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Aug 23, 2022

Matthew Muttart (P1208)
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RE: Review and Entry into the Ontario Public Register of Archaeological Reports: Archaeological Assessment Report Entitled, "Stage 2 Archaeological Assessment Proposed Subdivision Development Part of Lots 2 and 3, Part of the North Half of Lot 4, and Part of the South Half of Lot 4, Concession 10, Geographic Township of Innisfil, City of Barrie, Simcoe County, Ontario Revised Report ", Dated Jul 26, 2022, Filed with MHSTCI Toronto Office on Aug 2, 2022, MHSTCI Project Information Form Number P1208-0059-2022, MHSTCI File Number 43SP301

Dear Mr. Muttart:

This office has reviewed the above-mentioned report, which has been submitted to this ministry as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18.¹ This review has been carried out in order to determine whether the licensed professional consultant archaeologist has met the terms and conditions of their licence, that the licensee assessed the property and documented archaeological resources using a process that accords with the 2011 *Standards and Guidelines for Consultant Archaeologists* set by the ministry, and that the archaeological fieldwork and report recommendations are consistent with the conservation, protection and preservation of the cultural heritage of Ontario.

The report documents the assessment of the study area as depicted in Figures 6-10 of the above titled report and recommends the following:

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

1. No artifacts or other archaeological resources were identified during the Stage 2 archaeological assessment of the project area. The project area has now been fully assessed according to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 Standards and Guidelines for Consultant Archaeologists. No further archaeological assessment of the project area is required.
2. The remainder of the subject property retains archaeological potential and requires Stage 2 assessment prior to development as shown in Figures 9 and 10 of this report.
 - a. All portions of the subject property that retain archaeological potential and can be ploughed, i.e., cultivated and formerly cultivated fields, should be assessed by pedestrian survey at 5 m intervals. The land to be assessed must be recently ploughed and must be disked after ploughing if the soils are heavy

clay. Direction should be provided to the contractor undertaking the ploughing that the ploughing should be deep enough to provide total topsoil exposure, but not deeper than previous ploughing. The ploughed lands must be weathered by one heavy rainfall or several light rains to improve the visibility of archaeological resources. At least 80% of the ground surface must be visible to conduct a pedestrian survey. If the fields to be assessed do not meet the above conditions, then the land may need to be reploughed prior to survey. The ploughed lands should be surveyed at 5 metre ("m") intervals.

When archaeological resources are found, the survey intervals will be decreased to 1 m intervals over a minimum of 20 m radius around the archaeological find to determine if it is an isolated find or part of a larger scatter. The 1 m interval survey should continue until the full extent of the surface scatter has been identified. All formal artifact types and diagnostic categories are to be collected and enough artifacts should be left in-situ to relocate the site if it is necessary to conduct further assessment.

b. All portions of the subject property that retain archaeological potential and cannot be ploughed should be assessed by test pit survey at 5 m intervals. The test pits should be excavated by hand at 5 m intervals. Test pits should be at least 30 centimetres ("cm") in diameter and should be dug into the first 5 cm of subsoil. Test pits should be conducted to within 1 m of any disturbances or until test pits show evidence of recent ground disturbance. Each pit should be examined for stratigraphy, cultural features, or evidence of fill. Soils should be screened through wire mesh with an aperture no greater than 6 mm to facilitate artifact recovery. All artifacts should be collected according to their associated test pit. All test pits should be backfilled unless otherwise instructed.

When artifacts are found, the survey grid should be continued to determine whether there are further positive test pits. This may produce sufficient archaeological resources to meet criteria for requiring a Stage 3 archaeological assessment. When insufficient archaeological resources are found through continued grid survey to meet criteria for Stage 3 assessment, survey coverage around the positive test pit should be continued, by means of eight additional test pits and one or more 1 m by 1 m square test unit placed above the positive test pit.

Based on the information contained in the report, the ministry is satisfied that the fieldwork and reporting for the archaeological assessment are consistent with the ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences. This report has been entered into the Ontario Public Register of Archaeological Reports. Please note that the ministry makes no representation or warranty as to the completeness, accuracy or quality of reports in the register.

Should you require any further information regarding this matter, please feel free to contact me.

Sincerely,

Melissa Wallace
Archaeology Review Officer

cc. Archaeology Licensing Officer
Alexa-Rae Valente,DG Group
Shelby White,Services Barrie

¹ In no way will the ministry be liable for any harm, damages, costs, expenses, losses, claims or actions that may result: (a) if the Report(s) or its recommendations are discovered to be inaccurate, incomplete, misleading or fraudulent; or (b) from the issuance of this letter. Further measures may need to be taken in the event that additional artifacts or archaeological sites are identified or the Report(s) is otherwise found to be inaccurate, incomplete, misleading or fraudulent.



ACC

ARCHAEOLOGICAL
CONSULTANTS CANADA

Stage 2 Archaeological Assessment

Proposed Subdivision Development

Part of Lots 2 and 3, Part of the North Half of Lot 4, and Part of the South Half of Lot 4, Concession 10, Geographic Township of Innisfil, City of Barrie, Simcoe County, Ontario

Revised Report

Prepared for:

Ontario Ministry of Heritage, Sport, Tourism and Culture Industries

Prepared by:

Archaeological Licensee: Matthew Muttart, M. A., P1208

Archaeological Consultants Canada

785 Mohawk Road East

Hamilton, ON L8T 2R4

PIF# 1208-0059-2022

Project No. 162-12-22

26 July 2022

EXECUTIVE SUMMARY

Archaeological Consultants Canada (“ACC”) was contracted by the Proponent to conduct a Stage 2 archaeological assessment. The assessment was carried out for a proposed residential subdivision development and was required under the *Planning Act, R.S.O. 1990*. The legal subject property (“subject property”) is approximately 114.68 hectares (“ha”) in size and is located on Part of Lots 2 and 3, Part of the North Half of Lot 4, and Part of the South Half of Lot 4, Concession 10, Geographic Township of Innisfil, City of Barrie, Simcoe County, Ontario (Figure 1). Only a portion of the subject property was assessed for this current study. The assessed portion, or “project area” measures 28.8 ha in size.

This Land Archaeology (“TLA”) completed a Stage 1 assessment of the entire subject property as well as a Stage 2 assessment of a portion of the subject property including some lands within the project area (TLA, 2016). Stage 1 background research conducted by TLA determined that the project area had archaeological potential and required a Stage 2 archaeological assessment due to the proximity of water and historical significance of the subject property (TLA, 2016). 21.2 ha of the 28.8 ha project area has previously been subject to Stage 2 assessment by TLA (2016). Agricultural fields were assessed by pedestrian survey and landscaped lawn surrounding a demolished homestead were assessed by test pit survey as part of this assessment (TLA, 2016). No archaeological resources were found within the project area or subject property as a result of the assessment (TLA, 2016). As these lands have been assessed and no sites are present, the previously assessed lands within the project area no longer retain archaeological potential and did not require further assessment as part of the current study.

The remaining 7.6 ha of the project area, consisting of woodlot, was determined to retain archaeological potential and warrant Stage 2 assessment. During the survey, 0.04 ha, 1 %, of the project area was determined to have low to no archaeological potential because it is low-lying and permanently wet. 7.2 ha, 25 %, was subject to test pit survey at 5 m intervals as it could not be ploughed. No artifacts or other archaeological resources were identified during the Stage 2 property assessment of the project area (see Figure 8). According to the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI, 2011), the project area has now been completely assessed and does not require any additional fieldwork.

While the project area has now been fully assessed, there are remaining archaeological concerns to be addressed within the subject property. Stage 2 assessment is still required within the areas of the subject property that retain archaeological potential (Figure 9). As these areas consist of woodlot and greenspace and cannot be ploughed, this assessment should be conducted by test pit survey at 5 m intervals.

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

1. No artifacts or other archaeological resources were identified during the Stage 2 archaeological assessment of the project area. The project area has now been fully

assessed according to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the project area is required.

2. The remainder of the subject property retains archaeological potential and requires Stage 2 assessment prior to development as shown in Figures 9 and 10 of this report.
 - a. All portions of the subject property that retain archaeological potential and can be ploughed, i.e., cultivated and formerly cultivated fields, should be assessed by pedestrian survey at 5 m intervals. The land to be assessed must be recently ploughed and must be disked after ploughing if the soils are heavy clay. Direction should be provided to the contractor undertaking the ploughing that the ploughing should be deep enough to provide total topsoil exposure, but not deeper than previous ploughing. The ploughed lands must be weathered by one heavy rainfall or several light rains to improve the visibility of archaeological resources. At least 80% of the ground surface must be visible to conduct a pedestrian survey. If the fields to be assessed do not meet the above conditions, then the land may need to be reploughed prior to survey. The ploughed lands should be surveyed at 5 metre ("m") intervals.

When archaeological resources are found, the survey intervals will be decreased to 1 m intervals over a minimum of 20 m radius around the archaeological find to determine if it is an isolated find or part of a larger scatter. The 1 m interval survey should continue until the full extent of the surface scatter has been identified. All formal artifact types and diagnostic categories are to be collected and enough artifacts should be left in-situ to relocate the site if it is necessary to conduct further assessment.

- b. All portions of the subject property that retain archaeological potential and cannot be ploughed should be assessed by test pit survey at 5 m intervals. The test pits should be excavated by hand at 5 m intervals. Test pits should be at least 30 centimetres ("cm") in diameter and should be dug into the first 5 cm of subsoil. Test pits should be conducted to within 1 m of any disturbances or until test pits show evidence of recent ground disturbance. Each pit should be examined for stratigraphy, cultural features, or evidence of fill. Soils should be screened through wire mesh with an aperture no greater than 6 mm to facilitate artifact recovery. All artifacts should be collected according to their associated test pit. All test pits should be backfilled unless otherwise instructed.

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PROJECT PERSONNEL

Project Manager:	Matthew Muttart, M.A., P1208
Professional Licence:	Matthew Muttart, M.A., P1208
Field Director:	Joshua Garrett, M.A., R1293
Field Archaeologists:	Zack Cousineau, B.A Brienne McDonald Matthew Muttart, M.A., P1208 Leah Peacock, B.A., R1273 Michelle Volpe, M.A., R1241 Petros Shoonian Donny Vongphakdy
Report Preparation:	Kristy O'Neal, M.A., P066
Graphics:	Kristy O'Neal, M.A., P066



Stage 2 Archaeological Assessment

Proposed Subdivision Development

Part of Lots 2 and 3, Part of the North Half of Lot 4, and Part of the South Half of Lot 4, Concession 10, Geographic Township of Innisfil, City of Barrie, Simcoe County, Ontario

1.0 PROJECT CONTEXT

1.1 Development Context

Archaeological Consultants Canada (“ACC”) was contracted by the Proponent to conduct a Stage 2 archaeological assessment. The assessment was carried out for a proposed residential subdivision development and was required under the *Planning Act, R.S.O. 1990*. The legal subject property (“subject property”) is approximately 114.68 hectares (“ha”) in size and is located on Part of Lots 2 and 3, Part of the North Half of Lot 4, and Part of the South Half of Lot 4, Concession 10, Geographic Township of Innisfil, City of Barrie, Simcoe County, Ontario (Figure 1). Only a portion of the subject property was assessed for this current study. The assessed portion, or “project area” measures 28.8 ha in size.

This Land Archaeology (“TLA”) completed a Stage 1 assessment of the entire subject property as well as a Stage 2 assessment of a portion of the subject property including some lands within the project area (TLA, 2016). Stage 1 background research conducted by TLA determined that the project area had archaeological potential and required a Stage 2 archaeological assessment due to the proximity of water and historical significance of the subject property (TLA, 2016).

Approximately 21.2 ha of the 28.8 ha project area has been previously subject to Stage 2 assessments by TLA. No archaeological resources were identified within the project area as a result of the previous Stage 2 assessment (TLA, 2016). While these lands have been previously assessed, they are included in the project area limits provided by the Proponent and are therefore discussed in this report. However, any lands within the 28.8 ha project area that has been previously subject to Stage 2 property survey were not reassessed as part of the current study. Figures 6 & 7 show the results of the previous assessment by TLA. A 7.6 ha portion of the 28.8 ha project area, made up of four wooded areas, has not been previously subject to Stage 2 property survey and was recommended for Stage 2 assessment (TLA, 2016:28).

The objective of a Stage 2 property assessment is to document all archaeological resources present on the property and to make a determination about whether these resources, if present, have cultural heritage value or interest. Archaeological resources consist of artifacts (Indigenous stone tools, pottery and subsistence remains as well as Euro-Canadian objects), subsurface settlement patterns and cultural features (post moulds, trash pits, privies, and wells), and sites (temporary camps and special purpose activity areas, plus more permanent settlements such as villages, homesteads, grist mills and industrial structures). If any archaeological resources are



present that exhibit cultural heritage value or interest, a Stage 2 survey will determine whether these resources require further assessment and, if necessary, recommend appropriate Stage 3 strategies for identified archaeological sites.

The Stage 2 assessment was conducted under Professional Archaeological License P1208, held by Matthew Muttart. The fieldwork was completed under the direction of Joshua Garrett (R1293). The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (“MHSTCI”) assigned project information number P1208-0059-2022 to this project. The licensee of ACC received permission from the proponent to access the property and to conduct all required archaeological fieldwork activities including the removal of artifacts, as necessary. The property was accessed on March 21, 22, and 23, 2022.

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 2 archaeological assessment. All documents and records related to this project will be curated at the corporate offices of ACC, in accordance with subsection 66(1) of the *Ontario Heritage Act*.

1.2 Historical Context

1.2.1 Background Research

Stage 1 background research for the project area has been completed by TLA in 2016. Stage 1 research determines the potential for finding and identifying archaeological resources including sites within the current project area 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 project area.
- develop an historical framework for assigning levels of potential significance to any new sites discovered during fieldwork.

The following sections summarize the findings from TLA’s 2016 report. When applicable, ACC has updated the previous findings with new information to include additional relevant information and to conform to the 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI, 2011).

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, to a greater or lesser degree, physical evidence of their lifeway activities and settlements at many locations. Based upon a published synthesis of Indigenous cultural occupations

Stage 2 Archaeological Assessment
Part Lots 2, 3, & 4, Concession 10, Township of Innisfil
City of Barrie, Simcoe County, ON

(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.

Table 1: General Cultural Chronology for Southern 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	
	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
	Early Woodland	Meadowood Complex	2,900-2,400	introduction of pottery
		Middlesex Complex	2,500-2,000	
WOODLAND	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:		
		Riviere au Vase	1500/1400-1200/1100	
	Late Woodland: Ontario Iroquois Tradition	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: Neutral	600-450	
	Late Woodland: Western Basin Tradition	Younge Phase	1200/1100-800	
		Springwells Phase	800-600	
		Wolf Phase	600-450	
HISTORIC	SW Ontario Iroquois	Historic Neutral	450-350	tribal warfare
	European Contact	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)



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 500 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.

The Woodland period is distinguished by the introduction of pottery vessels for storage and cooking. Sites of the Woodland period (*circa* 3000 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.

The project area was historically located on Part of Lots 3 and 4, Concession 10, Geographic Township of Innisfil, Simcoe County. The entire subject property also extends onto Part of Lot 2, Concession 10. Simcoe County, called “the cradle of Ontario History”, was named after Colonel John Graves Simcoe, the first Lieutenant Governor of Upper Canada (Cranston, 1979).



Originally it was part of the Home District, it attained county status in 1850, with Barrie serving as the county seat.

The area around what is now Simcoe County was inhabited by the Huron. Prior to 1600, European goods reached the Hurons through trade networks with the Algonkians. Fur exchange was an early lucrative business in the region.

In 1610, Etienne Brûlé, a Frenchman and the first European in the area, arrived to study the Huron language and customs. This began a period of construction of French and Jesuit missions, including Penetanguishene, Sainte Marie, and St. Ignace, in an attempt to convert the Huron (Belden, 1881:3-4). This was also a turbulent time involving warfare between the Huron and the Iroquois, which ended in the defeated surviving Huron seeking refuge on Christian Island. The island was abandoned in June 1650, and the area remained wilderness for many years (Mika & Mika, 1983). The Algonkians gradually penetrated the area, using trails left behind by the Huron.

Traders in search of beaver fur became some of the early settlers. In 1793, Lieutenant-Governor Simcoe recommended the establishment of a naval base in Penetanguishene Bay (Belden, 1881:4). Land grants in the area were made to veterans and retired officers. New roads were constructed, and existing roads were improved to encourage settlement. Some of the early industries were shipping, shipbuilding, and lumbering.

Innisfil Township was first surveyed in 1820. The township was named after the poetic name for Ireland, Innisfail. The first settlers to the area were the Hawson family who arrived via Lake Simcoe. They established their residence at the entrance of Kempenfeldt Bay. Francis Hewson was appointed magistrate and performed all of the wedding ceremonies in the township (Mika & Mika, 1981:347). Following the opening of the Northern Railway in 1853, the township became an important area for lumber manufacturing. Allendale became the principal village in the township as the terminus of the Northern Railway (Belden, 1881:14). It gained further importance when railway connections were established (Hunter, 1909).

The nearest community to the project area was the post office town of Holly, located 1.4 km to the north. Holly was first established as a post office in 1874 and was named by W. C. Little for his home in England. The first postmaster was James Brown, and the office closed in 1914. The community had a population of 50 in 1893 (Carter, 1984:542).

The town of Vine is located 2.4 km to the east. A post office was first established in Vine in 1864. Again, the town was named by W. C. Little for his home in England. The first postmaster was Richard Simpson, and the office closed in 1914. A train station at Vine is called Victoria Station and it was on the North and North West Railway, later the Grand Trunk Railway. The community had a population of 175 in 1875 (Carter, 1984:1263).

Historical records and mapping were examined for evidence of early Euro-Canadian occupation within and near the project area. Figures 2 to 4 represent the Euro-Canadian settlement in and around the current project area in the late nineteenth century. Hogg's 1871 *Map of the County of*



Simcoe shows that the north half of Lot 3 was owned by W. Gibson. The south half of Lot 4 was owned by F. B. Tago. There were no owners listed for the north half of Lot 4 (Figure 2). No structures are depicted within or within 300 m of the project area. The project area is just south of a historic transportation route, Salem Road.

Tackabury's 1875 map of Simcoe County in the *Atlas of the Dominion of Canada* does not indicate an owner for Lots 3 or 4 at that time, but it does show the nearby post office towns, including Vine and Stroud, and shows the project area fronting Salem Road (Figure 3).

H. Belden & Co.'s 1881 map of Innisfil Township in the *Illustrated Historical Atlas of the County of Simcoe* does not list an owner for Lot 3 at that time. Lot 4 was owned by D. J. Terry, and there is a homestead on the property along McKay Road, approximately 300 m to the south. A church and the Holly post office are shown 1.4 km to the north, on Concession 12. The community of Vine is located 2.6 km to the east, just east of the North and North West Railway (Figure 4).

No specific structures are indicated within the current project area on any map consulted. The absence of structures on this map, however, does not necessarily mean that one or more structures were not present at that time, earlier or later. Not all features of interest were mapped systematically on the Ontario series of historical maps and atlases, given that they were financed by subscription, and subscribers were given preference regarding the level of detail provided on the maps.

1.3 Archaeological Context

1.3.1 Natural Environment

The project area is located within the Peterborough Drumlin Field physiographic region (Chapman & Putnam, 1984:113). The Peterborough drumlin field is a rolling till plain with an area of roughly 1,750 square miles, containing approximately 3,000 full drumlins along with smaller drumlin-like hills and till sheets. The region is also notable for its eskers, gravel ridges with poor soil. The rock underlying this region is mostly limestone, which is highly fossiliferous and tends to disintegrate easily. Drumlins in this area are of typical shape with many swampy areas intervening. Valleys across the entire drumlin field break the continuity of the physiographic region and are deep enough to provide excellent drainage to the adjacent uplands (Chapman and Putnam 1984: 169-172). The dominant physiographic landform of the project area is drumlinized till plain (MNDM, 2007).

The *Soil Survey of Simcoe County* (Hoffman et al., 1962) indicates that there are four dominant surface soil types within the project area (Figure 5). Tioga loamy sand is found in the northeast and southeast portions of the project area. This soil is characterized as being a grey calcareous outwash sand with good drainage, variable topography, and variable stoniness. Sargent gravelly sandy loam comprises the western portion of the project area. This soil is characterized as being a stone free pale brown, calcareous outwash gravel, with good drainage, smooth to gently



sloping topography. Alliston sandy loam is present in the central portion of the project area. This soil is characterized as being a grey calcareous outwash sand with imperfect drainage, smooth to very gently sloping topography, and variable stoniness. Finally, Muck is found along the east-central edge of the project area. This soil is characterized as consisting of well decomposed organic material that is more than 30 cm deep and is underlain by rock, sand, silt, or clay. Muck drains poorly and is made up of depressional topography.

The presence of potable water is the single most important resource necessary for any extended human occupation or settlement. The nearest water source is a low-lying wet area within the east central portion of the property. Historically an unnamed tributary of Lover's Creek is shown transecting Lot 4 on Belden's 1881 historical atlas map (Figure 4). Lover's Creek is within the Innisfil Creek watershed. This creek is now 140 m to the south of the project area.

1.3.2 Current Land Use

The project area currently consists of agricultural field, woodlot and scrub with high rock content. The surrounding area is rural and used for agriculture or remains wooded. To the east and west and south of the project area are marsh lands that are classed as a natural heritage system. To the southeast of the project area is a horse track.

Figure 1 provides the location of the subject property and project area on a 1:50000-scale topographic map. Fieldwork for the project was conducted on March 21, 22, and 23, 2022.

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 project area, 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 project area is located within the BbGw Borden block.

No archaeological sites have been registered within the subject property or project area. Twenty-one sites have been registered within approximately 1 km of the project area (MHSTCI 2022a). Table 2 lists these sites along with the current Cultural Heritage Value or Interest ("CHVI") for each site, when available. Seven of the sites are Indigenous, and are findspots, campsites, hunting losses, or unknown type. Eleven of the sites are Euro-Canadian. All are homesteads or farmsteads, with one site also having a chapel. Three sites have unknown cultural affiliation. None of the sites are located within 300 m of the subject property or project area.

Table 2: Registered Archaeological Sites within 1 km of the Project Area

REG. #	NAME	TIME PERIOD	CULTURAL AFFILIATION	TYPE	STATUS
BbGv-38	Kloosterman Site 2	Post-Contact	Euro-Canadian	farmstead	No further CHVI
BbGw-15	Veterans Drive	Post-Contact	Euro-Canadian	homestead	
BbGw-19	Sun Valley	Archaic, Late, Archaic, Middle	Indigenous	findspot	
BbGw-20	Zachary	Woodland, Late	Iroquoian	campsite	
BbGw-22	James Brown	Post-Contact	Euro-Canadian	church/chapel, homestead	
BbGw-29	Timothy	Archaic, Late	Indigenous	findspot	
BbGw-34					
BbGw-36	Parcel 2 W site	Post-Contact	Euro-Canadian	homestead	No further CHVI
BbGw-37	Kloosterman 1 Site	Post-Contact	Euro-Canadian	homestead	Further CHVI
BbGw-38	Kloosterman 2 Site	Post-Contact	Euro-Canadian	homestead	Further CHVI
BbGw-40	DiPoce 1	Post-Contact	Euro-Canadian	homestead	No further CHVI
BbGw-6	IF 1				
BbGw-7	IF 2				
BbGw-79	Historic Parcel 8 Site	Post-Contact	Euro-Canadian	farmstead	No further CHVI
BbGw-81	Historic Parcel 2V	Post-Contact	Euro-Canadian	homestead	No further CHVI
BbGw-82	Parcel 2 Findspot	Archaic, Late	Indigenous	hunting loss	No further CHVI
BbGw-83	Parcel 14 Findspot	Archaic, Late	Indigenous	hunting loss	No further CHVI
BbGw-84	Parcel 2A Scatter	Post-Contact	Indigenous	unknown	No further CHVI
BbGw-85	Parcel 2G Scatter	Pre-Contact	Indigenous	unknown	No further CHVI
BbGw-90	Location 3	Post-Contact	Euro-Canadian	farmstead	Further CHVI
BbGw-91	Brooks Site	Post-Contact	Euro-Canadian	homestead	Further CHVI

1.3.3.2 Previous Archaeological Reports

A review of archaeological reports within the *Public Register of Archaeological Reports* indicated that three archaeological reports detailing previous archaeological fieldwork within the /project area and one report detailing fieldwork within 50 m of the project area have been filed with the MHSTCI at the time this report was written (MHSTCI, 2021b). A summary of each of these reports is provided below. Figure 6 provides the location of the below reporting in relation to the current assessment.

Report on the 2007, 2008 and 2009 Stage 1 to 3 Archaeological Assessments of Watersand Construction Ltd. and Wormwood Development Inc.'s Properties, Town of Innisfil, Simcoe County, Ontario. This Land Archaeology Inc., March 31, 2016. PIFs P059-045-2007, P059-074-2008, P059-175-2009.

TLA conducted Stage 1 to 3 assessment of an 853 ha developable property. The entirety of the current subject property was subject to Stage 1 assessment as part of TLA's study (TLA, 2016:1-2). During the Stage 2 assessments, 14 archaeological locations were found, including four Indigenous locations and 10 Euro-Canadian locations (TLA, 2016:3).

The Indigenous sites include the following four sites, none of which were determined to have CHVI:

- BbGw-82 (Parcel 2 Findspot) - 1 projectile point and 1 piece of chert
- BbGw-82 (Parcel 14B Findspot) - 1 projectile point
- BbGw-84 (Parcel 2A Scatter) - 2 pieces of chert
- BbGw-85 (Parcel 2G Scatter) - 3 pieces of fragmentary chert till

The Euro-Canadian sites include four sites determined to have no CHVI and six sites that were subject to Stage 3 excavation consisting of Controlled Surface Artifact Pickup ("CSP") and/or unit excavation. The following four sites were determined by TLA to have no CHVI:

- BbGw-81 (Parcel 2V Site) - artifacts related to demolition of twentieth century house demolition)
- Parcel 4F deposit (not registered) - 12 artifacts relating to refuse from derelict house
- BbGw-79 (Historic Parcel 8B Site) – site with lack of early diagnostic artifacts and continuous occupation from late 19th century to 20th century
- Parcel 16 deposit (not registered) – site with lack of pre-twentieth century artifacts

The following six Euro-Canadian sites were determined to retain CHVI and were subject to Stage 3 site-specific assessment:

- BbGw-36 (Historic 2W site) - subject to Stage 2 Test Pit assessment and Stage 3 unit excavation)
- BbGw-32 (Wormwood Site) - subject to Stage 3 CSP and Stage 3 unit excavation
- BbGw-80 (Historic 4C Site) - subject to Stage 3 CSP
- BbGw-35 (Selbye Site) - subject to Stage 3 CSP
- BbGw-37 (Kloosterman 1 Site) - subject to Stage 3 CSP
- BbGw-38 (Kloosterman 2 Site) - subject to Stage 3 CSP

Additional fieldwork was recommended for four of the Euro-Canadian sites (TLA, 2016:15-16). BbGw-33, Wormwood Site, requires excavation of further Stage 3 test units to define the site extent, as well as in-depth archival research. BbGw-35, Selbye Site, requires Stage 3 test unit excavation and in-depth archival research. BbGw-37, Koosterman 1 Site, requires Stage 3 test unit excavation and in-depth archival research. BbGw-38, Koosterman 2 Site, requires Stage 3 test unit excavation and in-depth archival research.

None of the above archaeological locations are within the subject property or current project area, or within 300 m of the subject property or the project area.

Within the current subject property, the Stage 1 assessment determined that the land retained archaeological potential and Stage 2 was recommended for the entire parcel. Stage 2 assessment was conducted within a portion of the current project area; all agricultural fields were assessed by pedestrian survey. A landscaped area with a demolished farmstead was assessed by test pit survey. Woodlots and greenspace on the subject property and within the current project area were not assessed but were recommended for Stage 2 assessment, including 7.6 ha of lands within the current project area (TLA, 2016: Figure 7).

Stage 1-2 Archaeological Assessment, Ruch Property, 124 and 128 McKay Road and 854 Veterans Drive, (Geographic Township of Innisfil, County of Simcoe), City of Barrie. AMICK Consultants Limited, October 26, 2017. PIF P384-0036-2013.

AMICK conducted a Stage 1 & 2 assessment of a property that includes lands directly to the east and south of the current subject property/project area. AMICK's Stage 1 determined that their property exhibited archaeological potential due to proximity to registered sites and water, and due to the presence of a historical homestead and transportation routes on historical atlas mapping (AMICK, 2017:29-30). The property warranted Stage 2 assessment, which was conducted by both pedestrian survey and test pit survey at 5 m intervals. No archaeological resources were found during AMICK's assessment, but an area of the property was not assessed at that time. This area was recommended for Stage 2 fieldwork prior to development (AMICK, 2017:36).

Stage 1-2 Archaeological Property Assessment, 124, 180 & 228 McKay Road, Part of Lots 4 & 5, Concession 10 (Geographic Township of Innisfil), City of Barrie, County of Simcoe. AMICK Consultants Limited, July 12, 2021. PIF P038-1049-2021.

AMICK completed the Stage 1 & 2 assessment of the property above, focusing on the areas that were not assessed during their 2017 study. The surveyed areas include woodlots directly east and south of the current subject property/project area (AMICK, 2021). No archaeological resources were found during AMICK's assessment. As the entire property has now been assessed, AMICK recommended that no further assessment was required (AMICK, 2021:33).

Stage 1 Archaeological Assessment of the Simcoe Forest Blauxham Tract, 161 Salem Road, Part of Lot 5, Concession 10, Geographic Township of Innisfil, County of Simcoe, City of Barrie, County of Simcoe. Archaeological Services Inc., December 2, 2019. PIF P449-0390-2019.

Archaeological Services Inc. ("ASI") completed a Stage 1 assessment of the Simcoe Forest Blauxham tract, located approximately 50 m from the current subject property/project area. ASI determined that 96.6% of the 37.7 ha property had archaeological potential, with the remainder having steeply sloping topography (ASI, 2019:9). Stage 2 test pit survey at 5 m intervals was recommended for all areas of archaeological potential (ASI, 2019:9).

1.3.4 Potential for Archaeological Resources

Archaeological potential is defined as the likelihood of finding archaeological sites within a property. For planning purposes, determining archaeological potential provides a preliminary indication that significant sites might be found within the 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. The project area is generally comprised of well drained land that is suitable for human habitation. Historic atlas mapping indicates that the project area is located adjacent to Salem Road, a historic transportation route. There are eleven registered Euro-Canadian sites located within 1 km of the project area (Table 2).

Several factors can be used to assess the potential for recovery of Indigenous archaeological resources on a property. The project area is largely comprised of well-drained land that is suitable for human habitation and is within 140 m of a tributary of Lover’s Creek. There are seven registered Indigenous sites located within 1 km of the project area (Table 2).

TLA’s Stage 1 & 2 report documenting the subject property/project area indicated that all previously undisturbed portions of the subject property/project area exhibited general archaeological potential for the discovery of both pre/post-contact Indigenous and Euro-Canadian archaeological resources therefore, a Stage 2 archaeological assessment was required for the entire subject property.

TLA has completed Stage 2 assessment on 21.2 ha of the 28.8 ha project area. Agricultural fields were assessed by pedestrian survey and landscaped lawn surrounding a demolished homestead were assessed by test pit survey as part of these assessments (TLA, 2016). No archaeological resources were found within the project area or subject property as a result of these assessments (TLA, 2016). As these lands have been assessed and no sites are present, the previously assessed lands within the project area no longer retain archaeological potential and do not need further assessment as part of the current study. The unassessed wooded portions of both the subject property and project area retain archaeological potential and require Stage 2 assessment through test pit survey at 5 m intervals (TLA, 2016: Figure 7). Within the project area 7.6 ha of woodlot retains archaeological potential and requires Stage 2 test pit survey at 5 m intervals.



2.0 FIELD METHODS

The Stage 2 property assessment was conducted on March 21, 22, and 23, 2022, with advance permission to enter the project area obtained from the Proponent.

The limits of the project area had been previously staked and a shape file of the property was uploaded to a Global Positioning System to allow for confirmation of the project area limits during survey. Table 3 provides a description of weather conditions during the assessment. There were no weather, ground, or lighting conditions detrimental to the recovery of artifacts. As such, it is confirmed that the assessment met Section 2.1 Standard 3 of the *Standards and Guidelines for Consultant Archaeologists* regarding weather and lighting.

Table 3: Weather Conditions for Dates of Survey

DATE	TEMPERATURE	WEATHER
March 21, 2022	6° C	mostly sunny
March 21, 2022	4° C	variable skies, increasing clouds
March 21, 2022	2° C	overcast

The project area is approximately 28.8 ha in size. Of this 28.2 ha, 21.2 ha, 74%, has been previously subject to Stage 2 assessment by TLA (2016), with no archaeological resources documented within the project area during the assessment (TLA, 2016). As these lands have been assessed and no sites are present, the previously assessed lands within the project area no longer retain archaeological potential and do not need further assessment as part of the current study. The 21.2 ha of land that had been previously assessed TLA (2011) was not reassessed during the current Stage 2 assessment.

7.6 ha of the project area, consisting of four wooded areas, had not yet been subject to Stage 2 survey, but was determined to retain archaeological potential and therefore require assessment (TLA, 2016, Figure 7). Because this 7.6 ha portion of the project area consists of woodlot and rocky scrubland surrounding wet areas it could not be ploughed. As such it met the condition of terrain where ploughing is not possible or viable, meeting the requirements of Section 2.1.2 1 a. and b. of the *Standards and Guidelines for Consultant Archaeologists*, that ploughing or cultivation is not viable. Therefore, a Stage 2 archaeological assessment in the form of a test pit survey was conducted in areas with archaeological potential (see Figure 7).

Test pits were excavated by hand at 5 m intervals (see Images 1, 4, 6, 8, 12, and 14, Figure 8). All test pits were minimum 30 cm in diameter and were dug into the first 5 cm of subsoil (see Images 2, 5, 7, 9, 13, 15). Each pit was examined for stratigraphy, cultural features, or evidence of fill. Test pitting was conducted to within 1 m of all disturbances. All soils were screened through wire mesh with an aperture of 6 mm to facilitate artifact recovery. Appropriate photographic documentation was taken, and all test pits were backfilled upon completion. Test pit survey was completed on 7.2 ha, 25% of the project area.



During the Stage 2 assessment, ACC observed that 0.4 ha, 1%, of the project area was determined to have low to no archaeological potential because it is low-lying and permanently wet (Figure 8). These low-lying and permanently wet areas were not subject to Stage 2 survey, rather they were photo-documented and mapped as per Section 2.1 Standards 2.a.i and 2.a.iii and Section 7.8.a Standard 1.a. of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI, 2011).

The entirety of the project area has now been assessed. Results of the Stage 2 assessment are shown on Figure 7. While the project area has been fully assessed, portions of the subject property still retain archaeological potential and require Stage 2 assessment.



3.0 RECORD OF FINDS

3.1 Soils

All test pits were undisturbed. Topsoil within the test pits ranged from 20 to 38 cm in thickness and varied from dark brown loam/muck to dark to light brown sandy loam. Subsoil varied between sand, sandy loam, and sandy clay soil and ranged between yellow, orange, and grey in colour (see Images 2, 5, 7, 9, 13, 15).

3.2 Artifacts

No artifacts or other archaeological resources were recovered during the Stage 2 assessment of the project area.

3.3 Documentary Record

All fieldwork-related activities were documented and kept, including field notes and observations and detailed maps. Appropriate photographic records were kept of the excavation, and all pictures were recorded in a photo log.

A detailed list of field records is presented in Table 4. All digital items have been duplicated and all paper items have been scanned and stored as digital documents. All items are housed in the corporate offices of ACC.

Under Section 6 of Regulation 881 of the *Ontario Heritage Act*, ACC will keep in safekeeping all objects of archaeological significance that are found under the authority of the license and all field records that are made in the course of the work authorized by the license, except where the objects and records are donated to Her Majesty the Queen in right of Ontario or are directed to be deposited in a public institution under subsection 66 (1) of the Act.

Table 4: Inventory of Documentary and Material Records

PROJECT INFORMATION		
ACC project number	162-12-22	
Licensee	Matthew Muttart	
MHSTCI PIF number	P1208-0059-2022	
DOCUMENT/MATERIAL	NUMBER	DESCRIPTION
field notes & photo logs	3	pages (paper, with digital copies)
maps	1	sketch map of the project area
	1	aerial photograph of subject property & project area draft plan of the project area
photos	15	digital format



4.0 ANALYSIS AND CONCLUSIONS

Stage 1 background research conducted by TLA determined that the 28.8 ha project area had archaeological potential and required a Stage 2 archaeological assessment due to the proximity of water and historical significance of the subject property (TLA, 2016).

21.2 ha of the 28.8 ha project area has previously been subject to Stage 2 assessment by TLA (2016). Agricultural fields were assessed by pedestrian survey and landscaped lawn surrounding a demolished homestead were assessed by test pit survey as part of this assessment (TLA, 2016). No archaeological resources were found within the project area or subject property as a result of the assessment (TLA, 2016). As these lands have been assessed and no sites are present, the previously assessed lands within the project area no longer retain archaeological potential and did not require further assessment as part of the current study.

The remaining 7.6 ha of the project area, consisting of woodlot, was determined to retain archaeological potential and warrant Stage 2 assessment. During the survey, 0.04 ha, 1 %, of the project area was determined to have low to no archaeological potential because it is low-lying and permanently wet. 7.2 ha, 25 %, was subject to test pit survey at 5 m intervals as it could not be ploughed.

No artifacts or other archaeological resources were identified during the Stage 2 property assessment of the project area (see Figure 8). According to the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI, 2011), the project area has now been completely assessed and does not require any additional fieldwork.

While the project area has now been fully assessed, there are remaining archaeological concerns to be addressed within the subject property. Stage 2 assessment is still required within the areas of the subject property that retain archaeological potential (Figure 9). As these areas consist of woodlot and greenspace and cannot be ploughed, this assessment should be conducted by test pit survey at 5 m intervals.

5.0 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 Proponent and by the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries:

1. No artifacts or other archaeological resources were identified during the Stage 2 archaeological assessment of the project area. The project area has now been fully assessed according to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' 2011 *Standards and Guidelines for Consultant Archaeologists*. No further archaeological assessment of the project area is required.
2. The remainder of the subject property retains archaeological potential and requires Stage 2 assessment prior to development as shown in Figures 9 and 10 of this report.
 - a. All portions of the subject property that retain archaeological potential and can be ploughed, i.e., cultivated and formerly cultivated fields, should be assessed by pedestrian survey at 5 m intervals. The land to be assessed must be recently ploughed and must be disked after ploughing if the soils are heavy clay. Direction should be provided to the contractor undertaking the ploughing that the ploughing should be deep enough to provide total topsoil exposure, but not deeper than previous ploughing. The ploughed lands must be weathered by one heavy rainfall or several light rains to improve the visibility of archaeological resources. At least 80% of the ground surface must be visible to conduct a pedestrian survey. If the fields to be assessed do not meet the above conditions, then the land may need to be reploughed prior to survey. The ploughed lands should be surveyed at 5 metre ("m") intervals.

When archaeological resources are found, the survey intervals will be decreased to 1 m intervals over a minimum of 20 m radius around the archaeological find to determine if it is an isolated find or part of a larger scatter. The 1 m interval survey should continue until the full extent of the surface scatter has been identified. All formal artifact types and diagnostic categories are to be collected and enough artifacts should be left in-situ to relocate the site if it is necessary to conduct further assessment.
 - b. All portions of the subject property that retain archaeological potential and cannot be ploughed should be assessed by test pit survey at 5 m intervals. The test pits should be excavated by hand at 5 m intervals. Test pits should be at least 30 centimetres ("cm") in diameter and should be dug into the first 5 cm of subsoil.



Test pits should be conducted to within 1 m of any disturbances or until test pits show evidence of recent ground disturbance. Each pit should be examined for stratigraphy, cultural features, or evidence of fill. Soils should be screened through wire mesh with an aperture no greater than 6 mm to facilitate artifact recovery. All artifacts should be collected according to their associated test pit. All test pits should be backfilled unless otherwise instructed.

When artifacts are found, the survey grid should be continued to determine whether there are further positive test pits. This may produce sufficient archaeological resources to meet criteria for requiring a Stage 3 archaeological assessment. When insufficient archaeological resources are found through continued grid survey to meet criteria for Stage 3 assessment, survey coverage around the positive test pit should be continued, by means of eight additional test pits and one or more 1 m by 1 m square test unit placed above the positive test pit.



6.0 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.

7.0 BIBLIOGRAPHY AND SOURCES

AMICK Consultants Limited (“AMICK”)

- 2017 *Stage 1-2 Archaeological Assessment, Ruch Property, 124 and 128 McKay Road and 854 Veterans Drive, (Geographic Township of Innisfil, County of Simcoe), City of Barrie.* Report on file, MHSTCI, Toronto. PIF P384-0036-2013.
- 2021 *Stage 1-2 Archaeological Property Assessment, 124, 180 & 228 McKay Road, Part of Lots 4 & 5, Concession 10 (Geographic Township of Innisfil), City of Barrie, County of Simcoe.* Report on file, MHSTCI, Toronto. PIF P038-1049-2021.

Adams, Nick

- 1994 *Field Manual for Avocational Archaeologists in Ontario.* Publication No.16, Ontario Archaeological Society Inc.

Archaeological Services Inc. (“ASI”)

- 2019 *Stage 1 Archaeological Assessment of the Simcoe Forest Blauxham Tract, 161 Salem Road, Part of Lot 5, Concession 10, Geographic Township of Innisfil, County of Simcoe, City of Barrie, County of Simcoe.* Report on file, MHSTCI, Toronto. PIF P449-0390-2019.

Belden, H. & Co.

- 1881 *Illustrated Historical Atlas of the County of Simcoe, Ontario.* Reprinted 1975. Cumming Atlas Reprints, Port Elgin.

Borden, Charles E.

- 1952 *A Uniform Site Designation Scheme for Canada. Anthropology in British Columbia,* No. 3, 44-48.

Carter, Floreen Ellen

- 1984 *Place Names of Ontario.* Phelps Publishing, London.

Chapman, Lyman John and Donald F. Putnam

- 1984 *The Physiography of Southern Ontario (Third Edition). Ontario Geological Survey Special Volume 2.* Ontario Ministry of Natural Resources, Toronto.

Cranston, J. Herbert

- 1979 *Huronian, Cradle of Ontario’s History.* Simcoe County Historical Association.

Ellis, Chris & Neal Ferris

- 1990 *The Archaeology of Southern Ontario to A.D. 1650.* Occasional Publication No. 5. London Chapter, Ontario Archaeological Society Inc.



Energy, Mines and Resources Canada
1986 *Map 31-D/05, Barrie*, 1:50,000 scale.

Hoffman, D.W., R. E. Wicklund and N.R. Richards
1962 *Soil Survey of Simcoe County, Ontario*. Report No. 29 of the Ontario Soil Survey.
Research Branch, Canada Department of Agriculture and the Ontario Agricultural
College, Guelph, Ontario.

Hogg, John
1871 *Hogg's Map of the County of Simcoe*. Collingwood. Reprinted 1975. Cumming Atlas
Reprints, Port Elgin.

Hunter, Andrew F.
1909 *A History of Simcoe County*. The County Council, Barrie.

Mika, Nick and Helma Mika
1981 *Places in Ontario: Their Name Origins and History. Part II, F-M*. Mika Publishing
Company, Belleville
1983 *Places in Ontario: Their Name Origins and History, Part III N-Z*. Mika Publishing,
Belleville.

Ministry of Heritage, Sport, Tourism and Culture Industries ("MHSTCI")
2005 *The Heritage Act, R.S.O. 2005*. Queen's Printer, Toronto.
2011 *Standards and Guidelines for Consultant Archaeologists*. Toronto.
2022a Sites within a one km radius of the project area. Provided from the *Ontario
Archaeological Sites Database*.
2022b Archaeological assessments completed within the project area or within 50 m of the
subject property. Provided from the *Ontario Public Register of Archaeological Report*.

Ministry of Natural Resources and Forestry
2019 *Ontario Topographic Map*
https://www.lioapplications.lrc.gov.on.ca/MakeATopographicMap/index.html?viewer=Make_A_Topographic_Map.MATM&locale=en-CA
[Accessed 26 July 2022].

Ministry of Northern Development and Mines ("MNDM")
2007 *Physiography of Southern Ontario*. Chapman, L.J. and D.F. Putnam, authors. GIS map
data layer distributed by the Ontario Geological Survey as Miscellaneous Release – Data
(MRD) 228. Queen's Printer for Ontario.
<http://www.mndm.gov.on.ca/en/mines-and-minerals/applications/ogsearch>
[Accessed 21 March 2022].



Ontario Ministry of Agriculture, Food and Rural Affairs (“OMAFRA”)
2012 *GIS Layers for Soils and Physiography in the Province of Ontario*.
<http://sis.agr.gc.ca/cansis/publications/surveys/on/index.html>
[Accessed 21 March 2022].

Tackabury, George N.
1875 *Tackabury's Atlas of the Dominion of Canada*. Toronto.

This Land Archaeology Inc. (“TLA”)
2016 *Report on the 2007, 2008 and 2009 Stage 1 to 3 Archaeological Assessments of Watersand Construction Ltd. and Wormwood Development Inc.'s Properties, Town of Innisfil, Simcoe County, Ontario*. Report on file, MHSTCI, Toronto. PIFs P059-045-2007, P059-074-2008, P059-175-2009.

Wright James V.
1968 *Ontario Prehistory: an eleven thousand-year archaeological outline*.
Archaeological Survey of Canada, National Museums of Canada, Ottawa.



8.0 IMAGES





Image 1: Crew at work, test pit survey. Facing northwest.



Image 2: Typical test pit – 25 cm of dark brown loam/muck above orange sandy loam subsoil. Water present 10-15 cm into subsoil indicating proximity to low-lying wet areas.



Image 3: Project area showing low-lying and permanently wet area. Note standing water, reeds and cattails. Facing north.



Image 4: Crew at work, test pit survey. Facing southwest.



Image 5: Typical test pit – 25 cm of dark brown loam/muck above grey sandy clay subsoil. Water present 10-15 cm into subsoil indicating proximity to low-lying wet areas.



Image 6: Crew at work, test pit survey. Facing southwest.



Image 7: Typical test pit – 25 cm of light brown sandy loam above orange sandy subsoil.



Image 8: Crew at work, test pit survey. Facing north.



Image 9: Typical test pit – 25 cm of light brown sandy loam above orange sandy subsoil.



Image 10: General project area conditions. Facing east.



Image 11: General project area conditions. Facing southeast.



Image 12: Crew at work, test pit survey. Facing north.



Image 13: Typical test pit – 25 cm of dark brown loam/muck above yellow sandy clay subsoil. Water present 10-15 cm into subsoil indicating proximity to low-lying wet areas.



Image 14: Crew at work, test pit survey. Facing south.

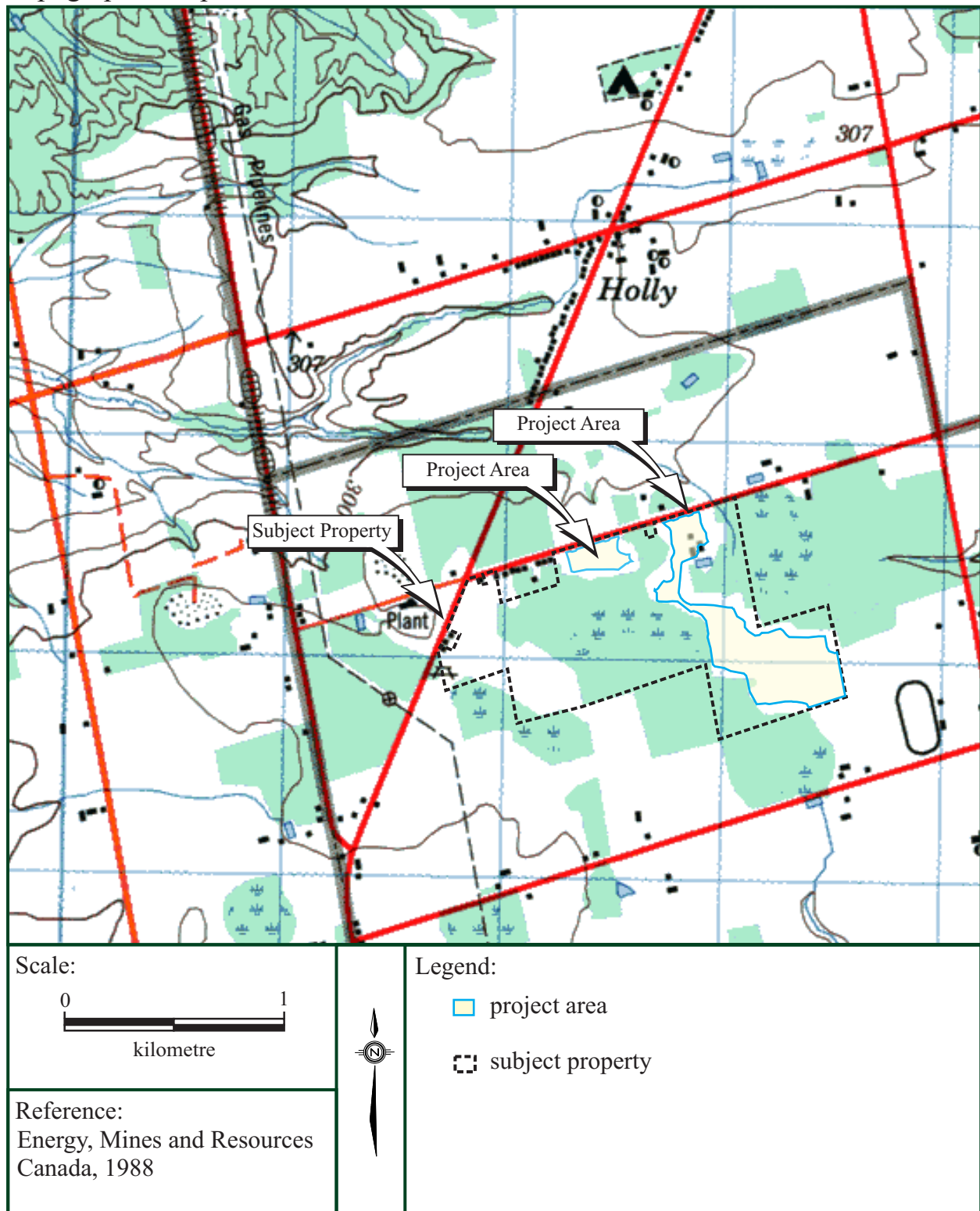


Image 15: Typical test pit – 30 cm of dark brown sandy loam above orange sandy clay subsoil.

9.0 FIGURES



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



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Figure 2: Location of the Project Area on Hogg's 1871 Historic Atlas Map of Simcoe County



Figure 3: Location of the Project Area on Tackabury's 1875 Historic Atlas
 Map of Simcoe County



Figure 4: Location of the Project Area on H. Belden's 1881 Historic Atlas Map of Innisfil Township, Simcoe County



Figure 5: Location of the Project Area on a Map of Simcoe County Soils

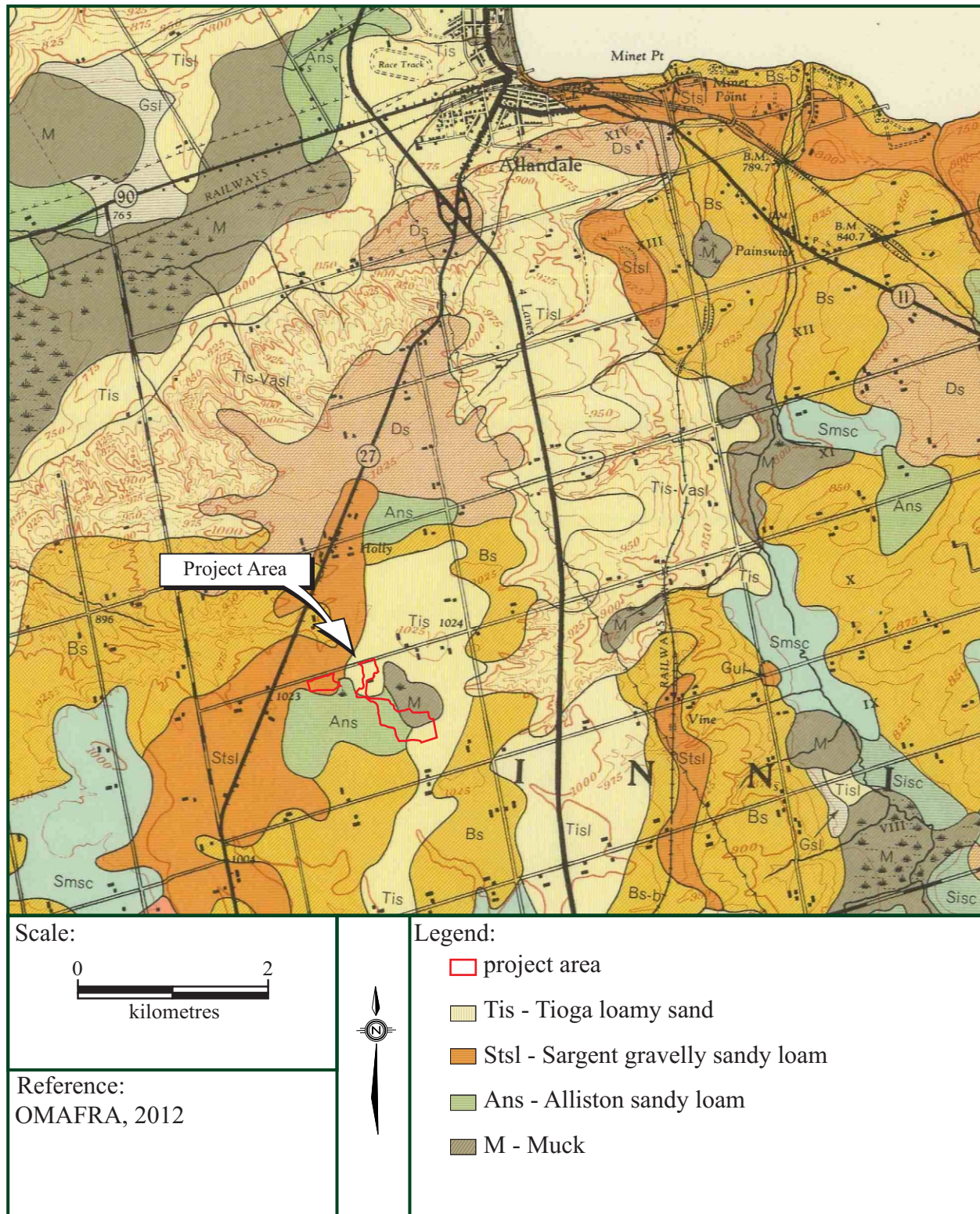


Figure 6: Aerial Photograph Showing Previous Archaeological Assessments
Conducted within 50 m of the Project Area

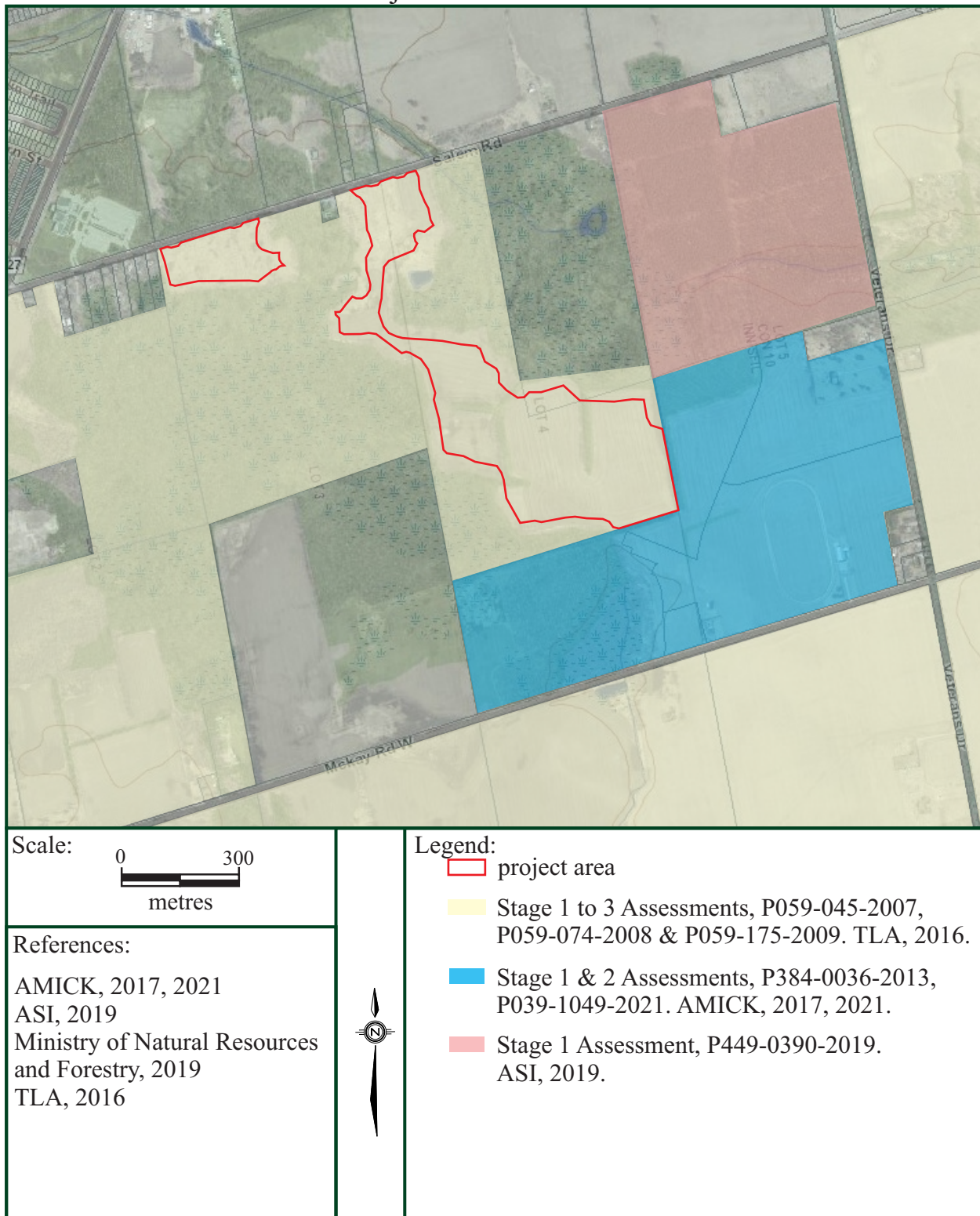
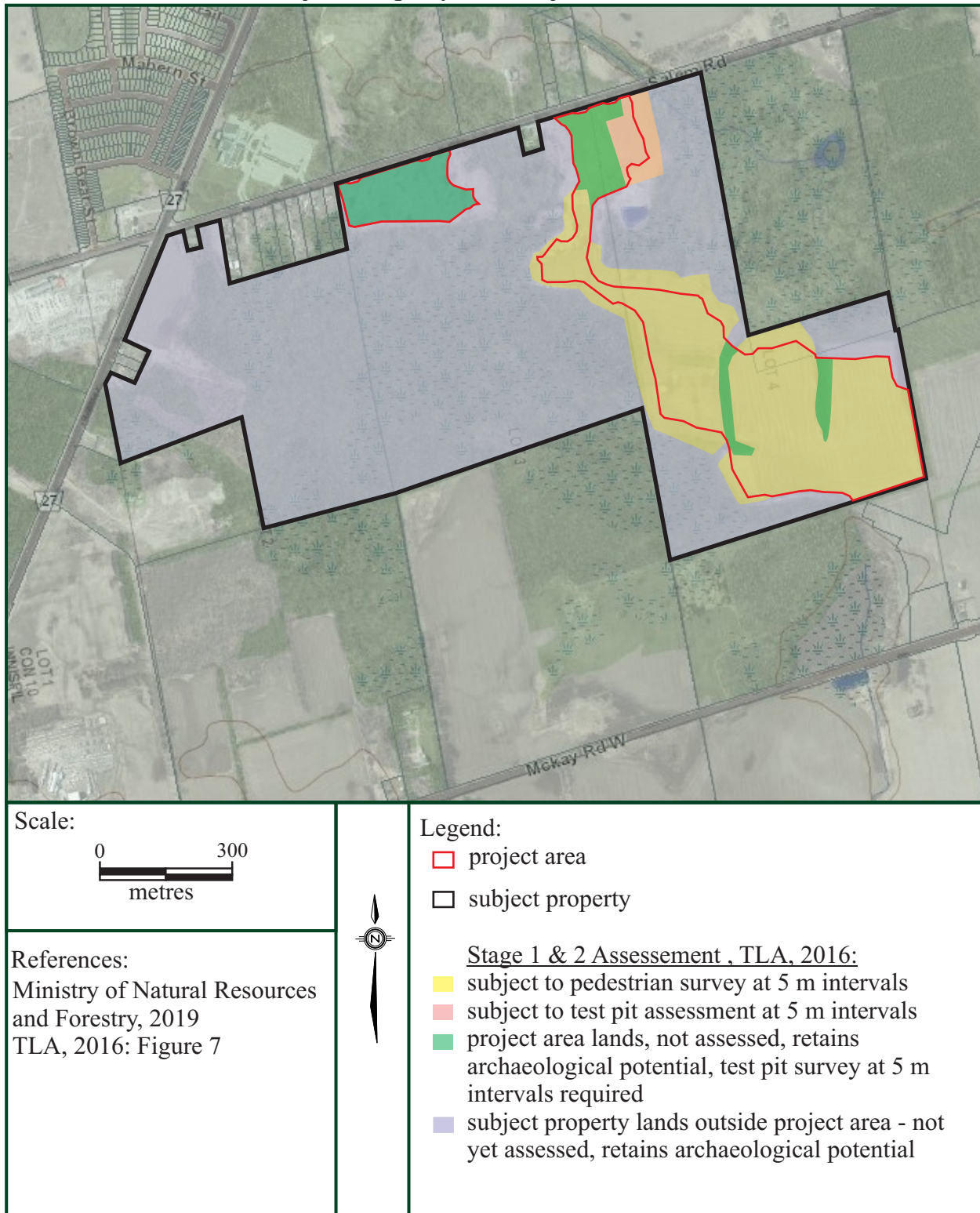


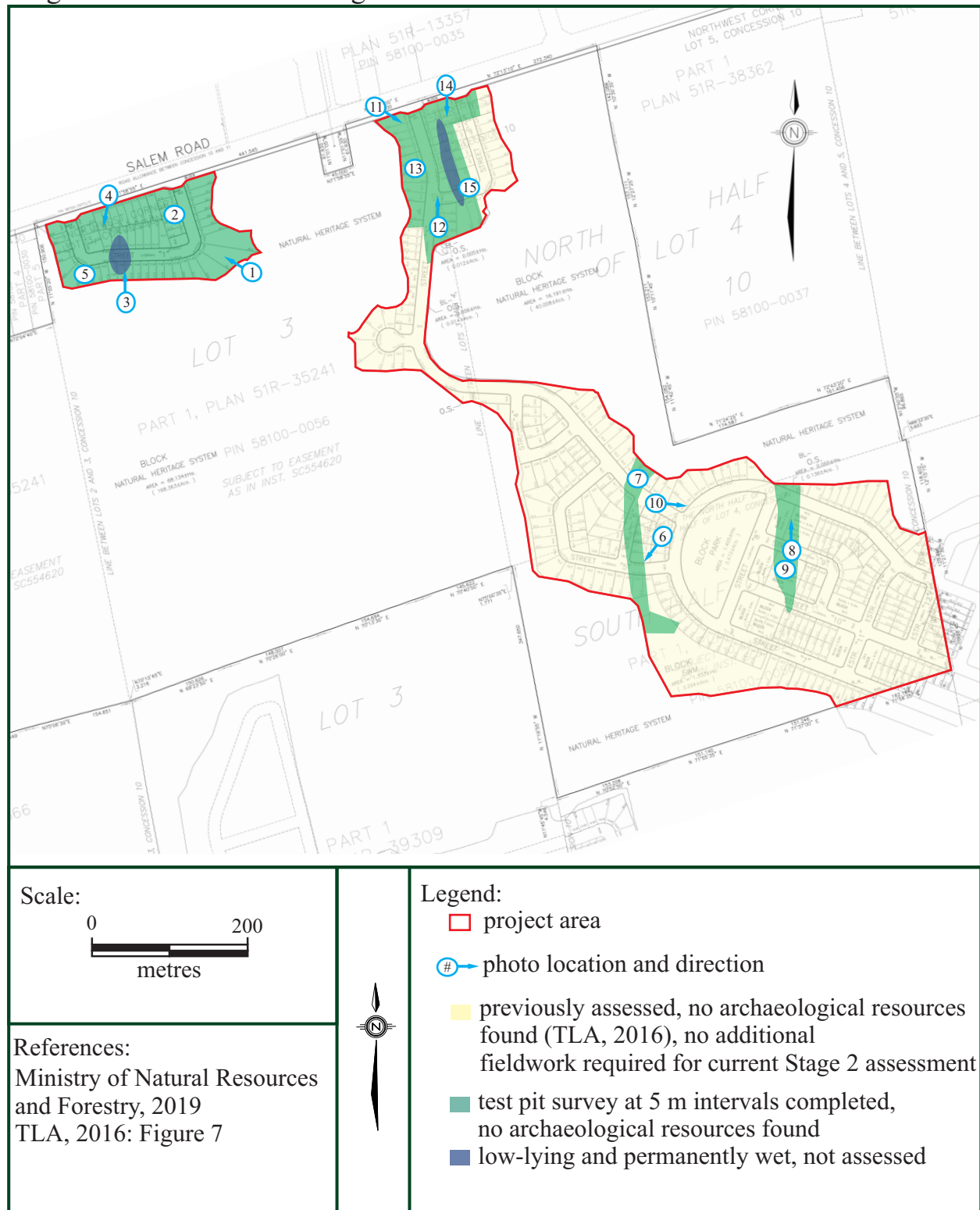
Figure 7: Aerial Photograph Showing the Results of the Previous Stage 1 and 2 Fieldwork within the Subject Property and Project Area



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Figure 8: Section of the Development Plan Showing the Results of the Current Stage 2 Assessment with Image Locations and Directions



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Figure 9: Aerial Photograph Showing Recommendations for Future Fieldwork within the Subject Property

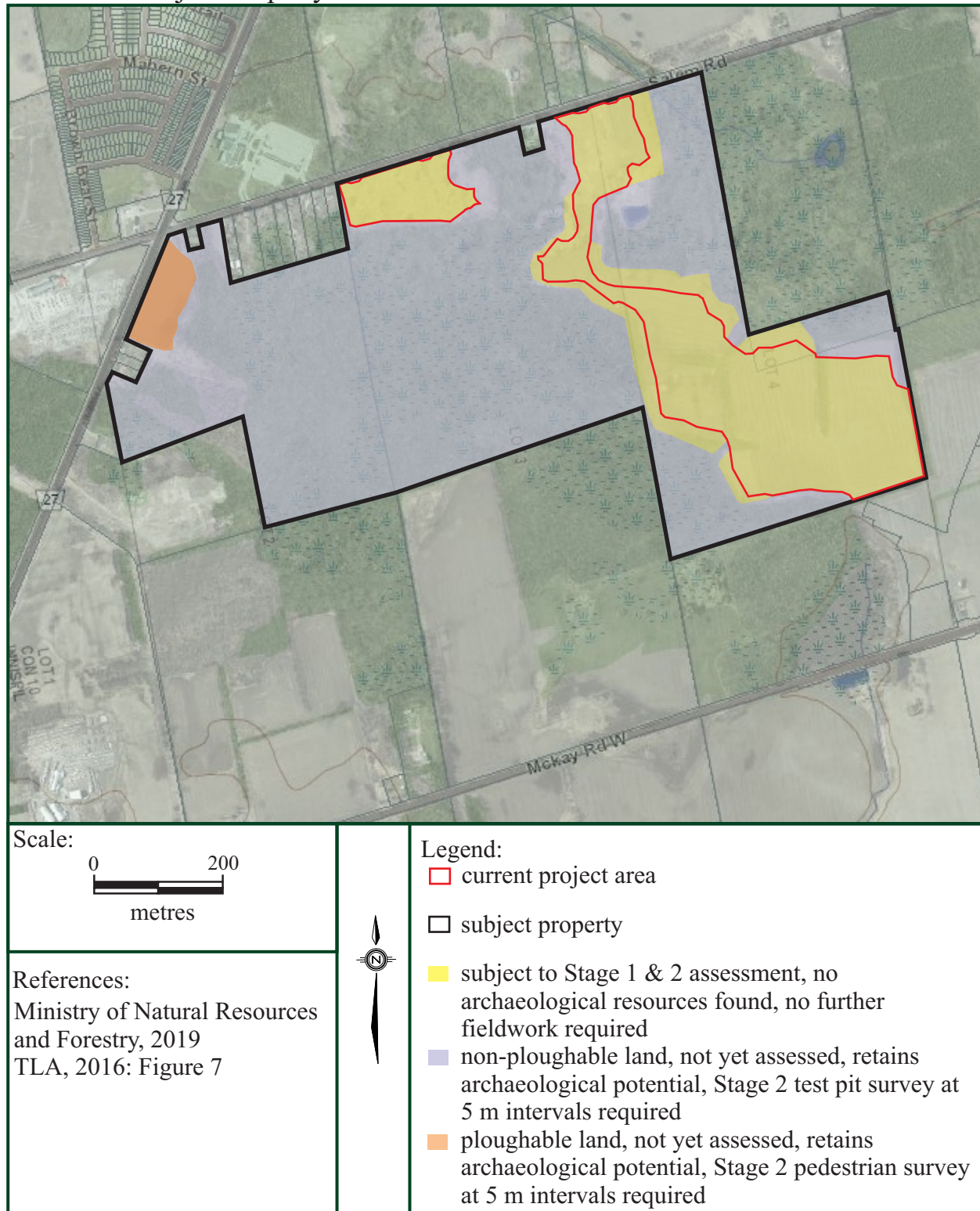


Figure 10: Development Plan Showing Recommendations for Future Fieldwork within the Subject Property

