



ACC

ARCHAEOLOGICAL
CONSULTANTS CANADA

Stage 1 Archaeological Assessment

46 Stevens Road, Part of Lots 13 and 14, Concession 2, Township of Darlington,
Municipality of Clarington, Regional Municipality of Durham

Original Report

Prepared for:

Ontario Ministry of Heritage, Sport, Tourism and Culture Industries

Prepared by:

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EXECUTIVE SUMMARY

Archaeological Consultants Canada (“ACC”) was contracted to conduct a Stage 1 Background Study as a requirement prior to the land severance of the subject property. The assessment was required in advance of planning permits under the Planning Act, R.S.O. 1990. The Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries assigned project information number P1208-0070-2022 to this project. The study area is 3.19 hectares (“ha”) in size and is located at 46 Stevens Road, Part of Lots 13 and 14, Concession 2, Township of Darlington, Municipality of Clarington, Regional Municipality of Durham (Figure 1).

Background research indicates that the subject property has general archaeological potential due to the historic presence of a farmstead within the subject property, proximity to a major historic transportation routes and river systems, and proximity to multiple registered archaeological sites.

Of the entire property, 8.63 ha, only 3.19 ha will be developed. Therefore, all values discussed in this report pertain to the area proposed for development. An inspection of aerial imagery determined that 3.10 ha, 97 percent, of the study area retains archaeological potential and requires a Stage 2 Property Assessment prior to ground disturbance or development activities (Figure 8). Three percent, 0.09 ha of the study area is disturbed and retains no archaeological potential due to modern structures and laneways.

Subject to acceptance of the results and approval of the recommendations, MHSTCI is requested to deem this report compliant with ministry requirements for archaeological fieldwork and reporting and to issue a letter accepting this report into the *Ontario Public Register of Archaeological Reports*.

The following recommendations are provided for consideration by the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries:

1. Stage 2 assessment is required for 97 percent, 3.10 ha of the subject property. Because the subject property cannot be ploughed, an assessment in the form of a test pit survey is recommended.
2. 0.09 ha, three percent, of the study area exhibits no archaeological potential due to previous disturbance in the form of laneways and structures within the property.

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PROJECT PERSONNEL

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Stage 1 Archaeological Assessment

46 Stevens Road, Part of Lots 13 and 14, Concession 2, Township of Darlington, Municipality of Clarington, Regional Municipality of Durham

1.0 PROJECT CONTEXT

1.1 Development Context

Archaeological Consultants Canada (“ACC”) was contracted to conduct a Stage 1 Background Study as a requirement prior to the land severance of the subject property. The assessment was required in advance of planning permits under the Planning Act, R.S.O. 1990. The Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries assigned project information number P1208-0070-2022 to this project. The study area is 3.19 hectares (“ha”) in size and is located at 46 Stevens Road, Part of Lots 13 and 14, Concession 2, Township of Darlington, Municipality of Clarington, Regional Municipality of Durham (Figure 1). The Proponent provided the property limits, survey plan, and verified the subject area defined within this report.

The Stage 1 assessment was conducted under Professional Archaeological License P1208, held by Matthew Muttart. The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) assigned project information number P1208-0070-2022 to this project.

All fieldwork and reporting were completed using MHSTCI’s 2011 *Standards and Guidelines for Consultant Archaeologists*. This report documents the research, the field methods and results, and the conclusions and recommendations based on the Stage 1 archaeological assessment. All documents and records related to this project will be curated at the offices of Archaeological Consultants Canada, in accordance with subsection 66(1) of the *Ontario Heritage Act*.

1.2 Historical Context

1.2.1 Background Research

Stage 1 background research was conducted to determine the potential for finding and identifying archaeological resources including sites within the current subject property and to determine the necessity of conducting a Stage 2 survey. This is done by reviewing geographic, archaeological, and historical data for the property and the surrounding area. The background research was conducted to:

- amass all the readily available information on any previous archaeological surveys in the area.

- determine the locations of any registered and unregistered sites within and around the subject property.
- develop an historical framework for assigning levels of potential significance to any new sites discovered during fieldwork.

1.2.2 A Cultural Chronology for Southern Ontario

Over their thousands of years of occupation in the general region, Indigenous peoples have left behind physical evidence of their lifeway activities and settlements at many locations. Based upon a published synthesis of Indigenous cultural occupations (Wright, 1968), Table 1 is a general outline of the cultural history of southern Ontario that is applicable to the subject property. Ellis and Ferris (1990) provide greater detail of the distinctive characteristics of each time period and cultural group.

It is likely that Ontario was occupied soon after the retreat of the Ice Age glaciers. The earliest known human occupation in the area was during the Paleoindian period (between 12,000 and 9,500 years ago) wherein small groups of nomadic peoples hunted big game such as caribou in a cool sub-arctic climate. Sites are typically found near glacial features such as the shorelines of glacial lakes or kettle ponds which allowed access to the low-lying environments favoured by the caribou and other wildlife. These people were few and their small, temporary campsites are relatively rare. Paleoindian sites are recognized by the presence of distinctive artifacts such as fluted projectile points, beaked scrapers, and gravers and by the preference for light colored cherts, such as Collingwood chert. The Paleoindian Period is divided into two sub-periods, Early Paleoindian, and Late Paleoindian.

People during the Archaic period (*circa* 10,000 to 2,800 years ago) were still primarily nomadic hunters, but they adapted to a more temperate climate. Groups were dispersed during winter months and converged around watercourses from the spring to fall in large fishing campsites. The Archaic period is characterized by the appearance of ground stone tools, notched, or stemmed projectile points. The Archaic Period is divided into three sub-periods, Early, Middle and Late Archaic. During the Archaic Period groups began to establish territorial settlements and introduce burial ceremonialism. There is a marked increase in the number and size of sites, especially during the Late Archaic period.

Table 1: General Cultural Chronology for Southwestern Ontario

PERIOD	SUBDIVISION I	SUBDIVISION II	YEARS BEFORE PRESENT	COMMENTS
PALEOINDIAN	Early Paleoindian	Fluted Point Horizon	12,000-10,500	big game hunters
	Late Paleoindian	Holcombe & Hi-Lo Horizons	10,500-9,500	small nomadic groups
ARCHAIC	Early Archaic	Side Notched Horizon	10,000-9,700	nomadic hunters and gatherers
		Corner-Notched Horizon	9,700-8,900	
		Bifurcate Horizon	8,900-8,000	

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PERIOD	SUBDIVISION I	SUBDIVISION II	YEARS BEFORE PRESENT	COMMENTS
	Middle Archaic	Middle Archaic I/Stemmed Horizon	8,000-5,500	territorial settlements
		Middle Archaic II	5,500-4,500	polished ground stone tools
	Late Archaic	Narrow Point Horizon	4,500-3,500	
		Broad Point Horizon	4,000-3,500	
		Small Point Horizon (including Haldimand and Glacial Kame Complexes)	3,500-2,800	burial ceremonialism
WOODLAND	Early Woodland	Meadowood Complex	2,900-2,400	introduction of pottery
		Middlesex Complex	2,500-2,000	
	Middle Woodland	SW Ontario: Saugeen	2,300-1,500	long distance trade networks
		Western Basin: Couture	2,300-1,500	
	Transitional Woodland	SW Ontario:		
		Princess Point	1,500/1,400-1,200	incipient agriculture
		Western Basin:		
	Late Woodland: Ontario Iroquois Tradition	Riviere au Vase	1500/1400-1200/1100	
		Early: Glen Meyer	1200/100-750/700	transition to village life
		Middle I: Uren	720/700-710/670	large villages with palisades
		Middle II: Middleport	710/670-670/600	wide distribution of ceramic styles
	Late Woodland: Western Basin Tradition	Late: Neutral	600-450	
		Younge Phase	1200/1100-800	
		Springwells Phase	800-600	
	HISTORIC	European Contact	Wolf Phase	600-450
Historic Neutral			450-350	tribal warfare
Initial Contact			380-300	tribal displacement
European Settlement			200 >	European settlement
		First Nations Resettlement	200 >	

(Compiled from Adams, 1994, Ellis *et al.*, 1990, Wright, 1968)

The Woodland period is distinguished by the introduction of pottery vessels for storage and cooking. Sites of the Woodland period (*circa* 2,900 to 400 years ago) are usually the most numerous because the population levels in southern Ontario had significantly increased, especially along the shores of Lakes Erie and Ontario. The Woodland Period is also marked by the establishment of complex long distance trading networks. The Woodland Period is divided into three sub-periods, Early, Middle and Late Woodland. During the Late Woodland Period, there is increasing sedentarism and the establishment of horticulture, a reliance on tribal warfare, and the introduction of semi-permanent villages with large protective palisades. The Late Woodland period also envelops the emergence of Iroquoian tribes and confederacies.

The historic period (from A.D. 1650 to 1900) begins with the arrival of Euro-Canadian groups. While North America had been visited by Europeans on an increasing scale since the end of the fifteenth century, it was not until the voyages of Jacques Cartier in the 1530s that Europeans visited Ontario Iroquoians in their home territories. Sites of this period document European exploration, trade, and the displacement and devastation of native groups caused by warfare and infectious disease. The most common sites of this period include Euro-Canadian homesteads, industries, churches, schools, and cemeteries.

By the mid-seventeenth century, warring between the Iroquois and the Huron-Wendat had expelled the Huron-Wendat out of Southern Ontario. Conflict then erupted between the Mississaugas and the Iroquois, resulting in the migration and settlement of the Mississaugas further into Southern Ontario, and the Iroquois settling south of the Great Lakes.

The study area is located on 46 Stevens Road, Part of Lots 13 and 14, Concession 2, Township of Darlington, Municipality of Clarington, Regional Municipality of Durham. Darlington Township was first established in 1792 and first settled in 1794 (Mika and Mika, 1977). John Burk, one of the first settlers to the area, constructed the first sawmill in an area called Barber's Creek within the township in 1805 (Mika and Mika, 1977). In 1823, the name was changed to Bowmanville when a Montreal merchant purchased a store and considerable amount of land from John Burk. In 1879, Robert McLaughlin opened a carriage works manufacturing business in nearby the hamlet of Enniskillen which eventually moved to Oshawa and became the largest carriage works factory in the British Empire. In 1907 McLaughlin founded a motor car company which he eventually merged with his carriage works business to create General Motors Canada in 1918 (Mika and Mika, 1977).

The County of Durham was historically part of the County of Newcastle, which was established after the Revolutionary War in 1774, when British Loyalists fled the United States and settled in areas around Upper Canada (Lucas, 2004). The County of Newcastle soon became Newcastle District due to legislation enacted in 1798 that stated that when a county surpassed 1000 inhabitants and included six separate townships with the ability to hold town meetings as a form of their own independent government, they will amalgamate into one district. In 1800, the district established mills, lumber operations and created local harbors along the shores of Lake Ontario which would ship goods throughout Southern Ontario and the United States. One notable company established in the district was the McLaughlin Carriage Company, which would later become General Motors of Canada (LDIPC, 2022).

By 1802, due to growing population, Newcastle District became the United Counties of Durham and Northumberland (Village of Newcastle, 2016). The most notable contribution to the industrial success of the area was from the Massey Manufacturing Co. Founded in 1847 by Daniel Massey as a tractor parts manufacturer, the company was the foundation of the current day, internationally recognized Massey-Harris-Ferguson tractor company (Village of Newcastle, 2016).

The Municipality of Clarington was formed in 1974 after the approval of the Regional Municipality of Durham Act which brought together 21 municipalities into a two-tier government comprised of eight larger municipalities (Clarington, 2021). Clarington was formed through the amalgamation of the former Town of Bowmanville, the Village of Newcastle and the Townships of Clarke and Darlington. In 1993, the Municipality gained the name Clarington after the two original townships: Clarke and Darlington (Clarington, 2021). The municipality is now comprised of Courtice, Bowmanville, Newcastle and Orono and 14 hamlets.

A large contribution to the growing Mill industry within the town of Bowmanville was the Bowmanville Creek Valley. The valley, which surrounds the Bowmanville river, stretches 4 kilometers through the center of the town (Hodkinson, 2020). The first mill established along the river was the sawmill built by Charles Bowman in 1806. Other industrial businesses decided to set up camp along Bowmanville Creek in the early 1800s, including the first Goodyear plant in Canada, the Ross Can canning factory which shared the property with a CN train track dating back to 1856 (Hodkinson, 2020).

The current bridge which spans across the valley on Highway #2, the historic King's highway, is the fifth bridge to be constructed. No relative dates are known for the construction of the first bridge but it has been documented that the structure had been moved upstream because the grade was easier for horses to pull their loads across the western part of the valley (Taws, 2012). There were two wooden bridges built before the construction of a third stone arched bridge, constructed in 1835. Unfortunately, this bridge was destroyed during a storm in 1876 due to the structural arches collapsing. The stone pillars were quickly utilized for a new wooden bridge which additionally was destroyed by a cloud burst during a flood in 1890 (Taws, 2012). The town hired the New York based Weddell Bridge Company to construct a more permanent steel bridge which wasn't replaced until 1973.

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the subject property. Figures 2 and 3 represent the Euro-Canadian settlement in and around the current subject property in the late nineteenth century. Tremaine's 1861 *Illustrated Historic Atlas Map of the County of Durham* (Figure 2) shows that both Lot 13 and 14, Concession 2 was divided into multiple properties. The properties owned by David Downey within Lot 14, and by E Raynes within Lot 13, include the current study area (Library and Archives Canada, 2022; Tremaine, 1861). Lot 14 is divided into five additional properties, with a roadway traveling east to west through the center of the lot. The property directly north of David Downey is owned by John Tillerm. A county road divides the square division of land into two misshapen properties, with the northeast corner property owned by J Ross. To the north of John Tiller and J Ross' land is a property owned by George McDougall. There is a body of water located along the eastern edge of George McDougall's property as well as the name of a Mill within the area: "Foulden Mills." North of that is the final division of land within the lot, consisting of a road dividing two properties, one to the north and the other two the south. The southern property is owned by James Stephens and the north owned by Johnathan Stephens. There are no farmhouse structures shown within any of the properties at this time.

Lot 13 is divided into nine properties, including the property owned R. T & E Raynes (written as Raymes) which contains the study area. R.T & E Rayne's property spans the entire eastern quarter division of the lot with a as well as a larger half portion in the south. Along the western edge, in the southern half of the lot, directly north of R.T & E Rayne's property, are two properties divided by a small waterway. The northern property is owned by T. T and the southern owned by T. Fairbanks. To the north of this is another property owned by George McDougall which encompasses the southern portion of the body of water within both lots. A road meanders it's way around the body of water, creating the northern lot division of G McDougall's property from four small unclaimed lots. Just north of this is the final property within the lot owned by Johnathan Stephens. There is only one farmhouse structure depicted within Lot 13 at this time within George McDougall's property, to the east of the small body of water.

David Downey is a blacksmith born in Canada and active member of the Presbyterian Free Church. He lived in a one and a half story log home on the property with his Scottish wife, Margaret, age 41, and their six children: Samuel, 13, George, 12, Mary Ann, 9, Margaret Jane, 8, William James, 5, and David, 3. There is no record of R.T Raynes within the 1861 Canadian Census.

The property is located just on the edge of the Town of Bowmanville, only 88m to the southeast. An unnamed body of water located partially within the southern edge of Lot 13 and directly to the south. To the south of this body of water lies the Bowmanville Mills. The King's highway runs in an east to west direction, 338 metres to the south. There are two unnamed river systems which run through the south of north Lot 13 and 14 in a north to south direction. This river system eventually meets up with a second branch of the river, 2.4km to the east, which channels through Port Darlington and into Lake Ontario, 4.3 km to the south. There is a second mill: Ontario Mills, located within Timothy Soper's property 2.2 km so the southeast within Lot 9, Concession 1.

H. Belden & Co.'s 1878 *Historic Atlas Map of Darlington Township, Durham County* shows the property within Lot 14 Concession 2 is owned by William Horsey. R.T Raynes still owns the property within Lot 13 (Figure 3). There is a farmhouse structure shown along the southern edge of William Horsey's property. James McDougall is now the owner of George McDougall's property, there is also a small division of three small lots along the eastern edge of Lot 14 owned by N.D, D.D and an unidentifiable name. The property owned by James Stephenson in the northern edge of Lot 14 is now owned by William Hanbly, which is the only property within the lot to not have a farmhouse structure depicted within.

There is no evidence of William Horsey within the 1871 Canadian Census however there is a documented grave within the Bowmanville Cemetery of a William Mitchell Horsey, born 1832, died 1927. Additionally, the grave mentions Margaret Wilson, his wife and their two daughters: Ann Wilson and Margaret M. Mountstephen. Both William and Margaret were born in England. There is no record of R.T Raynes within the 1871 Canadian Census or within the Bowmanville cemetery database.

The watercourse which flows through the property as well as the bodies of water to the north and south are still illustrated. The town of Bowmanville remains the same distance from the property but has now grown and expanded the town limits to the north. The Town of Hampton also remains in the same location. The major roadways are still located to the south of the property. The Grand Trunk Railway system is still shown to the south. (Figures 2 to 3).

1.3 Archaeological Context

1.3.1 Natural Environment

The study area is located within the Iroquois Plain physiographic region (Chapman and Putnam 1984). This region is a lowland bordering Lake Ontario that was once engulfed by a body of water known as Lake Iroquois. The region is made up of undulating till plains that once made up the shorelines of Lake Iroquois. These old shorelines and the smoothed lake bottoms are easily identifiable geographic features.

The prominent soil type within this region is Newcastle Clay Loam (Figure 4), a well-adapted heavy textured soil that suits farming, dairying and fruit growing agricultures (Morwick, Richards, Webber, 1946). This soil type boasts higher natural fertility levels than other regions in the country. Newcastle Clay Loam is the heavier soil type in this series which is characterized by its fair drainage and low phosphatic levels. This soil type includes a dark grey-brown loam or clay top with a crumb structure, followed by multiple layers of grey-brown loam and a 4-10 inches of brownish silty clay and grayish calcareous stone free lacustrine silts (Morwick, Richards, Webber, 1946).

The Bowmanville Creek is situated within the Bowmanville Valley network which runs through the property flowing southeast towards Lake Ontario. The subject property is located 4.3 metres north of Lake Ontario.

1.3.2 Current Land Use

The subject property is largely comprised of an undeveloped clearing surrounded by tree lot to the north and east and some urban development to the south and west. The town of Bowmanville is situated less than 100 metres to the east. Commercial buildings are located to the southeast. Durham Highway 2 (King Street West) runs in an east to west direction directly south of the property. Durham Regional Road 57 runs in a north to south direction directly west of the property. The intersection of Durham Highway 2 and Durham Regional Road 57 intersect 351 metres to the southwest of the property.

Figure 5 provides the location of the subject property on a 1:7,000-scale topographic map.



1.3.3 Previous Archaeological Investigations

1.3.3.1 Registered Archaeological Sites

Previously registered archaeological sites can be used to indicate archaeological potential. To determine if any previous assessments have yielded archaeological sites, either within or surrounding the current subject property, two main sources were consulted. These include the *Ontario Archaeological Sites Database* (“OASD”) and the *Public Register of Archaeological Reports*, both of which are maintained by MHSTCI.

The *Ontario Archaeological Sites Database* contains archaeological sites registered within the Borden system (Borden, 1952). The Borden system divides Canada into 13 kilometre (“km”) by 18.5 km blocks based on longitude and latitude. Each Borden block is designated with a four-letter label and sites identified within the block are numbered sequentially as they are registered. The subject property is located within the *AlGq* Borden block.

No archaeological sites have been registered within the subject property. Sixteen sites have been registered within 1 km of the subject property (MHSTCI 2021a). One site is within 250 m of the subject property (MHSTCI 2021a). Table 2 lists these sites along with the current Cultural Heritage Value or Interest (“CHVI”) for each site. Eight sites are of Euro-Canadian origins and five sites are of Indigenous origin. Three sites are of unknown origin. Sites include farmsteads, scatters, a findspot and two mill sites: The Bowmanville Grist Mill site (AlGq-57) and the Vanstone Mill site (AlGq-199). Sites AlGq-110, AlGq-109, and AlGq-108 are within 250m, of the study area (MHSTCI, 2021a).

Table 2: Registered Archaeological Sites within 1 km of the Subject Property

REG. #	NAME	TIME PERIOD	CULTURAL AFFILIATION	SITE TYPE	STATUS
AlGq-9	Tabb	Unknown	Unknown	Unknown	Unknown
AlGq-8	Pickering	Woodland, Late	Indigenous	Unknown	Unknown
AlGq-66		Other	Indigenous	Findspot	No Further CHVI
AlGq-65	Bowmanville School	Pre-Contact	Indigenous	Unknown	No Further CHVI
AlGq-58	Cooper's Shop	Post-Contact	Euro-Canadian	Unknown	Unknown
AlGq-57	Bowmanville Grist Mill	Post-Contact	Euro-Canadian	mill	Unknown
AlGq-33	Purdy 1	Unknown	Unknown	Unknown	Unknown
AlGq-199	Vanstone Mill Site	Post-Contact	Euro-Canadian	mill	Further CHVI
AlGq-191	Munday Site	Post-Contact	Euro-Canadian	agricultural	No Further CHVI
AlGq-170		Post-Contact	Euro-Canadian	homestead	Further CHVI
AlGq-149	Burns Site	Archaic, Early, Archaic, Middle	Indigenous	Unknown	unknown

AlGq-148	Downey Site	Unknown	Unknown	Unknown	Unknown
AlGq-112	Brookhill Meadows H1	Post-Contact	Euro-Canadian	homestead	Further CHVI
AlGq-110		Archaic	Indigenous	Unknown	No Further CHVI
AlGq-109	Munday	Post-Contact	Euro-Canadian	homestead	Unknown
AlGq-108	Stevens	Post-Contact	Euro-Canadian	scatter	Unknown

- In 2010, Northeastern Archaeological Associates Limited (“NAA”) under the direction of Lawrence Jackson, conducted a Stage 1 to 3 archaeological assessment on a 22-hectare parcel of farmland on the intersection of Regional Road No. 57 and Stevens Road, Bowmanville. The investigation yielded three separate archaeological occurrences which were given the site distinctions of AlGq-110, AlGq-109, the Munday Site, and AlGq-108, the Stevens Site. AlGq-110 consisted of a single findspot of an archaic corner notched point discovered during a Stage 2 pedestrian survey assessment. The area was intensified and nothing else was discovered. AlGq-110 was concluded to hold no more archaeological significance and requires no further assessment. The Munday Site AlGq-109 was a Euro- Canadian scatter believed to be associated with a former homestead within the property. A total of 22 artifacts were discovered including ceramics, a pipe bowl and stem, bottle glass, window glass and nails. Due to the nature of disturbance in the area, it was concluded that the site holds no archaeological potential and requires no further assessment. AlGq-108 retained very little Euro-Canadian artifacts and is believed to be associated with a secondary building within the property rather than a homestead. It was concluded that there is no archaeological potential, and no further assessment is required.

1.3.3.2 Previous Archaeological Reports

A review of archaeological reports within the *Public Register of Archaeological Reports* indicated that there are no archaeological reports detailing previous archaeological fieldwork within 50 m of the subject property have been filed with MHSTCI at the time this report was written (MHSTCI, 2021b).

1.3.4 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a subject property. For planning purposes, determining archaeological potential provides a preliminary indication that significant sites might be found within the subject property, and consequently, that it may be necessary to allocate time and resources for archaeological survey and mitigation.

The framework for assigning levels of potential archaeological significance is drawn from provincial guidelines found in the *Standards and Guidelines for Consultant Archaeologists*

(MHSTCI, 2011: Sections 1.3.1 and 1.3.2). The following are features or characteristics that can indicate archaeological potential:

- previously identified archaeological sites
- water sources (It is important to distinguish types of water and shoreline, and to distinguish natural from artificial water sources, as these features affect site locations and types to varying degrees.)
 - primary water sources (e.g., lakes, rivers, streams, creeks)
 - secondary water sources (e.g., intermittent streams and creeks, springs, marshes, swamps)
 - features indicating past water sources (e.g., glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained lakes or marshes, cobble beaches)
 - accessible or inaccessible shoreline (e.g., high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh)
- elevated topography (e.g., eskers, drumlins, large knolls, plateaus)
- pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground
- distinctive land formation that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings.
- resource areas, including:
 - food or medicinal plants (e.g., migratory routes, spawning areas, prairie)
 - scarce raw materials (e.g., quartz, copper, ochre or outcrops of chert)
 - early Euro-Canadian industry (e.g., fur trade, logging, prospecting, mining)
- areas of early Euro-Canadian settlement. These include places of early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches and cemeteries. There may be commemorative markers of their history, such as local provincial, or federal monuments or heritage parks
- early historical transportation routes (e.g., trails, passes, roads, railways, portages)
- property listed on a municipal register or designated under the *Ontario Heritage Act* or that is in a federal, provincial, or municipal historic landmark site



- property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations

Archaeological potential can be determined not to be present for either the entire property or parts of it when the area under consideration has been subject to extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. This is commonly referred to as “disturbed” or “disturbance” and may include:

- quarrying
- major landscaping involving grading below topsoil
- building footprints
- sewage and infrastructure development
- activities such as agricultural cultivation, gardening, minor grading and landscaping do not necessarily affect archaeological potential.

Several factors can be used to assess the potential for recovery of Euro-Canadian archaeological resources on a property. A historic farmstead was located within the southern edge of the subject property. Additionally, the subject property is located 88 metres to the west of the historic town of Bowmanville, 4.3 km north of Lake Ontario, and 2.3 km north of the Canadian National Railway, formerly the Grand Trunk Railway and just north of historic the historic King’s highway.

Several factors can be used to assess the potential for recovery of Indigenous archaeological resources on a property. The subject property is largely comprised of well-drained land that is suitable for human habitation and agriculture and is 4.3 metres north of Lake Ontario. There is a waterway which is associated with the Bowmanville River and Bowmanville River Valley system running through the property and directly east. There are five Indigenous sites and four sites of unknown cultural affiliation within 1 km of the subject property.

Background archival research indicates that all previously undisturbed portions of the subject property exhibit archaeological potential for the discovery of both pre/post-contact Indigenous and Euro-Canadian archaeological resources; therefore, a Stage 2 archaeological assessment is required prior to development.



2.0 ANALYSIS AND CONCLUSIONS

Background research indicates that the subject property has general archaeological potential due to the historic presence of a farmstead within the subject property, proximity to a major historic transportation routes and river systems, and proximity to multiple registered archaeological sites.

An inspection aerial imagery determined that a Stage 2 assessment is required for, 3.10 ha, 97 percent, of the study area and requires a Stage 2 Property Assessment prior to ground disturbance or development activities (Figure 6). 0.09, three percent, of the study area holds no archaeological potential due to disturbance from modern laneways and structures.



3.0 RECOMMENDATIONS

Subject to acceptance of the results and approval of the recommendations, MHSTCI is requested to deem this report compliant with ministry requirements for archaeological fieldwork and reporting and to issue a letter accepting this report into the *Ontario Public Register of Archaeological Reports*.

The following recommendations are provided for consideration by the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries:

1. An inspection of the property concluded that a Stage 2 assessment is required for 97 percent, 3.10 ha, of the study area. Because the area cannot be ploughed, the assessment should be conducted by test pit survey at 5 m intervals. Test pits should be at least 30 cm in diameter and should be dug into the first 5 cm of subsoil. Each test pit should be examined for stratigraphy, cultural features, or evidence of fill. Test pitting should be conducted to within 1 m of all built structures or until test pits show evidence of recent ground disturbance. All soils should be screened through wire mesh with an aperture of 6 mm to facilitate artifact recovery. Appropriate photographic documentation should be taken, and all test pits should be backfilled upon completion (Figure 6).
2. 0.09 ha, one percent, of the study area exhibits no archaeological potential due to previous disturbance in the form of laneways and structures within the property.



4.0 ADVICE ON COMPLIANCE WITH LEGISLATION

The following advice on compliance with current legislation is provided for consideration:

- a. This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part IV of the *Ontario Heritage Act*, R.S.O. 2005, c O.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection, and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- b. 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 a time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- c. 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*.
- d. The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the local police or coroner and the Registrar of Cemeteries at the Ministry of Government and Consumer Services.
- e. It is an offence to destroy or alter an archaeological site without approval from the Ministry of Tourism and Culture. Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

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6.0 FIGURES



Figure 1: Location of the Subject Property on a 1:50,000 Scale Topographic Map

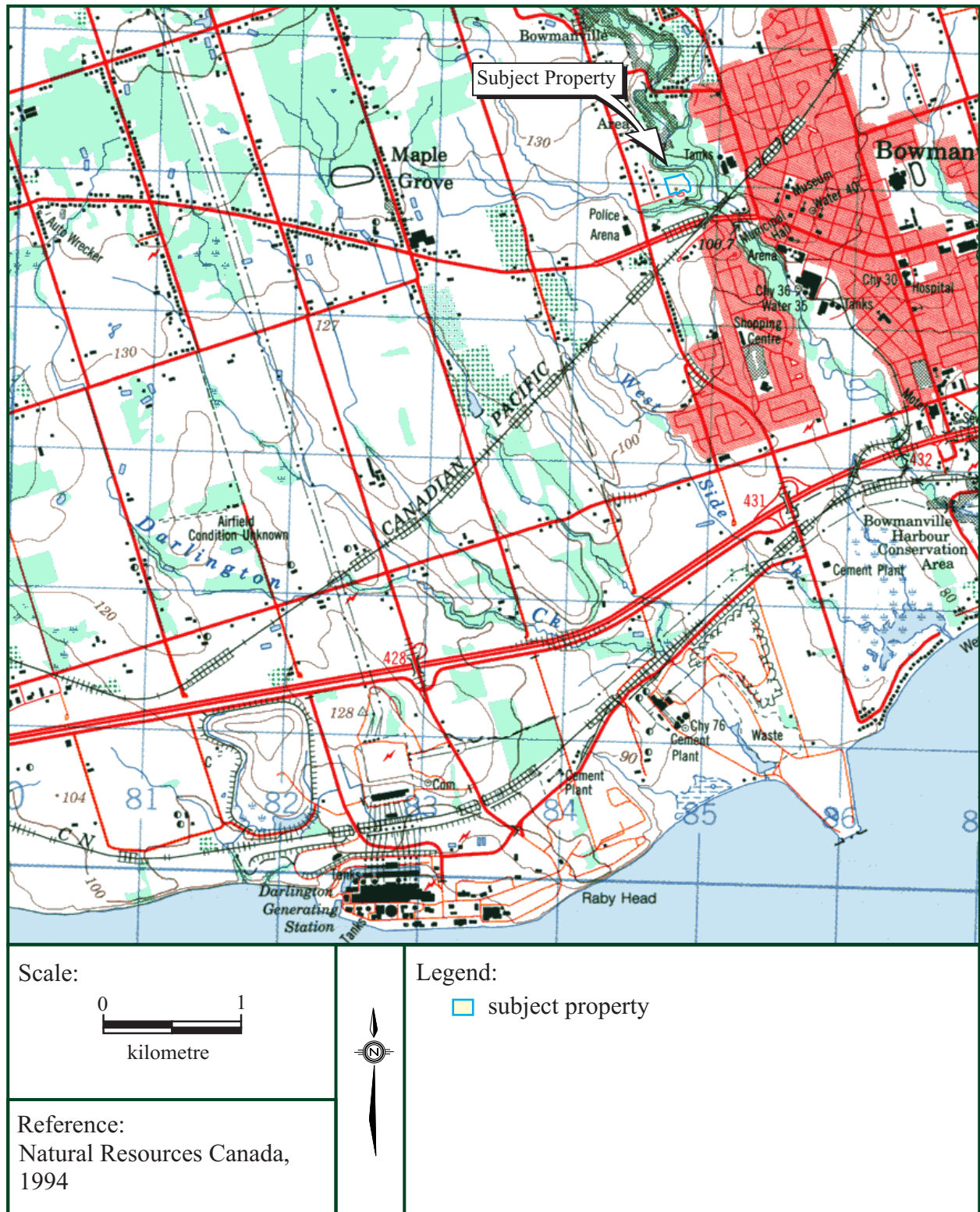


Figure 2: Location of the Subject Property on Tremaine's 1861 Illustrated Historic Atlas Map of the County of Durham, Upper Canada



Figure 3: Location of the Subject Property on H. Belden & Co.'s 1878 Historic Atlas Map of Darlington Township, Durham County



Scale:



Legend:

 subject property

Reference:

H. Belden & Co., 1878:15-16



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Figure 4: Location of the Subject Property on a Map of Durham County Soils

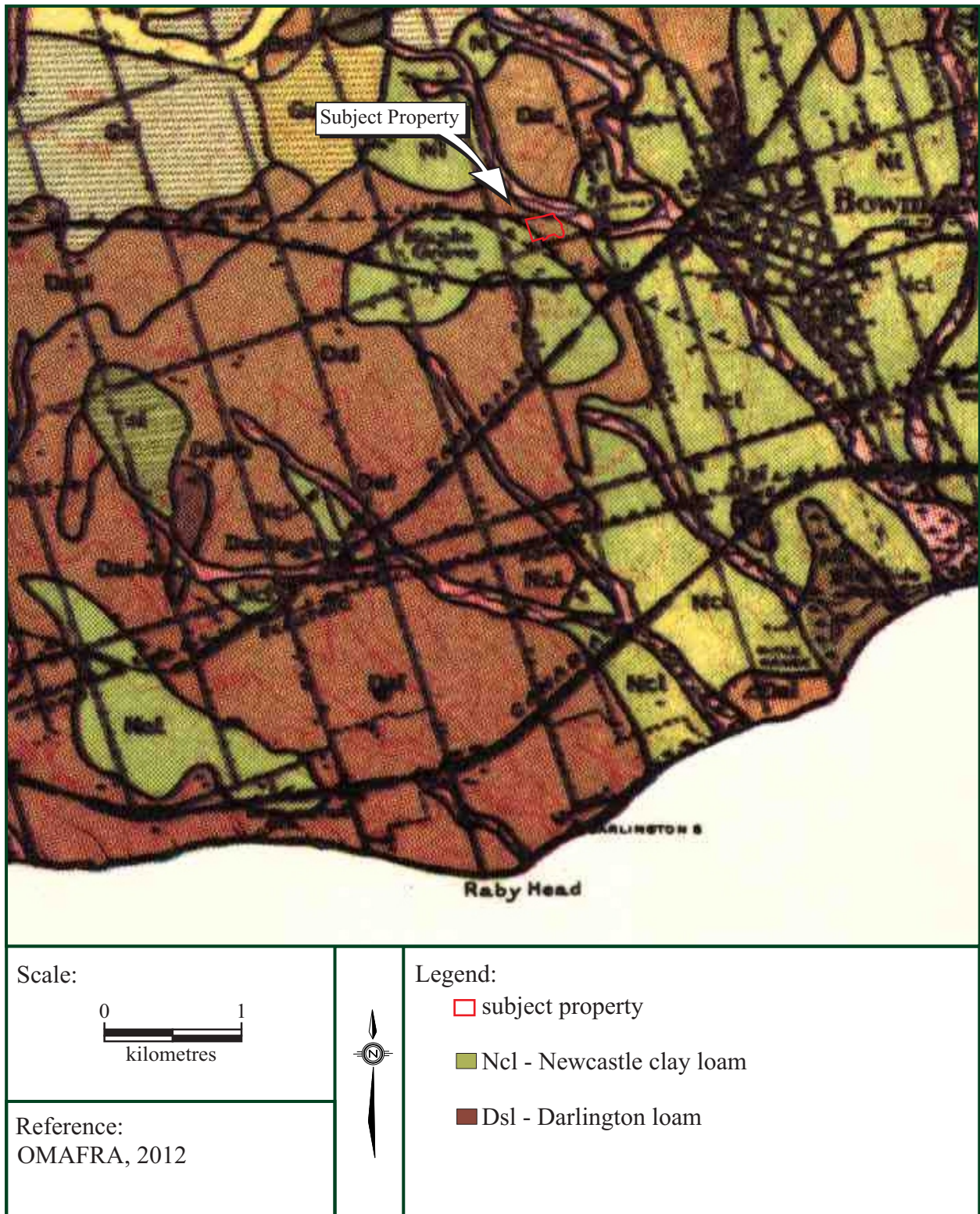


Figure 5: Location of the Subject Property on a 1:7,000 Scale Topographic Map

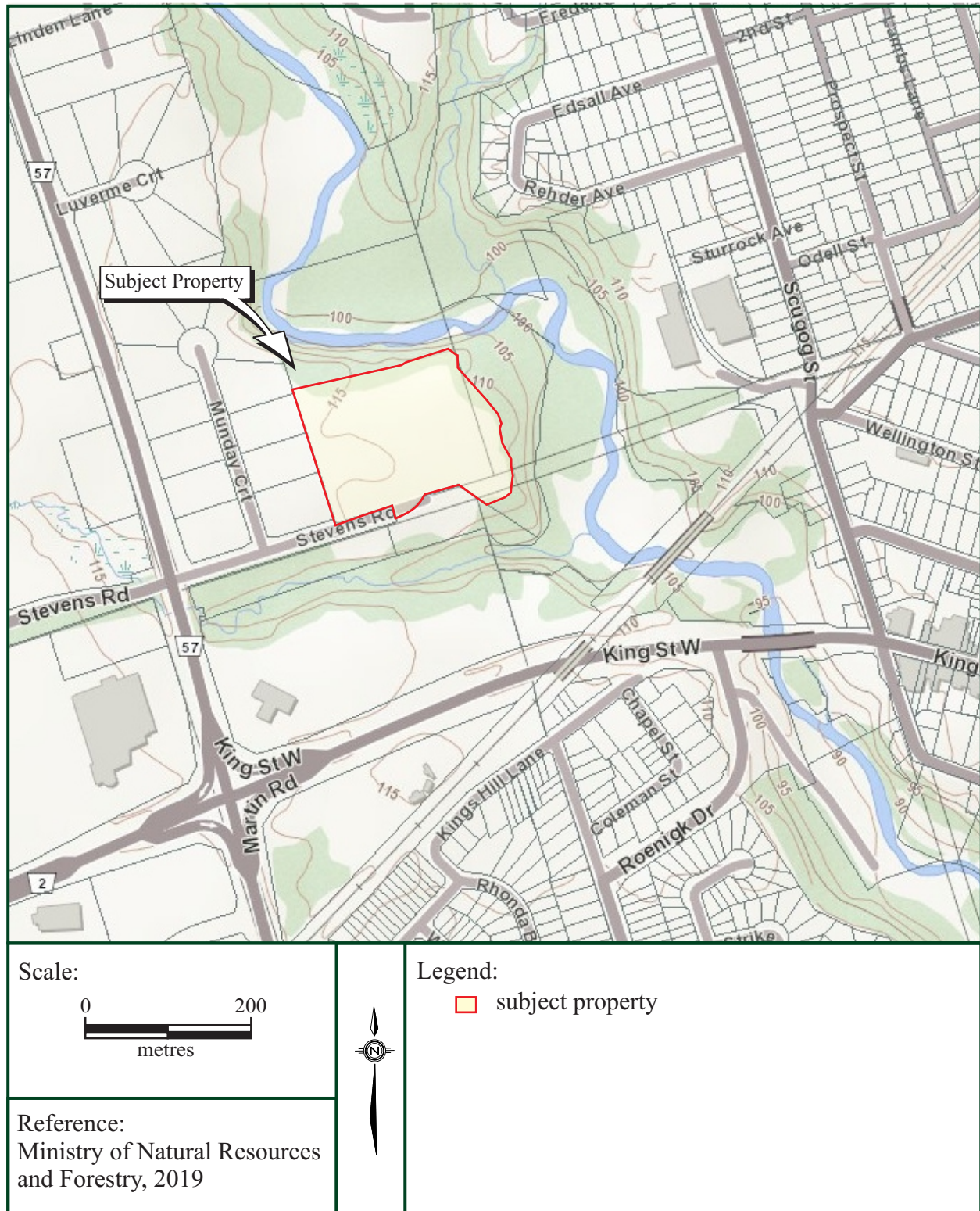


Figure 6: Aerial Photograph Showing Results of the Stage 1 Assessment of the Subject Property



Scale:



Reference:
Ministry of Natural Resources
and Forestry, 2019



Legend:

- subject property
- Area of Archaeological Potential:
 - Stage 2 test pit survey at 5 m intervals required
- Areas of Low to No Archaeological Potential To Confirm and Document during Stage 2 Survey:
 - previously disturbed, laneway & structures

