

THE MYRIAD GROUP

STAGE 1 ARCHAEOLOGICAL ASSESSMENT

LOT 28 CONCESSION 7, TOWN OF BLUE MOUNTAINS

**LOT 28, CONCESSION 7, TOWN OF BLUE MOUNTAINS,
FORMER GEOGRAPHIC TOWNSHIP OF COLLINGWOOD,
GREY COUNTY, PROVINCE OF ONTARIO**

Submitted to:

The Myriad Group
125 Norfinch Drive
Toronto, Ontario L4M 1B1

ORIGINAL REPORT

DECEMBER 8, 2016

WSP Canada Inc.

582 Lancaster Street West, Kitchener, Ontario, CANADA N2K 1M3
Phone: +1 519-743-8777 Fax: +1 519-743-8778 www.wspgroup.com



STAGE 1 ARCHAEOLOGICAL ASSESSMENT
LOT 28 CONCESSION 7, TOWN OF
BLUE MOUNTAINS

LOT28, CONCESSION 7, TOWN OF BLUE
MOUNTAINS, FORMER GEOGRAPHIC
TOWNSHIP OF COLLINGWOOD, GREY
COUNTY, PROVINCE OF ONTARIO

Project No.: 161-12260-00

December 2016

WSP Canada Inc.
582 Lancaster Street W.
Kitchener, Ontario N2K 1M3

Phone: +1 519-743-8777
Fax: +1 519-743-8778
www.wspgroup.com



EXECUTIVE SUMMARY

WSP Canada Inc. was retained by The Myriad Group to conduct a Stage 1 Archaeological Assessment of an approximately 11.67ha property located on Part of Lot 28, Concession 7, Town of Blue Mountains, Former Geographic Township of Collingwood, Grey County, in the Province of Ontario.

This archaeological assessment has been triggered by the Client's intent to proceed with property development. The County of Grey is the approval authority under the *Planning Act*. The approval process includes the requirement for an archaeological assessment as one of the conditions for development approval to ensure that the proponent meets their legal obligations under the *Ontario Heritage Act*.

Archaeological activities were carried out in accordance with the *Standards and Guidelines for Consultant Archaeologists* (Ministry of Tourism, Culture and Sport 2011). This study involved a review of documents pertaining to the property including historic maps, aerial photographs and local histories. A property inspection was conducted on August 26, 2016.

Archaeological recommendations have been made based on the background historic research, locations of known or registered archaeological sites, previous archaeological assessments, and indicators of archaeological potential as outlined in the *Standards and Guidelines for Consultant Archaeologists* (Section 1.3.1). These recommendations include the following:

- 1) Stage 2 archaeological assessment is recommended for all undisturbed lands present within the study area (As per section 1.4.1 Standard 1c-e, Figure 5 – Green). The Stage 2 assessment should be conducted using test pit survey at 5m intervals. It is advised that the Saugeen Ojibway Nation be contacted prior to the commencement of the Stage 2 assessment.**
- 2) The remainder of the study area holds low archaeological potential due to extensive land disturbance, steeply sloped terrain, and water saturated/poorly drained sediments. No further archaeological assessments are recommended for these areas.**

TABLE OF CONTENTS

1	PROJECT CONTEXT	1
1.1	OBJECTIVES	1
1.2	DEVELOPMENT CONTEXT	1
1.3	HISTORICAL CONTEXT.....	1
1.3.1	HISTORIC DOCUMENTATION.....	1
1.3.2	PRE-CONTACT PERIOD	1
1.3.3	STUDY AREA SPECIFIC HISTORY IN THE POST CONTACT PERIOD	3
1.3.4	SUMMARY.....	3
1.4	ARCHAEOLOGICAL CONTEXT	4
1.4.1	CURRENT CONDITIONS.....	4
1.4.2	PHYSIOGRAPHY	4
1.4.3	PREVIOUS ARCHAEOLOGICAL ASSESSMENTS.....	5
1.4.4	REGISTERED ARCHAEOLOGICAL SITE.....	5
1.4.5	SUMMARY.....	5
2	FIELD METHODS.....	6
2.1	PROPERTY INSPECTION	6
2.2	RECORD OF FINDS	6
2.3	INVENTORY OF DOCUMENTATION RECORDS.....	6
3	ANALYSIS AND CONCLUSIONS.....	7
3.1	ARCHAEOLOGICAL POTENTIAL	7
3.2	CONCLUSIONS	7

4	RECOMMENDATIONS.....	8
5	ADVICE ON COMPLIANCE WITH LEGISLATION	9
6	BIBLIOGRAPHY AND SOURCES	10
7	IMAGES.....	12

APPENDICES

Appendix A	Features Indicating Archaeological Potential
Appendix B	Photograph Locations

PROJECT PERSONNEL

Project Manager	Dale Langford, MES (P474) <i>Archaeologist</i>
Field Director	Dale Langford
Report Preparation	Dale Langford
Mapping/GIS	Dale Langford
Report Review	Douglas A. Yahn, MES (P365) <i>Senior Archaeologist</i>
Administrative Support	Lyn Pedersen <i>Administrative Supervisor</i>

1 PROJECT CONTEXT

1.1 OBJECTIVES

The objective of a Stage 1 Archaeological Assessment is to evaluate in detail the property's archaeological potential, which will support recommendations for Stage 2 survey for all or parts of the property and to recommend appropriate strategies for Stage 2 survey (if required). In support of the determination of archaeological potential, the Stage 1 will provide information about the property's geography, history, previous archaeological fieldwork and current land condition. The Stage 2 survey provides an overview of archaeological resources on the property and a determination of whether any of the resources may be artifacts and archaeological sites with cultural heritage value or interest.

1.2 DEVELOPMENT CONTEXT

WSP Canada Inc. was retained by The Myriad Group to conduct a Stage 1 Archaeological Assessment of an approximately 11.67ha property located on Part of Lot 28, Concession 7, Town of Blue Mountains, Former Geographic Township of Collingwood, Grey County, in the Province of Ontario, traditional territory of the Saugeen Ojibway Nation.

This archaeological assessment has been triggered by the Client's intent to proceed with property development. The County of Grey is the approval authority under the *Planning Act*. The approval process includes the requirement for an archaeological assessment as one of the conditions for development approval to ensure that the proponent meets their legal obligations under the *Ontario Heritage Act*.

This archaeological assessment was carried out during the pre-approval stage of the process; therefore detailed mapping was not available. The boundaries of the assessment correspond to maps provided by the Client at the outset of the investigation (Figures 1 and 2).

Permission to access the property to conduct the property inspection was granted by the Client and no limits were placed on this access during the Property Inspection.

1.3 HISTORICAL CONTEXT

1.3.1 HISTORIC DOCUMENTATION

The property is located in the Town of Blue Mountains, Former Geographic Township of Collingwood, County of Grey, Province of Ontario. The Grey Supplement in the *Illustrated Atlas of the Dominion of Canada* (H Belden & Co. 1880), the *Topographical Map of the Township of Collingwood* (J Fleming 1872), and the *Collingwood Township Census* (Prepared from Rorke and Rankin 1851) provide insight into the early development of Collingwood Township, illustrating early transportation routes and communities. The proximity of the study area in relation to established town centres results in there being no Fire Insurance Plans for the study area.

The following sections provide a brief outline of the study area history during the pre-contact and post-contact era in order to provide a generalized chronological framework in which Archaeological Assessment was conducted.

1.3.2 PRE-CONTACT PERIOD

Paleoindian period populations were the first to occupy what is now southern Ontario, moving into the region following the retreat of the Laurentide Ice Sheet approximately 11,000 years before

present (BP). The first Paleoindian period populations to occupy southern Ontario are referred to as Early Paleoindians (Ellis and Deller 1990:39).

Early Paleoindian period groups are identified by their distinctive projectile point morphologies, exhibiting long grooves, or 'flutes', that likely functioned as a hafting mechanism. These Early Paleoindian group projectile morphologies include Gainey (ca. 10,900 BP), Barnes (ca. 10,700), and Crowfield (ca. 10,500) (Ellis and Deller 1990:39-43). By approximately 10,400 BP, Paleoindian projectile points transitioned to various un-fluted varieties such as Holcombe (ca. 10,300 BP), Hi-Lo (ca. 10,100 BP), and Unstemmed and Stemmed Lanceolate (ca. 10,400 to 9,500 BP). These morphologies were utilized by Late Paleoindian period groups (Ellis and Deller 1990:40).

Both Early and Late Paleoindian period populations were highly mobile, participating in the hunting of large game animals. Paleoindian period sites often functioned as small campsites (less than 200 m²) where stone tool production and maintenance occurred (Ellis and Deller 1990).

By approximately 8,000 BP the climate of Ontario began to warm. As a result, deciduous flora began to colonize the region. With this shift in flora came new faunal resources, resulting in a transition in the ways populations exploited their environments. This transition resulted in a change of tool-kits and subsistence strategies recognizable in the archaeological record, resulting in what is referred to archaeologically as the Archaic period. The Archaic period in southern Ontario is divided into three phases: the Early Archaic (ca. 10,000 to 8,000 BP), the Middle Archaic (ca. 8,000 to 4,500 BP), and the Late Archaic (ca. 4,500 to 2,800 BP) (Ellis et al. 1990).

The Archaic period is differentiated from earlier Paleoindian populations by a number of traits such as: 1) an increase in tool stone variation and reliance on local tool stone sources, 2) the emergence of notched and stemmed projectile point morphologies, 3) a reduction in extensively flaked tools, 4) the use of native copper, 5) the use of bone tools for hooks, gorges, and harpoons, 6) an increase in extensive trade networks, and 7) the production of ground stone tools. Also noted is an increase in the recovery of large woodworking tools such as chisels, adzes, and axes (Ellis et al. 1990:65-66). The Archaic period is also marked by population growth. Archaeological evidence suggests that by the end of the Middle Archaic period (ca. 4,500 BP) populations were steadily increasing in size (Ellis et al. 1990). Over the course of the Archaic period populations began to rely on more localized hunting and gathering territories. By the end of the Archaic period, populations were utilizing more seasonal rounds. From spring to fall, settlements would exploit lakeshore/riverine locations where a broad-based subsistence strategy could be employed, while the late fall and winter months would be spent at interior site where deer hunting was likely a primary focus with some wild edibles likely being collected (Ellis et al. 1990:114). This steady increase in population size and adoption of a more localized seasonal subsistence strategy eventually evolved into what is termed the Woodland period.

The Woodland period is characterized by the emergence of ceramic technology for the manufacture of pottery. Similar to the Archaic period, the Woodland period is separated into three primary timeframes: the Early Woodland (approximately 800 BC to 0 AD), the Middle Woodland (approximately 0 AD to 700/900 AD), and the Late Woodland (approximately 900 AD to 1600 AD) (Spence et al. 1990; Fox 1990).

The Early Woodland period is represented in southern Ontario by two different cultural complexes: the Meadowood Complex (ca. 900 to 500 BC), and the Middlesex Complex (ca. 500 BC to 0 AD). During this period the life ways of Early Woodland population differed little from that of the Late Archaic with hunting and gathering representing the primary subsistence strategies. The pottery of this period is characterized by its relatively crude construction and lack of decorations. These early ceramics exhibit cord impressions, likely resulting from the techniques used during manufacture (Spence et al. 1990).

The Middle Woodland period is differentiated from the Early Woodland period by changes in lithic tool morphologies (projectile points) and the increased elaboration of ceramic vessels (Spence et al.

1990). In southern Ontario the Middle Woodland is observed in three different cultural complexes: the Point Peninsula Complex to the north and northeast of Lake Ontario, the Couture Complex near Lake St. Claire, and the Saugeen Complex throughout the remainder of southern Ontario. These groups can be identified by their use of either dentate or pseudo-scalloped ceramic decorations. It is by the end of the Middle Woodland period that archaeological evidence begins to suggest the rudimentary use of maize (corn) horticulture (Warrick 2000).

The adoption and expansion of maize horticulture during the Late Woodland period allowed for an increase in population size, density, and complexity among Late Woodland populations. As a result, a shift in subsistence and settlement patterns occurred, with the adoption of a more sedentary village life and reliance on maize horticulture, with beans, squash, and tobacco also being grown (Racher 2014). Late Woodland occupation in the study area is predominantly that of the Iroquoian speaking Petun or Tobacco Nation as well as Algonquian speaking Odawa (Fox 1990). Nearing the end of the Late Woodland Period (approximately 1400 AD) villages reached their maximum size. During this period, increased warfare resulted in the development of larger villages with extensive palisades.

Early contact with European settlers at the end of the Late Woodland period resulted in extensive change to the traditional lifestyles of most populations inhabiting southern Ontario.

1.3.3 STUDY AREA SPECIFIC HISTORY IN THE POST CONTACT PERIOD

Euro-Canadian settlement in Collingwood Township, originally Alta Township until renamed in honour of Admiral Collingwood, began in the spring of 1833 when Charles Rankin and a team of surveyors were sent to survey and lay out the townships of Grey County. During this time Rankin settled near the town of Thornbury at Rankin's Landing.

Initial settlement near the study area was slow, due largely in part to the rugged and difficult to access terrain. Settlement began to increase following the completion of Government and opening of mills near Thornbury. By 1856 the railway connecting Collingwood to Barrie had been completed, and by 1870 the railway was running through Thornbury. This early railway now functions as a recreational trail forming the eastern boundary of the study area.

In 1887 the Town of Thornbury divided from the Township of Collingwood to form its own separate administration. The town existed as a separate entity until 2001, when it re-merged with Collingwood Township to form The Blue Mountains Municipality.

While the 1880 illustrated atlas does not show any land ownership for the study area, the 1872 topographic map indicates that the property is owned by a J Randall (sp.). No detailed mapping is available for the study area to indicate the presence of historic structures on the property or past land use. Given site topography and current conditions it is likely that the property remained undeveloped throughout the early settlement of Collingwood Township.

Today the study area consists of a partly developed woodlot located in the Town of Blue Mountains. The property also falls within the traditional territory of the Saugeen Ojibway Nation.

1.3.4 SUMMARY

First Nations peoples have a deep history of occupation in the study area area since initial migrations following deglaciation. Early First Nations groups would have made use of resource areas and various well-drained terrain features located near river mouths or along the glacial and post-glacial shorelines.

By 1833, Euro-Canadian settlers began to enter the area, beginning with the initial surveys by Rankin. With the expansion of the railway through to Thornbury in 1870 settlement near the study

area began in earnest, however historical mapping and local site topography suggests that no development likely occurred within the study area.

1.4 ARCHAEOLOGICAL CONTEXT

1.4.1 CURRENT CONDITIONS

The study area consists of a triangular section of land located northwest of Grey County Road 40 and Woodland Park Road. At the time of the assessment the study area had already undergone some development; with the result that basic infrastructure to support a small housing development had been constructed. This completed development includes the construction of roadways, the installation of various utilities (i.e. sewer and electrical), the excavation of a large storm water catchment, and the clearing and leveling of large sections of property for the purpose of lot development (See Figure 3 for draft sub-division plan).

In addition to disturbance associated with the housing development, a large square section of the property owned by the County of Grey (see Figure 2) has also been impacted. This impact, described further in Section 2.1, has resulted in the buildup and leveling of land to create a large square platform into which some form of subsurface utility has been installed (Image 13).

Topographically, the study area consists of a relatively flat section of land bounded to the west by a marked rise in terrain, the slopes of which are present along the western boundary of the property. To the south is a small stream which flows east into Georgian Bay. Present within the study area are a number of areas containing low, water saturated sediments (Figures 3 and 5, Images 9, 12, and 16). Also present within the study area are a series of terraces representing various phases of water recessions from Glacial Lake Nipissing levels.

1.4.2 PHYSIOGRAPHY AND GENERALIZED ECOLOGY

The study area is located in the Sand Plains of the Beaver Valley physiographic region (Chapman and Putnam 1984). This region contains a diverse physiography including beaches, lake plains, shore cliffs, moraines, and valleys. Of note in the study area is the presence of a former beach ridge associated with Glacial Lake Nipissing running southeast to northwest along the western edge of the study area (Figure 4 - Chapman and Putnam 1984). While the sloped edges of this beach ridge extend into the study area, no upper plateau sections, representing the active beach at the time, are included. Instead the majority of the study area consists of lands that would have represented the submerged nearshore and offshore environments at the time. As glacial waters receded, the lands downslope of the Nipissing shoreline would have opened to later occupational groups who may have utilized pockets of well drained soils in close proximity to the lakeshore. This recession is visible throughout the study area by a series of terraces within the undisturbed sections of the property. These terraces consist of a cobbled terrain that would have made occupation less desirable for site settlement.

The property lies in the Mixedwood Plains Ecozone, within the Lake Simcoe-Rideau Ecoregion (Ecoregion 6E) (Crins et al. 2009). Climatic and geological characteristics for this ecoregion are provided below, along with a brief description of dominant vegetation and wildlife species.

The climate is mild and moist, with a mean annual temperature range of 4.9 to 7.8 degrees Celsius. The land cover is/was predominantly cropland, pasture and abandoned fields. Forested areas include deciduous, coniferous and mixed forest types.

The study area is within the Great Lakes-St. Lawrence Forest Region. The deciduous trees characterizing this region include sugar maple, beech, red maple, yellow birch, basswood, white ash, large-toothed aspen, red and burr oak, white eastern hemlock, eastern white pine, white spruce and balsam fir are among the coniferous species (Rowe 1972).

Characteristic mammals, birds, reptiles and fish include white-tailed deer, striped skunk, wood ducks, field sparrow, bullfrog, snapping turtle, white sucker, small mouth bass and pearl dace.

1.4.3 PREVIOUS ARCHAEOLOGICAL ASSESSMENTS

Despite the presence of extensive development within the study area, there are no reports of previous archaeological field work conducted either on the subject area or within a radius of 50m around the proposed undertaking.

1.4.4 REGISTERED ARCHAEOLOGICAL SITE

A search of the Ontario Archaeological Sites Database of the Ontario Ministry of Tourism, Culture and Sport indicated that there is one registered sites are located within a 1km radius of the study area. This site, BdHc-14 consists of a late woodland site located along the shoreline north of the study area. This site is located greater than 300m to the north of the areas to be impacted by this project.

Table 1: Registered Archaeological Site within 1km of Study Area.

Borden	Site Name	Time Period / Cultural Affiliation	Site Type	Current Status
BdHc-14	Indian Brook	Late Woodland	-	-

1.4.5 SUMMARY

The study area consists of a triangular section of land that has previously been subjected to land development in anticipation of a housing subdivision. This development has included the construction of roadways, the installation of sub-surface utilities, the excavation of a storm water catchment, and the levelling and modification of lands.

There are no reports of previous archaeological field work conducted either on the subject area or within a radius of 50m around the proposed undertaking. The Ontario Archaeological Sites Database (OASDB) indicates that there is one registered sites located within a 1km radius of the property; however this site is located beyond 300m of the impact area.

2 FIELD METHODS

2.1 PROPERTY INSPECTION

A property inspection is a visit to the property to gain first-hand knowledge of its geography, topography, and current condition and to evaluate and map the archaeological potential.

An inspection of the areas to be impacted by development and its periphery was conducted on August 26, 2016. The temperature at the time of the property inspection was 27° C and conditions allowed for 100% visibility of all land features. A second property inspection was conducted on December 1, 2016 with representatives from the Saugeen Ojibway Nation to allow for community input within the current assessment.

The property inspection began in the southeast corner of the study area. Moving northwest into a strip of wooded terrain revealed low and flat terrain (Image 2). The ground in this area does not appear to have been impacted by the development of the adjacent railway (now a gravel trail) and contained sections with large rocks and boulders (Image 3). This woodland is bisected by a cleared pathway running southeast to northwest (Image 4). This path is undulates roughly, indicating that the removal of trees and the clearing of the path was conducted using heavy machinery, resulting in extensive disturbance.

Located throughout the property are various infrastructure components resulting from initial property development. These include roadways, cleared and leveled gravel lots, an artificial drainage pond, and various berms and sections of raise terrain (Images 5-7 and 13-15). These areas are heavily disturbed.

Moving to the southwest of the study area is a small gravel path that runs between two low, poorly drained wetland areas (Images 8, 9, and 12). The southwest corner of the study area contains a steep slope associated with the Lake Nipissing beachline (Images 10 and 11).

An additional section of undisturbed terrain was encountered along the western boundary of the property. This area contains a slightly sloped terrain (rising to the west) with numerous large boulders and rocks (Image 18). Continuing north indicated that the study area contains a large poorly drained wetland area (Image 16).

Field notes and photographs of the property were taken during the inspection. The photograph locations and directions were noted and all photographs were catalogued. Locations of images presented in this report can be found on Figure 6.

2.2 RECORD OF FINDS

A Stage 1 Archaeological Assessment includes a visual inspection only and does not include excavation or collection of archaeological resources.

2.3 INVENTORY OF DOCUMENTATION RECORDS

The following list represents all the documentation taken in the field relating to this project and is being retained by WSP Canada Inc.:

- 2 page of field notes
- 18 digital photographs in JPG format
- GPS readings taken during the property inspection

3 ANALYSIS AND CONCLUSIONS

3.1 ARCHAEOLOGICAL POTENTIAL

A number of factors are employed in determining archaeological potential. Features indicating archaeological potential can be found in [Appendix A](#).

Criteria for pre-contact archaeological potential is focused on physiographic variables that include distance from the nearest source of water, the nature of the nearest source/body of water, distinguishing features in the landscape (e.g. ridges, knolls, eskers, wetlands), the types of soils found within the area of assessment and resource availability. Also considered in determining archaeological potential are known archaeological sites within or in the vicinity of the study area. Historic research provides the basis for determining historic archaeological potential. Land registry records, historical maps and aerial photographic evidence and a property inspection of the project area all assist in determining historic archaeological potential. Additionally, the proximity to historic transportation corridors such as roads, rail and water courses also affect the historic archaeological potential.

There are no reports of previous archaeological field work conducted either on the subject area or within a radius of 50m around the proposed undertaking. The Ontario Archaeological Sites Database (OASDB) indicates that there is one registered archaeological site located within a 1km radius of the property; however this site falls well beyond 300m of the impact area.

The location of the study area in close proximity to both primary and secondary water sources (300m of Georgian Bay and a small tributary creek), past water sources (300m of former Lake Nipissing shoreline and recessional terraces), and historic transportation routes (100m of the historic roadways, Northern Railway and early township roads) indicates that the property holds potential for the recovery of both pre-contact and contact period archaeological resources. Property inspection however indicated that large sections of the property have been impacted by development associated with subdivision infrastructure resulting in significant ground disturbance (Figure 5 – Red). In addition to this, sections of the property exhibit steeply sloped terrain and water saturated sediments limiting the ability to conduct Stage 2 survey (Figure 5 – Yellow and Blue). The remainder of the property retains archaeological potential (as per section 1.4.1) and must be subjected to Stage 2 assessment using 5m test pit survey (Figure 5 – Green).

It should be noted that while the undisturbed sections of the property exhibit archaeological potential, the cobbled terrain of the study area would have made it an inhospitable habitation location. Discussion with the Saugeen Ojibway Nation and regional archaeologist Dr. William Fitzgerald during the secondary property inspection (December 1, 2016) indicated that local excavations and surveys on similar site topographies have yielded no archaeological materials, with sites being concentrated to areas exhibiting well drained sandy terrains. These observations should be taken into consideration when formulating Stage 2 assessment strategies to target areas where cobble presence is limited.

3.2 CONCLUSIONS

Based on the proximity of primary and secondary water sources (300m), former shorelines (300m), and historic transportation routes (100m) it is determined that the whole of the study area holds archaeological potential as per Section 1.4.1. Following property inspection it was determined that the majority of the development area has low potential for the discovery of pre-contact and contact period sites due to ground disturbance and modification associated with previous subdivision development and low, water saturated terrain. The remainder of the property must be subjected to Stage 2 archaeological assessment utilizing 5m test pit survey (Figure 5). Stage 2 assessment should focus areas of the property where cobble presence is limited.

4 RECOMMENDATIONS

Archaeological activities were carried out in accordance with the *Standards and Guidelines for Consultant Archaeologists* (Ministry of Tourism, Culture and Sport 2011).

This study involved a review of documents pertaining to the property including historic maps, aerial photographs and local histories. A property inspection was conducted on August 26, 2016 to review current conditions.

Archaeological recommendations have been made based on the background historic research, property inspection, locations of known or registered archaeological sites, previous archaeological assessments, and indicators of archaeological potential as outlined in the *Standards and Guidelines for Consultant Archaeologists* (Section 1.3.1). These recommendations include the following:

- 1) Stage 2 archaeological assessment is recommended for all undisturbed lands present within the study area (As per section 1.4.1 Standard 1c-e, Figure 5 – Green). The Stage 2 assessment should be conducted using test pit survey at 5m intervals. It is advised that the Saugeen Ojibway Nation be contacted prior to the commencement of the Stage 2 assessment and allowed to provide input regarding the Stage 2 assessment.
- 2) The remainder of the study area holds low archaeological potential due to extensive land disturbance, steeply sloped terrain, and water saturated/poorly drained sediments. No further archaeological assessments are recommended for these areas.

5 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Tourism and Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the Standards and Guidelines for Consultant Archaeologists (2011a) 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 Tourism, Culture and Sport, 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.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological 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*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48(1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

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 licence.

6 BIBLIOGRAPHY AND SOURCES

- Adam, G.M. and C.P. Mulvany
1885 *History of Toronto and the County of York Ontario, Volume 1.* C. Blackett Robinson Publishers. Toronto, Ontario
- Chapman, L.J. and D.F. Putnam
1984 *The Physiography of Southern Ontario.* Ontario Ministry of Natural Resources.
- Ellis, C.J. and D.B. Deller
1990 *Paleo-Indians.* In *The Archaeology of Southern Ontario to A.D. 1650*, Ed C.J. Ellis and N. Ferris, pp. 37-74. Occasional Publication of the London Chapter, OAS No. 5. London: Ontario Archaeology Society.
- Ellis, C.J., I.T. Kenyon, and M.W. Spence
1990 *The Archaic.* In *The Archaeology of Southern Ontario to A.D. 1650*, Ed C.J. Ellis and N. Ferris, pp. 65-124. Occasional Publication of the London Chapter, OAS No. 5. London: Ontario Archaeology Society.
- Fox, W.
1990 *The Middle Woodland to Late Woodland Transition.* In *The Archaeology of Southern Ontario to A.D. 1650*, Ed C.J. Ellis and N. Ferris, pp. 171-188. Occasional Publication of the London Chapter, OAS No. 5. London: Ontario Archaeology Society.
- The Odawa.* In *The Archaeology of Southern Ontario to A.D. 1650*, Ed C.J. Ellis and N. Ferris, pp. 171-188. Occasional Publication of the London Chapter, OAS No. 5. London: Ontario Archaeology Society.
- Marsh, E.L.
1931 *A History of the County of Grey.* Fleming Publishing. Owen Sound, Ontario.
- Miles & Co.
1879 *Illustrated Historical Atlas of the County of York and the Township of West Gwillimbury & Town of Bradford, Ont.,* Toronto.
- Ontario Geological Survey
1991 *Bedrock Geology of Ontario, East-central Sheet. Map. 2543,* Ontario Geological Survey, Queen's Printer for Ontario, Toronto, Ontario.
- Ontario Geological Survey.
2010 *Surficial Geology of Southern Ontario.*
- Rowe, J.S.
1972 *Forest Regions of Canada.* Department of the Environment Canada Forestry Services, Ottawa.
- Spence, M.W., R.H. Pihl, and C. Murphy
1990 *Cultural Complexes of the Early and Middle Woodland Periods.* In *The Archaeology of Southern Ontario to A.D. 1650*, Ed C.J. Ellis and N. Ferris, pp. 125-170. Occasional Publication of the London Chapter, OAS No. 5. London: Ontario Archaeology Society.
- Warrick, G.
2000 *The Precontact Iroquoian Occupation of Southern Ontario.* *Journal of World Prehistory* 14(4):415-456.

7 IMAGES



Image 1: View west into study area. Note rise in terrain in background associated with Nipissing strandline.



Image 2: View of relatively flat, undisturbed terrain in east of study area.



Image 3: View of large boulder and rocks located in east of study area.



Image 4: View northwest along disturbed pathway.



Image 5: View along roadway.



Image 6: View along roadway to disturbed gravel lot.



Image 7: View of artificial plateau. Note clearly defined ridge running through centre of photo.



Image 8: View along gravel pathway.



Image 9: Poorly drained wetland area.



Image 10: Sloped terrain associated with Nipissing strandline in southwest of study area.



Image 11: Sloped terrain associated with Nipissing strandline in southwest of study area.



Image 12: Poorly drained wetland area.



Image 13: Concrete hatch located in artificial plateau.



Image 14: disturbed roadway showing artificial berming and push associated with construction.



Image 15: View east-northeast.



Image 16: Poorly drained wetland area located in the north of the study area.

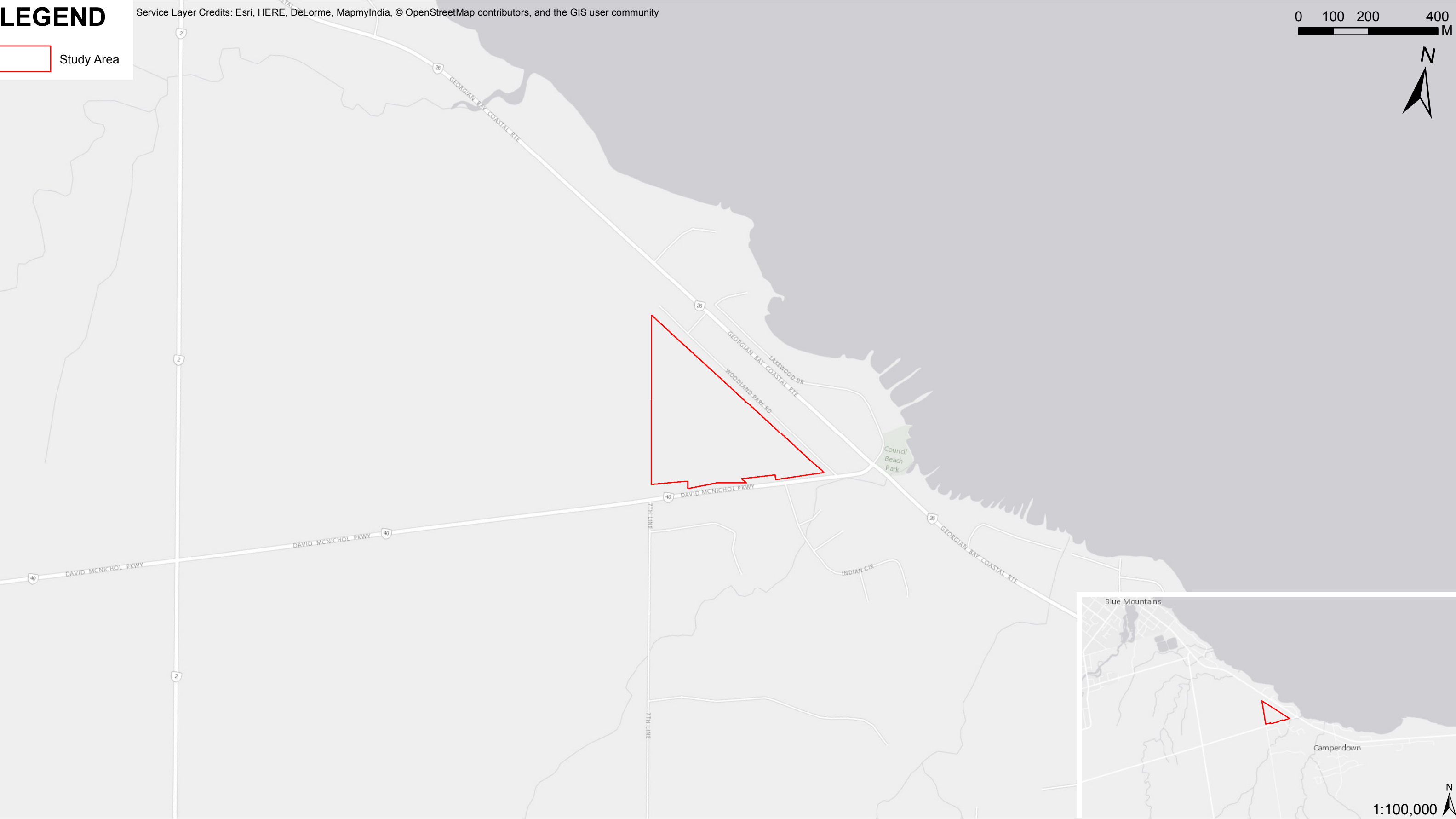


Image 17: View south along disturbed pathway.



Image 18: view of undisturbed terrain located along western portion of study area with large rocks and boulders visible.

FIGURES



PROJECT:
STAGE 2 ARCHAEOLOGICAL ASSESSMENT:
LOT 28 CONCESSION 7, TOWN OF BLUE MOUNTAINS

CLIENT:
THE MYRIAD GROUP

PROJECT NO.:
161-12260-00

DATE:
12/7/2016

DRAWN BY:
DGL

CHECKED BY:
DAY



LEGEND

-  Study Area
-  Owned by Town of Blue Mountains



PROJECT:
STAGE 2 ARCHAEOLOGICAL ASSESSMENT:
LOT 28 CONCESSION 7, TOWN OF BLUE MOUNTAINS

CLIENT:
THE MYRIAD GROUP

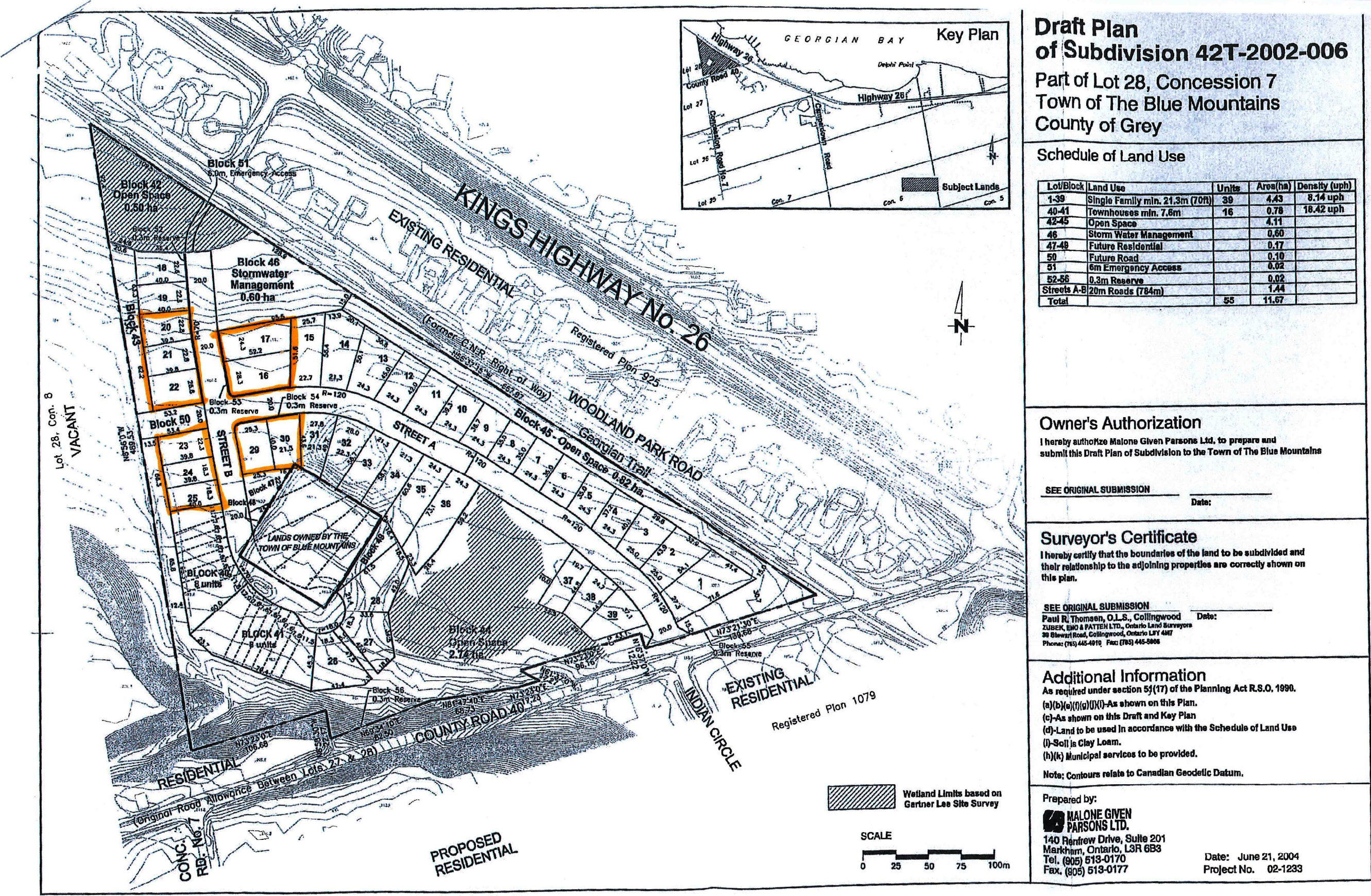
PROJECT NO.:
161-12260-00

DATE:
12/7/2016

DRAWN BY:
DGL

CHECKED BY:
DAY





PROJECT:
STAGE 1 ARCHAEOLOGICAL ASSESSMENT:
LOT 28 CONCESSION 7 IN THE TOWN OF BLUE MOUNTAINS

CLIENT:
MINISTRY OF TRANSPORTATION ONTARIO

PROJECT NO.:
161-12260-00

DRAWN BY:
PROVIDED BY CLIENT

DATE:
CHECKED BY:



LEGEND

-  Study Area
-  Owned by Town of Blue Mountains
-  5m Contour Intervals



PROJECT:
STAGE 2 ARCHAEOLOGICAL ASSESSMENT:
LOT 28 CONCESSION 7, TOWN OF BLUE MOUNTAINS

CLIENT:
THE MYRIAD GROUP

PROJECT NO.:
161-12260-00

DATE:
12/7/2016

DRAWN BY:
DGL

CHECKED BY:
DAY



LEGEND

- Study Area
- Stage 2 Test Pit Required (5m Intervals)
- Low and Wet Terrain
- Slope >30 Degrees
- Disturbed



PROJECT:
STAGE 2 ARCHAEOLOGICAL ASSESSMENT:
LOT 28 CONCESSION 7, TOWN OF BLUE MOUNTAINS

CLIENT:
THE MYRIAD GROUP

PROJECT NO.:
161-12260-00

DATE:
12/7/2016

DRAWN BY:
DGL

CHECKED BY:
DAY



LEGEND

-  Study Area
-  Owned by Town of Blue Mountains
-  Photo Location and Direction



PROJECT:
STAGE 2 ARCHAEOLOGICAL ASSESSMENT:
LOT 28 CONCESSION 7, TOWN OF BLUE MOUNTAINS

CLIENT:
THE MYRIAD GROUP

PROJECT NO.:
161-12260-00

DATE:
12/7/2016

DRAWN BY:
DGL

CHECKED BY:
DAY



Appendix A

FEATURES INDICATING ARCHAEOLOGICAL POTENTIAL

FEATURES INDICATING ARCHAEOLOGICAL POTENTIAL

The following are features or characteristics that indicate archaeological potential:

- Previously identified archaeological sites
- Water sources:
 - o primary water sources (lakes, rivers, streams, creeks).
 - o secondary water sources (intermittent streams and creeks, springs, marshes, swamps).
 - o features indicating past water sources (e.g. glacial lake shorelines, relic river. or stream channels, shorelines of drained lakes or marshes, cobble beaches).
 - o 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, plateaux)
- Pockets of well-drained sandy soil, especially near areas of heavy soil or rocky ground
- Distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases
- Resource areas, including:
 - o food or medicinal plants (e.g. migratory routes, spawning areas, prairie).
 - o scarce raw materials (e.g. quartz, copper, ochre or outcrops of chert).
 - o 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 early cemeteries.
- Early historical transportation routes (e.g. trails, passes, roads, railways, portage routes).
- Property listed on a municipal register or designated under the Ontario Heritage Act or that is a federal, provincial or municipal historic landmark or site.
- Property that local histories or informants have identified with possible archaeological sites, historic events, activities, or occupations.

Source: Ontario Ministry of Tourism, Culture and Sport
2011 Standards and Guidelines for Consultant Archaeologists
Section 1.3.1

Appendix B

PHOTOGRAPH LOCATIONS

PHOTOGRAPH LOCATIONS

Image	Zone	Easting	Northing	Facing
1	17 T	546914	4932016	W
2	17 T	546819	4932059	NNE
3	17 T	546805	4932035	SW
4	17 T	546742	4932088	NW
5	17 T	546680	4932082	NW
6	17 T	546740	4932040	S
7	17 T	546509	4932066	WNW
8	17 T	546522	4931997	S
9	17 T	546578	4931972	NNE
10	17 T	546559	4931942	S
11	17 T	546498	4931907	NW
12	17 T	546487	4931952	N
13	17 T	546496	4932059	SE
14	17 T	546439	4932107	S
15	17 T	546419	4932234	ENE
16	17 T	546393	4932284	NNW
17	17 T	546369	4932212	S
18	17 T	546401	4932163	W

Source: GPSmap 62s (NAD 83)