

Stage 1 Archaeological Assessment of 1148 and 1154 Mona Road, Part of Lots 99 and 100, Registered Plan 323, Part of Lots 4-5, Range 1 Credit River Indian Reserve, Geographic Township of Toronto, Peel County, now in the City of Mississauga, Regional Municipality of Peel

Original Report

Prepared for:

Queenscorp (Mona II) Inc.

300-170 Evans Avenue

Toronto, Ontario, M8Z 1J7

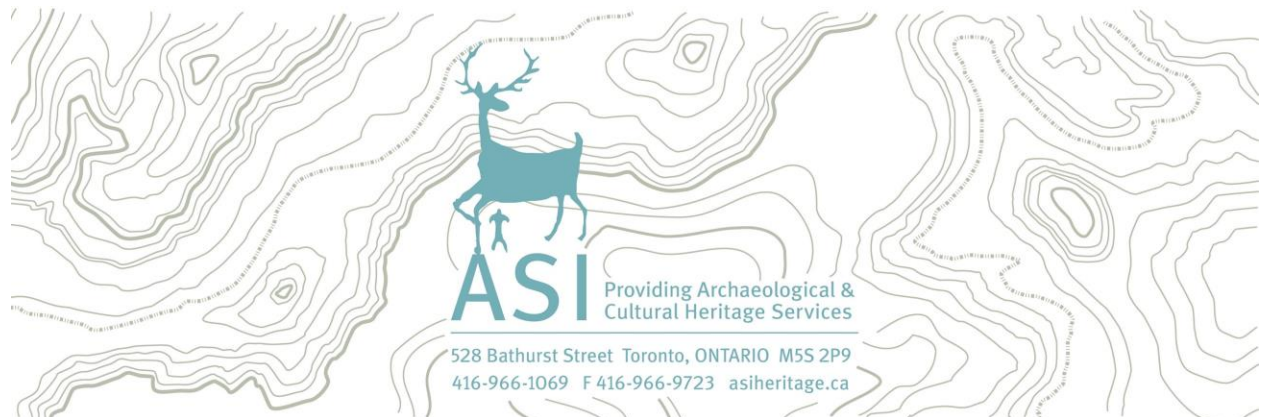
(416) 253-6909

Archaeological Licence: P449 (Bhardwaj)

Project Information Form P449-0771-2024

Archaeological Services Inc. File: 23PL-112

28 May 2024



Executive Summary

Archaeological Services Inc. was contracted by Queenscorp (Mona II) Inc. to undertake a Stage 1 Archaeological Assessment of 1148 and 1154 Mona Road, Part of Lots 99 and 100, Registered Plan 323, Part of Lots 4-5, Range 1 Credit River Indian Reserve, Geographic Township of Toronto, Peel County, now in the City of Mississauga, Regional Municipality of Peel. The subject property is approximately 0.3 hectare.

The Stage 1 background research entailed consideration of the proximity of previously registered archaeological sites and the original environmental setting of the subject property, along with nineteenth- and twentieth-century settlement trends. This research suggested that there is archaeological potential for the presence of both Indigenous and Euro-Canadian archaeological sites within the subject property. The Stage 1 field review determined that approximately 80% of the subject property is disturbed and the balance of the property retains archaeological potential.

It is recommended that Stage 2 Archaeological Assessment be conducted in all portions of the subject property that retain archaeological potential, in accordance with the *Standards and Guidelines for Consultant Archaeologists (2011)*.



Project Personnel

- **Senior Project Manager:** David Robertson, Master of Arts (P372), Partner, Director, Planning Assessment Division
- **Project Manager:** Robb Bhardwaj, Master of Arts (P449), Associate Archaeologist, Project Manager, Planning Assessment Division
- **Project Director:** Robb Bhardwaj
- **Project Administrator:** Lauren Vince, Honours Bachelor of Arts (R1235), Archaeologist, Project Administrator, Planning Assessment Division
- **Field Director:** Christopher Brown, Master of Arts (P361), Associate Archaeologist, Project Manager, Planning Assessment Division
- **Report Preparation:** Dana Millson, Doctor of Philosophy, Archaeologist, Technical Writer, Planning Assessment Division
- **Graphics:** Andrew Clish, Bachelor of Environmental Science (P047), Senior Archaeologist, Senior Field Director, Laboratory and Fieldwork Services, Operations Division
- **Report Reviewers:** Robb Bhardwaj; David Robertson



Table of Contents

| | |
|--|----|
| Executive Summary | 2 |
| Project Personnel | 3 |
| 1.0 Project Context | 6 |
| 1.1 Development Context | 6 |
| 1.2 Historical Context | 6 |
| 1.2.1 Indigenous Land-Use Settlement | 6 |
| 1.2.2 Post-Contact Settlement | 8 |
| 1.2.3 Review of Map Sources | 12 |
| 1.2.4 Review of Twentieth- and Twenty-first Century Aerial Imagery | 13 |
| 1.3 Archaeological Context | 14 |
| 1.3.1 Registered Archaeological Sites | 14 |
| 1.3.2 Previous Assessments | 15 |
| 1.3.3 Physiography | 16 |
| 1.3.4 Existing Conditions | 17 |
| 1.3.5 Review of Archaeological Potential | 17 |
| 2.0 Field Methods | 19 |
| 2.1 Findings | 20 |
| 3.0 Analysis and Conclusions | 20 |
| 4.0 Recommendations | 21 |
| 5.0 Advice on Compliance with Legislation | 22 |
| 6.0 Bibliography and Sources | 23 |
| 7.0 Images | 29 |
| 8.0 Maps | 34 |

List of Tables

| | |
|---|----|
| Table 1: Registered Sites within a One-Kilometre radius of the Subject Property | 40 |
|---|----|



List of Images

| | |
|---|----|
| Image 1: View of the front of the house at 1154 Mona Road in the northeast of the subject property. | 29 |
| Image 2: View of the front of the house at 1148 Mona Road in the northeast of the subject property. | 29 |
| Image 3: View along the southeast limit of the subject property. | 30 |
| Image 4: View southeast along the backyards of the houses. | 30 |
| Image 5: View west between the two houses. Note the grading that extends past the southwest limit of the subject property. | 31 |
| Image 6: View north across area of grading in the south of the subject property from the south corner. | 31 |
| Image 7: View along the southwest limit of the subject property across the grading in the centre and south of the property. | 32 |
| Image 8: View along the northwest limit of the subject property from the west corner of the property. | 32 |
| Image 9: View northwest along the southwest limit of the subject property. | 33 |
| Image 10: View south across the centre of the subject property from the northwest limit. | 33 |

List of Maps

| | |
|--|----|
| Figure 1: Location of the Subject Property | 35 |
| Figure 2: Subject Property located on the 1859 <i>Tremaine Map of the County of Peel</i> | 36 |
| Figure 3: Subject Property located on the 1877 <i>Illustrated Historical Atlas of the County of Peel</i> | 36 |
| Figure 4: Subject Property located on the 1918 Brampton Topographic Map | 36 |
| Figure 5: Subject Property located on 1954 and 2000 Aerial Imagery | 37 |
| Figure 6: Existing Conditions of the Subject Property | 38 |
| Figure 7: Stage 1 Archaeological Assessment of the Subject Property | 39 |



1.0 Project Context

Archaeological Services Inc. was contracted by Queenscorp (Mona II) Inc. to undertake a Stage 1 Archaeological Assessment of 1148 and 1154 Mona Road, Part of Lots 99 and 100, Registered Plan 323, Part of Lots 4-5, Range 1 Credit River Indian Reserve, Geographic Township of Toronto, Peel County, now in the City of Mississauga, Regional Municipality of Peel (Figure 1). The subject property is approximately 0.3 hectare.

1.1 Development Context

This assessment was conducted under the senior project management of David Robertson (P372) and the project management and project direction of Robb Bhardwaj (P449) under Ministry of Citizenship and Multiculturalism (hereafter the “Ministry”) Project Information Form P449-0771-2024. All activities carried out during this assessment were completed as part of a site plan application, as required by the City of Mississauga. All work for this project was completed in accordance with the *Ontario Heritage Act* (Ministry of Culture [now the Ministry], 1990) and the *Standards and Guidelines for Consultant Archaeologists* (hereafter the “Standards”) (the Ministry of Tourism and Culture [now the Ministry], 2011).

Permission to access the subject property and to carry out all activities necessary for the completion of the assessment was granted by the proponent on March 13, 2024.

1.2 Historical Context

The purpose of this section is to describe the past and present land use and settlement history, and any other relevant historical information gathered through the Stage 1 background research. First, a summary is presented of the current understanding of the Indigenous land use of the area. This is followed by a review of historical Euro-Canadian settlement trends.

1.2.1 Indigenous Land-Use Settlement

Current archaeological evidence indicates humans were present in southern Ontario 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 and Fritz, 1988) and populations now occupied less extensive territories (Ellis and Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels. Many sites that would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy woodworking 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 archaeological evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is interpreted by archaeologists to be indicative of increased social organization and the investment of labour into social infrastructure (Brown, 1995:13; Ellis *et alia*, 1990, 2009).

Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. With the beginning of the Woodland period around 2,500 B.P., exchange and interaction networks broadened (Spence *et alia*, 1990:136, 138). By approximately 2,000 B.P., small community camps emerged, focusing on the seasonal harvesting of resources (Spence *et alia*, 1990:155, 164). The earliest macro botanical evidence for maize in southern Ontario dates to 1,500 B.P., although it is thought that maize only supplemented people's diet at this time. Phytolithic evidence for maize in central New York State by 2,300 B.P., however, indicates an earlier use of maize may have been present. Once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence may be found here (Birch and Williamson, 2013:13–15). 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.), larger settlement sites focused on horticulture begin to dominate the archaeological record. Seasonal dispersal of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson, 1990:317). By 1300-1450 C.E., archaeological research focusing on these horticultural societies note that this episodic dispersal was no longer practised and these populations now occupied sites throughout the year (Dodd *et alia*, 1990:343). By the mid-sixteenth century these small villages had coalesced into larger communities (Birch *et alia*, 2021). Through this process, the socio-political organization of these First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed. Other First Nation communities continued to practice residential mobility and to harvest available resources across landscapes they returned to seasonally/annually.

By 1600 C.E., the Confederation of Nations was encountered by the first European explorers and missionaries in Simcoe County. In the 1640s, devastating epidemics and the traditional enmity between the Haudenosaunee and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) led to their dispersal from southern Ontario. 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

The Head of the Lake Purchase (Treaty 13A and 14)

Treaty 13a was signed on August 2, 1805, between the Mississaugas and the British Crown in Port Credit at the Government Inn. A provisional agreement was reached in which the Mississaugas ceded 70,784 acres of land bounded by the Toronto Purchase of 1787 in the east, the Brant Tract in the west, and a northern



boundary that ran six miles back from the shoreline of Lake Ontario. The Mississaugas also reserved the sole right of fishing at the Credit River and were to retain a one-mile strip of land on each of its banks, which became the Credit Indian Reserve.

On September 5, 1806, the signing of Treaty 14 confirmed the Head of the Lake Purchase between the Mississaugas of the Credit and the Crown for lands along the north shore of Lake Ontario southwest of the Toronto Purchase to what is now Oakville (Mississauga of the New Credit First Nation, 2001; Mississaugas of the Credit First Nation, 2017).

In 1818, the majority of the Mississauga Tract was acquired by the Crown excluding the lands tracts flanking the Credit River, Twelve Mile Creek, and Sixteen Mile Creek. The remainder of Mississauga land was surrendered in 1820, except approximately 81 hectares along the Credit River (Heritage Mississauga, 2012). The Credit Indian Village was established in 1825-26 as an agricultural community and Methodist mission near present day Port Credit (Heritage Mississauga, 2019; Mississaugas of the Credit First Nation, 2014), but by 1840, the village was under such pressure from Euro-Canadian settlement that plans began to relocate the settlement. In 1847, the Credit Mississaugas were made a land offer by the Six Nations Council to relocate to the Grand River and within the same year, 266 Mississaugas settled at New Credit approximately 23 kilometres southwest of Brantford. In 1848, a mission of the Methodist Church was established there by Reverend William Ryerson (Woodland Indian Cultural Education Centre, 1985). Although the majority of the former Mississauga Tract had been surrendered from the Mississauga by 1856 (Gould, 1981), this does not exclude the likelihood that the Mississauga continued to utilise the landscape at large during travel and for resource extraction (Ambrose, 1982).

Township of Toronto

At the conclusion of the American War of Independence (1774-1783), the British were forced to recognize the emergence of a new political frontier, one that had to be maintained by a strong military presence. In addition, several British loyalists travelled north and crossed the border in order to remain in British territory. Many of them were given land grants by the Crown in exchange for loyal



service. These new developments ultimately led to the purchase of Mississauga land by the Crown in 1787 (although boundary disputes were not resolved until the signing of a treaty in 1805).

The Township of Toronto was originally surveyed in 1806 by Samuel Wilmot, Deputy Surveyor. The first settler in this Township (and also the County of Peel) was Colonel Thomas Ingersoll. The whole population of the Township in 1808 consisted of seven families, scattered along Dundas Street. The number of inhabitants gradually increased until the war broke out in 1812, which gave considerable check to its progress. When the war was over, the Township's growth revived, and the rear part of the Township was surveyed and called the "New Survey". The greater part of the New Survey was granted to a colony of Irish settlers from New York City, who suffered persecution during the war.

The first transportation routes to be established followed early Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers. Local roads were initially cleared by the grantees of adjacent land as part of their settlement duties although the many rivers and creeks posed a challenge to the gridded road system, and nineteenth-century maps detail the many jags and detours necessary to avoid bad crossing points.

The Credit River runs through the western portion of the Township and proved to be a great source of wealth to its inhabitants, as it was not only a good watering stream, but there were seemingly endless mill privileges along the entire length of the river. Communities began to emerge, usually along the river or at crossroads along Dundas Street, which developed into the villages of Clarkson, Cooksville, Dixie, Erindale, Malton, Meadowvale Village, Port Credit and Streetsville, as well as the hamlet of Lakeview and numerous other settlements, which later disappeared. In 1821, the township's population was 803. By 1851, over 7,500 people lived in the township and more than 36,000 acres were being farmed to produce barley, wheat, oats, vegetables, and fruit. Small industries were located throughout the township, manufacturing products ranging from hosiery to ploughshares (Archaeological Services Inc., 2020).

During the second half of the nineteenth century, railways were built, and the markets shifted. Water-powered industries in the rural areas could no longer



compete with those in larger centres, which were run by electricity. By 1901, the township's population had dropped considerably to 4,690. The economy did not recover until the 1950s, when new industries moved into the township and spurred massive growth. When the Township of Toronto became the Town of Mississauga in 1968, it had a population of 107,000 and covered 70,598 acres. It grew very quickly, and the rural township transformed into an urban area, with over 1,200 industries locating in Mississauga by the 1970s. In 1974, the towns of Port Credit, Streetsville and Mississauga were amalgamated to become the City of Mississauga (Mika and Mika, 1981).

Town of Port Credit

Around 1804, Colonel Ingersoll, the first settler, built a trading store. At around the same time, a Government Inn was established on the east bank of the river to accommodate and direct new settlers. Port Credit was officially surveyed and established as a village in 1834. The land on the west side of the Credit River was the first to be surveyed and developed, however, a disastrous fire in 1855 halted its growth. In 1856, a survey of the land on the east side of the river was undertaken, and surveyed lots between the lakefront and the railway were quickly occupied (Hicks, 2007). The first train station opened in 1855 just north of the town limits to accommodate the Hamilton and Toronto Railway. While the railway boosted the local economy, it led to the decline in use of the port. The original station was destroyed by fire in the early twentieth century, and the former Western Hotel was built in its place on Stavebank Road (Heritage Mississauga, 2009). Port Credit attained status as a police village by 1909, and in 1961, it was incorporated as a town. In 1974, Port Credit amalgamated with the City of Mississauga (Hicks, 2007).

Hamilton and Toronto Railway

The Hamilton and Toronto Railway was formed in 1852, and in 1855, completed its lake shore route. In 1871, the railway was amalgamated with the Great Western Railway, which in turn, was amalgamated in 1882, with the Grand Trunk Railway, and then in 1923, it became part of the Canadian National Railway (Andreae, 1997). As the City of Toronto grew after World War II and populations in the Greater Toronto Area rose, the need for public transport became more



urgent. In 1965, a commuter train along the Canadian National's Lakeshore line was proposed and two years later, the first GO train travelled along the railway corridor, stopping at several stations, including Pickering, Union, Oakville, and Hamilton (Go Transit, 2017). The subject property is located north of the present Port Credit station, which was one of the original stops on the Lakeshore West line.

1.2.3 Review of Map Sources

A review of nineteenth- and early twentieth-century mapping was completed to determine if these sources depict any nineteenth-century Euro-Canadian settlement features that may represent potential historical archaeological sites within or adjacent to the subject property. Historic map sources are used to reconstruct/predict the location of former features within the modern landscape by cross-referencing points between the various sources and then georeferencing them to provide the most accurate determination of the location of any property from historic mapping sources. The results can be imprecise (or even contradictory) because sources of error, such as the vagaries of map production, differences in scale or resolution, and distortions caused by the reproduction of the sources, introduce error into the process. The impacts of this error are dependent on the size of the feature in question, the constancy of reference points on mapping, the distances between them, and the consistency with which both are depicted on historic mapping.

In addition, not all settlement features were depicted systematically in the compilation of these historical map sources, given that they were financed by subscription, and subscribers were given preference with regards to the level of detail provided. Thus, not every feature of interest from the perspective of archaeological resource management would have been within the scope of these sources.

On the 1859 *Tremaine Map of the County of Peel* (Tremaine, 1859) (Figure 2), the subject property is within a parcel owned by Robert Cotton, north of the settlement of Port Credit. While there are no settlement features or watercourses depicted on the subject property, the Hamilton and Toronto Railway corridor passes the property to the southeast and Mary Fix Creek is illustrated



immediately east. A settlement road (present-day Stavebank Drive) is indicated to the west of the subject property.

On the 1877 *Illustrated Historical Atlas of the County of Peel* (Pope, 1877) (Figure 3), the subject property overlies parcels now owned by James W. Cotton. Mary Fix Creek is illustrated north of the property and Kenollie Creek is now shown further south of the property limits.

Early topographic mapping was also reviewed for the presence of potential historical features (Figure 4). Land features such as waterways, wetlands, woodlots, and elevation are clearly illustrated on this series of mapping, along with roads and structure locations. The 1918 Brampton Topographic Map (Department of Militia and Defence, 1918) displays the subject property on the 280-foot (85-metre) elevation contour in an area without trees immediately northeast of Kenollie Creek. The railway corridor, now controlled by the Grand Trunk Railway, extends southeast of the subject property, with an associated embankment abutting the property limits. A bridge on the railway corridor, under which Kenollie Creek flows, is immediately south.

1.2.4 Review of Twentieth- and Twenty-first Century Aerial Imagery

Aerial imagery spanning from 1954 to 2005 was reviewed to better understand the previous land use and development of the subject property (Hunting Survey Corporation Limited, 1954; City of Mississauga, 2020).

Figure 5 displays the subject property on the 1954 aerial photograph of southern Ontario (Hunting Survey Corporation Limited, 1954). The property now forms the southern part of a residential subdivision in the northwest of Port Credit. There are two houses, surrounded by grading in the north and centre of the property, both fronting Mona Road to the northeast, and lawn in the southwest of the property. A third house is immediately southeast of the property, abutting the centre of the southeast boundary, and there is an area of lawn to the southwest and a woodlot to the northwest.



In the photo from 2005, the house at 1154 Mona Road in the north of the property now includes a sunroom extension to the rear of the structure, and there is a detached garage in the centre of the subject property, associated with the house at 1148 Mona Road. The backyard areas consist of lawn dotted with trees.

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the subject property, its environment characteristics (including drainage, soils, surficial geology, and topography), and current land use and field conditions.

1.3.1 Registered Archaeological Sites

In order that an inventory of archaeological resources could be compiled for the subject property, three sources of information were consulted: the site record forms for registered sites housed at the Ministry, published and unpublished documentary sources, and the files of Archaeological Services Inc.

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database, which is maintained by the Ministry. This database contains archaeological sites registered within the Borden system. The Borden system was first proposed by Doctor Charles E. Borden and is based on a block of latitude and longitude. Each Borden block measures approximately 13 kilometres east-west by 18.5 kilometres north-south and is referenced by a four-letter designator. Sites within a block are numbered sequentially as they are found. The subject property is in the AjGv Borden block.

There are 23 archaeological sites registered within a one-kilometre radius of the subject property (Ministry, 2024). All sites are presented in Appendix A. The nearest site is AjGv-83, a multi-component Indigenous campsite, which is immediately west of the subject property.



1.3.2 Previous Assessments

During the course of the background research, it was determined that five previous archaeological assessments have been completed within 50 metres of the subject property. No previous archaeological assessments were found to have been completed within the subject property.

In 2016, Archaeological Services Inc. conducted a Stage 1 Archaeological Assessment of 1142 Mona Road, which bounds the current subject property to the southeast and southwest (Archaeological Services Inc., 2016; P046-0139-2016). The background research determined that approximately 90% of the study area retained archaeological potential and Stage 2 survey was recommended.

In June 2016, Archaeological Services Inc. completed the Stage 2 test pit survey of the areas identified as retaining archaeological potential (Archaeological Services Inc., 2016b; P046-0158-2016). During the survey, one Indigenous site, AjGv-83, comprising 12 lithic artifacts from three positive test pits and two test units, was identified in the north of the property, adjacent to the west boundary of the current subject property. Stage 3 mitigation was recommended to identify the extent and character of the site ahead of development.

In August 2016, a Stage 3 site-specific Archaeological Assessment was conducted at AjGv-83, consisting of 13 test units (Archaeological Services Inc., 2016c; P223-0103-2016). A total of 55 lithic artifacts, including two non-diagnostic biface fragments, 53 pieces of debitage, and five Indigenous ceramic sherds and one calcined faunal fragment were retrieved from 11 of the units. Three potential features were also identified during the excavation. These results indicated that the site met the criteria for Stage 4 mitigation.

The Stage 4 excavation was conducted by Archaeological Services Inc. in 2017, consisting of block excavation and mechanical topsoil removal (Archaeological Services Inc., 2017; P223-0107-2016). A total of 126 contiguous units were excavated during which 779 pre-contact artifacts were recovered, consisting of 748 lithic artifacts, 24 ceramic sherds, and seven faunal artifacts (see Supplementary Document: Figure 1). Subsurface One feature was determined to be cultural and was fully excavated and found to contain two lithic artifacts. AjGv-



83 was determined to be the result of many occupations spanning the Middle-Late Archaic to the Woodland periods. Following the complete excavation of AjGv-83, it was cleared of further archaeological concern within the boundaries of the study area.

In 2017, Archaeological Services Inc. completed a Stage 1 Archaeological Assessment of several GO Transit rail corridors ahead of the electrification of the network (Archaeological Services Inc., 2017a; P057-0834-2016). The Lakeshore West corridor was included in the study, which passes approximately 50 metres south of the current subject property. It was determined that within the area adjacent to the current subject property, the Go Transit corridor retained no archaeological potential and was cleared of further archaeological concern.

1.3.3 Physiography

The subject property is situated within the sand plains of the Iroquois Plain physiographic region of southern Ontario (Chapman and Putnam, 1984). The Iroquois Plain 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). 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).

The surficial geology of the subject property is mapped as coarse-textured glaciolacustrine deposits of sand, gravel, minor silt, and clay from foreshore and basal deposits (Ontario Geological Survey, 2018).

The subject property is within the Mary Fix Creek sub-watershed of the Credit River watershed (Ministry of Natural Resources and Forestry, 2020). Mary Fix Creek flows approximately 33 metres south of the property, meeting Kenollie Creek approximately 80 metres west. The stream empties into the Credit River



approximately 375 metres west of the property, although this drainage is the product of modern engineering. Both creeks originally drained into Lake Ontario.

The Credit River Watershed drains an area of approximately 860 square kilometres from its headwaters in Orangeville, Erin, and Mono, passing through part of the Niagara Escarpment and the Oak Ridges Moraine, and draining into Lake Ontario at the town of Port Credit (Credit Valley Conservation, 2009). The river was named “Mis.sin.ni.he” or “Mazinigae-zeebi” by the Mississaugas, and surveyor Augustus Jones believed this signified “the trusting creek” or could also be translated as “to write or give and make credit”, while the French name used when the river was first mapped in 1757 was “Rivière au Credit”. These names refer to the fur trading period, when French, British, and Indigenous traders would meet along this river (Gibson, 2002; Jameson, 1838; Rayburn, 1997; Robb *et alia*, 2003; Scott, 1997; Smith, 1987). The Credit River was historically considered to be one of the best potential power sources for milling in all of southern Ontario, which led to the development of early saw and grist mill industries, and later textile mills, distilleries, bottling plants, and hydro-electric plants, which spawned communities throughout the river valley, and typically close to the Niagara Escarpment (Town of Caledon, 2009: Figure 7.1).

1.3.4 Existing Conditions

The subject property, approximately 0.3 hectare, consists of two houses fronting Mona Road to the northeast (Figure 6). The house at 1148 Mona Road includes a detached garage immediately west of the residential structure. The centre and west portions of the subject property comprise backyard areas of maintained lawn and trees. Mona Road bounds the property to the northeast, there are houselots to the northwest and southeast, and an area of scrub to the southwest. The Stage 1 visual review was conducted on April 25, 2024.

1.3.5 Review of Archaeological Potential

The Standards, Section 1.3.1 stipulates that primary water sources (such as, lakes, rivers, streams, and creeks), secondary water sources (intermittent streams and creeks, springs, marshes, and swamps), as well as 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, and cobble beaches) are characteristics that indicate archaeological potential. Geographic characteristics also indicate archaeological potential and include distinct topographic features and soils.

Potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in south central Ontario after the Pleistocene era, 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 used variables for predictive modelling of site location.

Other geographic characteristics can indicate pre-contact archaeological potential, including elevated topography (eskers, drumlins, large knolls, plateaux), pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground, and distinctive land formations that might have been special or spiritual places for indigenous populations, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use by indigenous peoples, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including food or medicinal plants (migratory routes, spawning areas, prairie), and scarce raw materials (quartz, copper, ochre, or outcrops of chert) are also considered characteristics that indicate pre-contact archaeological potential.

For the post-contact period, Section 1.3.1 of the Standards stipulates that those areas of early Euro-Canadian settlement, including places of early military pioneer settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries, are considered to have archaeological potential. There may be commemorative markers of their history, such as local, provincial, or federal monuments or heritage parks. 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 historical landmark or site, and properties that local histories or informants have identified with possible



archaeological sites, historical events, activities, or occupations are also considered to have archaeological potential.

The majority of early nineteenth century farmsteads, which are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps, are likely to be captured by the basic proximity to the water model, since these occupations were subject to similar environmental constraints. An added factor, however, is the development of the network of concession roads and railroads through the course of the nineteenth century. These transportation routes frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early historical transportation route are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The subject property is located approximately 33 metres north of Mary Fix Creek and 80 metres east of Kenollie Creek. The confluence of the creeks continues west where it meets the Credit River approximately 375 metres distant. However, historical mapping indicates that Mary Fix Creek flowed northeast of the subject property and Kenollie Creek to the west, both emptying into Lake Ontario before they were diverted as the surrounded area was developed. In addition, a multi-component Indigenous site, AjGv-83, is located immediately west of the subject property (Supplementary Document: Figure 1). Historical mapping also illustrates the railway corridor, which is approximately 50 metres southeast, from the mid-nineteenth century onwards, and the settlement of Port Credit is indicated immediately beyond. A settlement road (present-day Stavebank Road) is illustrated on both the *Tremaine* map and the *Illustrated Atlas* to the west of the property. As a result, there is potential for the presence of archaeological resources remaining *in situ* on the subject property, depending on the degree of subsequent land alteration.

2.0 Field Methods

The Stage 1 field assessment was conducted to inventory, identify, and describe any archaeological resources extant within the subject property prior to development. All fieldwork was conducted under the field direction Christopher



Brown (P361) and was carried out in accordance with the Standards. The weather conditions were appropriate for the completion of fieldwork, permitting good visibility of the land features.

Representative photos documenting the field conditions during the Stage 1 fieldwork are presented in Section 7.0 of this report, and photo locations and field observations have been compiled on project mapping (Figure 7; Images 1-10).

2.1 Findings

The assessment was conducted by means of a visual inspection. During this review, approximately 80% of the subject property was determined to retain no archaeological potential due to disturbance (Figure 7). The areas of disturbance consist of the footprints of the two houses and their associated driveways in the east of the property, fronting Mona Road to the east (Images 1-5). In the centre and south of the property, there are extensive graded areas (Images 6-8). A small, graded area is located on the southwest boundary (Image 5). In accordance with the Standards, Section 1.3.2, these disturbances are considered too deep and extensive to warrant further survey.

The balance of the property, approximately 20% of the total area and comprising areas of lawn in the west and along the southwest limit (Images 9-10), retain archaeological potential and will require Stage 2 Archaeological Assessment.

3.0 Analysis and Conclusions

Archaeological Services Inc. was contracted by Queenscorp (Mona II) Inc. to undertake a Stage 1 Archaeological Assessment of 1148 and 1154 Mona Road, Part of Lots 99 and 100, Registered Plan 323, Part of Lots 4-5, Range 1 Credit River Indian Reserve, Geographic Township of Toronto, Peel County, now in the City of Mississauga, Regional Municipality of Peel. The subject property is approximately 0.3 hectare.

The Stage 1 background research entailed consideration of the proximity of previously registered archaeological sites, the original environmental setting of the subject property, and a review of available aerial imagery. This research



suggested that there was potential for the presence of both Indigenous and Euro-Canadian archaeological sites on the subject property. The Stage 1 field review confirmed that approximately 20% of the property retains archaeological potential.

4.0 Recommendations

In light of these results, the following recommendation is made:

1. Prior to any land-disturbing activities within the subject property, a Stage 2 Archaeological Assessment must be conducted on all undisturbed lands within the subject property, in accordance with the Ministry of Citizenship and Multiculturalism's 2011 *Standards and Guidelines for Consultant Archaeologists*.
 - a) All undisturbed lands that cannot be ploughed within the property must be assessed by means of a test pit survey. All test pits must be excavated at least five centimetres into sterile subsoil, with all soils being screened through six-millimeter mesh to facilitate artifact recovery. All test pits must be at least 30 centimetres in diameter and backfilled upon completion. Test pits must be excavated at five-metre transect intervals but may be adjusted in light of considerations of disturbance, topography, and drainage as outlined in the Standards, Section 2.1.2.

NOTWITHSTANDING the results and recommendations presented in this study, Archaeological Services Inc. notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Citizenship and Multiculturalism must be immediately notified.

The above recommendations are subject to Ministry approval, and it is an offence to alter any archaeological site without Ministry of Citizenship and Multiculturalism concurrence. No grading or other activities that may result in the



destruction or disturbance of any archaeological sites are permitted until notice of Ministry approval has been received.

The documentation and materials related to this project will be curated by Archaeological Services Inc. until such a time that arrangements for their ultimate transfer to His Majesty the King in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the Ontario Ministry of Citizenship and Multiculturalism, and any other legitimate interest groups.

5.0 Advice on Compliance with Legislation

Archaeological Services Inc. advises compliance with the following legislation:

- This report is submitted to the Ministry of Citizenship and Multiculturalism 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 subject property of a development proposal have been addressed to the satisfaction of the Ministry of Citizenship and Multiculturalism, a letter will be issued by the Ministry stating that there are no further concerns with 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 Archaeological Reports referred to in Section 65.1 of the Ontario Heritage Act.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48



(1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the Ontario Heritage Act.

- The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33, 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, Funeral, Burial, Ministry of Public and Business Services Delivery 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.

6.0 Bibliography and Sources

Ambrose, M. (1982). An Archaeological Survey of Highway 407 from Highway 10 to Airport Road (W.P. 87-78-00), Regional Municipality of Peel.

Andreae, C. (1997). Lines of Country: An Atlas of Railway and Waterway History in Canada. Boston Mills Press.

Archaeological Services Inc. (2016a). Stage 1 Archaeological Assessment 1142 Mona Road (Part of Lots 99 and 100, Registered Plan 323), part of Lots 4 and 5, Range 1, Credit Indian Reserve, Geographic Township of Toronto, Former Peel County, City of Mississauga, Regional Municipality of Peel, Ontario. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Archaeological Services Inc. (2016b). Stage 2 Archaeological Assessment of 1142 Mona Road (Part of Lots 99 and 100, Registered Plan 323), part of Lots 4 and 5, Range 1, Credit Indian Reserve, Geographic Township of Toronto, Former Peel County, City of Mississauga, Regional Municipality of Peel, Ontario. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.



Archaeological Services Inc. (2016c). Stage 3 Archaeological Assessment, 1142 Mona Road (Part of Lots 99 and 100, Registered Plan 323), Part of Lots 4 and 5, Range 1, Credit Indian Reserve, Geographic Township of Toronto, Former Peel County, City of Mississauga, R.M. Peel, Ontario. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Archaeological Services Inc. (2017a). Stage 1 Archaeological Assessment GO Rail Network Electrification TPAP City of Toronto, Regional Municipalities of Peel, Halton, York and Durham, County of Simcoe, Ontario (P057-0834-2016). Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Archaeological Services Inc. (2017b). Stage 4 Archaeological Mitigation Site AjGv-083 1142 Mona Road (Part of Lots 99 and 100, Registered Plan 323) Part of Lots 4 and 5, Range 1, Credit Indian Reserve, Geographic Township of Toronto, Former Peel County, City of Mississauga, R.M. Peel, Ontario. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Archaeological Services Inc. (2020). Cultural Heritage Evaluation Report: Applewood Creek Culvert (Mile 10.3), Cooksville Creek Bridge (Mile 11.8), Mississauga Road Bridge (Mile 13.39) Lakeshore West Rail Corridor, Oakville Subdivision City of Mississauga, Ontario.

Birch, J., Manning, S. W., Sanft, S., & Conger, M. A. (2021). Refined Radiocarbon Chronologies for Northern Iroquoian Site Sequences: Implications for Coalescence, Conflict, and the Reception of European Goods. *American Antiquity*, 86(1), 61–89.

Birch, J., & Williamson, R. F. (2013). *The Mantle Site: An Archaeological History of an Ancestral Wendat Community*. Rowman & Littlefield Publishers, Inc.

Brown, J. (1995). On Mortuary Analysis – with Special Reference to the Saxe-Binford Research Program. In L. A. Beck (Ed.), *Regional Approaches to Mortuary Analysis* (pp. 3–23). Plenum Press.

Chapman, L. J., & Putnam, F. (1984). *The Physiography of Southern Ontario* (3rd ed., Vol. 2). Ontario Ministry of Natural Resources.



City of Mississauga. (2020). Mississauga Maps—Interactive Online Mapping Service [Map]. City of Mississauga.
<https://www.mississauga.ca/portal/services/maps>

Credit Valley Conservation. (2009). *Rising to the Challenge: A Handbook for Understanding and Protecting the Credit River Watershed*.

Department of Militia and Defence. (1918). Brampton Sheet 30M/12 [Map].

Dodd, C. F., Poulton, D. R., Lennox, P. A., Smith, D. G., & Warrick, G. A. (1990). The Middle Ontario Iroquoian Stage. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 321–360). Ontario Archaeological Society Inc.

Edwards, T. W. D., & Fritz, P. (1988). Stable-Isotope Paleoclimate Records from Southern Ontario, Canada: Comparison of Results from Marl and Wood. *Canadian Journal of Earth Sciences*, 25, 1397–1406.

Ellis, C. J., & Deller, D. B. (1990). Paleo-Indians. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 37–64). Ontario Archaeological Society Inc.

Ellis, C. J., Kenyon, I. T., & Spence, M. W. (1990). The Archaic. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 65–124). Ontario Archaeological Society Inc.

Ellis, C. J., Timmins, P. A., & Martelle, H. (2009). At the Crossroads and Periphery: The Archaic Archaeological Record of Southern Ontario. In T. D. Emerson, D. L. McElrath, & A. C. Fortier (Eds.), *Archaic Societies: Diversity and Complexity across the Midcontinent*. (pp. 787–837). State University of New York Press.

Ferris, N. (2013). Place, Space, and Dwelling in the Late Woodland. In M. K. Munson & S. M. Jamieson (Eds.), *Before Ontario: The Archaeology of a Province* (pp. 99–111). McGill-Queen's University Press.
<http://www.jstor.org/stable/j.ctt32b7n5.15>



Gibson, M. M. (2002). Changes at the River's Mouth: The Port Credit Community. In Mississauga: The First Ten Thousand Years (F.A. Dieterman). Eastend Books.

Go Transit. (2017). 50 Years Going Strong. Go Transit.
<http://goingstrong.gotransit.com/en/1960.html>

Gould, A. (1981). History of the Mississauga Indians. Appendix to the Maracle Site Report.

Heritage Mississauga. (2009). Mississauga: A City of Many Villages.
<http://www.heritagemississauga.com/section/?section=7>

Heritage Mississauga. (2012). Heritage Guide: Mississauga.
<<http://www.heritagemississauga.com/assets/Heritage%20Guide%20-%20Final%20-%202012.pdf>>

Heritage Mississauga. (2019). Port Credit.
<http://www.heritagemississauga.com/page/Port-Credit>

Hicks, K. (2007). Port Credit: Past to Present. Mississauga Library System.

Hunting Survey Corporation Limited. (1954). 1954 Air Photos of Southern Ontario.
<https://mdl.library.utoronto.ca/collections/air-photos/1954-air-photos-southern-ontario/index>

Jameson. (1838). Winter Studies and Summer Rambles in Canada.

Mika, N., & Mika, H. (1981). Places In Ontario: Their Name Origins and History, Part II, F-M (<https://archive.org/details/placesinontariot0002mika>; Vol. 2). Mika Publishing Company; Internet Archive.

Ministry of Citizenship and Multiculturalism. (2024). Ontario's Past Portal.
<https://www.pastport.mtc.gov.on.ca>

Ministry of Culture (now the Ministry). (1990). Ontario Heritage Act, R.S.O. c.O.18, 1990 [as amended in 2021].

Ministry of Natural Resources and Forestry. (2020). Ontario Flow Assessment Tool [Map]. Ontario Flow Assessment Tool.



<https://www.lioapplications.lrc.gov.on.ca/OFAT/index.html?viewer=OFAT.OFAT&locale=en-ca>

Ministry of Tourism and Culture. (2011). Standards and Guidelines for Consultant Archaeologists. Cultural Programs Branch, Ministry of Tourism and Culture.

Mississauga of the New Credit First Nation. (2001). Toronto Purchase Specific Claim: Arriving at an Agreement.

Mississaugas of the Credit First Nation. (2014). History.
<http://www.newcreditfirstnation.com/our-culture.html>

Mississaugas of the Credit First Nation. (2017). Treaty Lands and Territory.
<http://mncfn.ca/category/treaty-lands-and-territory/>

Ontario Geological Survey. (2018). Quaternary Geology of Ontario [Map].
https://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=eds014-rev

Pope, J. H. (1877). Illustrated Historical Atlas of the County of Peel, Ont. [Map]. Walker and Miles.

Rayburn, A. (1997). Place Names of Ontario. University of Toronto Press.

Robb, G., Dilse, P., Henderson, H., Hermsen, B., Shearer, W., & Stewart, P. (2003). Heritage Conservation Feasibility Study of Old Port Credit Village Stage 1 Report.

Rogers, E. S. (1962). The Round Lake Ojibwa. Royal Ontario Museum.

Scott, D. E. (1997). Ontario Place Names. The Historical, Offbeat or Humorous Origins of More Than 1,000 Communities. (Lone Pine Publishing).

Smith, D. B. (1987). Sacred Feathers: The Reverend Peter Jones (Kahkewaquonaby) & the Mississauga Indians. University of Toronto Press.

Spence, M. W., Pihl, R. H., & Murphy, C. (1990). Cultural Complexes of the Early and Middle Woodland Periods. In C. J. Ellis & N. Ferris (Eds.), The Archaeology of Southern Ontario to A.D. 1650. Ontario Archaeological Society Inc.



Town of Caledon. (2009). Cultural Heritage Landscape Inventory Report.

Tremaine, G. C. (1859). Tremaine's Map of the County of Peel [Map]. George C. Tremaine.

Williamson, R. F. (1990). The Early Iroquoian Period of Southern Ontario. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 291–320). Ontario Archaeological Society Inc.

Woodland Indian Cultural Education Centre. (1985). *Mississaugas of New Credit Reserve: Community Profile*.
<[http://www.casbrant.ca/files/upload/Mississaugas%20of%20the%20New
2.pdf](http://www.casbrant.ca/files/upload/Mississaugas%20of%20the%20New%20Credit%20Reserve%20Community%20Profile.pdf)>



7.0 Images



Image 1: View of the front of the house at 1154 Mona Road in the northeast of the subject property.



Image 2: View of the front of the house at 1148 Mona Road in the northeast of the subject property.



Image 3: View along the southeast limit of the subject property.



Image 4: View southeast along the backyards of the houses.



Image 5: View west between the two houses. Note the grading that extends past the southwest limit of the subject property.



Image 6: View north across area of grading in the south of the subject property from the south corner.



Image 7: View along the southwest limit of the subject property across the grading in the centre and south of the property.



Image 8: View along the northwest limit of the subject property from the west corner of the property.



Image 9: View northwest along the southwest limit of the subject property.

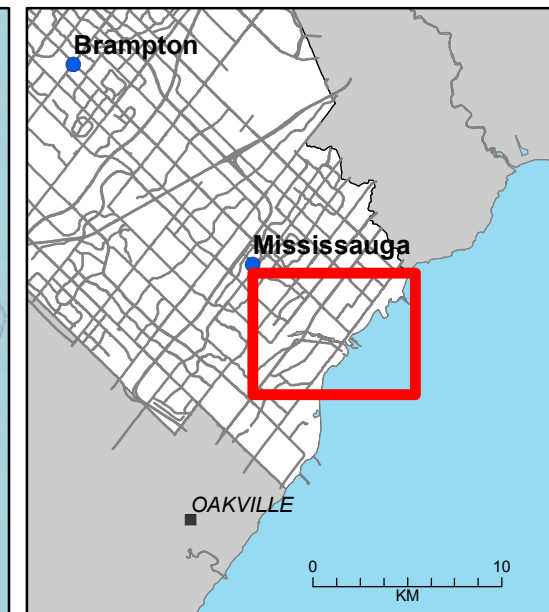
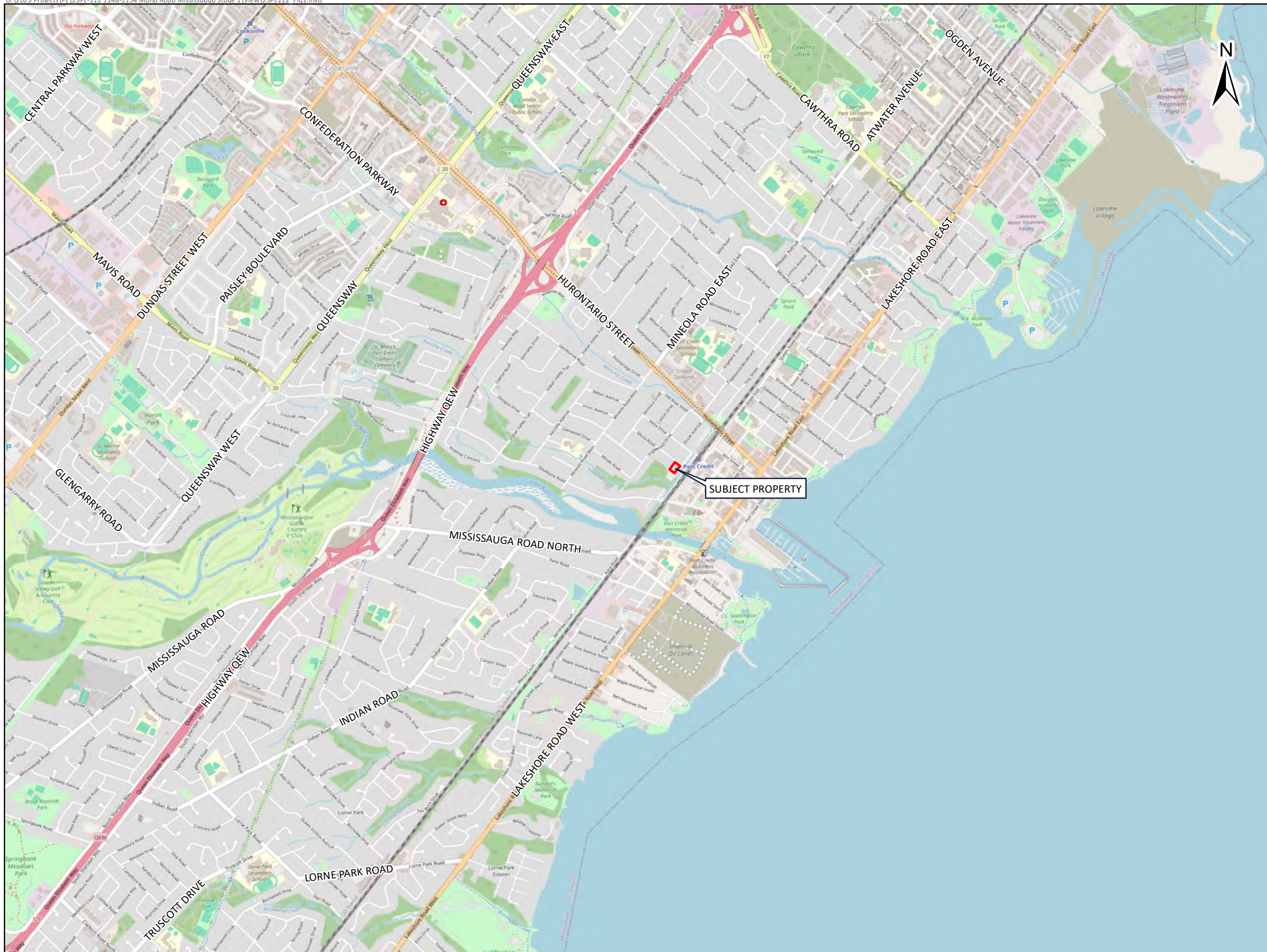


Image 10: View south across the centre of the subject property from the northwest limit.

8.0 Maps

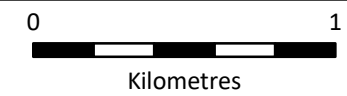
See following pages for detailed assessment mapping and figures





 SUBJECT PROPERTY

Sources: Open Street Map
 Projection: NAD 1983 UTM Zone 17N
 Scale: 1:25,000
 Page Size: 11 x 17



ASI PROJECT NO.: 23PL-112
 DATE: 2024-04-01
 DRAWN BY: A.C.
 FILE: 23PL112_Fig1

 **Providing Archaeological & Cultural Heritage Services**
 528 Bathurst Street Toronto, ONTARIO M5S 2P9
 T 416-966-1069 F 416-966-9723 asiheritage.ca

Figure 1: Location of the Subject Property



Figure 2: Subject Property located on the 1859 Tremaine Map of the County of Peel

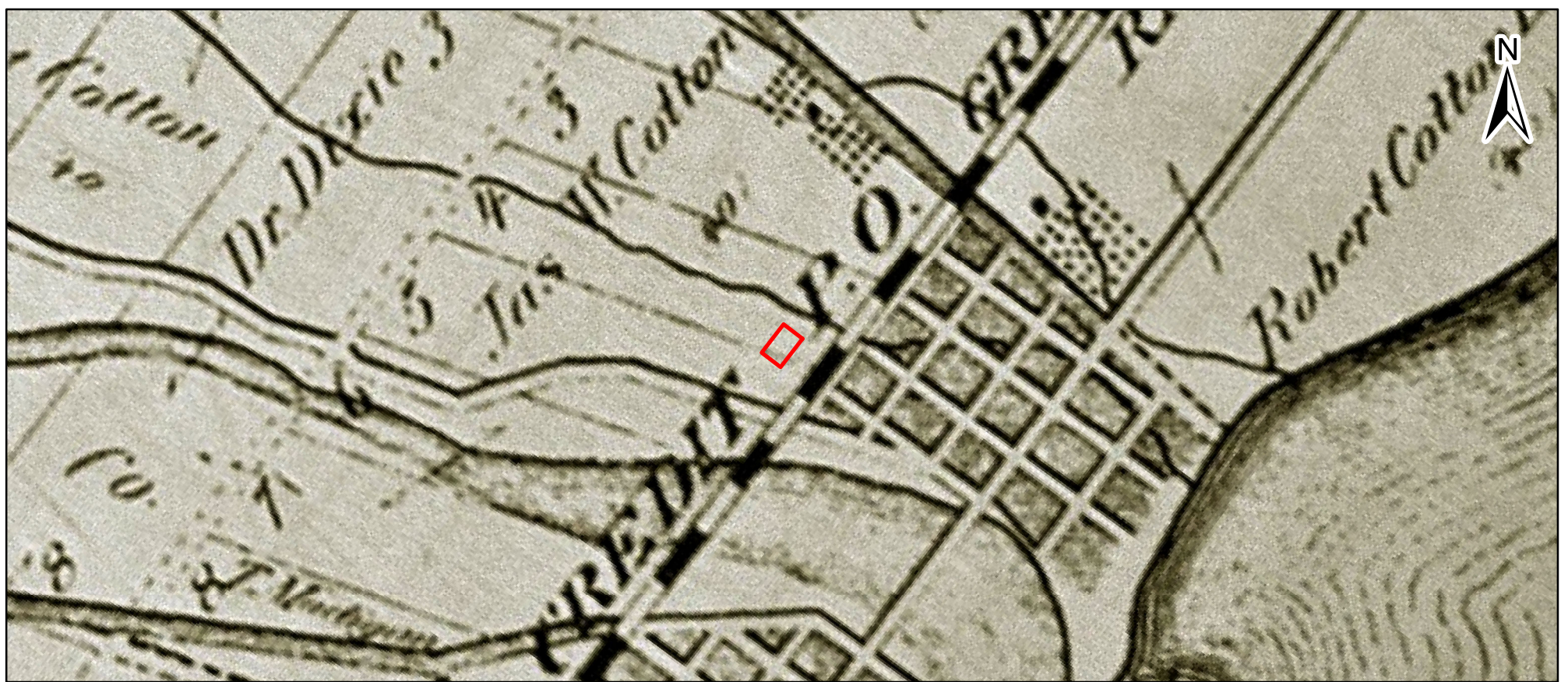


Figure 3: Subject Property located on the 1877 Illustrated Historical Atlas of the County of Peel

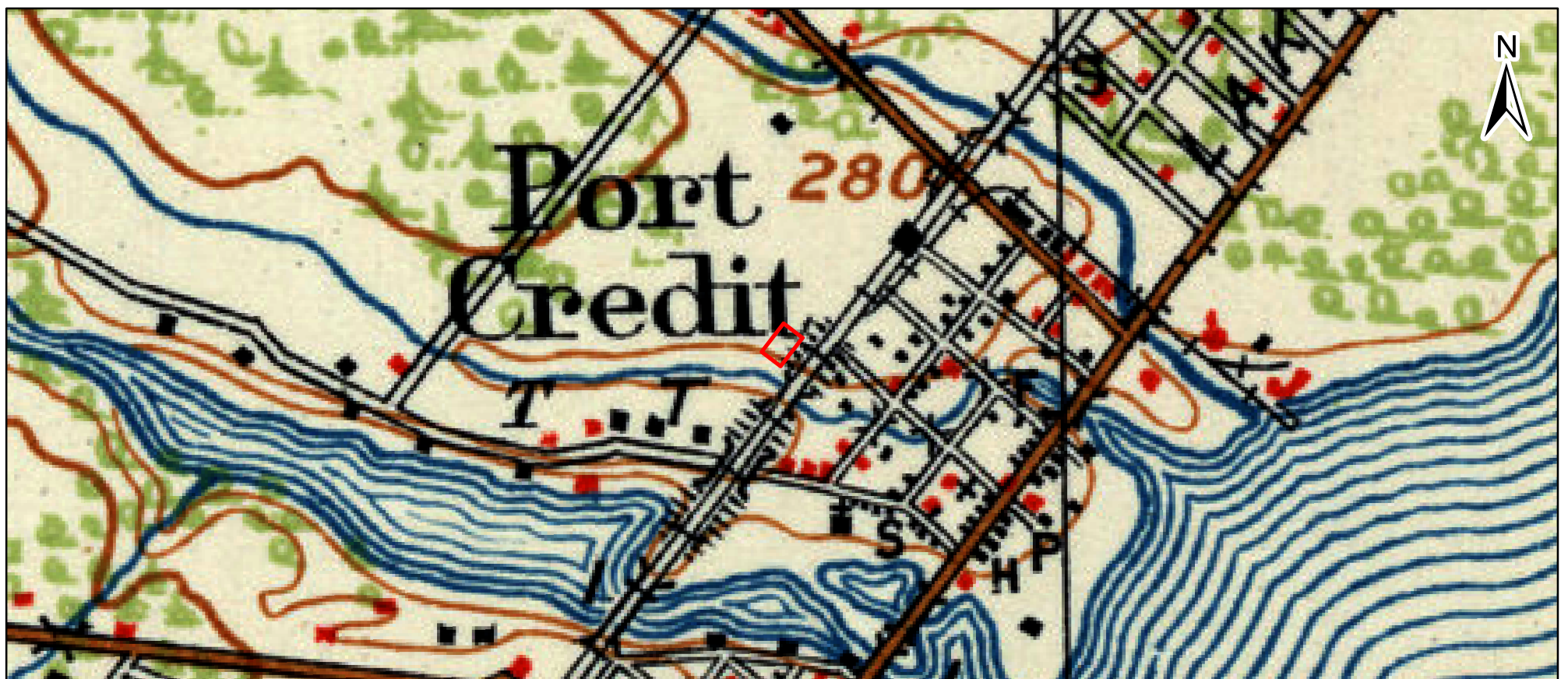


Figure 4: Subject Property located on the 1918 Brampton Topographic Map



1954



2005



- SUBJECT PROPERTY
- PROPERTY PARCEL

Sources:
Hunting Survey, University of Toronto
Google Earth

Projection: NAD 1983 UTM Zone 17N
Scale: 1:3,000
Page Size: 8.5 x 11

SCALE AS SHOWN

ASI PROJECT NO.: 23PL-112
DATE: 2024-05-01

DRAWN BY: A.C.
FILE: 23PL112_Fig5

Figure 5: Subject Property located on 1954 and 2005 Aerial Imagery



| | | | | | |
|--|--|--|--|--|--|
|  |  SUBJECT PROPERTY | Source: Peel Region, Maxar, Microsoft, ESRI 2022 | | 0  25 | |
| |  PROPERTY PARCEL | Projection: NAD 1983 UTM Zone 17N Scale: 1:800 Page Size: 8.5x11 | | Metres | |
| | | ASI Project No.: 23PL-112 Date: 5/2/2024 | | Drawn By: cnettleton File: 23PL112_Fig6 | |

Figure 6: Existing Conditions of the Subject Property









| | | | | | |
|--|--|--|--|--|--|
|  |  SUBJECT PROPERTY |  DISTURBED - NO POTENTIAL | Source: Peel Region, Maxar, Microsoft, ESRI 2022 | 0  20 | |
| |  PHOTO LOCATION AND DIRECTION |  STAGE 2 ARCHAEOLOGICAL ASSESSMENT REQUIRED | | Metres | |
| | | | Projection: NAD 1983 UTM Zone 17N Scale: 1:500 Page Size: 8.5x11 | ASI Project No.: 23PL-112 Date: 5/2/2024 | Drawn By: cnettleton File: 23PL112_Fig7 |

Figure 7: Stage 1 Archaeological Assessment Results