



Halifax Shopping Center Annex

Archaeological Resource Impact Assessment

Heritage Research Permit A2022NS202

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HALIFAX SHOPPING CENTER ANNEX:
ARCHAEOLOGICAL RESOURCE IMPACT ASSESSMENT

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Category C

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Cover: Oblique aerial photo of the study area c. 1918 (courtesy of HRM Archives)

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EXECUTIVE SUMMARY

In August 2022, Davis MacIntyre & Associates Limited was contracted by Englobe Corp. to conduct an archaeological assessment for Phases 1 and 2 of the Land Suitability Assessment on the Halifax Shopping Centre Annex in Halifax County. The assessment included a historic background study and reconnaissance to determine the potential for archaeological resources in the impact area and to provide recommendations for further mitigation, if necessary.

The historic background indicates that Mi'kmaq and their ancestors have had a long-standing and intensive tradition of land use and occupancy throughout the Halifax/Dartmouth region since time immemorial. They took advantage of well-established travel routes via the lakes and rivers, particularly along the Shubenacadie waterway, to travel between the coastal and interior regions and had encampments along these waterways, evidenced by the material remains left in the archaeological record. The Northwest Arm was a place of bountiful resources, and part of an interconnected series of watercourses and travel routes in the area known to have been utilized by the Mi'kmaq and their ancestors. A small watercourse, possibly Smelt Brook, once flowed approximately 70m west of the study area, west of the rail-line. Mi'kmaq may have frequented this brook for resources, and historic Mi'kmaq activity is well documented throughout the Northwest Arm.

Early Euro-Canadian activity near the study area began soon after the founding of Halifax in 1749. Three blockhouses connected by a road were established along the isthmus of the Halifax peninsula between the Northwest Arm and the Bedford Basin. A portion of the road, named Patrol or Perimeter Road, passed through the southeastern corner of the study area. Between 1749 and 1752, several hundred Swiss and German immigrants arrived in Halifax, and many settled at the head of the Northwest Arm to set up farms and lumbering operations. Eventually, the area became known as "Dutch Village". The study area remained largely forested until the late 19th century.

Historic maps from 1878 show that the study area encompasses several properties, with structures located the northern portion of the study area, in what is today the parking lot off Mumford Road, as well as in the southern extent of the study area, off Chebucto Road, though these have likely been destroyed by construction of Chebucto Place and the underground parking lot. The early 1920s saw major changes to the study area including the construction of the Simpsons Department Store and tram line, which was expanded in the 1950's.

The results of the archaeological assessment indicate that the study area is generally of low-moderate potential for encountering archaeological resources. Historic activity associated with 19th century farming and settlement may be present in the form of stone walls, midden or garbage deposits, and early infrastructure like sewers.

One area has been identified as moderate potential for encountering archaeological resources. This includes areas where georeferenced historic mapping has indicated the presence of 19th century historic homes associated with the former Murphy property and the 1920's tramline in what is today the parking lot west of the bus terminal. While development of these areas may have removed any trace of these homes, historic activity in the form of foundation walls, boundary walls, midden or garbage deposits, or sewers may be present in these locations.

Therefore, it is recommended that archaeological monitoring be conducted for ground disturbance associated with any proposed development of the Halifax Shopping Center Annex. Areas of low-moderate potential may require only periodic check-ins or for the archaeologist to be "on-call" for construction crews to notify if they encounter archaeological resources. However, in areas of moderate potential archaeological monitoring will be required until the archaeologist can make a determination that the area has been disturbed to the extent that intact archaeological resources will not be expected to be encountered.

In the event that archaeological resources are encountered at any point during ground disturbance and an archaeologist is not present, it is required that any ground-disturbing activity be halted immediately, and the Coordinator of Special Places (902-424-6475) be contacted regarding a suitable method of mitigation. Should the impact area be modified to expand beyond the currently understood range, a qualified archaeologist should be consulted to evaluate whether further archaeological assessment may be required.

1.0 INTRODUCTION

In August 2022, Davis MacIntyre & Associates Limited was contracted by Englobe Corp. to conduct an archaeological assessment for Phases 1 and 2 of the Land Suitability Assessment on the Halifax Shopping Centre Annex in Halifax County. The assessment included a historic background study and reconnaissance to determine the potential for archaeological resources in the impact area and to provide recommendations for further mitigation, if necessary.

The current assessment was conducted under Category C (Archaeological Resource Impact Assessment) Heritage Research Permit A2022NS202 issued by the Department of Communities, Culture, Tourism and Heritage. This report conforms to the standards required by the Culture and Heritage Development Division under the Special Places Protection Act (*R.S., c. 438, s. 1*).

2.0 STUDY AREA

The study area is comprised of the Halifax Shopping Centre Annex is bounded by Mumford Road, Chebucto Road and the Canada National Railway (CNR) (Figure 2.0-1). The Annex contains several existing buildings, as well as above and underground parking. The suitability assessment includes two phases (with corresponding locations) for study. The first phase includes approximately 3 hectares, including structures within (Figure 2.0-2). The second study area includes approximately 9 hectares, including structures (Figure 2.0-3).

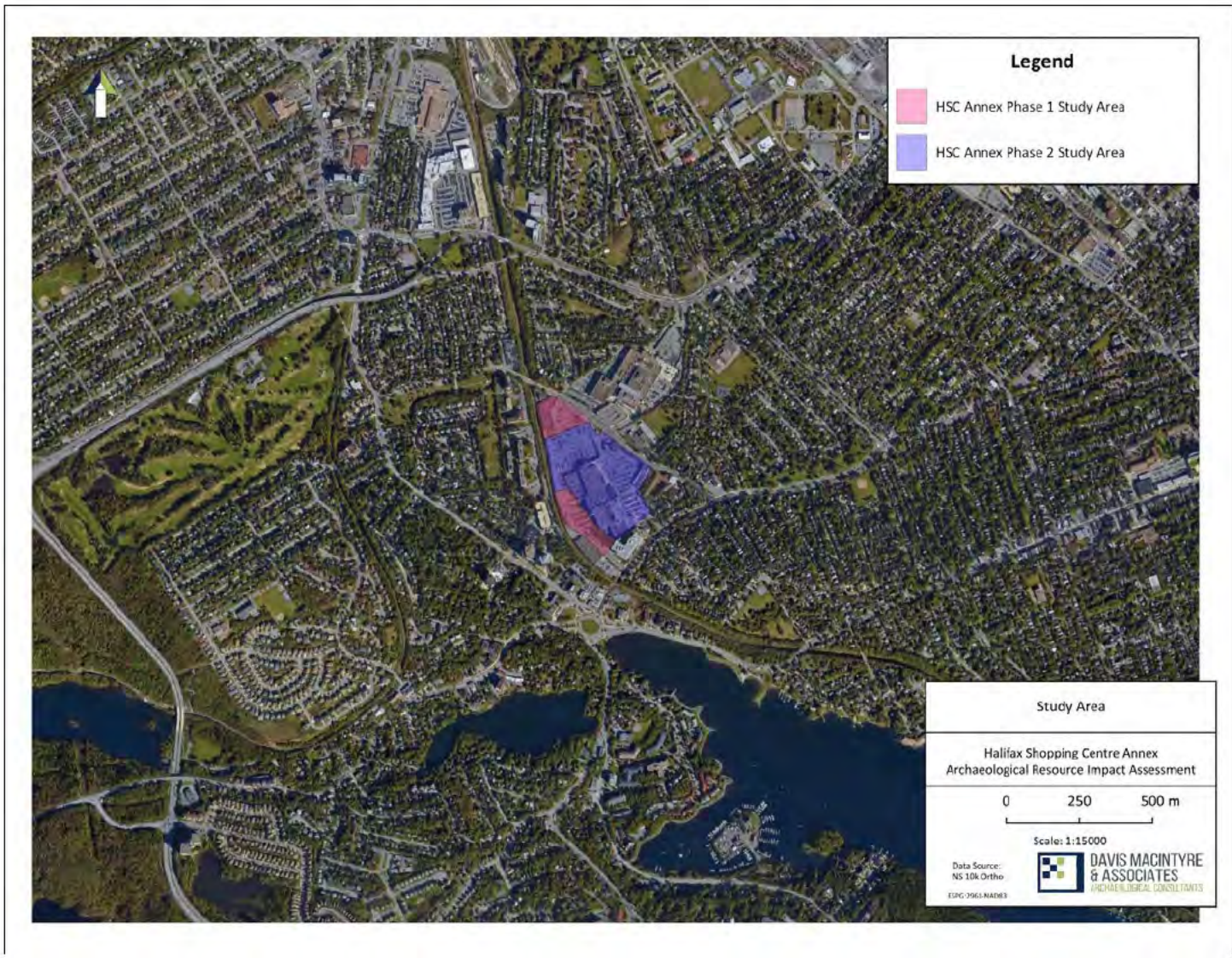


Figure 2.0-1: Location of the Halifax Shopping Centre Annex study area.

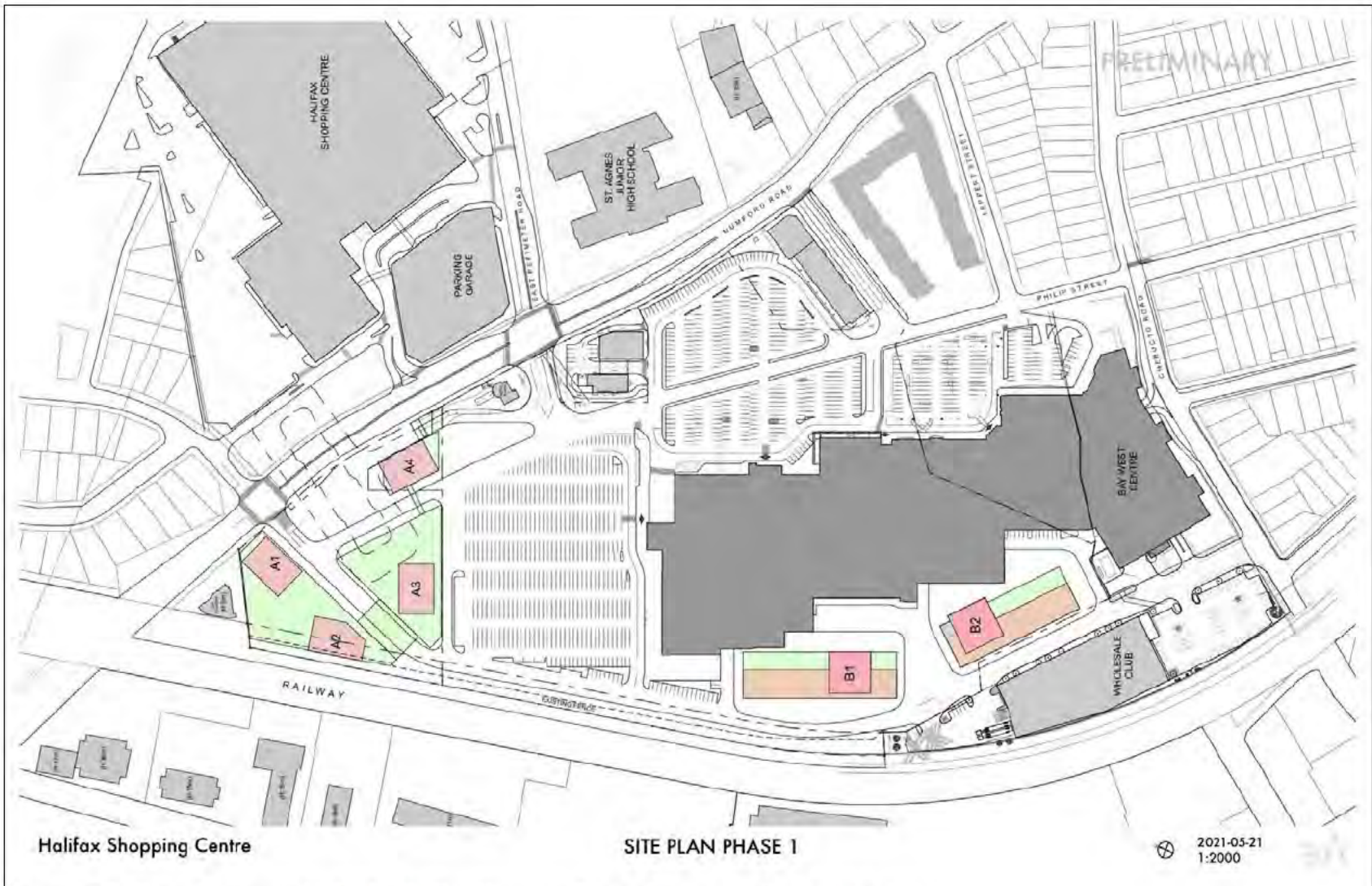


Figure 2.0-2: Phase 1 of upgrades to the Halifax Shopping Center Annex, courtesy Englobe Corp.



Figure 2.0-3: Phase 2 of upgrades to the Halifax Shopping Center Annex, courtesy Englobe Corp.

2.1 Paleoecology

Understanding the changing ecology of the early Holocene is paramount to understanding the archaeological record and the course of human history in our region from its beginnings. Processes associated with glacial advance and retreat have made a lasting impression on our province. During the most recent ice age, Atlantic Canada lay beneath the kilometre thick Laurentide Ice Sheet, which at the last glacial maximum (24 ka BP) extended its reach across the continental shelf to ocean depths of 800m.¹ The modern landscape bears the scars and relics of the Wisconsinan glaciation, in the form of drumlins, moraines, glacial erratics, lakes and drainage systems.

Deglaciation in the northeastern United States and the Atlantic Provinces began in earnest by 20 ka BP. Significant ice streams, draining vast areas of the Laurentide Ice Sheet, delivered large volumes of ice to the ocean and it was along these ice streams that calving occurred. The opening of the Gulf of Saint Lawrence in 14 ka BP accelerated this process, and calving ice margins eventually isolated a Newfoundland ice cap.² Glaciers were largely land-bound by 13 ka, and reduction continued through melting and climatic conditions rather than calving. In the wake of retreating glaciers, a mixed spruce woodland consisting of sedge, spruce, birch, and pine migrated northwards into Nova Scotia and created an environment suitable for large herds of migratory caribou. It is believed Sa'qiwe'k L'nu'k bands followed these herds into the region by at least 10,900 BP.³

Deglaciation was not a unilinear process, as climate variables caused glaciers to retreat at different rates at different times. The Younger Dryas Cooling event took place between 10,900 and 10,600 BP (or 12,900 – 11,600 cal BP) and had a profound effect on vegetation.⁴ Land-bound glaciers reactivated, and the advance of forested regions was reversed, with areas of open shrub tundra expanding southwards. A rapid warming period followed the Younger Dryas, and with it, the environment changed again to a more closed, mixed deciduous forest of oak and pine.⁵ Unburdened by the Laurentide Ice Sheet, the continental crust rebounded in isostatic uplift, resulting in a drop of relative sea level. At the same time, large volumes of water held in glacial ice was released back to the oceans, resulting in eustatic change. The pace of eustatic change was initially rapid, following a low sea level stand of -65m at 11.3-11.7 ka BP. Sea level rise slowed after 11 ka BP and was outpaced by isostatic change. By about 9.5 ka BP, the pace of land rise diminished, and sea levels again began to overtake exposed shores in most areas.⁶

Glacial isostasy and eustacy changed habitable coastlines over the millennia following deglaciation (Figure 2.1-1). Significant landforms, subaerially exposed through isostatic uplift

¹ Fader 2005, 2; Lothrop et al. 2011, 549..

² Shaw et al. 2006, 2069, 2072..

³ Ellis 2004, 244; Newby et al. 2005, 151..

⁴ Fader 2005, 5; Lothrop et al. 2011, 550..

⁵ Newby et al. 2005, 151; Deal et al. 2006, 256..

⁶ Shaw et al. 2002a, 1867; Fader 2005, 2..

were subsequently submerged by rising seas.⁷ Most ancient shorelines have been reclaimed by the sea or reshaped by powerful erosional forces. However, some sheltered or interior areas may hold the potential for relatively intact paleoshores. Evidence of human occupation from submerged sites has been found offshore. Artifacts like ridged ulus have turned up as unexpected catches of scallop draggers in the Bay of Fundy, Gulf of Maine, and off the coast of Prince Edward Island.⁸

More generally, by 6 ka BP, the geographical setting of the Atlantic region nearly matched conditions today. The inundation of the Northumberland Strait finally isolated what is now Prince Edward Island from the mainland as sea levels continued to rise, reaching within 5m of their present depth off the Atlantic coast by 3,000.⁹

The study area itself falls on the outer eastern seaboard of Nova Scotia, where sea-levels have risen continuously throughout the post-glacial period. This is a consequence of both the combined effects of global sea-level rise and the collapse of the peripheral forebulge, resulting in subsidence throughout the region.¹⁰ Researchers reconstructing sea-level histories for this region have found no evidence that relative sea-level was ever above present levels during the Holocene.

The coast features numerous headlands and inlets that are mostly drowned river estuaries, inundated by rising seas over the last several thousand years. Processes of glacial deepening and low sea level stands in the early Holocene created a chain of freshwater lakes through Halifax Harbour meaning that the colloquial “City of Lakes” was an accurate description for the ancient landscape as well as the present one.¹¹ The Sackville River may have functioned as the main artery for the early post-glacial lake system while a second major drainage system appears to have emptied at what is now Dartmouth Cove and may have joined with Sackville River north of George’s Island. This system was a spillway for glacial lakes, existing at the present-day locations of Lake Banook, Lake Charles, Lake William and Lake Micmac.¹²

2.2 Natural Environment

The study area is located within the Eastern Shore Beaches Natural Theme Region (#833) (Figure 2.2-1). This unit follows the meandering shore along headlands and long inlets from Halifax to Owls Head near Clam Harbour. Greywacke is the dominant bedrock, with bands of slate running in folds parallel to the coast. Lakes surrounding Dartmouth in this region, such as Morris Lake and

⁷ Fader 2005, 5..

⁸ Fader 2005, 6; Shaw et al. 2009, 24..

⁹ Shaw et al. 2002a, 1872..

¹⁰ Vacchi et al. 2018.

¹¹ Fader and Miller 2008, 148.

¹² Ibid:147

Bissett Lake, are notable for their high turbidity and significant levels of nutrients. Freshwater wetlands on the inland portion of this region are usually associated with lakes or small streams, while tidal marshes are common along the coast. Soils in this region include quartzite-derived and well-drained Halifax gravelly sandy loams, as well as Danesville soil, peat, Rockland soil, and poorly drained Aspotogan soil. The Eastern Passage area also includes areas of fine sandy clay loams from the Hantsport group of soils.¹³

The study area lies within the primary watershed containing several south draining watercourses including the Sackville, Nine Mile, Shubenacadie and Prospect rivers. Biologically productive wetlands and an abundance of glacial lakes are found throughout the greater region. Near Halifax, long faults create linear valleys followed by rivers and filled by lakes, such as at Porters Lake, Lake Charlotte, and Indian Harbour.¹⁴ The abundance of associated rivers and lakes not only provided access to marine resources and drinking water, but a suite of travelling routes throughout the interior of the province. The Shubenacadie Canal united two natural watercourses that are together known as the Shubenacadie River System. Lake Charles, a 3.4-kilometre-long lake, is the high point of this water system and drains both north and south. Water flows north from Lake Charles towards Minas Basin via the Shubenacadie River through a chain of lakes including Lake William, Lake Thomas, Fletchers Lake and Shubenacadie Grand Lake. The southern watercourse from Lake Charles flows through Lake Micmac, Lake Banook and Sullivan's Pond before emptying at the Halifax Harbour.

Lakes surrounding Dartmouth in this region, such as Morris Lake and Bisset Lake, are notable for their high turbidity and significant levels of nutrients. Freshwater wetlands on the inland portion of this region are usually associated with lakes or small streams, while tidal marshes are common along the coast. At the end of the eighteenth century, approximately 78 kilometres of streams flowed from the peninsula into either the Northwest Arm or directly into Halifax Harbour and were often bounded by wetlands.¹⁵ Freshwater Brook was one of the more substantial watercourses on the peninsula, originating in the north end near Needham Hill and flowing near Fairview Cove and the Commons before emptying into the harbour near Inglis and Barrington Streets.

Modern development and contamination have significantly altered the ecology of the harbour and rivers in the region. As of 2006, certain recreational and commercial fishing is prohibited due to high fecal coliform levels.¹⁶ In spite of this, Atlantic salmon and gaspereau still maintain a presence in Halifax Harbour, Sackville River and St. Mary's River, though at significantly lower levels than they did even within cultural memory.¹⁷ Fishing for cod, haddock and bait fish continues in the Halifax Harbour. Lobster remains the most significant species harvested commercially. Clam and mussel crowd the harbour, and sea mammals like porpoise, dolphin, and

¹³ Davis and Browne 1996, 198–9.

¹⁴ Davis and Browne 1996:56

¹⁵ Reid 2012

¹⁶ Cantwell 2006:18

¹⁷ Cameron 1990:4

seals inhabit the waters. White Sucker, shiners, sticklebacks, perch, banded killifish and brook trout are the predominant freshwater fishes. Fisheries officer, Fred H.D. Veith, reported in 1881 that poaching was an issue on the Shubenacadie River and in Shubenacadie Lake, but that numerous bass and shad were available in this system.¹⁸ Gaspereau also spawn in this river system, and Tonge's 1754 map of the Shubenacadie River notes a log house on the western shore of Shubenacadie Grand Lake used by the French in their Gaspereau fishery.¹⁹

Along the coast, forests include white spruce, balsam fir, maple, and birch. Farther inland the forest transitions into spruce, fir, and pine, with some pure stands of white spruce found on old field and on drumlins. Several locations including Cole Harbour provide waterfowl with habitat for both migration and winter residences. Significant populations of black duck and Canada goose use the area as a stopover during migration, and the former species also breeds along this coast. Birds that overwinter here include goldeneye and scaup, while great blue heron, osprey, piping plover, and bald eagle, which all find various nesting locations in this region. White sucker, shiners, sticklebacks, perch, banded killifish and brook trout are the predominant freshwater fish.²⁰

¹⁸ Veith 1886:55

¹⁹ Tonge 1754

²⁰ Davis and Browne 1996, 199.

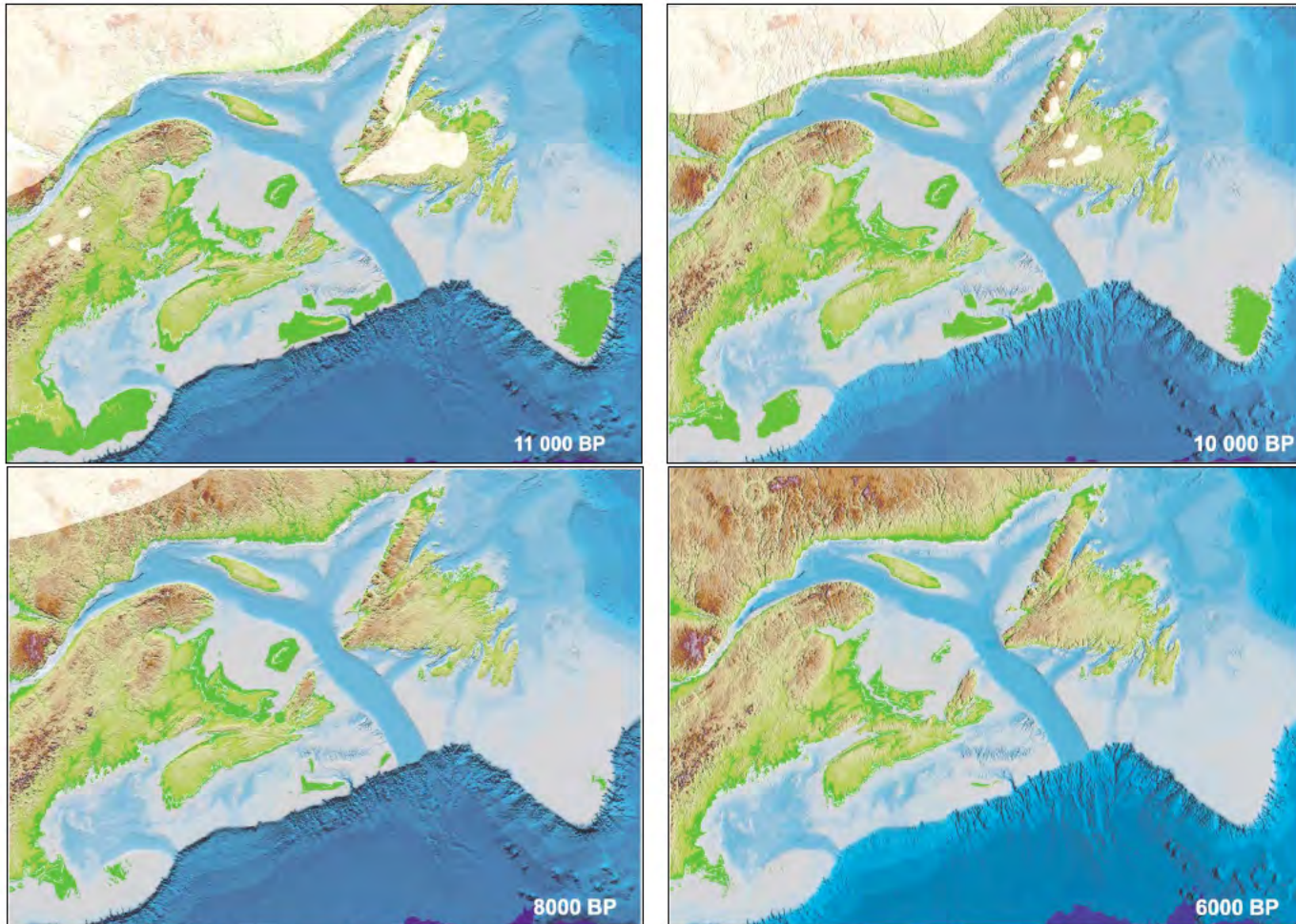


Figure 2.1-1: Palaeogeography of Maine and the Atlantic Provinces, depicting how emergent landforms on the continental shelf were gradually submerged.²¹

²¹ From Shaw et al. 2002



Figure 2.2-1: A map showing the Eastern Shore Beaches Natural Theme Region (#833) in relation to the approximate study area (red).²²

²² After Davis and Browne 1996.

3.0 METHODOLOGY

A historic background study was conducted by Davis MacIntyre & Associates Limited in December 2022. Historic maps and manuscripts and published literature were consulted from the Nova Scotia Archives and other online sources. LiDAR and air photos were also examined. The Maritime Archaeological Resource Inventory, a database of known archaeological resources in the Maritime region, was searched to understand prior archaeological research and known archaeological resources neighbouring the study area.

A field reconnaissance of the study area was conducted in December 2022, with particular attention paid to areas anticipated to be impacted. Detailed notes and photographs were collected, with tracklogs recorded via handheld GPS units.

The Archaeological Research Division at Kwilmu'kw Maw-klusuaqn Negotiation Office (KMKNO-ARD) was contacted in December 2022 to inquire whether traditional Mi'kmaw land use is known in or near the study area. A response was received on December 14, 2022. While the traditional use information provided is confidential, it has been taken consideration during this assessment. KMKNO-ARD also provided historical references from their database which have been incorporated into the historical background below.

3.1 Maritime Archaeological Resource Inventory

The Maritime Archaeological Resource Inventory (MARI) was accessed on December 2, 2022, to determine if known archaeological sites or resources exist within or near the study area. A search radius 5-km from the study was examined, which encompasses Fairmount, Bayers Lake, the Northwest Arm, downtown Halifax, Tufts Cove, and a portion of downtown Dartmouth.

No registered archeological sites have been identified within the study area. This review did establish that there are 57 registered archaeological sites within a 5-kilometre radius of the study area, 3 of which contain L'nuk cultural material (Table 2). The lack of L'nuk archaeological data for the immediate area likely reflects a lack of extensive archaeological survey rather than an absence of archaeological sites. This is compounded by poor site preservation and visibility due to historic land development as well as steadily rising sea-levels over the last several thousand years and modern environmental factors which influence geomorphology.

The closest known archaeological sites are located within 2.5 kilometres of the study area within Halifax. **BdCv-74**, located at Fort Needham Park in the Hydrostone

neighbourhood, consists of two historic features identified during upgrades within the park. The two features are believed to be associated with 18th century fortifications located in the area and included an infilled ditch or swale as well as two intersecting cross timbers. The timbers were hand-hewn and cut an angle so that when stood upright would meet in a pyramidal structure. **BdCv-70** represents several localized deposits and features identified during streetscape improvements for the North Park Street roundabouts. These features were largely disturbed by past roadwork and consist of historic urban infrastructure dating to the 19th and 20th century.

BeCv-02 is the nearest L'nuk archaeological site to the study area and one of the more compelling sites discovered in K'jipuktuk/Halifax. **BeCv-02** is a potential burial site located east of the study area in downtown Dartmouth, near the location of what is today Admiralty Place. An 1837 newspaper reported the discovery of a "spear head" and "two pieces of a hollow tube" while digging a cellar.²³ Though the spear head never made it into the museum collection, Harry Piers later identified the hollow tube as a blocked-end tubular pipe, an artifact strongly associated with the Middlesex or Adena archaeological complex of the Ohio River Valley (ca. 2,600 – 2,100 cal BP).²⁴ This find suggests that Mi'kmaq living in K'jipuktuk were involved in larger spheres of interaction, possibly stretching as far south as the northeastern United States.

A L'nuk precontact site was also identified in Point Pleasant Park, during a survey of the area following Hurricane Juan. **BdCv-41** consists of a single ground slate celt fragment recovered from a tree throw near the Prince of Wales tower. The slate celt fragment has been tentatively dated to the Kejikawe'k L'nuk/Woodland period (3,000–550 cal BP).

On the Halifax side of the harbour, a few isolated Precontact finds have recently been made at the former site of the Presbyterian Church of Saint David's church hall on Brunswick Street, though no evidence of intact Mi'kmaq features or sites were encountered (**BdCv-71**). This site also contains the remains of historic archaeological and burial features associated with the Methodist Burying Ground and Poor House Burying Ground, which were located and mitigated as part of a development project off Brunswick Street, behind the old Halifax Memorial Library property.

Archaeological domestic and military features dating to the 18th through 20th century have been unearthed within or adjacent to the original town plot of Halifax, east of Citadel Hill. These include resources at the location of the MetroPark parking structure on Hollis and Salter Streets, at the Marriott Courtyard Hotel and former Halifax Market location, at Government House (Barrington Street), at the corner of Hollis and Morris Streets, on Argyle and Grafton Streets, along Spring Garden near Queen Street, the Waterside Centre (Hollis and Duke Streets) and the Nova Centre, at 1801 Hollis Street,

²³ Christianson 2005:4

²⁴ Deal 2016:93-95

Duke Street, the Nova Scotia Crystal property, and the future site of Queen's Marque, as well as at the site of the Upper Water Street Sewage Treatment Plant. Additional domestic and military resources have been identified within and near Fort Needham Memorial Park. Behind Citadel Hill, archaeological features have been recorded during construction of the North Park Roundabouts, as well as during upgrades to the Wanderers Grounds and during ground disturbance in the Public Gardens. In the harbour itself, the fortifications on George's Island are a recorded site, as is the dumping site for Pier 21 ships, located in the water off the pier.

A variety of known historic sites are recorded in Point Pleasant Park, consisting of British military, agricultural, and residential sites. Similar sites are also recorded on McNabs Island. Many other known historic sites are present around the shores of the Halifax Harbour, in Bedford, Sackville, Dartmouth, Halifax, and the various islands in the harbour, as well as downtown Dartmouth and peninsular Halifax. These historic sites date from the 18th to 20th centuries and include domestic, military, and industrial activities.

3.2 Historic Background

3.2.1 L'nuk Settlement During the Precontact and Historic Periods

Spatially and geographically, L'nuk land use throughout Mi'kma'ki is not considered in the same sense that European occupation is recorded in historic times. Colonialism has had a significant impact on Mi'kmaw lifeways but prior to European contact, the Mi'kmaq and their ancestors had a very dynamic relationship with the land which was reflected in their language, legends, songs, dances, and oral tradition. The landscape was viewed as "sentient, ever-changing, and in a continual process of becoming".²⁵ Therefore, the euro-centric view of the land as discrete and definitive land parcels does not reflect the Mi'kmaw world view and references to site-specific pre-contact land use from the first-hand perspective of the Mi'kmaq (through oral tradition) are difficult to ascertain. However, historic references by Europeans do exist, although they must be carefully considered due to their inherent bias, and Mi'kmaw land use and occupation is reflected in the archaeological record.

Nova Scotia has been home to the Mi'kmaq and their ancestors for at least 13,000 years. A legacy of experience built over millennia shaped cultural beliefs and practices, creating an intimate relationship between populations and the land itself. The complexity of this history, culturally and ecologically, is still being explored.

²⁵ Sable and Francis 2012, 18.

The earliest period is Saqiw'e'k L'nuk (the Ancient People) or the Paleo-Indian period (13,000 - 9,000 cal BP). The changing ecology following deglaciation allowed the entrance of large herds of migratory caribou into Nova Scotia, followed by Paleoindian groups from the south.²⁶ Currently, the Debert/Belmont Sites provide the only significant evidence of Paleo-Indian settlement in the province. Commonly believed to be big-game hunters, research is now aimed at exploring the diverse subsistence patterns that may have supported populations, and what adaptations were made when the environment shifted once again in the early Holocene.²⁷

Succeeding the Saqiw'e'k L'nuk is the Mu Awsami Kejikawe'k L'nuk (the Not so Recent People) or the Archaic Period (9,000-3,000 cal BP). This time saw a reorientation to a more maritime subsistence, with settlement pivoting more towards coastal areas, lakes, and bountiful riverine resources.²⁸ Remnants of these sites along the coast have largely been engulfed by rising seas or battered by wind and wave, though interior sites are increasingly being discovered.²⁹ Ground stone tools, specialized for woodworking, appear at this time and may have been used to create dug-out canoes. Numerous traditions and distinct technologies have been documented throughout Maine and the Atlantic provinces. A growing catalogue of exotic cultural components demonstrates that groups within Nova Scotia were engaged in spheres of interaction spanning hundreds of kilometers. Unfortunately, a lack of formally excavated sites within Nova Scotia still obscures the degree to which these traditions were present.

By the Kejikawe'k L'nuk (the Recent People) or Woodland/Ceramic period (3,000-550 cal BP), the Mi'kmaq were a maritime people, with known sites concentrating along coastal shorelines and navigable watercourses.³⁰ Migration of ideas and people introduced new worldviews and technologies from groups originating in places like northern New England and the Great Lakes area, to local populations, including the earliest ceramic forms. Harvesting of marine molluscs and shellfish appears in this period, and substantial shell-middens have gifted archaeologists with well-preserved records of these past lives.³¹ Fish weirs populating the province's rivers and streams speak to the importance of migrating fish species to Mi'kmaq life. Terrestrial hunting and foraging were practiced with varying degrees of intensity depending on seasonality and region. A generally stable cultural form is believed to have developed by 2,000 cal BP, forming the way of life first encountered by Europeans arriving on our shores.³²

²⁶ Newby et al. 2005, 151.

²⁷ Lothrop et al. 2011, 562.

²⁸ Tuck 1975.

²⁹ Deal et al. 2006.

³⁰ Davis 1993, 100.

³¹ Davis 2005, 18.

³² Wicken 2004, 26.

Mi'kmaw life was substantially altered in the Kiskukewe'k L'nuk (Today's People) or Contact Period (500 BP- Present). Trade and European settlement introduced change and upheaval to the traditional way of Mi'kmaw life. Mobile hunting and gathering still defined Mi'kmaw life, with identity residing within family households.³³ Trading posts and fishing villages became intersections of European and Mi'kmaq interaction, affecting traditional seasonal rounds and access to land. The hunting of fur-bearing mammals intensified to satisfy the mutual exchange of skins for European goods.³⁴ It is not accurate, however, to say that Mi'kmaq *adopted* European goods and culture, but rather *adapted* to it. The Mi'kmaq remained an influential social and political force forming a triadic narrative of contention with the English and French in the 18th century. However, disease, conflict, and alienation from the land wreaked a ruinous effect on the Mi'kmaq by the 19th century, pushing people to the margins of colonial society.³⁵

The Mi'kmaq inhabited the territory known as Mi'kma'ki or Megumaage, which included all of Nova Scotia including Cape Breton, Prince Edward Island, New Brunswick (north of the Saint John River), the Gaspé region of Quebec, part of Aroostook County in northern Maine and southwestern Newfoundland (Figure 3.2-1).

Mi'kmaw life was substantially altered in the Kiskukewe'k L'nuk (Today's People) or Contact Period (550 cal BP- Present). Trade and European settlement introduced change and upheaval to the traditional way of Mi'kmaw life. Mobile hunting and gathering still defined Mi'kmaw life, with identity residing within family households.³⁶ Trading posts and fishing villages became intersections of European and Mi'kmaq interaction, affecting traditional seasonal rounds and access to land. The hunting of fur-bearing mammals intensified to satisfy the mutual exchange of skins for European goods.³⁷ It is not accurate, however, to say that Mi'kmaq *adopted* European goods and culture, but rather *adapted* to it. The Mi'kmaq remained an influential social and political force forming a triadic narrative of contention with the English and French in the 18th century. However, disease, conflict, and alienation from the land wreaked a ruinous effect on the Mi'kmaq by the 19th century, pushing people to the margins of colonial society.³⁸

³³ Wicken 2004, 30.

³⁴ Whitehead 1993, 89.

³⁵ Reid 2009.

³⁶ Wicken 2004, 30.

³⁷ Whitehead 1993, 89.

³⁸ Reid 2009.

Table 1: Mi'kmaw/Archaeological Cultural Periods.³⁹

Mi'kmaw Period	Archaeological Period	Years (C¹⁴ Uncalibrated)	Calendar Years (Calibrated)
Saqiwe'k L'nuk (the Ancient People)	Paleo-Indian <i>Early/Middle</i> <i>Late</i>	11,500 – 9,000 BP <i>11,500 – 10,000 BP</i> <i>10,000 – ~9,000 BP</i>	13,000 – 9,000 cal BP <i>13,000 – 11,600 cal BP</i> <i>11,600 – 9,000 cal BP</i>
Mu Awsami Kejikawe'k L'nuk (the Not so Recent People)	Archaic <i>Early/Middle</i> <i>Late/Transitional</i>	9,000 – 3,000 BP <i>9,000 – 5,000 BP</i> <i>5,000 – 2,500 BP</i>	9,500 – 3000 cal BP <i>9500 – 5,500 cal BP</i> <i>5,500 – 3,000 cal BP</i>
Kejikawe'k L'nuk (the Recent People)	Woodland/Ceramic <i>Early</i> <i>Middle</i> <i>Late</i>	3,000 – 500 BP <i>3,000 – 2,400 BP</i> <i>2,400 – 1,700 BP</i> <i>1,700 – 500 BP</i>	3,000 – 550 cal BP <i>3,000 – 2200 cal BP</i> <i>2,200 – 1,300 cal BP</i> <i>1,300 – 550 cal BP</i>
Kiskukewe'k L'nuk (Today's People)	Protohistoric Historic/Modern	500 BP – 350 BP 500 BP - present	550 – 350 cal BP 350 cal BP - present

³⁹ Lewis 2006b; Confederacy of Mainland Mi'kmaq 2007, 3; Davis 2011, 22; Betts and Hynick 2021, 19.



Figure 3.2-1: Map of the Mi'kmaw districts.⁴⁰

The cultural significance of the study area to the Mi'kmaw and their ancestors is recorded in the Mi'kmaw language. The Mi'kmaw language, inseparable from Mi'kma'ki, is embedded with knowledge of the land and a unique way of understanding the world, reflected in both oral traditions and place names.⁴¹ The Mi'kmaw name for the Halifax Harbour is Kjiipuktuk meaning "great harbour".⁴² However, Piers writes in his communications with Jerry Lonecloud, that Gwowaqmictook (Kuowa'qamikt) refers to "white pine forest" that was a common landscape feature of peninsular Halifax.⁴³ Jerry Lonecloud explained that the name for Fairview, Al-e-sool-a-way-ga-deek ('at the place of measles'), is in reference to the tragic death of many Mi'kmaq from disease transmitted by the French, perhaps during Duc d'Anville's doomed 1746 expedition.⁴⁴

⁴⁰ Adapted from Lewis and Sable 2019. Some traditional territory overlap exists in western New Brunswick and Northern Maine with the Wolastoqiyik. Boundaries in these regions are more historically fluid. Boundaries within modern day Nova Scotia may have also been more fluid during periods of landscape and climactic changes.

⁴¹ Sable and Francis 2012:26

⁴² Ta'n Weji-sqalia'tiek – Mi'kmaw Place.

⁴³ Piers 1879.

⁴⁴ Christianson 2005, 2.

There are Mi'kmaw place names in the vicinity of study area, including the name for the Northwest Arm: We'kwaltijk, meaning "end of the bay; ending without a river coming in." Other nearby Mi'kmaw placenames include Mulipjikejk (Herring Cove) meaning "deep valley-like," Mniku'j (McNab's Island) meaning "little island," Apji'jkmuje'katik (Black Duck Pond, Halifax Commons) meaning "place of black ducks," Kuowaqe'jk (Citadel Hill) meaning "big pine hill", Elpaqkwitk (George's Island) meaning "water splashed on it by the waves," and Tkipowik (Sandy Cove) meaning "there is a spring there." Bedford Basin was Asogômapsgiatjg, while Sackville was called Goipao gisna Alosôloegatig, possibly referring to an epidemic of measles.⁴⁵

Archaeological evidence supports a precontact occupation of the Halifax area and the surrounding landscape by the Mi'kmaq and their ancestors for several millennia. The Mi'kmaq and their ancestors would have harvested marine birds and animals at the coast, gone to interior rivers and lakes for seasonal migrations of fish, eel, and opportunities to hunt larger game animals. Plants were also harvested from different interior and coastal environments. Movement from the coast to the interior may have followed a generalized winter-interior, summer-coastal migration round suggested by ethnohistoric sources.⁴⁶ However, mobility across Mi'kma'ki was likely more complex.⁴⁷ Use of rivers and long inlets allowed more fluid movement between coastal and interior camps.⁴⁸ Movement between the coast and interior may have been dependant on weather and availability of valued resources, as suggested by other sites found throughout Nova Scotia.⁴⁹

The early cultural landscape of K'jipuktuk/Halifax before the arrival of Europeans, and ever-expanding city development, was vastly different from what it is today. Mi'kmaw settlement on the Halifax peninsula may have been limited in the area now occupied by the downtown core, where the original topography was rocky and sloped. Other areas, such as the Halifax Common, were originally wetland and there is a tradition that Mi'kmaq hunted moose in these swampy areas. Encampments to seasonally fish trout and alewife would have lain at the mouths of streams that flowed into the harbour and are now vanished under city streets. They also hunted ducks and fished in the watercourses available on the peninsula,⁵⁰ most of which have since disappeared through the development of the City of Halifax.⁵¹ The Bedford Basin was an ideal location for the Mi'kmaq and their ancestors. Birch Cove and Fairview Cove were both

⁴⁵ Ta'n Weji'sqalia'tiek Mi'kmaw Place Names URL.

⁴⁶ Hoffman 1955, 153–4.

⁴⁷ Wicken 1994, 63.

⁴⁸ Lewis 2006a, 58.

⁴⁹ Sheldon 1988, 134.

⁵⁰ Raddall 2007, 2..

⁵¹ Reid 2012.

excellent locations for occupation, with sheltered coves, accessible beaches and fresh water, as well as access to a variety of resources.⁵²

Throughout the 18th, 19th and 20th centuries, Mi'kmaw family groups spent summers at places like Birch Cove and Kearney Lake, sometimes making and selling baskets.⁵³ Many of these families have been recorded in census records. Thirty-six Mi'kmaq are recorded living in "Chibouctou" in 7 wigwams in the 1687-88 census.⁵⁴ In 1701, Jancque-Francois de Monbeton de Brouillan, the Governor of Acadia visited Chebookt and met 200 to 300 Mi'kmaq.⁵⁵ Three hundred Mi'kmaq were recorded as living in Halifax County in 1842.⁵⁶ Around this time, Joseph Howe, Commissioner of Indian Affairs reported that Mi'kmaq were living in the Halifax-Dartmouth area⁵⁷ and in 1871, 13 Mi'kmaq are listed in the census as living on the Northwest Arm.⁵⁸ In 1924, there were 84 Mi'kmaq living in Halifax, owning 4 rowboats and canoes, 6 shotguns, and 20 steel traps, and were earning \$200.00 through fishing.⁵⁹ Close to the study area, Euro-settler oral history of the Fairview area recalls a "strong encampment" of Mi'kmaw people living on a brook just north of the Northwest Arm near a well-known beaver dam (Figure 3.2-2).⁶⁰

⁵² Ingalls and Ingalls 2010, 11.

⁵³ Ingalls and Ingalls 2010, 21-2.

⁵⁴ de Gargas 1687.

⁵⁵ Ingalls and McGrath 1998, 10.

⁵⁶ Chisholm 1933:494.

⁵⁷ Journal of House of Assembly 1943:6.

⁵⁸ Wicken 2020:151.

⁵⁹ House of Commons 1924:71, 79.

⁶⁰ Regan 1908, 137.



Figure 3.2-2: Artistic rendition of a Mi'kmaw family fishing on the Northwest Arm from 1830.⁶¹

The Northwest Arm had a bounty of aquatic resources and connected to several transportation routes within the region. Piers' interviews with local Mi'kmaw individuals explains that otters and beavers would often swim up the Northwest Arm into the small brook that runs to the west of the study area to reach Deal's Little Pond, known as Hoon-goo-a-mik, or an otter slide. From this pond the animals would continue north through a series of brooks to reach the Bedford Basin.⁶² This pond has been lost through the development of the city but was located just north of Bayer's Road approximately halfway between Dutch Village Road and the CNR rail tracks, less than one kilometre north of the study area.

Travel around the Northwest Arm was possible through the numerous lakes and interconnected watercourses which flow towards the Atlantic Ocean, such as the nearby Prospect River. One of these L'nuk routes is mentioned in a grant of land on the western shore of the Northwest Arm. According to early 20th century historian John Regan the grant "...comprised 200 acres and ran north to John Trider's property, beginning at Indian Cove, so named because in early days the Micmacs resorted to it for the purpose of fishing and celebrating festivals [...] A spot between the military wharf [at the stone quarries on the west side of the Northwest Arm] and a small peninsula is named Indian Path, by which the aborigines gained the lakes situated beyond the boundaries of the

⁶¹ Watts and Raymond 2003, 9.

⁶² Piers 2003a, 66.

quarries.”⁶³ The quarry Regan refers to is the Queen’s Quarry, located in what is now Purcell’s Cove. A number of isolated projectile points have been found in the Purcell’s Cove area, suggesting longer-term use of this area.

Several well-known Mi’kmaw individuals lived near the study area in the 19th and 20th centuries. Firstly, Jerry Lonecloud briefly lived just north of the study area in 1922 at the old Chapel of St. John the Baptist at the intersection of Mumford Road and Joseph Howe Drive.⁶⁴ Mali Christianne Paul Mollise, or her anglicized name, Christina Morris, was a Mi’kmaw artist who resided at Chocolate Lake with her husband Thomas. They lived on a patch of land “on a grassy hill where an old powder magazine was,” which they apparently received in exchange from Queen Victoria for one of Christina’s quill-ornamented moccasins. One of her few surviving pieces of artwork, a quill cradle, which she made for her friend Reuben Rhuland in 1868 is still on display at the DesBrisay Museum in Bridgewater.⁶⁵ Christina had made a set of snowshoes for the Mayor of Halifax’s son, William Caldwell Jr., and Henry Piers recorded detailed drawings and measurements of the shoes.⁶⁶

Although there have been many documented Mi’kmaw families living on the Northwest Arm and within its vicinity, the largest archaeological representation of Mi’kmaw settlement in the Metro Halifax region is located within peninsular Halifax and Dartmouth. This is perhaps due, in part, to finds made in association with heavily developed areas rather than the lack of Mi’kmaw settlement in residential areas on the outskirts of the city such as Fairview and Armdale. A single artifact representing the Palaeo period was discovered in Dartmouth at the height of land overlooking Red Bridge Pond. This was an isolated single bifacial preform characteristic of the earliest known occupation of the Halifax area. This find suggests the possibility of further undiscovered Palaeo sites along the former shorelines of the outlet of the former Glacial Lake Shubenacadie on either side of the harbour.

⁶³ Regan 1908:80-81.

⁶⁴ Whitehead 2002, 36.

⁶⁵ Whitehead 1977.

⁶⁶ Piers 2003b, 99.

3.2.2 Historic Period Euro-Canadian Settlement

When Halifax was occupied by the British in 1749, a grid of the streets and city blocks was laid out, originally stretching north-south from Joseph Street (now Scotia Square) to Salter Street, and east-west from the harbour to just below the Citadel. By the middle of October of that year, shortly after the arrival of Halifax's European settlers, a rough barricade had been erected around the town. This barricade was composed of “felled trees, logs and birchwood.” The following summer, a true palisade was erected, with five forts located at intervals along the fortifications. The forest was cleared 30 feet beyond the palisade to prevent potential attackers from using it for cover.⁶⁷

Between 1749 and 1752, several hundred Swiss and German immigrants arrived in Halifax, and many settled at the head of the Northwest Arm to set up farms and lumbering operations. Initially thought to be fresh water, this natural feature was called Sandwich River, “after a statesman who ruled in the councils of George II.”⁶⁸ It also shows up as “Hawke River” on a military map dating to 1751.⁶⁹ It was not until 1752 that the “Northwest Arm” was used in a land grant description for a “William Russell” at Purcell’s Cove.⁷⁰ The Northwest Arm settlement area would become known as “The Dutch Village,” named for the German word for “German,” Deutsch. Finally, in 1860, Sir Charles Tupper referred to his estate on the Northwest Arm as “Armdale,” as opposed to the original “Dutch Village.”⁷¹ Armdale eventually came into use instead of Dutch Village.

Hostilities between the French, Mi’kmaq, and British, meant protection was needed for settlers living at the Northwest Arm, outside the defensive palisade of Halifax. Therefore, a series of three blockhouses connected by the Patrol Road, sometimes called the Peninsula Road, was established along the isthmus of the Halifax peninsula between the Northwest Arm and the Bedford Basin (Figure 3.2-3). The South Blockhouse was located approximately 200m south of the study area, and the Patrol Road ran roughly through the study area’s southeast corner.

⁶⁷ Piers 1947, 1–3..

⁶⁸ Regan 1908:11.

⁶⁹ Regan 1908:11.

⁷⁰ Regan 1908:11-12.

⁷¹ Brown 1922, 20.

Across the three blockhouses and Patrol Road, there were several conflicts that took place between the stationed soldiers and the Mi'kmaq. These attacks along Patrol Road occurred at a heightened conflict between the British and the Mi'kmaq, and a dark period in the history of the province. In 1749 Governor Cornwallis released the Scalping Proclamation which promised "ten Guineas for every Indian Micmac taken or killed."⁷³ Recorded history of these conflicts is often from the Euro-settler perspective focusing on the attacks on their soldiers, although there were certainly countless attacks on the Mi'kmaq, with some reports saying that Mi'kmaw "scalps [were] brought in by the bagful."⁷⁴ In retaliation of Cornwallis' proclamation, the French released a corresponding one for the scalps of English soldiers.⁷⁵

According to accounts from 19th and early 20th century historians, the Mi'kmaq vigorously defended their territory, conducting several attacks in the vicinity of the Patrol Road. Writing in 1895, historian Thomas Beamish Akins describes an event that occurred between 1753 and 1760 not far from the South Blockhouse.⁷⁶ Three men working at sawmill located at the outflow of Chocolate Lake were killed in a Mi'kmaq attack. Akins reports that the men were buried near one of the blockhouses but were subsequently dug up three times by the Mi'kmaq looking to claim their scalps. It is a sensational story, but Akins does not provide a reference for where he heard of the attack, which occurred almost 150 years prior. Subsequent authors have cited Akins version of events, but unfortunately, none have scrutinized the truth behind the account.

There are more well-documented attacks conducted by Mi'kmaq along the Patrol Road. Harry Piers, former curator of the Nova Scotia Museum, describes two more incidents during the same time period along the Patrol Road.⁷⁷ One occurred at the North Blockhouse where an NCO and five privates were killed in a Mi'kmaq attack while drinking and playing cards. Another occurred in 1750 when a gardener, his son, and 4 others were killed or captured along the road in the vicinity of the North Blockhouse. Piers believes human remains discovered near the former North Blockhouse location when the land was being cleared for the installation of the Fairview Lawn Cemetery may be from a soldier at the blockhouse or a man who went missing after the 1750 incident.⁷⁸

⁷³ Paul 2000, 110.

⁷⁴ Paul 2000, 116.

⁷⁵ Paul 2000, 112.

⁷⁶ Akins 1973, 209.

⁷⁷ Piers 1933, 112-113.

⁷⁸ Piers 1933, 112.

As this area of the city developed, many artifacts have been located relating to the blockhouses and Patrol Road. Edwards describes a “serpentine shaped brass side plate of an old army flint-lock musket, a pair of ancient shears, bricks, pieces of old black liquor bottles, earth-ware” found near the North Blockhouse. A “cast-iron grape-shot” was found in relation to the Middle Blockhouse near the corner of Bayers Road and Connaught Avenue. Finally, “bits of earth-ware, bricks, old copper coins” and “liquor bottles” were located near the South Blockhouse.”⁷⁹ Between Glen Eagle Way and Ashburn Golf Course, just over 700m northwest of the study area, part of a stone wall was located by Harry Piers, who hypothesized it may date back to 1751 when stone walls were erected to divide the Church of England’s land from other settlers.⁸⁰ Akins reports that the foundation of the middle blockhouse could still be seen in 1848 in “... the hollow below Philip Bayers’ pasture”.⁸¹



Figure 3.2-4: Fragment of old stone wall found by Harry Piers just over 700m northwest of the study area.⁸²

⁷⁹ Edwards 2019.

⁸⁰ Edwards and Edwards 2003, 22.

⁸¹ Akins 1973, 209.

⁸² Edwards and Edwards 2003, 22.

By the 1760's, the blockhouses had begun to fall into ruin as the threat of violence between the settlers and Mi'kmaq had largely subsided. In 1763 with the establishment of Lunenburg, many of these settlers left for the promise of more land, abandoning their Northwest Arm homesteads. It is thought the dismantlement of the blockhouses was expedited by farmers who moved into the area, availing of land left empty by the emigrating Swiss and Germans.

The first known owner of the land that corresponds to the study area is John Burbridge and William Best who were granted the land before they left the city in 1764 (Figure 3.2-5).⁸³ Both men were residents of downtown Halifax and likely never formally settled the land. At some point between 1764 and 1816, William Leppert, a shipwright at the head of the Northwest Arm, received the land (see Figure 3.2-3). By 18 January 1816, Leppert had sold 110 acres of his land to Philip and Maria Roberts for 200 pounds. The deed explains that Philip Roberts was working as an Ordinance Storekeeper and that they inherited all “stablehouses and out-houses” on the property.⁸⁴ It appears the Leppert family did maintain some property as later maps depict a Leppert homestead to the southwest of the study area (Figure 3.2-6). Many later maps continue to depict this brook into the mid-twentieth century. Watercourses and drainage on the Halifax peninsula have been dramatically altered by settlement. Reid estimates that of the 24260.37m of watercourses only 152.1m remain leaving a reduction of 99.37%.⁸⁵ The brook leading north from the Northwest Arm is considered within this, being one of several minor watercourses that drain the western part of the peninsula.⁸⁶

By 6 September 1850, William Leppert, and his wife, Susannah, sold the same parcel of land previously sold to Philip Roberts to John Murphy. The land was sold for thirty pounds and included “all houses, outhouses, barns, stables, building's ways, watercourses, tenements, commodities, hereditaments, privileges, and appurtenances.”⁸⁷ John Murphy had a property totalling 48 acres named *Pleasant Valley Farm* between Dutch Village Road and Mumford Road.⁸⁸ A J. Murphy is visible on the 1865 Church map, as well a Mrs. Leopold, which may be a misspelling or anglicization of Leppert (Figure 3.2-7). This map depicts a forest covering a large portion of the study area and the unnamed brook is shown as pooling into a small pond to the west.

⁸³ Dunlop 1983.

⁸⁴ Registry of Deeds 1816.

⁸⁵ Reid 2012, 40.

⁸⁶ Reid 2012, 35.

⁸⁷ Registry of Deeds 1850.

⁸⁸ Edwards and Edwards 2003, 20.



Figure 3.2-5: A 1946 map showing notable historic buildings and grantees in the Dutch Village area near the study area (green circle).⁸⁹

⁸⁹ McLaren 1946.



Figure 3.2-6: Early-nineteenth century map depicting the approximate study area (red) overlapping with Philip Roberts' property. Inset showing indiscernible name of brook.⁹⁰

⁹⁰ Crown Lands Office.

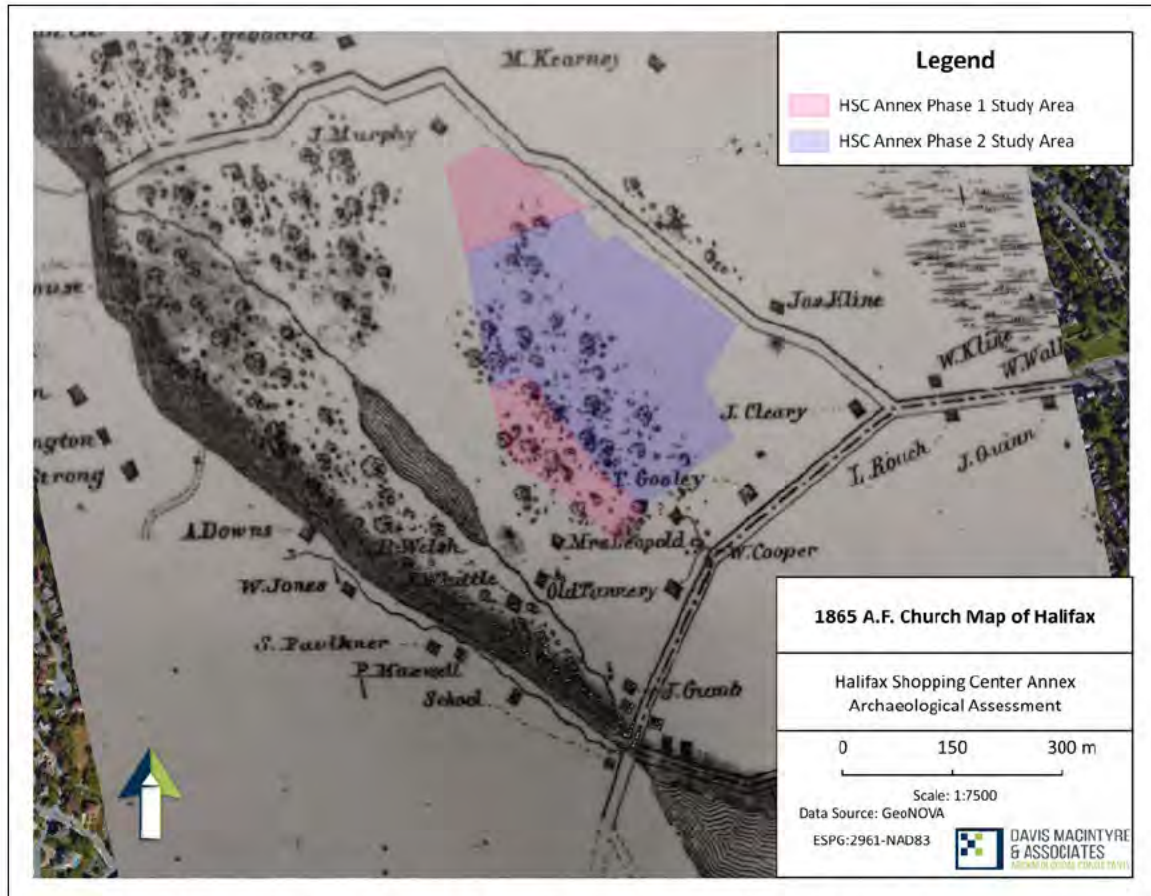


Figure 3.2-7: 1865 georeferenced A. F. Church map showing the study area largely overlapping with a wooded area with J. Murphy to the north and Mrs. Leopold to the south. Note the brook pooling to the west of the study area.⁹¹

In the 1878 Hopkins map of Halifax, John Murphy’s property is shown as having seven frame stables or sheds and one frame building (Figure 3.2-8). Although hand drawn maps are not completely precise, it appears the study area overlaps with several other properties including the back of J. W. Hutt and the Leppert properties and a large portion of Mrs. Cabot’s land and houses. The unnamed brook is still shown on this map, crossing John Murphy’s property northwest of the study area and the forest also remains as a notable feature on the landscape. By this period, the city of Halifax’s urban sprawl was reaching north but still not quite at the study area, as seen on the southeast corner in the Hopkins map.

⁹¹ Church 1865.

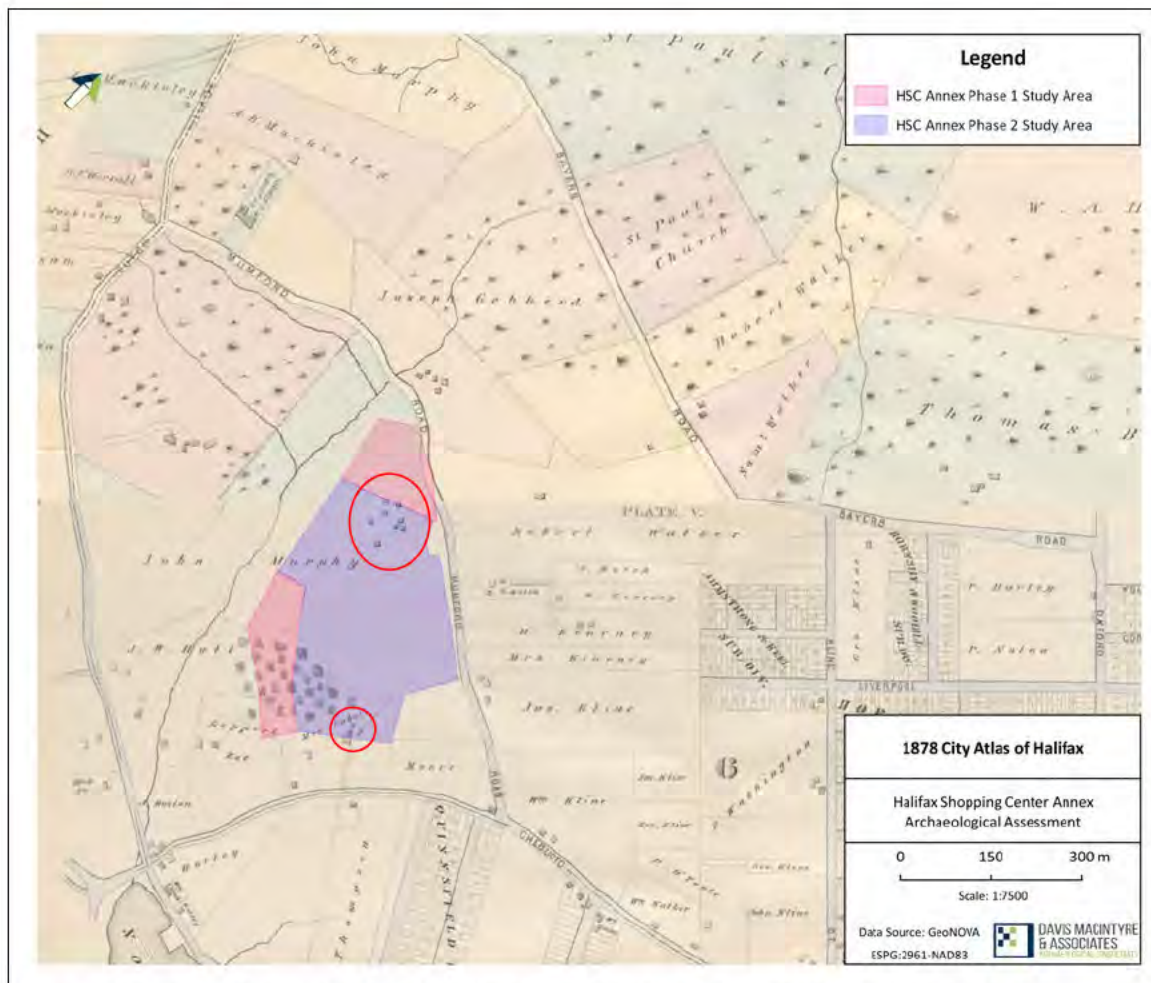


Figure 3.2-8: Georeferenced 1878 Hopkins City Atlas of Halifax. Red circles highlighting buildings noted within the study area. Note the presence of a forested area at south.⁹²

A series of topographic maps from 1918 was released showing details of the city before the 1917 Halifax Explosion (Figure 3.2-9). By this time, the CNR railway had been built, but the brook is still depicted as flowing alongside the rail tracks to the west. The map depicts two structures within or near the study area. In the north extent of the study area John Murphy’s homestead is depicted in the same location as the 1865 Church map. To the south there is a building that roughly aligns with the Cabot homestead as seen on the 1878 Hopkins map. The neighbourhood just south of Chebucto Road has been developed, but the study area is still sparsely occupied. An oblique aerial photo from 1920 confirms the presence of these two homesteads, and the Simpson’s department store had also been constructed by that time (Figure 3.2-10).

⁹² Hopkins 1878.

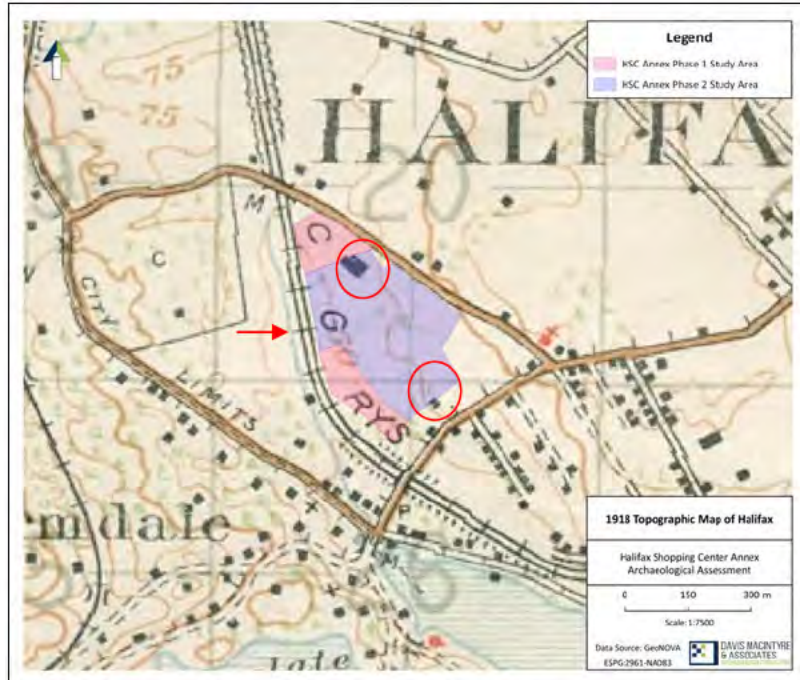


Figure 3.2-9: Georeferenced 1918 Topographic map of Halifax. Red circles showing building within or near study area and red arrow depicting the unnamed brook alongside CNR tracks.⁹³

⁹³ Department of Militia and Defence: Survey Division 1918.

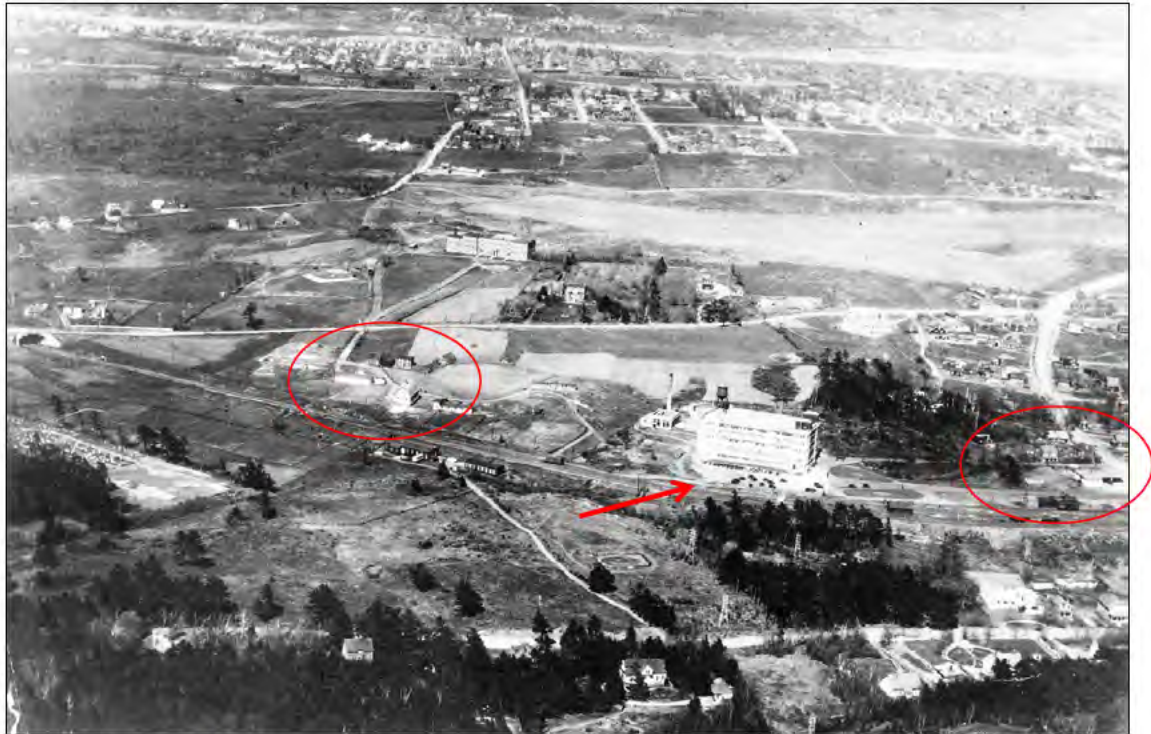


Figure 3.2-10: Oblique aerial photo from 1918, showing two homesteads (red circles) and the Simpson's building (red arrow) looking east.⁹⁴ Note the urban sprawl in background.

A corresponding topographic map series from 1950 shows some minor changes from the 1918 version (Figure 3.2-11). J. Murphy's homestead is no longer represented, whose disappearance can be corresponded to an oblique aerial photo at this time (Figure 3.2-12). The Simpson's Department store first appears on this map which was built in 1919 as a mail-order center and opened as a retail store in 1924. At the time of its construction, this area of the city was on the outskirts which was dominated by farmland and forest. Simpson's, however, helped to change this perception. A tram line was constructed in 1930 to reach Simpson's from the downtown core to meet customer's demands.⁹⁵ By the 1950's, Simpson's planned further development to more than double their retail space. Architectural plans relating to this construction show a detailed route of the brook that runs alongside the CNR tracks (Figure 3.2-13), the underground water and sewage lines to Simpson's (Figure 3.2-14) and the grade of the land before excavation for the expansion (Figure 3.2-15). At the same time as the

⁹⁴ Anon 1920.

⁹⁵ Paynter 2019.

expansion, the Halifax Shopping Center was beginning construction on the opposite side of Mumford Road, solidifying this neighbourhood place as a part of urban Halifax.



Figure 3.2-11: Georeferenced 1950 topographic map of Halifax. Red circles showing buildings within or near study area, the larger showing Simpson's and the smaller, houses on the same land as the Cabot homestead. Red arrow indicates the unnamed brook alongside CNR railway.⁹⁶

⁹⁶ Dept. of Energy, Mines and Resources, Surveys and Mapping Branch 1950.

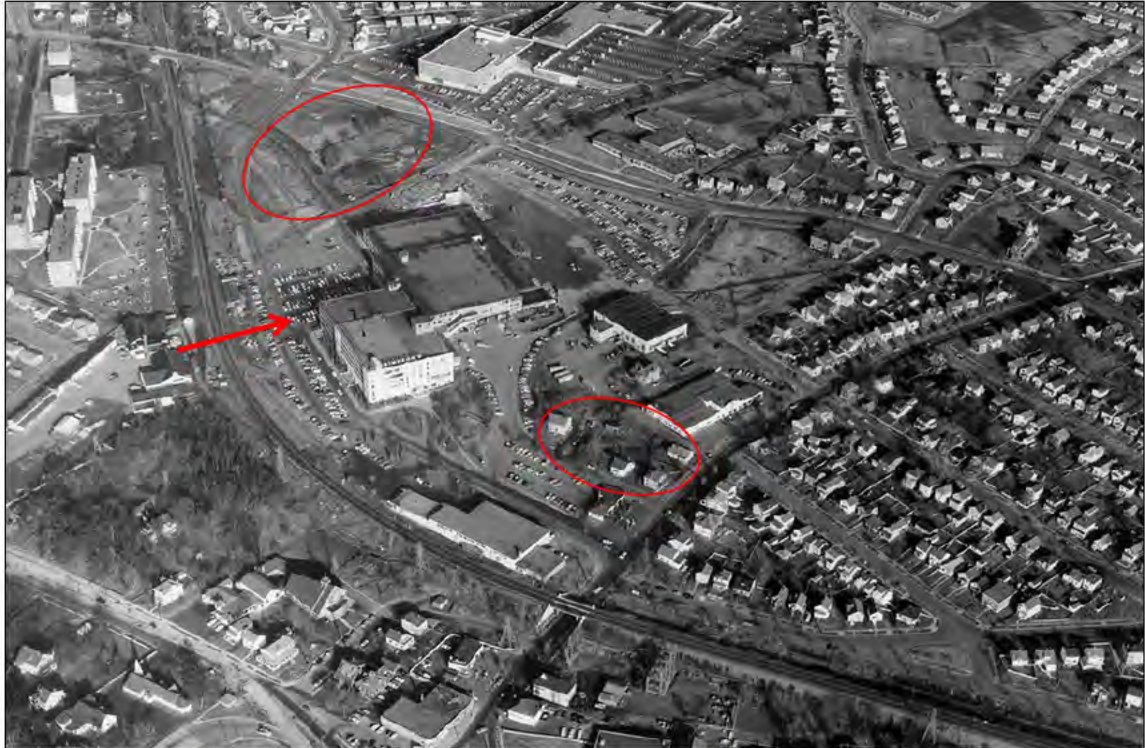


Figure 3.2-12: Oblique aerial photograph from 1962. John Murphy's homestead is no longer standing, while there still are homes near the Cabot property (red circle). The Simpson's expansion and the Halifax Shopping Center have been completed (indicated by red arrow).⁹⁷

⁹⁷ City of Halifax Development and Planning 1962.

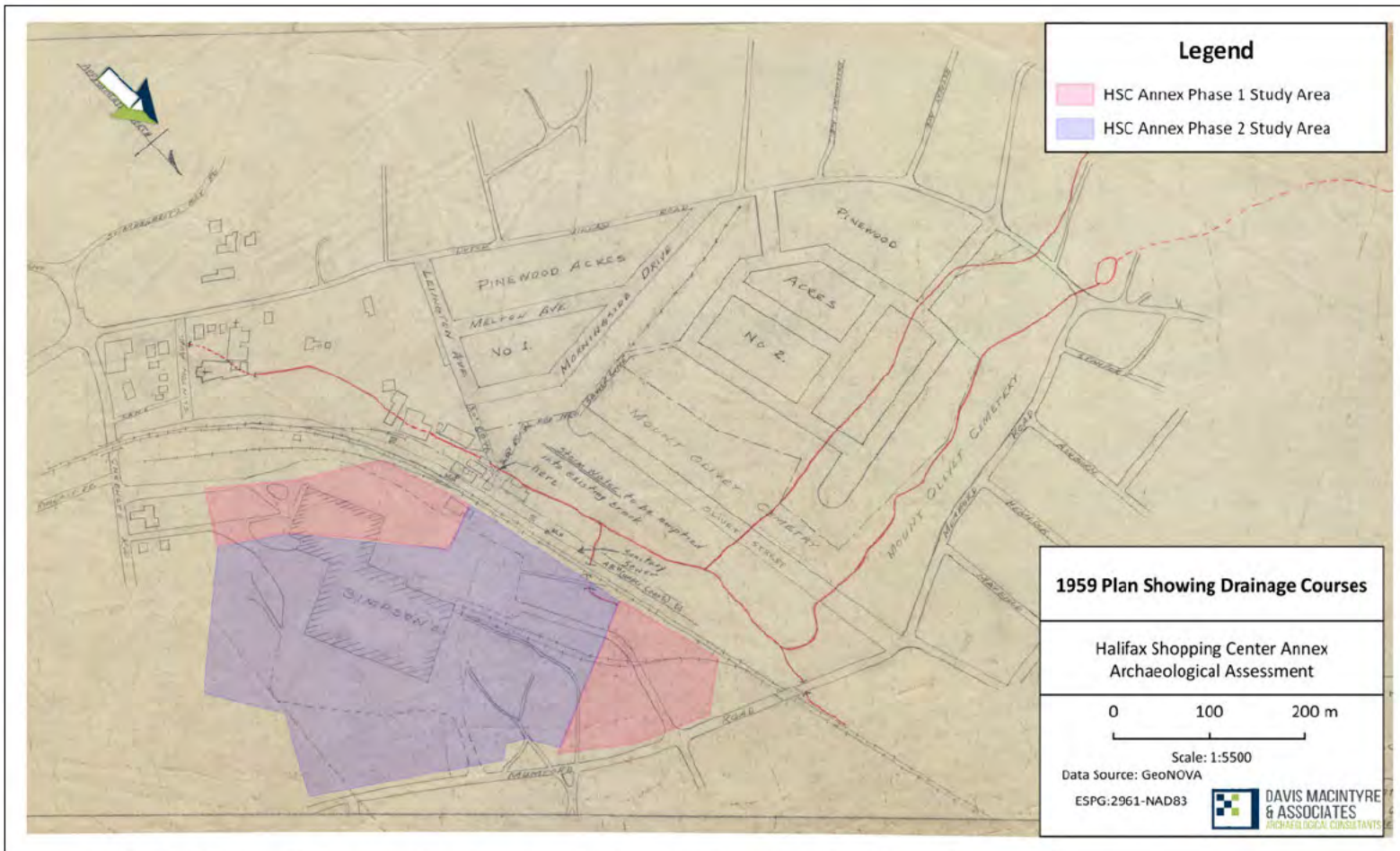


Figure 3.2-13: Architectural plan showing the water drainage (red) surrounding the study area.⁹⁸

⁹⁸ Anon 1959.

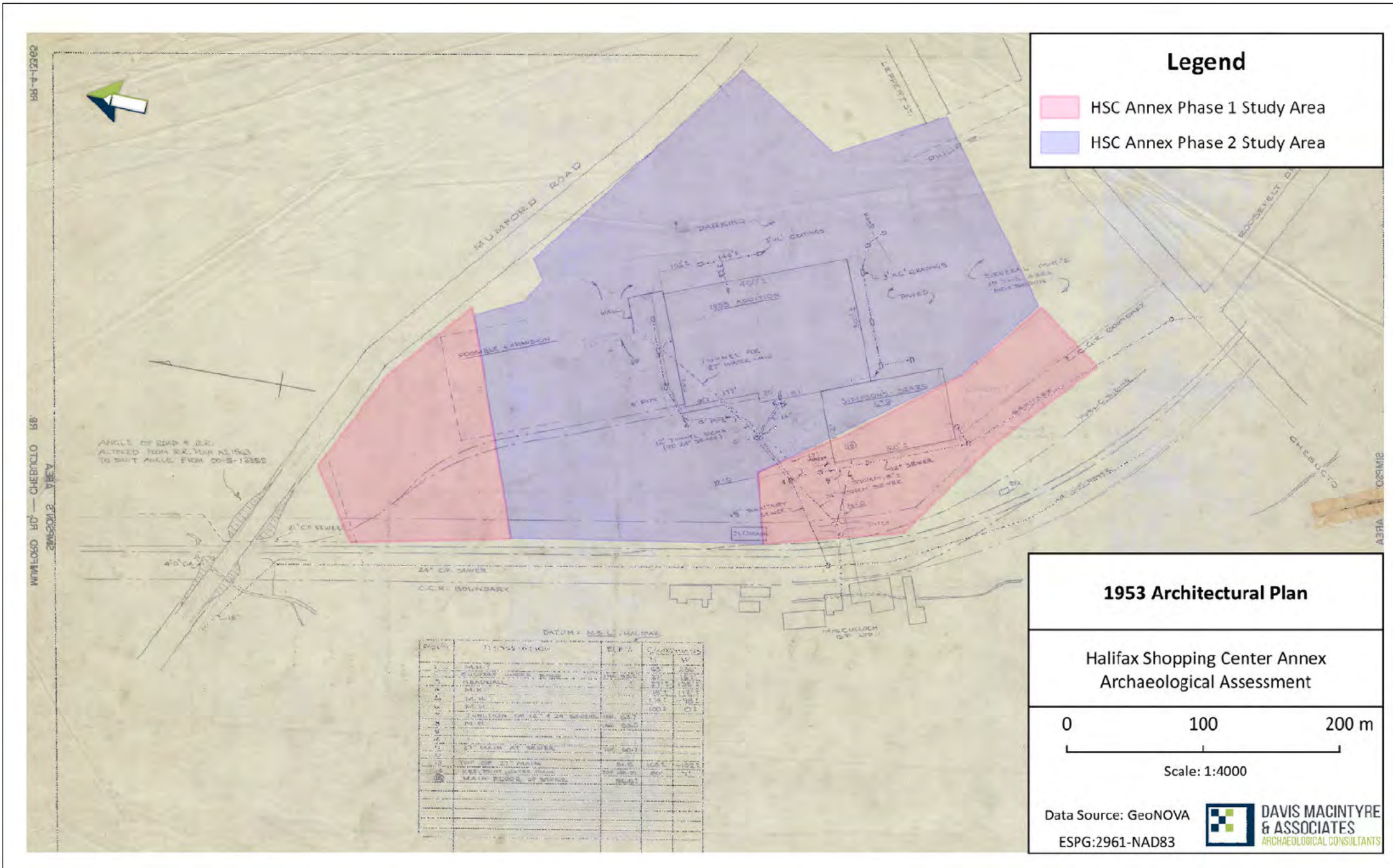


Figure 3.2-14: Architectural Plan showing locations of sewers and underground water infrastructure. Sections of the unnamed brook are still present on this map.⁹⁹

⁹⁹ Valentine 1956.



Figure 3.2-15: 1953 Architectural Plan of the Simpson's Department store before its expansion showing the grade of the land pre-excitation.¹⁰⁰

¹⁰⁰ Corley 1953.

Aerial photography covering the study area shows that by 1931 there were still buildings where the John Murphy homestead was, and the initial Simpson building had been constructed (Figure 3.2-16). Furthermore, the forested area at the south of the study area shown on the 1865 Church and 1878 Hopkins map was still present. The old Halifax Airport can still be seen to the east of the study area. By 1954 roadways had been built through the Murphy homestead and the forest was no longer present (Figure 3.2-17). The Simpson's department store had also constructed its expansion to the northeast. Other industrial, retail, and residential buildings were located within the study area as the area developed. By 1981 most of the study area had been paved into a parking lot and the Simpson's complex had expanded even further into the building's present configuration (Figure 3.2-18). The northmost part of the study area, although it had roadways crossing it, was still largely undeveloped and some large linear objects, potentially buses or tram cars, were stored here. Furthermore, the western side of the CNR tracks had been completely developed by this time, likely destroying the last traces of the unnamed brook. By 1992 the northern extent of the study area had been paved and was still being used storage. The old Simpsons complex and its parking lots appear largely unchanged in this photo (Figure 3.2-19).

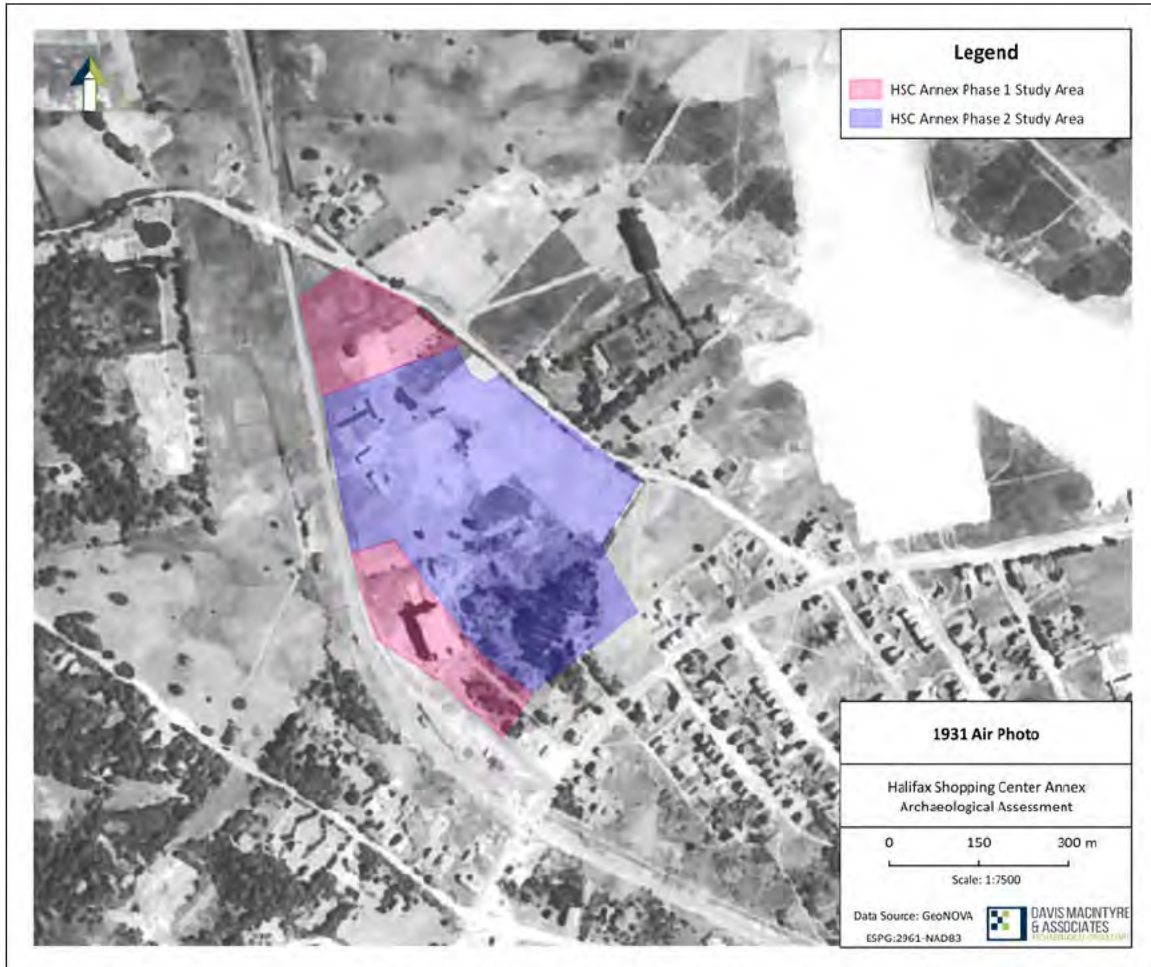


Figure 3.2-16: Georeferenced 1931 air photo of the Halifax Shopping Center Annex Phase 1 and 2 study area overlaid.¹⁰¹

¹⁰¹ Nova Scotia Department of Lands and Forestry 1931.



Figure 3.2-17: Georeferenced 1954 air photo of the Halifax Shopping Center Annex Phase 1 and 2 study area overlaid.¹⁰²

¹⁰² Nova Scotia Department of Lands and Forestry 1954.

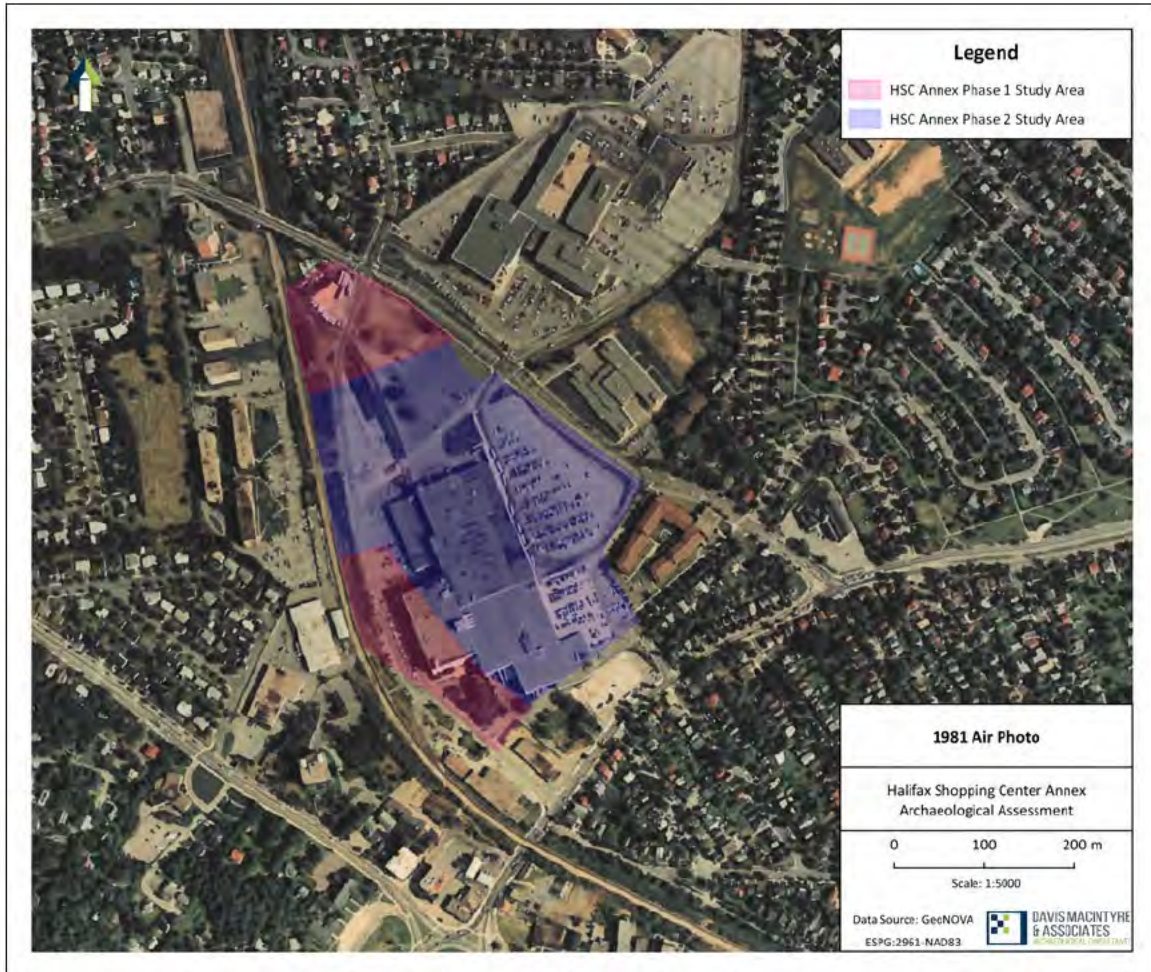


Figure 3.2-18: Georeferenced 1981 air photo of the Halifax Shopping Center Annex Phase 1 and 2 study area overlaid.¹⁰³

¹⁰³ Nova Scotia Department of Lands and Forestry 1981.

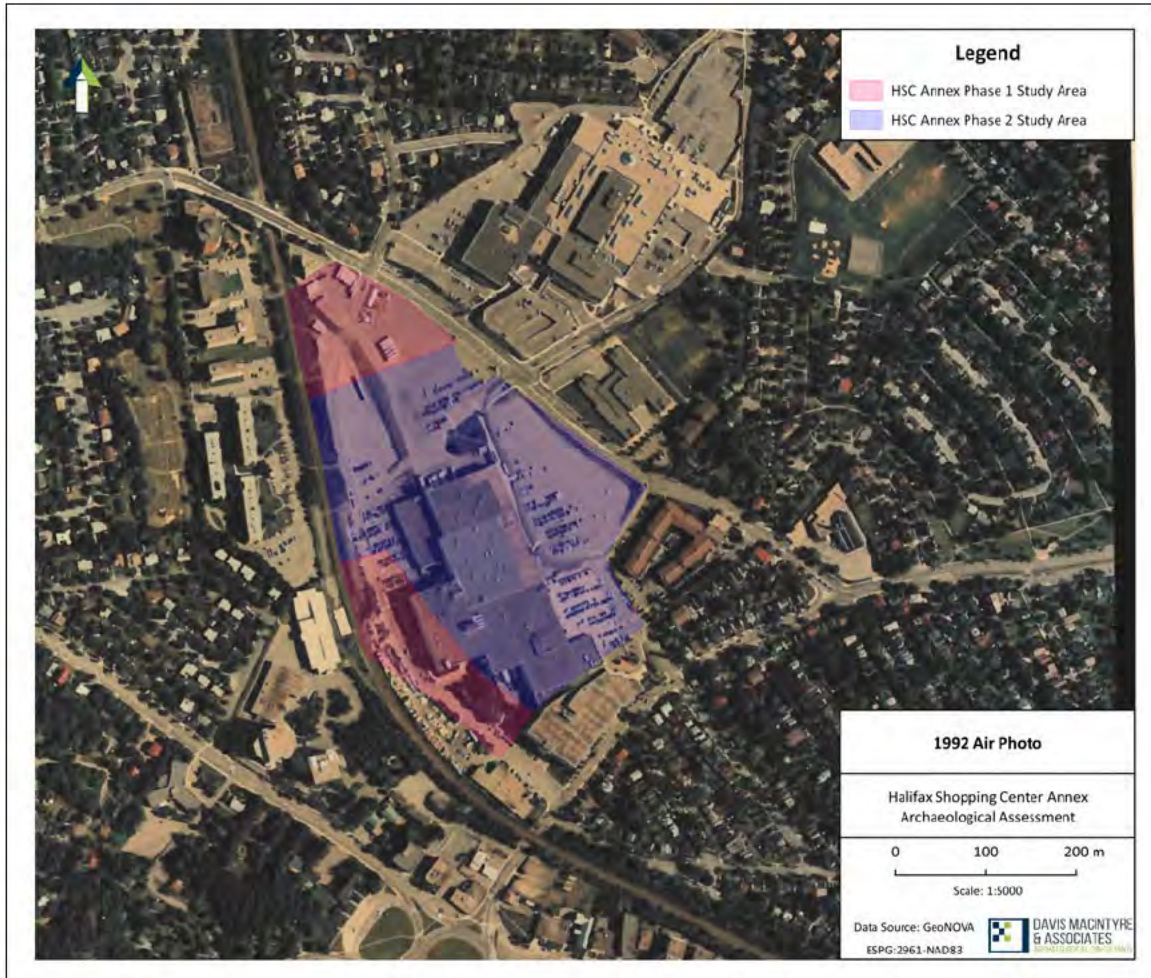


Figure 3.2-19: Georeferenced 1992 air photo of the Halifax Shopping Center Annex Phase 1 and 2 study area overlaid.¹⁰⁴

¹⁰⁴ Nova Scotia Department of Lands and Forestry 1992.

3.3 Predictive Modeling

Predicting the occurrence of L'nuk heritage resources during the Late Pleistocene to the Holocene is a complicated task. Understanding localized geomorphological factors that influenced this rapidly evolving landscape and how the landscape may have been utilized by the ancestors is paramount for the prediction of potential site locations. Often, face value modern visual interpretations of these landscapes are not sufficient. This may lead to unintentionally overlooked resources for this expansive time period.¹⁰⁵ However, human movement is seldom tied solely to resource collection and to the ease of passage between resource collection areas. Exchange networks, familial histories, traditions, and ceremonial practices are also important factors to consider when seeking the relationships of past peoples and a given landscape.¹⁰⁶ Nevertheless, the prediction of past resource collection areas and travel corridors, such as the evolution of individual watercourses, can help narrow down potential activity areas. Difficulty in predicting landscape use for a specific study area is also compounded by the lack of localized geomorphological, climactic, and archaeological research. Historic anthropogenic landscape alterations further complicate desktop models. This is additionally muddled by innumerable unknown factors. However, broader regional trends and statistical modeling may offer insight into how the landscape may have been utilized as it evolved, thus, predicting the occurrence of previously unknown resources with greater accuracy and efficiency.

The earliest known occupation of the Maritime Peninsula occurred just before, and roughly overlapping with, the Younger Dryas cooling event that occurred from ~11,000 ¹⁴C to 10,000 BP (13,000 to 11,600 cal BP). During this time glaciers residing in the Highlands of Nova Scotia were reinvigorated, blocking several river systems near these areas with sediments and ice. New glacial lakes and outflows were formed (See Section 2.1).¹⁰⁷ The Minas Basin Glacier was reactivated and blocked the outlet to the Shubenacadie drainage system with an ice and clay dam. At around 10.6 ¹⁴Cka, this caused the Shubenacadie River and its tributaries to overflow their banks resulting in the flooding of low-lying areas in the Shubenacadie, Musquodoboit and Stewiacke River valleys under 30 m. This massive lake, coined Glacial Lake Shubenacadie II, was the largest of the two large glacial lakes flooding the region, that essentially bisected the province for the duration of its existence. New outflows were created through the Dartmouth lakes into Dartmouth Cove and near Gibraltar Rock in Musquodoboit Harbour.¹⁰⁸ The Dartmouth outlet flowed into the remnants of the Ancient Sackville River north of Georges Island towards the sea, which at the time, was located at

¹⁰⁵ Suttie et al. 2007.

¹⁰⁶ Lacroix 2015, 31.

¹⁰⁷ Stea 2011.

¹⁰⁸ Stea and R.J. Mott 1989.

approximately -65m below modern levels. Sea level rose rapidly during this period, and then steadily increased after 11 ka.¹⁰⁹ The landscape eventually rebounded, and ice dammed lakes breached as glaciers retreated as the climate again warmed. These once flooded regions emerged as bogs and fens leaving large sand and clay deposits in their stead. These glacial lake strandlines may have continued to be important activity areas and travel corridors for both animals and L'nuk during the early post glacial period as the once flooded landscape recovered. Relative sea level (RSL) reached approximately -40 m below modern levels by 10,000 BP.¹¹⁰ The lowstand within the Halifax Harbour and Northwest Arm slowly inundated with water progressively eroding the Ancient Sackville River and its tributaries resulting in the creation ten postglacial lakes. Two of these were located within the Northwest Arm.¹¹¹

Archaeological evidence for mobility patterns southward beyond the Debert/Belmont site into the interior of Nova Scotia is supported by isolated finds of fluted points recovered from approximately 8 km northeast of the study area at Miller Mountain in Dartmouth, and further south at Medford, Sable River and Yarmouth.¹¹² Later Palaeo period artifacts postdating the late glacial period have been found further inland along the Lower Mersey and at Gaspereau Lake.¹¹³ Evidence of continuing occupation spanning the Late Palaeo to the Transitional Archaic Period in the region, though sparse, have been found in private collections that are generally attributed to the southwest Nova area.¹¹⁴

Predictive modeling for the early Holocene Archaic Period presents a unique set of challenges for archaeologists. Over this approximately 3,000-year period post deglaciation, riverine systems and coastlines of the Maritime Peninsula experienced a series of dramatic changes influenced by numerous factors including localized isostatic rebound, lake formation and collapse, changes in relative sea levels, and rapid sediment depositions.¹¹⁵ Recent studies, following examples from Northern Maine suggest that during the period between 9,000 BP and 7,000 BP, river systems in the region were largely unstable, with near continual gradation and reworking due to accelerated sea level rise. Often, inland archaeological sites from this period are masked by deep aggraded deposits of alluvium. The small fraction of isolated finds representing this period are likely “dislodged” by a multitude of natural and unnatural disturbances.¹¹⁶ Submerged palaeoshores and ancient channels have been mapped at Lake Banook and indicate significant water fluctuations in the Dartmouth Lakes throughout the

¹⁰⁹ Shaw et al. 2002a, 1867.

¹¹⁰ Fader and Miller 2008.

¹¹¹ National Resources Canada 2010.

¹¹² Davis and Christianson 1988., Betts et al. 2018.

¹¹³ Pentz 2008, 167.

¹¹⁴ Laybolt 1999, 22.

¹¹⁵ Murphy 1998, 93.

¹¹⁶ Murphy 1998, 93.

postglacial period.¹¹⁷ By 6,000 BP, sea levels had largely stabilized, rising approximately 0.36 m/100 years.¹¹⁸ This stable rise resulted in the formation of a well-defined palaeoshoreline at approximately -23 m within the inner reaches of Halifax Harbour.¹¹⁹ The last remaining lake in the Harbour, Lake Bedford, transitioned from freshwater to marine as the waters raised over the shallow sill at The Narrows around 5,700 BP.¹²⁰ By 5,000 to 4,000 BP, the lake and river systems in Nova Scotia largely stabilized coinciding with the latter half of the Late Archaic Period.¹²¹ By 3,000 BP, Halifax Harbour had resembled its current conditions with its shoreline residing less than 5 metres from modern levels.¹²²

The general location of Woodland to Historic period occupation sites along the river systems and coastlines of Nova Scotia are largely predictable owing, in part, to river stabilization and the characteristic slow predictable sea level rise of this period. Yet, the increasing pace of mid-20th century sea level rise has left near coastal sites from this period vulnerable to rapid erosion and loss. Sea level rise and increasing storm severity will undoubtedly affect upstream watercourse alignments and sediment depositions, especially in low lying areas, in the years to come with upper limits of SLR projections at 1.3 m over the next 100 years.¹²³ This process has submerged known L'nuk cultural resources first recorded in the early 20th century and has undoubtedly caused the erosion of numerous unknown sites along coastlines and river systems within recent memory. Modern development has also effectively masked and altered the former cultural landscape. Throughout the mid to late 19th century many watercourses that were once recorded on the peninsula were diverted underground and major wetlands, such as those on the Common, were infilled. This was largely an effort to constrict or divert their flow for sanitary purposes and to develop the landscape.

By the turn of the century, the remaining watercourses were either realigned or constricted and/or dammed to create park ponds. The watercourses that were once recorded near the study area were no longer depicted flowing along Mumford Road on maps past 1950. After this time, they would have likely been diverted underground and/or infilled burying the more natural cultural landscape. This increases the likelihood of finding cultural material within disturbed contexts of the urban landscape. Although original context may be lost due to landscape alteration (in a western archaeological sense), these resources continue to hold a significant cultural value to the Mi'kmaw and enrich the evolutionary story of the cultural landscape of greater Kjiptuk.

¹¹⁷ Webster et al. 2015.

¹¹⁸ Baechler 2017, 394.

¹¹⁹ National Resources Canada 2010.

¹²⁰ Fader and Miller 2008.

¹²¹ Shaw et al. 2002b, 143.

¹²² Fader and Miller 2008, 6.

¹²³ Forbes et al. 2009.

Understanding the geomorphological changes of shorelines and individual river systems is paramount in the prediction of L'nuk cultural resource potential due to the strong connections between Mi'kmaw, waterways, and bodies of water.¹²⁴ Yet, modeling landscape change and its subsequent landscape usage is a challenge that is often limited to the amount of prior localized geological and archaeological research. Historic alterations can further complicate these interpretations. However, the use of ground-truthed archeological potential buffers can be used to statistically highlight areas to inform interpretations in the field for archaeological potential when previous research is unavailable. Following the model required to be used for archaeological consulting by New Brunswick Archaeological Services (developed from the Sevogle River Test Plot),¹²⁵ a 50-metre high and an 80-metre moderate L'nuk archaeological potential buffer was created for the study area with the approximate locations of historic watercourses adapted from 19th century maps and plans (Figure 3.3-1).

Of the 10 sites attributed to L'nuk occupation recorded within 10-kilometre radius of the study area, seven sites lie within these predictive buffers providing an accuracy rate of 70% using the Sevogle model. It is important to note that many of these sites were recorded before the implication of handheld GPS. Their locations may rely solely on memory and human transcription; therefore, they may not be exact. Site locations are recorded within the MARI database as a single coordinate and, therefore, recorded site locations are reflective of overall mobility trends. It should also be noted that sites recorded within urban HRM that lie well outside potential buffers may be related to the alteration of historic watercourses as well as non-watercourse related movement.

¹²⁴ Thwaites 1896; Cook 2007, xxiii.

¹²⁵ Archaeological Services 2012.

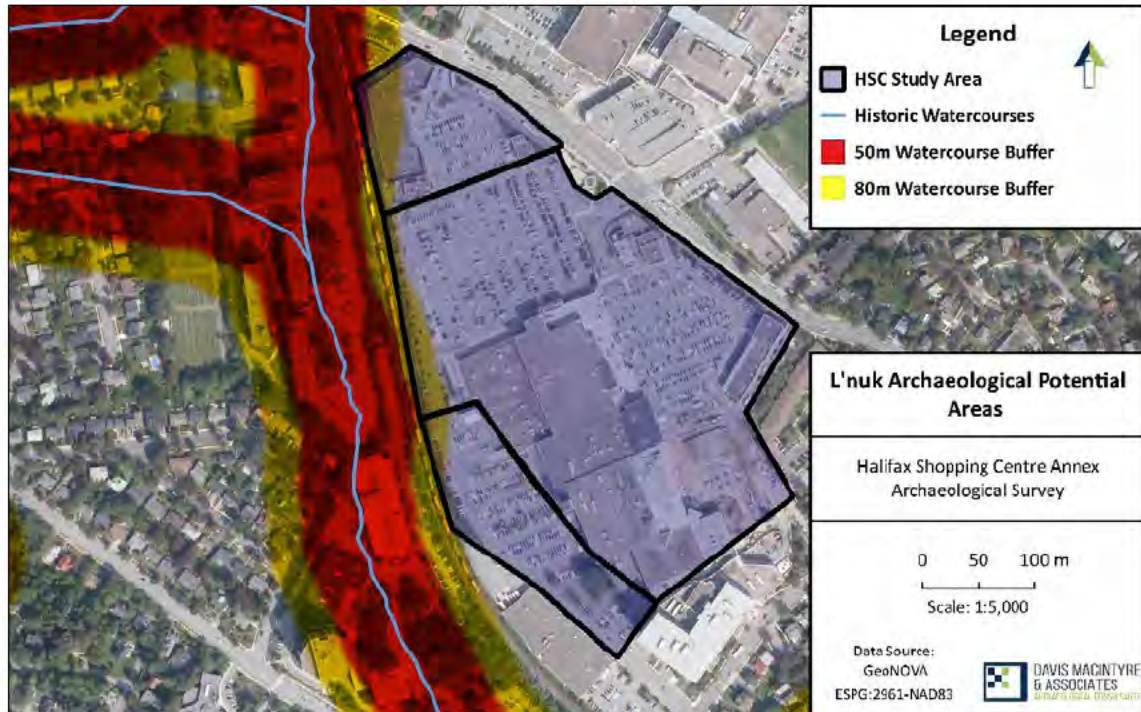


Figure 3.3-1: The study area with L'nuk activity potential buffers using the approximate location of 19th century mapped watercourses. Georeferenced 1992 air photo of the Halifax Shopping Center Annex Phase 1 and 2 study area overlaid.

3.4 Field Reconnaissance

A field reconnaissance was conducted by Travis Crowell on December 2, 2022, under cool and sunny conditions. The field reconnaissance consisted of a pedestrian survey of the Halifax Shopping Centre Annex property bounded by Mumford Road, Chebucto Road and Philip Road (Plate 1). The property has been extensively developed in a commercial area, and today consists of parking lots, strip malls, Walmart, Sobeys and office towers. GPS tracklogs and waypoints of interest were collected, and detailed notes and photographs were taken (Figure 3.4-1).

The reconnaissance began in the northern Phase 1 portion of the study area, in the parking lot in front of the strip mall. The terrain has seen extensive urban development and has been extensively landscaped for the asphalt parking lot and commercial buildings (Plate 2). The parking lot features several light standards and a catch basin at the southern entrance (Plate 3). The buildings themselves appear to be built onto concrete slabs. Behind the strip mall, the property boundary slopes steeply downhill several metres towards the rail cut (Plate 4).

The reconnaissance then proceeded south, along the western extent of the study area. The parking area slopes gently south towards a low point in the parking lot, where a catch basin is located (Plate 5). It is likely that the parking area has been landscaped to

direct surface water to this catch basin. The parking lot then rises again southwards moving into the southwestern portion of the Phase 1 study area. This area consists entirely of parking lots and trucking bays, commercial buildings and Chebucto Place (Plate 6). The Ta17 Road runs north-south along the western edge of the study area, connecting to Chebucto Road. Numerous manholes, catch basins and water hydrants were recorded along the back of the building, marking subsurface infrastructure (Plate 7). The western edge of the property drops steeply towards the rail cut, and the use of large aggregate and boulders along the edge suggest this area has been built up above the original natural terrain in this area (Plate 8).

Conversation with the operations manager from Chebucto Place support that this area has been substantially infilled. He recalled that excavation for subsurface utilities had turned up brick, plaster, and construction rubble up to a depth of over 1.5m below the asphalt surface. This material, he believed, was debris from later 20th century retrofitting of Chebucto Place which including the demolition of the upper 2 stories from the existing building.

The Phase 2 portion of the study area consists of parking lots, vehicle entrance and commercial buildings in the centre of the annex, including Walmart, Sobeys, Winners and the Mumford Professional Centre (Plate 9). The parking area in front of the main Walmart entrance gently slopes to a central catch basin, with lines of lampposts throughout (Plate 10). A retaining wall, several metres in height, runs east-west along the north end of the parking lot (Plate 11). The scale of the retaining wall suggests extensive cutting to level this area for the parking lot.

The parking lot along the eastern side of the study is like that in front of Walmart. Catch basins, surface drains, and light standards are found throughout the parking area and reflect past subsurface disturbances in these areas (Plate 12). In general, the parking area on the east side of the Phase 2 study area seems to have experienced less extensive modification compared to other portions of the study area. The parking area is approximately level with the natural slope of the hill, where exposed bedrock and mid-20th century homes are present (Plate 13; Plate 14). An underground parkade is in the southeastern corner of the Phase 2 portion of the study area, in front of the Mumford Professional Centre (Plate 15). Construction of the parkade would have required excavation of natural terrain in this area.

Construction of the various buildings within the study area would have had variable subsurface impact. Construction of the main annex building, containing Sobeys, Walmart, Chebucto Place and other businesses, would have required significant excavation of the natural terrain in this area. Other buildings in the study area, such as the strip malls at the northwest corner and east extent of the study area appear to have been built on slabs and may not have required as much subsurface disturbance. No significant archaeological features were observed on the surface during field reconnaissance of the study area.

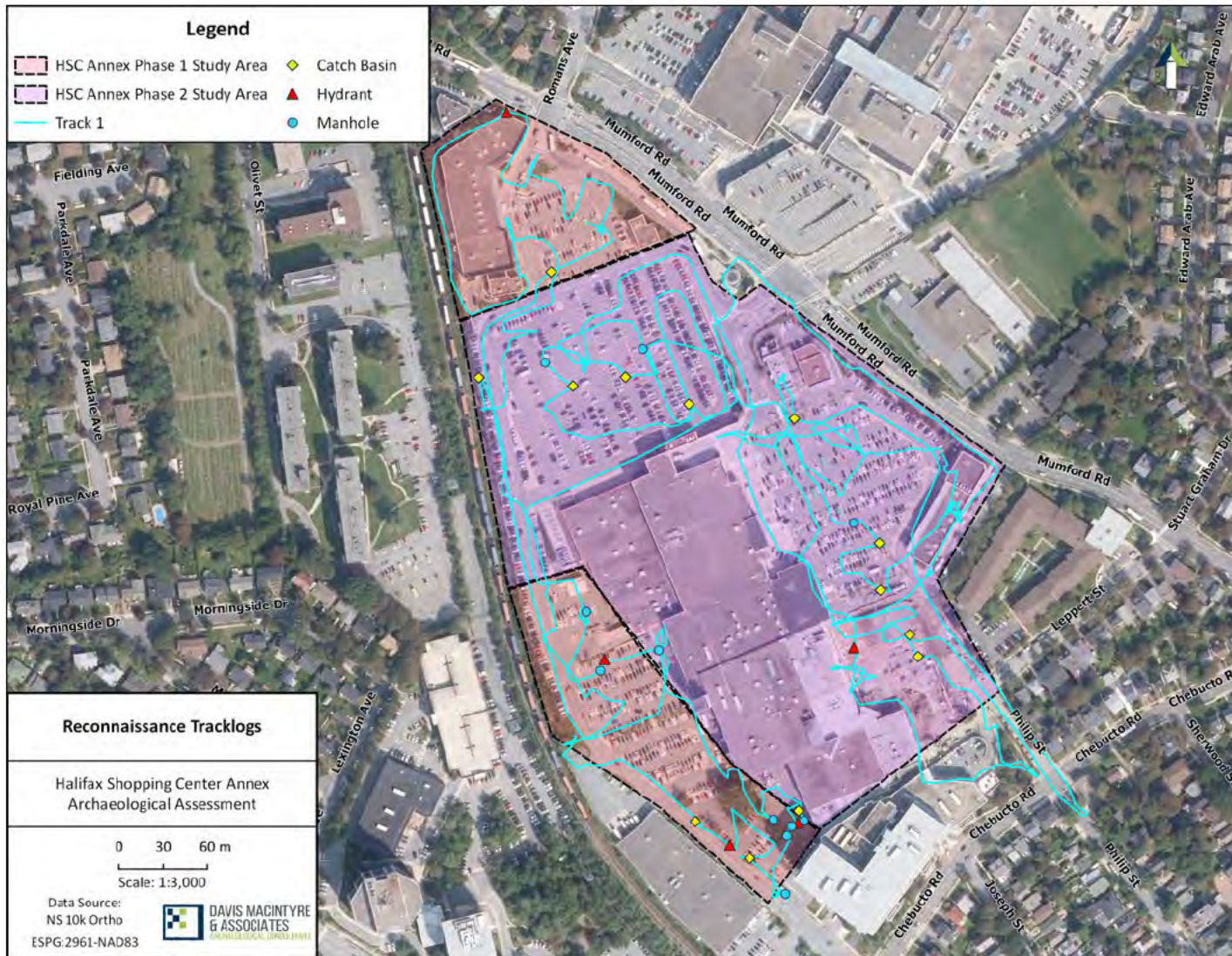


Figure 3.4-1: Tracklogs and GPS waypoints collected during the reconnaissance, indicating the approximate subsurface infrastructure.

4.0 RESULTS AND DISCUSSION

The historic background indicates that Mi'kmaq and their ancestors have had a long-standing and intensive tradition of land use and occupancy throughout the Halifax/Dartmouth region since time immemorial. They took advantage of well-established travel routes via the lakes and rivers, particularly along the Shubenacadie waterway, to travel between the coastal and interior regions and had encampments along these waterways, evidenced by the material remains left in the archaeological record. The Northwest Arm was a place of bountiful resources, and part of an interconnected series of watercourses and travel routes in the area known to have been utilized by the Mi'kmaq and their ancestors. A small watercourse, possibly Smelt Brook, once flowed approximately 70m west of the study area, west of the rail-line. Mi'kmaq may have frequented this brook for resources, and historic Mi'kmaq activity is well documented throughout the Northwest Arm.

Early Euro-Canadian activity near the study area began soon after the founding of Halifax in 1749. Three blockhouses connected by a road was established along the isthmus of the Halifax peninsula between the Northwest Arm and the Bedford Basin. A portion of the road, named Patrol or Perimeter Road, passed though the southeastern corner of the study area. Between 1749 and 1752, several hundred Swiss and German immigrants arrived in Halifax, and many settled at the head of the Northwest Arm to set up farms and lumbering operations. Eventually, the area became known as “Dutch Village”. The study area remained largely forested until the late 19th century.

Historic maps from 1878 show that the study area encompasses several properties, with structures belonging to John Murphy located the northern portion of the study area, in what is today the parking lot off Mumford Road (Figure 4.0-1). Structures on the “Mrs. Cabot” property are in the southern extent of the study area, off Chebucto Road, but have likely been destroyed by construction of Chebucto Place and the underground parking lot. The early 1920s saw major changes to the study area including the construction of the Simpsons Department Store and tram line, which was expanded in the 1950's.

Overall, the field reconnaissance determined that substantial landscape modification has occurred within the Phase 1 and Phase 2 study areas, related to past commercial and urban development. Consequently, no surficial archaeological features or resources were identified during the reconnaissance. The annex building itself, containing Sobeys, Walmart, Chebucto Place, and the underground parkade would have required significant subsurface excavation during construction. Other areas, including the northwest and southwest ends of the Phase 1 development area, appear to have experienced substantial infilling. At least some excavation was conducted along the northern edge of the Walmart parking lot, where a retaining wall has been erected.

Significant in-ground infrastructure is present throughout the study area, and it is likely that some of this, particularly the catch basins and manholes, may have extended into natural (pre-infilling) levels. However, the potential remains for undisturbed soils throughout the study area. The greatest potential for intact archaeological resources exists in the northern extent of the study area, below the parking lots for 7100 Mumford Road and Walmart. Both the 1920's tram line and remnants of structures associated with the John Murphy property may exist below the asphalt. Past streetscape improvements along Spring Garden Road and North Park Street have found fully intact rail systems directly below the asphalt surface, while parking areas excavated throughout urban HRM has uncovered the foundations of former buildings.

A portion of the footprint for the former Simpsons Department store may also remain beneath the parking lot in the southwest of the Phase 1 study area. This area has been substantially infilled meaning the remains of this building and associated infrastructure may be present below fill deposits. However, any remains of this structure are considered to be of low archaeological significance given their recent age and extensive documentation.

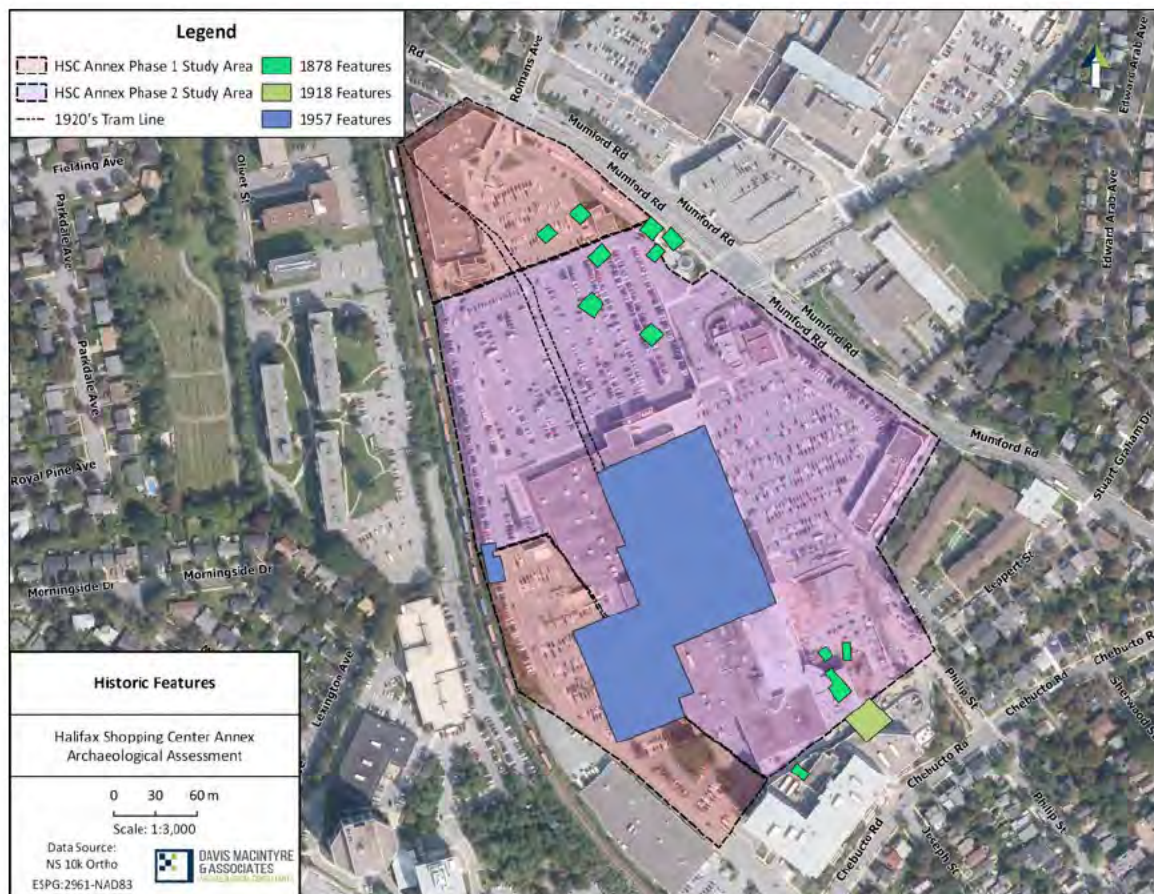


Figure 4.0-1: Study showing approximate location of georeferenced 19th and 20th century features.

5.0 RECOMMENDATIONS AND CONCLUSIONS

The results of the archaeological assessment indicate that the study area is generally of low-moderate potential for encountering archaeological resources. Historic activity associated with 19th century farming and settlement may be present in the form of stone walls, midden or garbage deposits, and early infrastructure like sewers.

One area has been identified as moderate potential for encountering archaeological resources. This includes areas where georeferenced historic mapping has indicated the presence of 19th century historic homes associated with the former Murphy property and the 1920's tramline in what is today the parking lot west of the bus terminal. While development of these areas may have removed any trace of these homes, historic activity in the form of foundation walls, boundary walls, midden or garbage deposits, or sewers may be present in these locations.

Therefore, it is recommended that archaeological monitoring be conducted for ground disturbance associated with any proposed development of the Halifax Shopping Center Annex. Areas of low-moderate potential may require only periodic check-ins or for the archaeologist to be "on-call" for construction crews to notify if they encounter archaeological resources. However, in areas of moderate potential archaeological monitoring will be required until the archaeologist can make a determination that the area has been disturbed to the extent that intact archaeological resources will not be expected to be encountered.

In the event that archaeological resources are encountered at any point during ground disturbance and an archaeologist is not present, it is required that any ground-disturbing activity be halted immediately, and the Coordinator of Special Places (902-424-6475) be contacted regarding a suitable method of mitigation. Should the impact area be modified to expand beyond the currently understood range, a qualified archaeologist should be consulted to evaluate whether further archaeological assessment may be required.

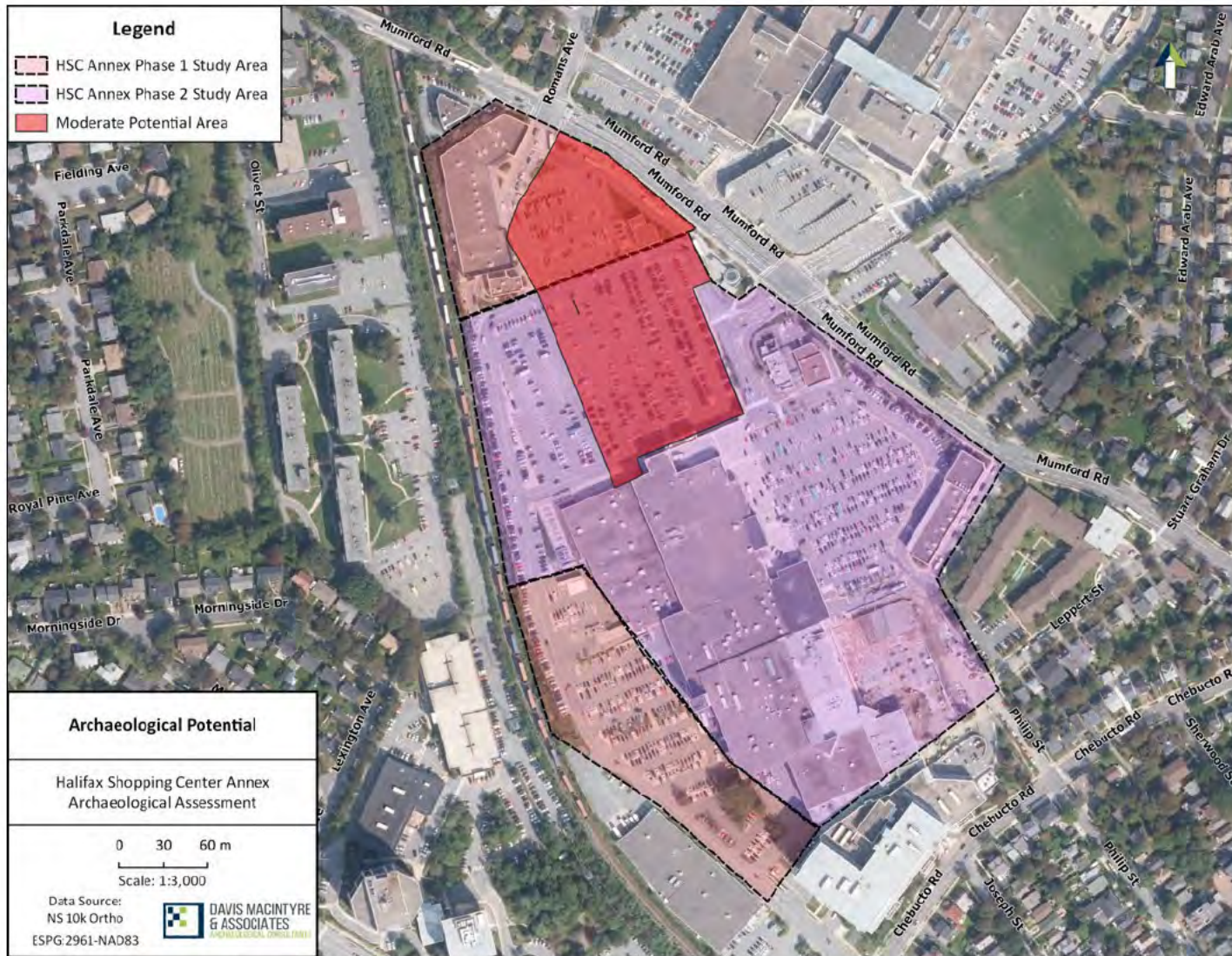


Figure 5.0-1: Areas of elevated archaeological potential identified through the archaeological assessment.

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PLATES



Plate 1: View of the HSC Annex from Mumford Road, facing southwest.



Plate 2: Storefronts in the northern portion of the Phase 1 study area, facing northwest.



Plate 3: Light pole in the parking area in the northern portion of the Phase 1 study area, facing northwest.



Plate 4: Steep slope to the rail cut along the western extent of the study area, facing south.



Plate 5: Catch basin at the west extent of the study area, facing west.

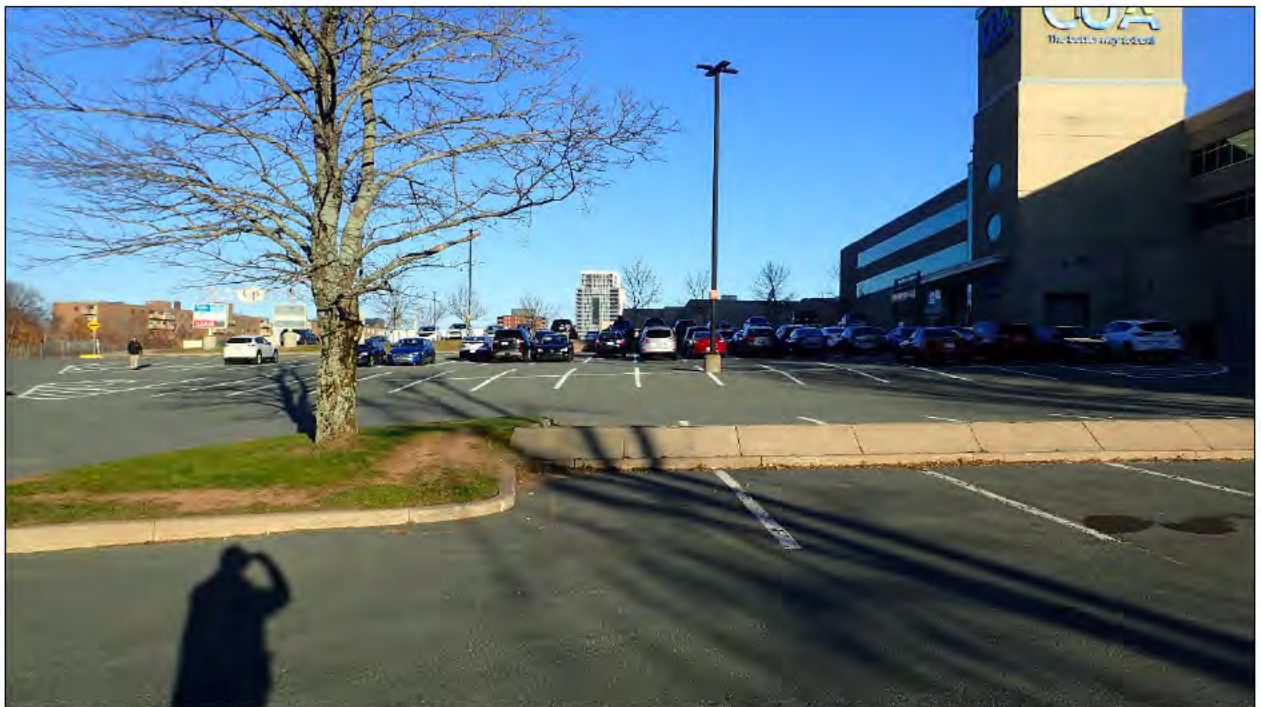


Plate 6: Parking area on the west side of the Halifax Shopping Centre Annex, facing north.



Plate 7: Manholes in the parking area with the Walmart trucking bays in the background, facing northeast.



Plate 8: Edge of fill at the western extent of the study area, facing north.



Plate 9: Overview of the Walmart parking lot from the top of the retaining wall, facing west.



Plate 10: Walmart storefront and parking lot, facing southwest.



Plate 11: Concrete retaining wall (left) at the east end of the Walmart parking lot, facing southeast.



Plate 12: Upper parking lot in the Phase 2 section of the study area, facing southwest.



Plate 13: Homes on the corner of Philip and Leppert Street which are at the same grade as the eastern extent of the study area, facing east.



Plate 14: Exposed bedrock at the southeastern extent of the study area, facing southeast.



Plate 15: Underground parking entrance in the Phase 2 section of the study area, in front of the Mumford Professional Centre, facing west.

APPENDIX A: HERITAGE RESEARCH PERMIT



Heritage Research Permit (Archaeology)

Special Places Protection Act 1989

(Original becomes Permit when approved by
Communities, Culture and Heritage)

Office Use Only
Permit Number:

A2022NS202

<i>Greyed out fields will be made publically available. Please choose your project name accordingly</i>	
Surname Crowell	First Name Travis
Project Name Halifax Shopping Centre Annex	
Name of Organization Davis MacIntyre & Associates Limited	
Representing (if applicable)	
Permit Start Date 28 November 2022	Permit End Date 31 December 2022
General Location: Mumford Road, Halifax, NS	
<p>Specific Location: <i>(cite Borden numbers and UTM designations where appropriate and as described separately in accordance with the attached Project Description. Please refer to the appropriate Archaeological Heritage Research Permit Guidelines for the appropriate Project Description format)</i></p> <p>20 T 450778.16 m E 4943864.10 m N</p>	
<p>Permit Category: Please choose one</p> <p><input type="checkbox"/> Category A – Archaeological Reconnaissance</p> <p><input type="checkbox"/> Category B – Archaeological Research</p> <p><input checked="" type="checkbox"/> Category C – Archaeological Resource Impact Assessment</p> <p><input checked="" type="checkbox"/> I certify that I am familiar with the provisions of the <i>Special Places Protection Act</i> of Nova Scotia and that I have read, understand and will abide by the terms and conditions listed in the Heritage Research Permit Guidelines for the above noted category.</p>	
Signature of applicant	Date 14 November 2022
Approved by Executive Director	Date 11/23/22