities was recommended.

(Jacques Whitford, 2007) Stage 1 Archaeological Assessment, Windows on the Lake, Proposed Hamilton Beach Pumping Station, City of Hamilton, Ontario [P002-115-2007]

Jacques Whitford conducted a Stage 1 Archaeological Assessment for the Proposed Hamilton Beach Pumping Station south of Grafton Avenue, within the current Study Area. Background research determined that Stage 2 Archaeological Assessment would be required.

2.0 Field Methods

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic



mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.

The Stage 1 archaeological assessment property inspection will be conducted at the locations of the preferred alternative(s).

3.0 Analysis and Conclusions

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the Study Area. Results of the analysis of the Study Area property inspection and background research are presented in Section 3.1.

3.1 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. The Study Area meets the following criteria indicative of archaeological potential:

- Previously identified archaeological sites (See Table 1);
- Water sources: primary, secondary, or past water source (Lake Ontario, Hamilton Harbour);
- Early historic transportation routes (Beach Boulevard); and
- Proximity to early settlements (Hamilton Beach)

According to the S & G, Section 1.4 Standard 1e, no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as disturbed. The Municipal Heritage Register was consulted, and the Study Area is within the Hamilton Beach Designated Heritage District. Sixty-three properties within the Study Area are Listed or Designated under the Ontario Heritage Act (see Figure 9: highlighted in yellow):

- 2 Fourth Avenue
- 867 Beach Boulevard
- 869 Beach Boulevard
- 873 Beach Boulevard



- 877 Beach Boulevard
- 883 Beach Boulevard
- 887 Beach Boulevard
- 893 Beach Boulevard
- 903 Beach Boulevard
- 913 Beach Boulevard
- 919 Beach Boulevard
- 925 Beach Boulevard
- 929 Beach Boulevard
- 935 Beach Boulevard
- 939 Beach Boulevard
- 945 Beach Boulevard
- 951 Beach Boulevard
- 967 Beach Boulevard
- 975 Beach Boulevard
- 983 Beach Boulevard
- 987 Beach Boulevard
- 991 Beach Boulevard
- 997 Beach Boulevard
- 1003 Beach Boulevard
- 1007 Beach Boulevard
- 1011 Beach Boulevard
- 1019 Beach Boulevard
- 870 Beach Boulevard
- 880 Beach Boulevard
- 890 Beach Boulevard
- 900 Beach Boulevard
- 908 Beach Boulevard
- 912 Beach Boulevard
- 916 Beach Boulevard
- 920 Beach Boulevard
- 924 Beach Boulevard
- 930 Beach Boulevard
- 936 Beach Boulevard
- 940 Beach Boulevard
- 954 Beach Boulevard
- 958 Beach Boulevard
- 962 Beach Boulevard
- 966 Beach Boulevard
- 970 Beach Boulevard
- 974 Beach Boulevard
- 978 Beach Boulevard
- 984 Beach Boulevard
- 990 Beach Boulevard
- 996 Beach Boulevard
- 1000 Beach Boulevard
- 1008 Beach Boulevard
- 1014 Beach Boulevard
- 1020 Beach Boulevard
- 1026 Beach Boulevard
- 1032 Beach Boulevard
- 1038 Beach Boulevard
- 1044 Beach Boulevard
- 1052 Beach Boulevard
- 1056 Beach Boulevard
- 1060 Beach Boulevard
- 1064 Beach Boulevard
- 1155 Beach Boulevard,
Burlington Canal Lighthouse
and Keepers Dwelling
- 1157 Beach Boulevard,
Burlington Canal Lighthouse
and Keepers



The *City of Hamilton Archaeology Management Plan 2016* (Warrick et al., 2016) indicates there is archaeological potential within the majority of the Study Area.

An archaeological potential model takes into consideration the following factors for the Study Area: proximity to water, the presence of well-drained soils, proximity to previously registered archaeological sites, up to 100 metres from any historic roadway and railway, heritage buildings, and soil integrity due to twentieth- and twenty-first-century land development as seen in historical orthoimagery. In consideration of these factors, parts of the Study Area are considered to exhibit archaeological potential (Figure 9: Areas highlighted in pink).

Parts of the Study Area have been cleared of further archaeological concern from previous archaeological assessments (Figure 9: areas highlighted in orange).

The remainder of the Study Area has low potential on account of deep and extensive land disturbance from twentieth and twenty-first century residential development and industrial use.

These criteria are indicative of potential for the identification of archaeological resources, depending on soil conditions and the degree to which soils have been subject to deep disturbance. This will be confirmed during the property inspection of the preferred alternatives.

4.0 Existing Conditions: Summary

The Project will require a complete Stage 1 archaeological assessment, including a property inspection, once preferred alternatives have been determined to further assess archaeological potential and existing conditions, as per the Standards and Guidelines for Consultant Archaeologists and to make recommendations for areas that may require Stage 2 survey.



5.0 Legislation Compliance Advice

ASI advises compliance with the following 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, RSO 2005, 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 field work and report recommendations ensure the conservation, preservation and protection 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 regards 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 field work 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 sec. 48 (1) of the Ontario Heritage Act.
- The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the



Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.

- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the Ontario Heritage Act and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.

DRAFT



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7.0 Maps

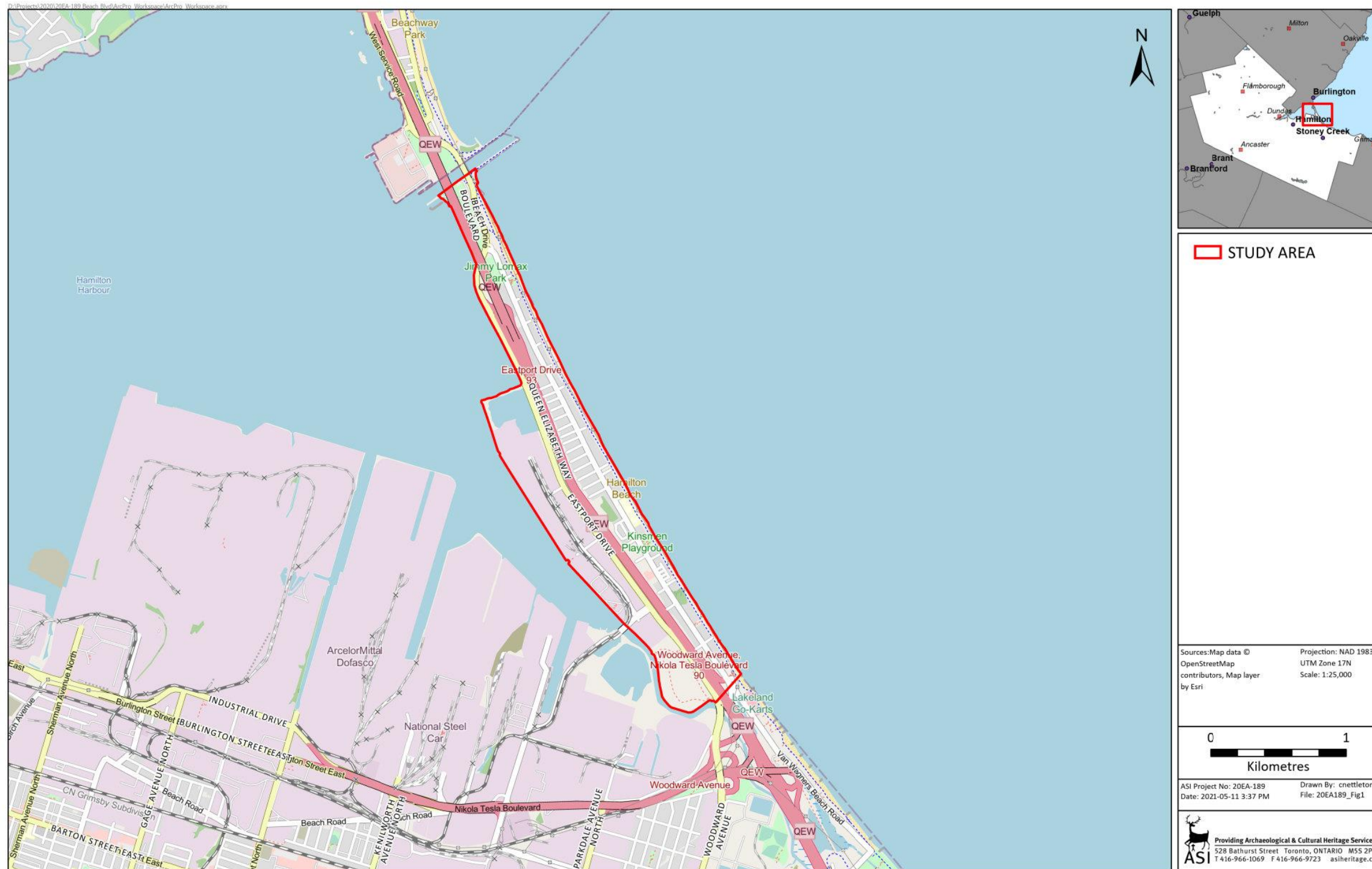


Figure 1: Beach Boulevard Study Area



Figure 2: Study Area (Approximate Location) Overlaid on the 1815 Map of Niagara District in Upper Canada

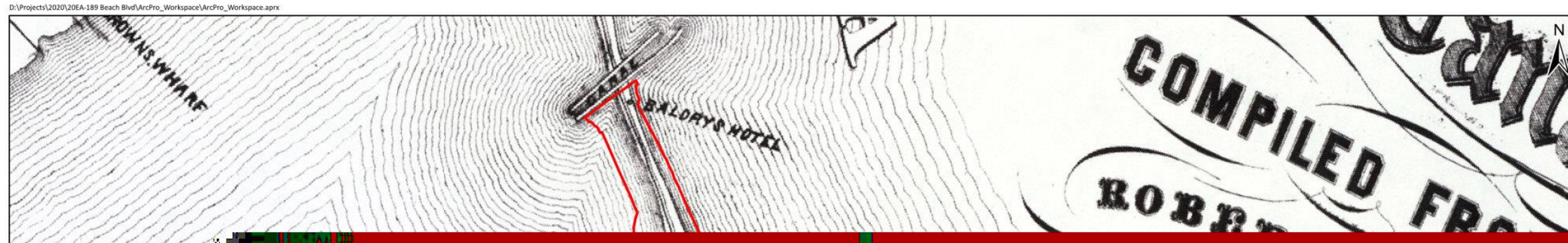


Figure 3: Study Area (Approximate Location) Overlaid on the 1859 Map of Wentworth County

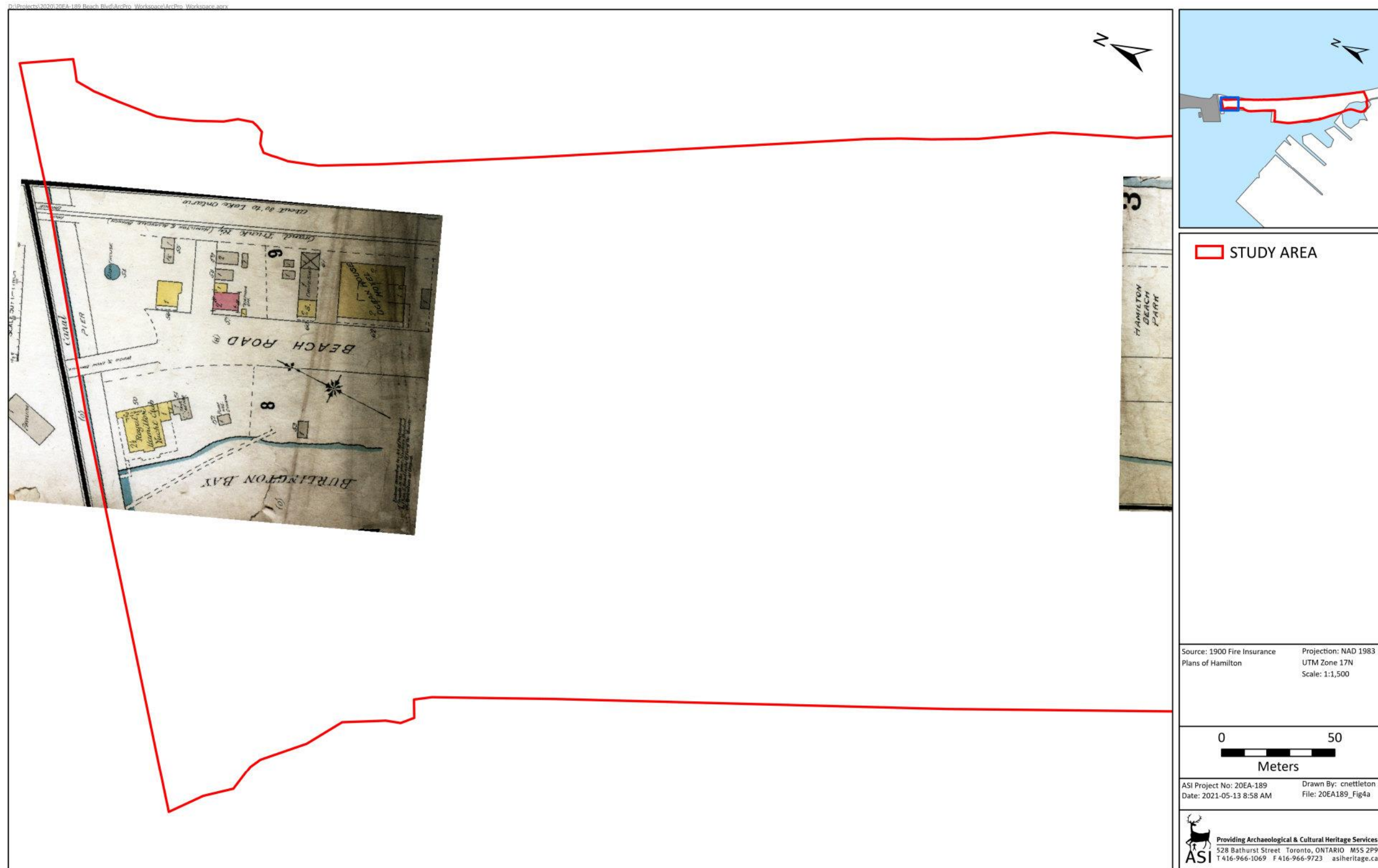


Figure 4: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton

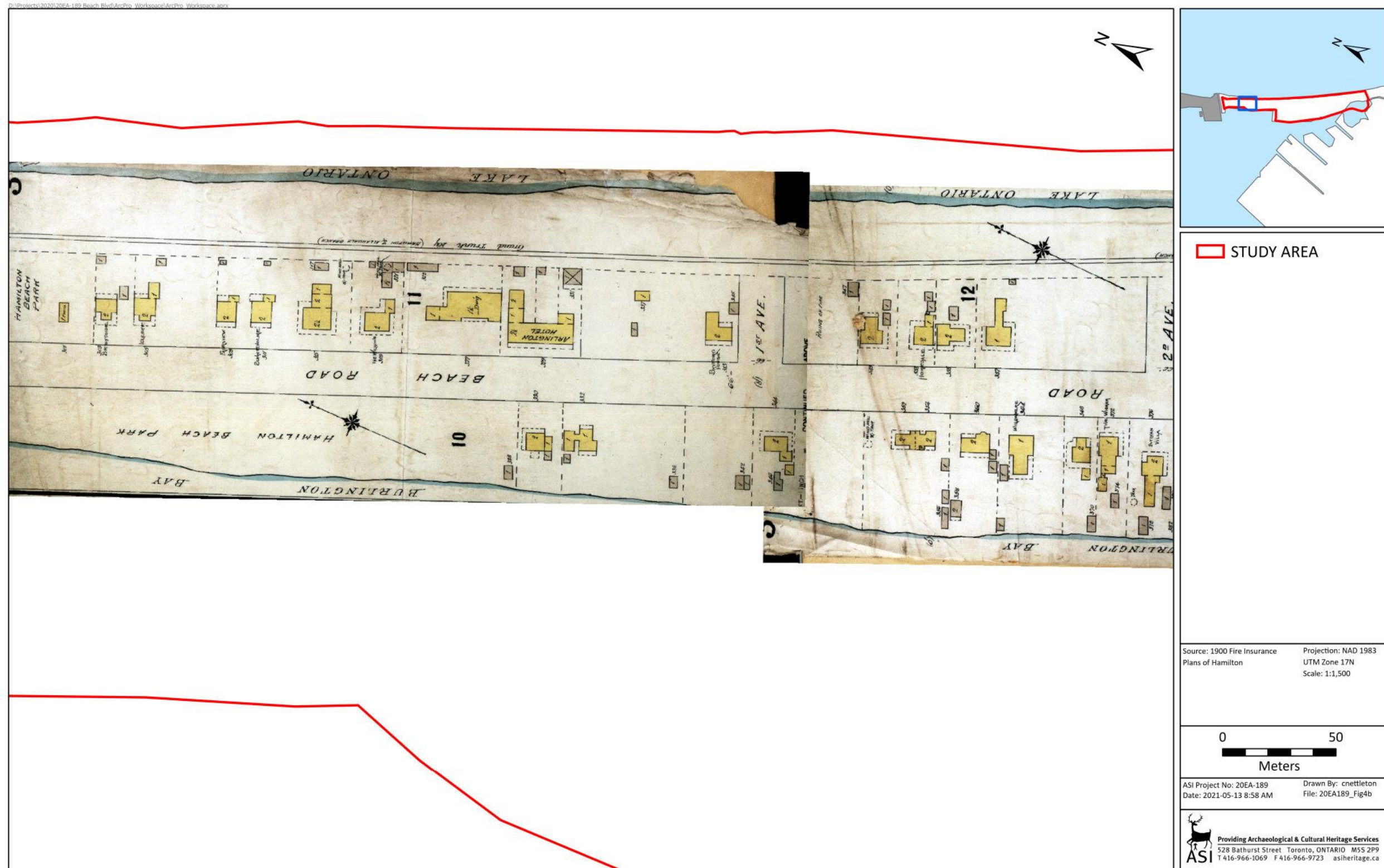


Figure 5: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton

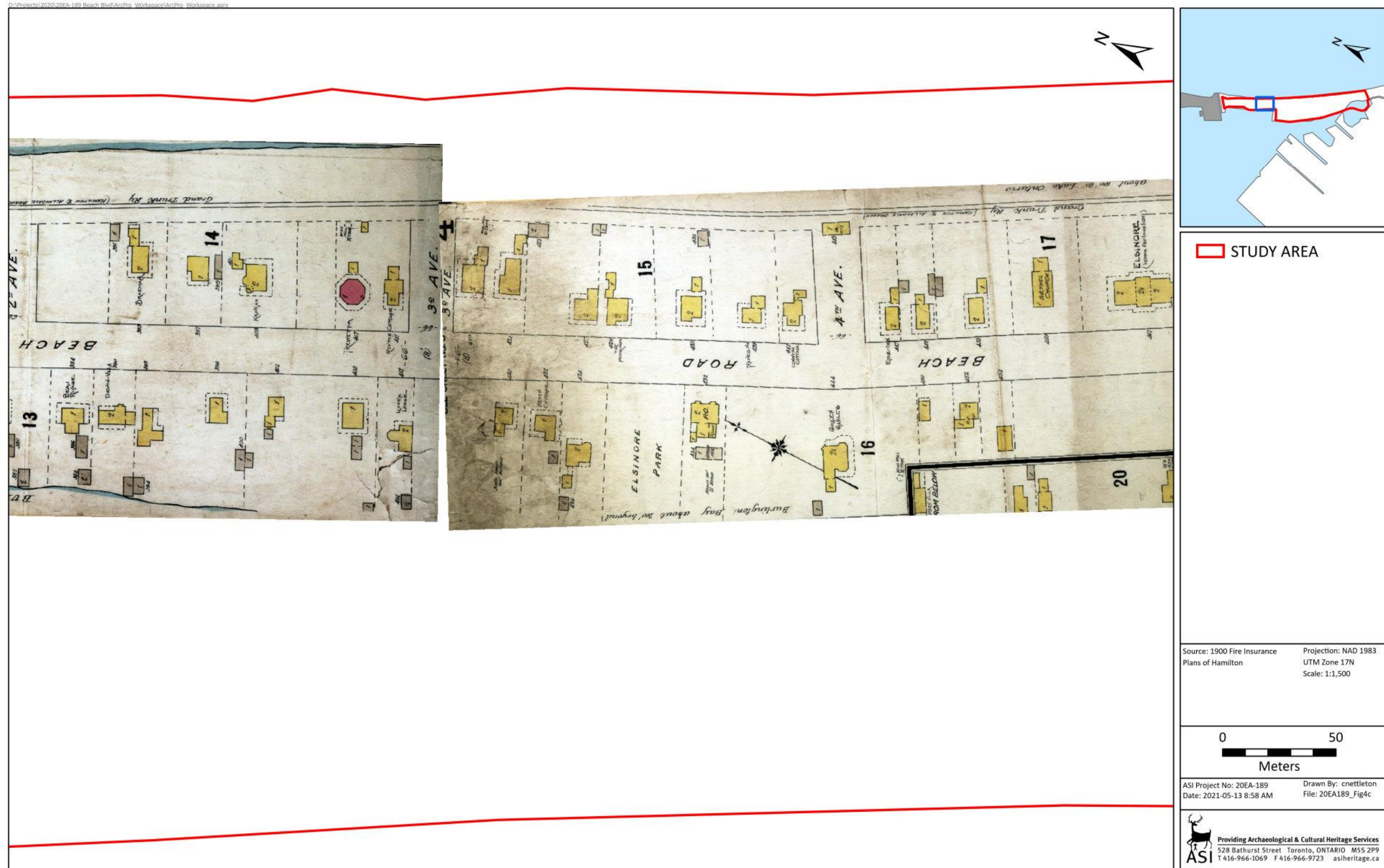


Figure 6: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton



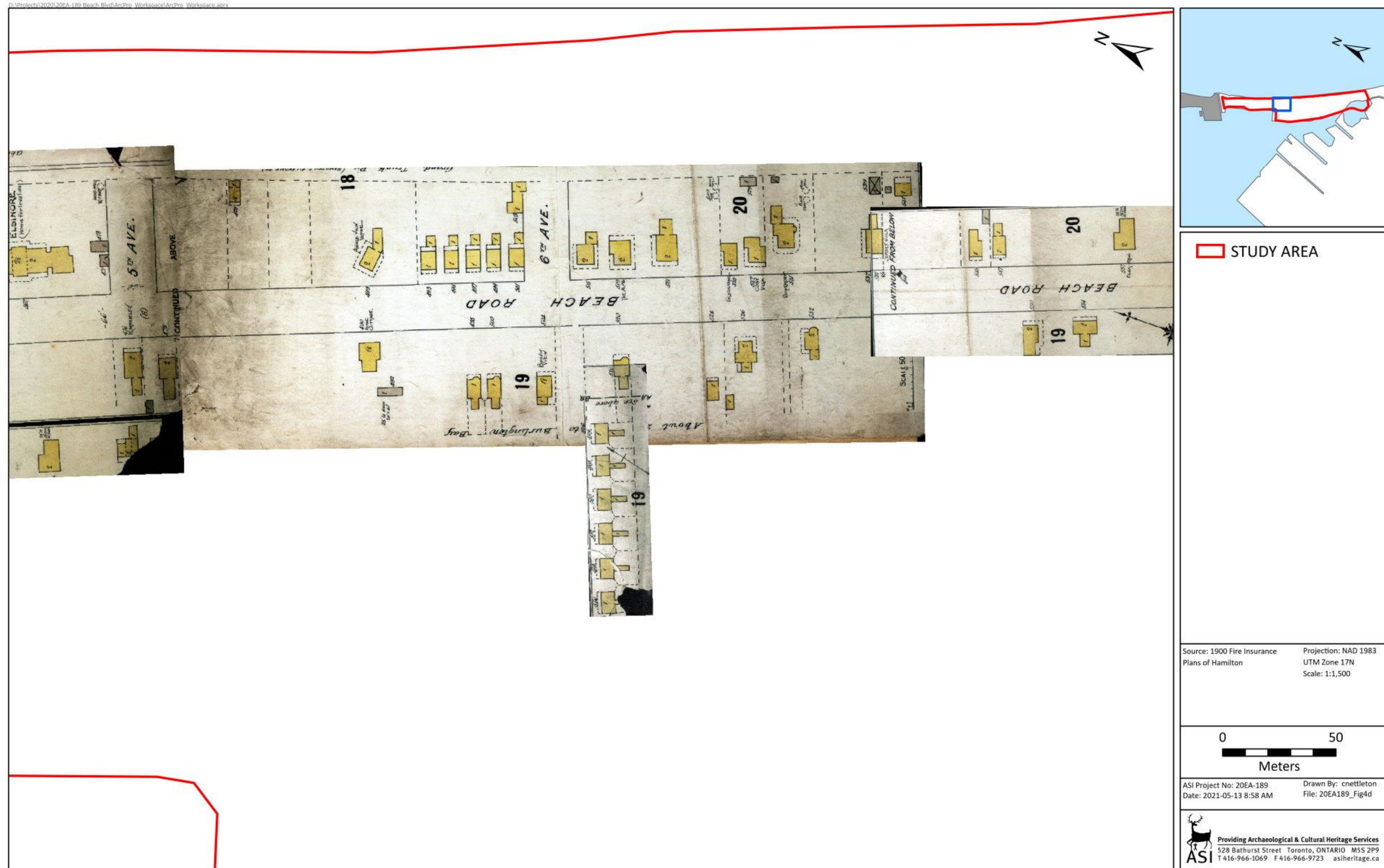


Figure 7: Study Area (Approximate Location) Overlaid on the 1900 Fire Insurance Plans of Hamilton

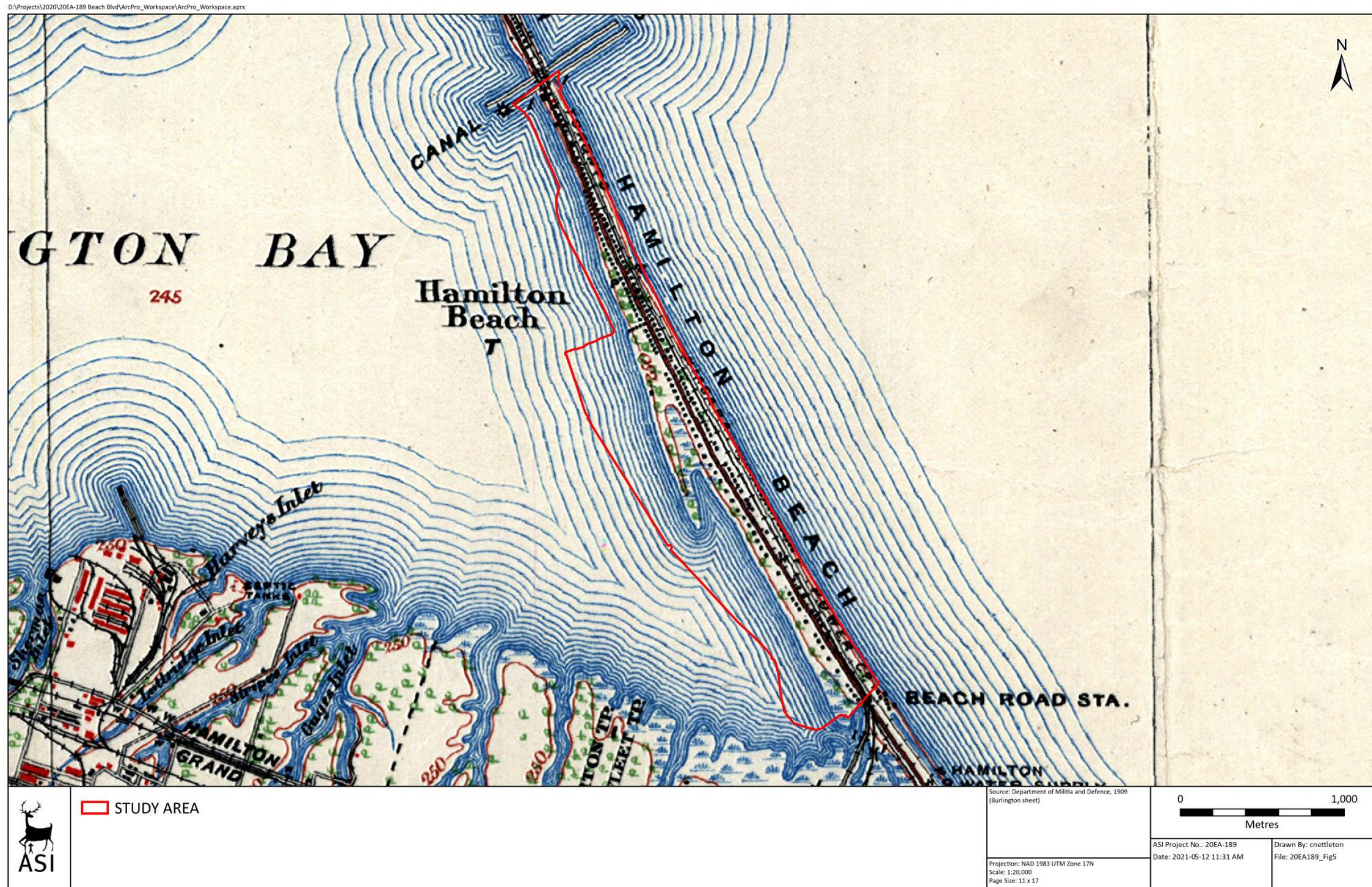


Figure 8: Study Area (Approximate Location) Overlaid on the 1909 Topographic Map Burlington sheet



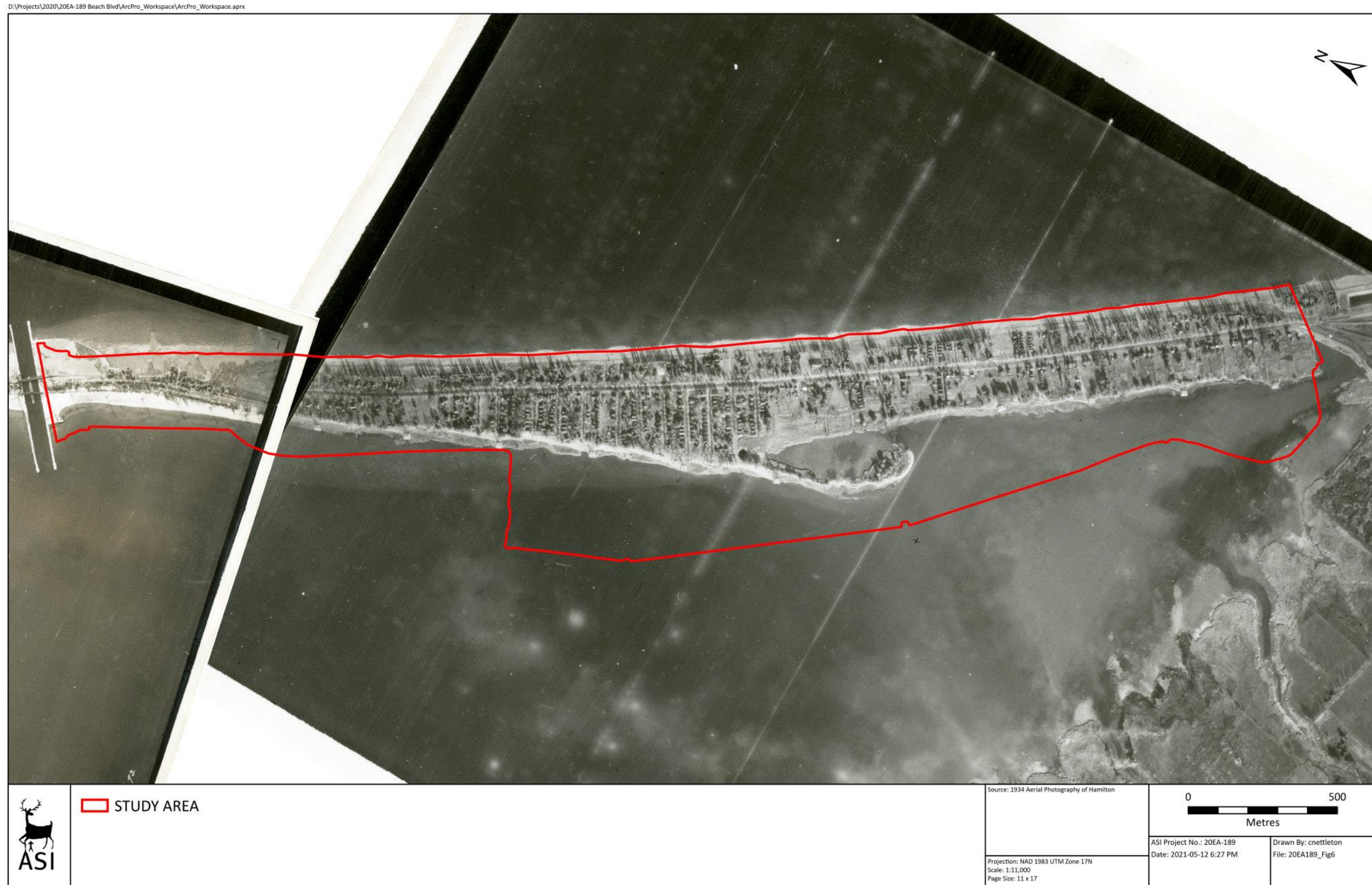


Figure 9: Study Area (Approximate Location) Overlaid on the 1934 Aerial Photography of Hamilton



Figure 10: Study Area (Approximate Location) Overlaid on the 1999 Orthoimagery of Hamilton



Figure 11: Study Area – Surficial Geology



Figure 12: Beach Boulevard – Archaeological Potential Model

