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**A STAGE I-II ARCHAEOLOGICAL/HERITAGE
ASSESSMENT OF THE PROPOSED EDEN OAK
AGGREGATES INC. GIBRALTAR PIT EXPANSION:
LOCATED IN PART LOT 6, CONCESSION 4, TOWN OF
BLUE MOUNTAIN (FORMER TOWNSHIP OF
COLLINGWOOD), COUNTY OF GREY, ONTARIO**

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UNDER MOC ISSUED ARCHAEOLOGICAL
LICENSE NO: P156; CIF NO: P156-050-2007
(REPORT PREPARED BY ADAM POLLOCK)

FEBRUARY 13, 2009

EXECUTIVE SUMMARY

In October of 2007, York North Archaeological Services (YNAS) was initially retained by William D. Fitzgerald of Geological Investigations, on behalf of Eden Oak Aggregates Inc., to conduct a Stage I archaeological/heritage potential assessment, and if necessary a Stage II assessment of the area of a proposed aggregate pit expansion (covering approximately 10.1 hectares), located in Part Lot 6, Concession 4, Town of Blue Mountain (formerly Township of Collingwood), County of Grey, Ontario. The purpose of this assessment was threefold: (1) to assess the potential for the presence of significant archaeological/heritage resources within the confines of the study area and determine whether Stage II fieldwork was required; (2) to determine appropriate methods to use in the field survey and conduct this work in order to determine whether any significant archaeological/heritage resources were present within the confines of the study area; and, (3) make recommendations concerning our findings so as to mitigate the impacts of the proposed development on significant cultural heritage resources should they be present.

Background research conducted during the Stage I archaeological/heritage potential assessment suggested that while there was a low potential for the presence of significant prehistoric archaeological/heritage resources within the confines of the study area, there was reason to suspect that the remains of ca. 1870 farmstead might have been present on the property. Given that the remains of Euro-Canadian farmsteads dating from this time period are considered to possess a significant cultural heritage value by the Ministry of Culture, it was determined that Stage II field investigations should be conducted.

The Stage II field investigations included the pedestrian survey of all ploughed areas of the study area at 5 m intervals. The forested portion of the study area, along the southern property boundary, was shovel test pitted at 10 m intervals. No significant archaeological/heritage resources were found during the assessment of the property.

On the basis of the results of the Stage I-II archaeological/heritage assessment, YNAS recommends that MOC issue a clearance of the archaeological/ heritage condition in order to permit the project proponent, Eden Oak Aggregates Inc., to proceed with the development of the proposed pit.

These recommendations come with the standard proviso that, should deeply buried archaeological/ heritage remains be found on the property during site preparation and/or construction activities, MOC should be notified immediately. In addition, in the event that human remains are encountered during site preparation and/or construction activities associated with the proposed development of the study area, the project proponent should immediately contact both MOC and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Commercial Relations at (416) 326-9382.

PROJECT PERSONNEL

<i>Project Director:</i>	Patricia Dibb (P156)
<i>Project Supervisors:</i>	Patricia Dibb (P156) & Adam Pollock (R269)
<i>Field Archaeologists:</i>	Gordon Dibb, Allison Hand & Sheri Taylor
<i>Figure Preparation:</i>	Adam Pollock
<i>Report Preparation:</i>	Adam Pollock

ACKNOWLEDGEMENTS

YNAS would like to thank the following people for their assistance in the course of the fieldwork activities, and/or the preparation of this report:

William D. Fitzgerald (owner, Geological Investigations, initial project planner)

Brian A. Zeman (planner with MHBC Planning, current project planner)

Rick Lloyd (with Eden Oak Aggregates Inc., project proponent)

Megan Kevill (acting on behalf of Rob von Bitter, Archaeological Data Coordinator with the Archaeology Unit, Heritage Branch, Ontario Ministry of Culture, Toronto)

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1.0 INTRODUCTION

This report presents the results of a Stage I-II archaeological/heritage assessment of a parcel of land proposed for development as an Eden Oak Aggregates Inc. Gibraltar Pit expansion in Part Lot 6, Concession 4, Town of Blue Mountain (formerly Township of Collingwood), County of Grey, Ontario (Figures 1-2; Plate 1).

The Stage I Archaeological Background Study and Stage II Archaeological Property Survey of the subject property were undertaken according to the requirements of the Ontario Heritage Act (R.S.O. 1990, Chapter O.18), the Environmental Assessment Act (R.S.O. 1990, Chapter E.18) and the Planning Act (R.S.O. 1990, Chapter P.13), as well as the Ontario Ministry of Culture's Archaeological Assessment Technical Guidelines (1993) and the Draft Standards and Guidelines for Consultant Archaeologists (2006).

As per MOC requirements, permission for access to the property and to remove and curate any artifacts collected was granted by the landowner. In addition, any documentation related to the archaeological assessment of this property (i.e. fieldnotes, maps, photographs, etc.) will be curated by York North Archaeological Services until such time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the land owner, the Ontario Ministry of Culture, and any other legitimate interest group(s).

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1.1 PROJECT DURATION AND STAFF

The Stage I-II archaeological/heritage assessment described below was carried out at the request of Geological Investigations, c/o William D. Fitzgerald. In March of 2008, Brian Zeman, with MHBC Planning, took over as the project planner.

The contract was awarded to York North Archaeological Services (YNAS) on October 18, 2007. The Contract Information Form (CIF) was submitted to the Ministry of Culture (MOC) for review on October 25, 2007, and was reviewed by Roshan Jussawalla on the same day.

The historic title search and report were prepared by Adam Pollock and Gordon Dibb. Field investigations were conducted over two days, from October 29 & 30, 2007. The field crew consisted of Gordon Dibb, Allison Hand, and Sheri Taylor. The field directors were Patricia Dibb (P156) and Adam Pollock (R269).

During the course of the project, written and verbal communications were conducted with William D. Fitzgerald with Geological Investigations (initial project

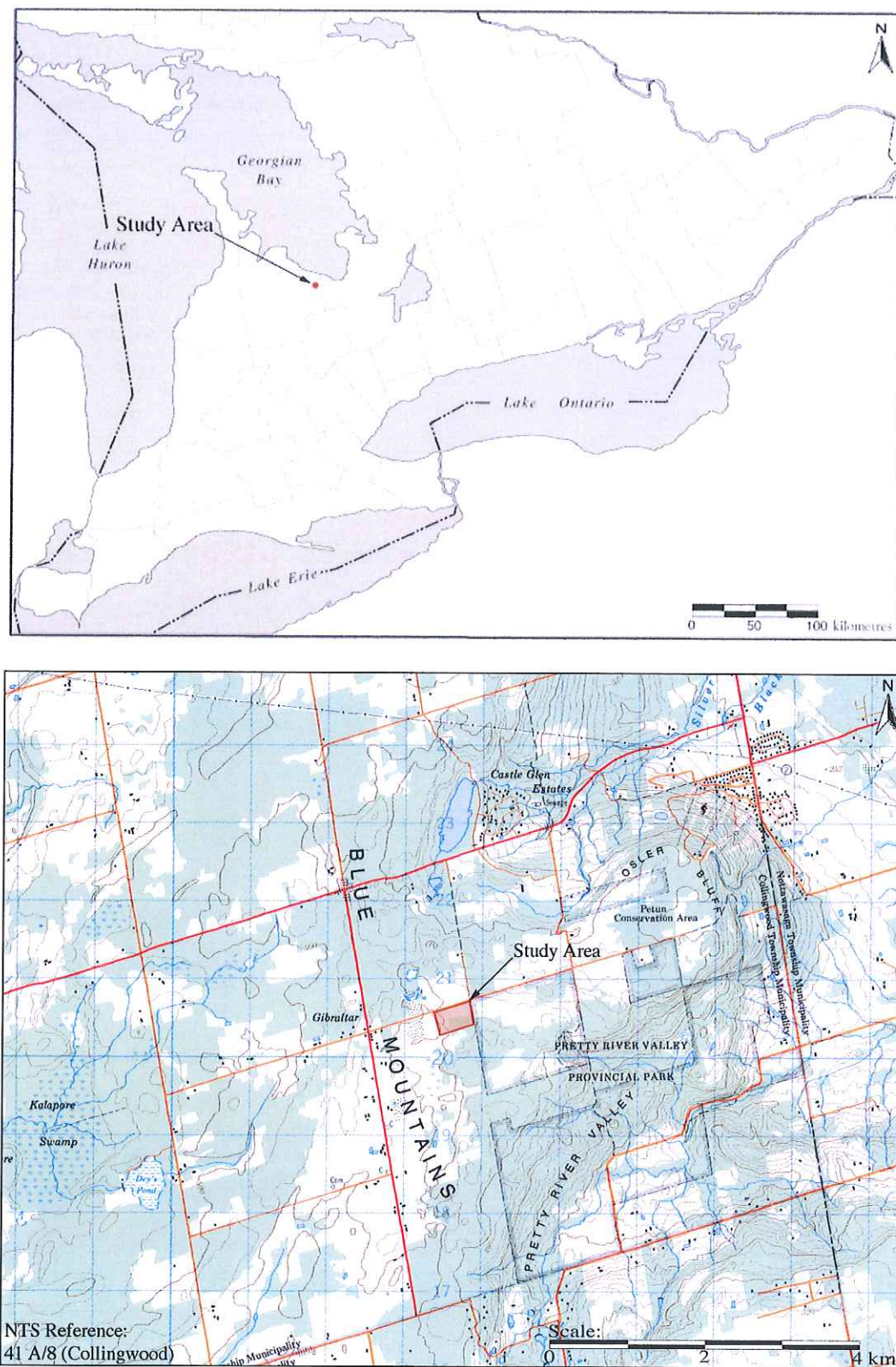


FIGURE 1 MAPS SHOWING THE LOCATION OF THE STUDY AREA IN RELATION TO (TOP) SOUTHERN ONTARIO, AND (BOTTOM) THE BLUE MOUNTAINS AND THE FORMER HAMLET OF GIBRALTAR

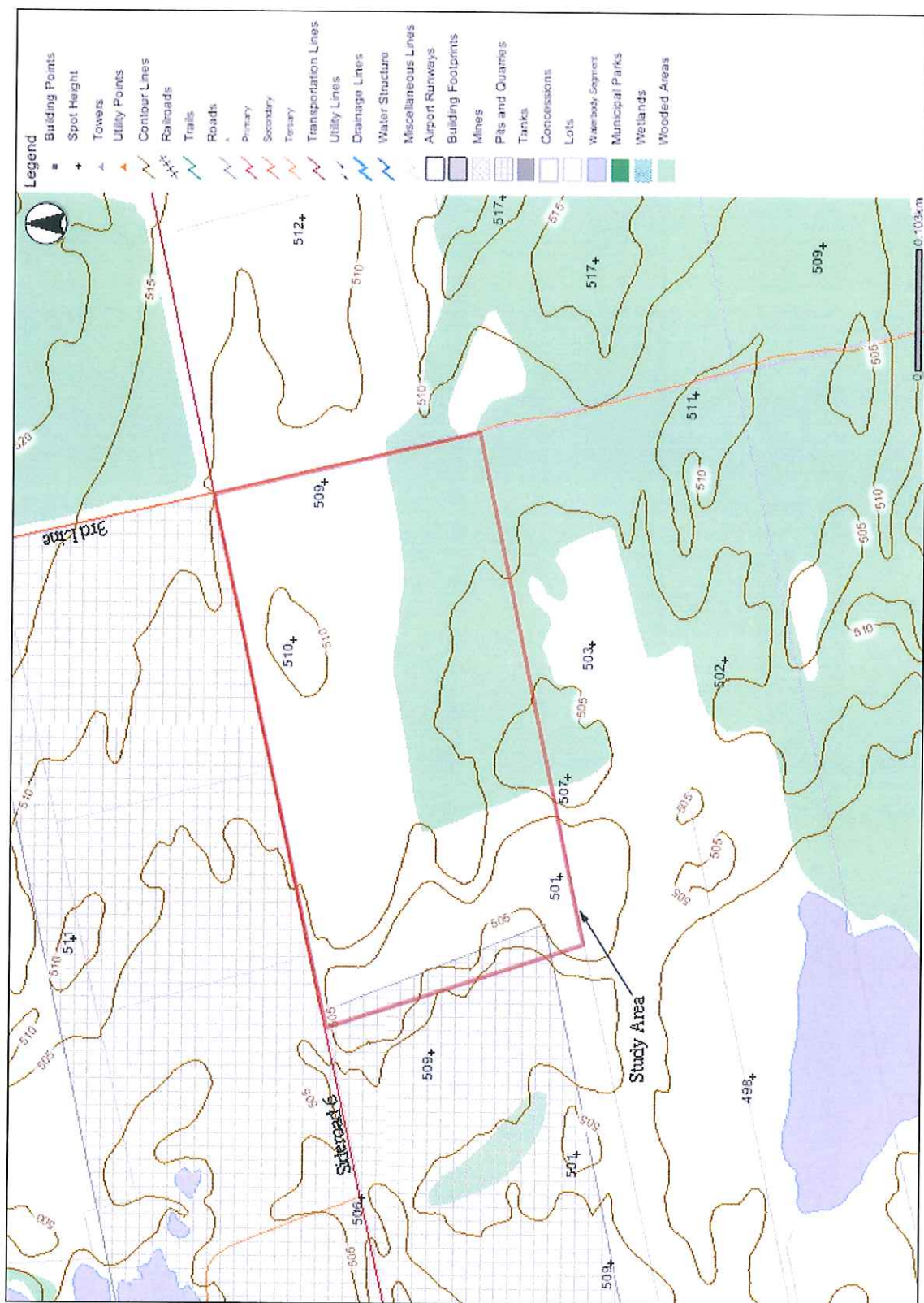


FIGURE 2 MAP SHOWING THE BOUNDARIES OF THE STUDY AREA, TOPOGRAPHY (AT 5 M INTERVALS), AND EXISTING CONDITIONS (SOURCE: ONTARIO BASIC MAPPING ONLINE ARCIMS VIEWER 2009 [ORIGINAL SCALE: 1:10,000])



PLATE 1 2006 SATELLITE IMAGE OF THE STUDY AREA SHOWING THE BOUNDARIES OF THE PROPERTY AND EXISTING CONDITIONS (SOURCE: GREY COUNTY WEB GIS APPLICATION)

planner), Brian A. Zeman with MHBC Planning (current project planner), Rick Lloyd with Eden Oak Aggregates Inc. (project proponent), as well as Roshan Jussawalla and Megan Kevill (on behalf of Robert von Bitter) (all with the MOC).

2.0 SITE LOCATION ANALYSIS

Legally, the study area is described as Part Lot 6, Concession 4, Town of Blue Mountain (former Township of Collingwood), County of Grey (Figures 1-2; Plate 1). The property is located on the southwest corner of the intersection of Sideroad 6 and 3rd Line, approximately one kilometre east of the former hamlet of Gibraltar, and approximately 10 km southwest of the town of Collingwood. Access to the property is provided via a private entranceway on the south side of Sideroad 6.

The specifics by which the property will be licensed by the Ministry of Natural Resources under the Aggregate Resources Act have yet to be determined. The size of the area included in the YNAS assessment is approximately 10.1 hectares (25 acres) in size.

2.1 *BEDROCK AND QUATERNARY GEOLOGY*

The study area is located just to the west of the Niagara Escarpment, which extends from the Niagara River to the northern tip of the Bruce Peninsula and carrying on through the Manitoulin Islands. While the bedrock-controlled topography of the Escarpment is the most dominant feature in the area, glacial activity during the Pleistocene Epoch (which lasted from approximately 1,800,000 to 11,500 years before present) also played a significant role in shaping the present physiography of this area. This period saw the repeated advance and melting back of extensive continental ice sheets, each obliterating the effects of the advance and retreat preceding it. During the last period of glaciation in southern Ontario, which began approximately 23,000 years ago (during the Wisconsinan Substage of the Pleistocene Epoch), the Laurentide Continental Ice Sheet advanced out of the Great Lakes Basins to cover the whole of this area. The locations of the ice lobes making up the advancing ice front and their margins fluctuated, undergoing numerous advances and retreats, with advancing glacial ice scouring the landscape and depositing the sediments (ranging from clays to boulders) where the ice melted, until the final retreat of the glacial ice from this area approximately 10,000 years ago.

The major glacial features in the vicinity of the study area are the result of the advance and retreat of ice from the Georgian Bay basin. As the ice melted northward over the uplands of the cuesta in the central portion of Grey County, a series of recessional moraines was deposited (Figure 3), creating what Chapman and Putnam (1984:113) refer to as the "Horseshoe Moraine" physiographic region. Each of these moraines represents a major standstill (or often at the terminal point of a temporary re-advance), as sediments that had been picked up and incorporated into the advancing ice lobe were deposited along its margins. This resulted in the creation of a landscape characterized by a complex series of till ridges, kame moraines, outwash plains, and meltwater channels, interspersed with till plains and drumlins. Within Collingwood Township, the main features of the Horseshoe Moraine are the Gibraltar and Banks recessional moraines, each identified by the name of a hamlet near their centre (Figure 3). Two arms of the Gibraltar recessional moraine meet at a point north of the hamlet of Gibraltar. The west limb extends to the southwest as a continuous ridge from Gibraltar to

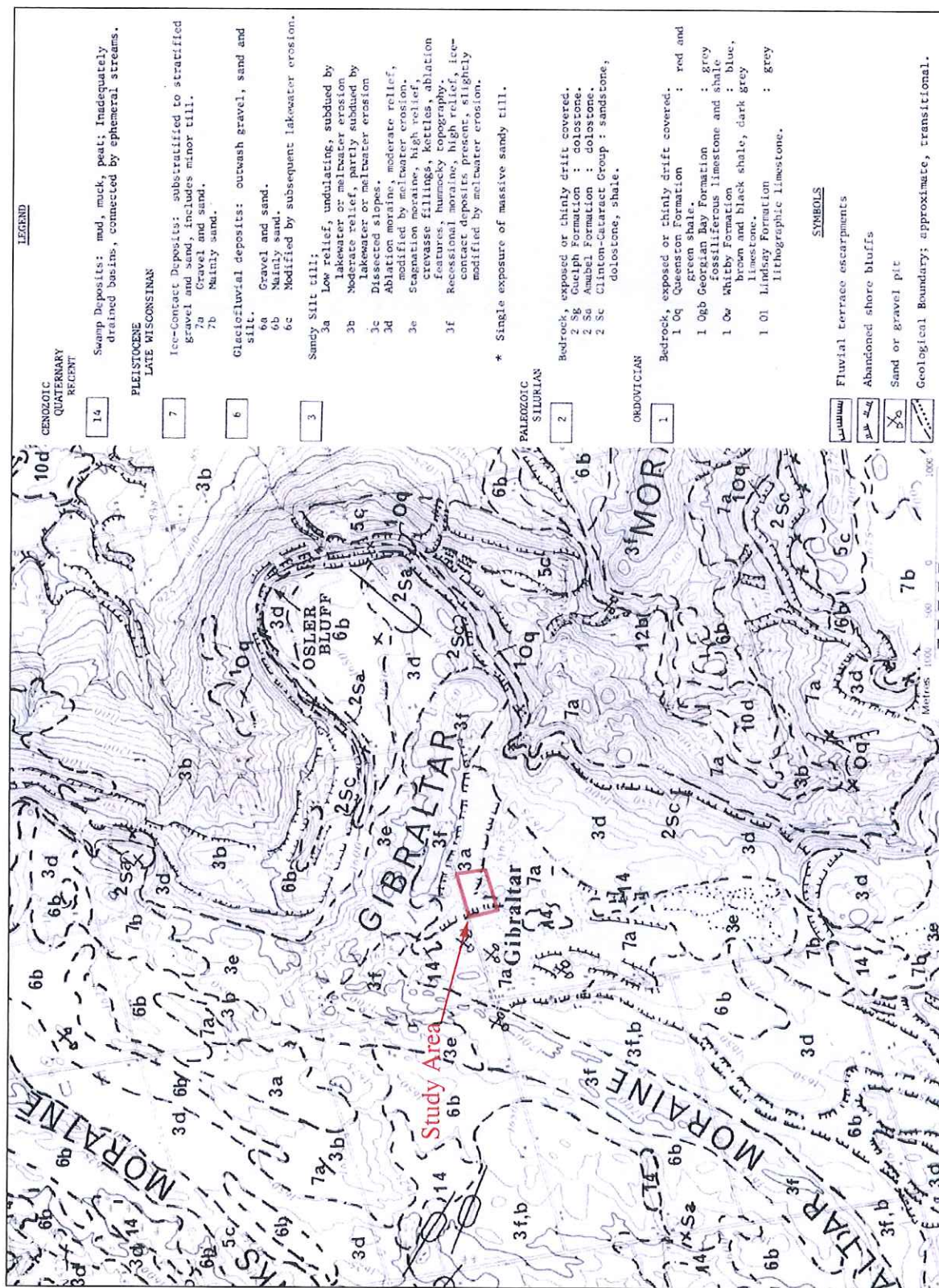


FIGURE 3

PORTION OF A QUATERNARY GEOLOGICAL MAP OF THE COLLINGWOOD-NOTTAWASAGA AREA SHOWING THE BOUNDARIES OF THE STUDY AREA (SOURCE: OGS P.919 1974)

the Osprey Township border (it is on this arm that the study area is located). Here the arm of the moraine consists of very sandy, bouldery till desposited around bedrock knobs and is interspersed with ice-contact sands and gravels (ARIP#87 1991:10). Meltwater erosion has reshaped the moraine along the western limb, and extensive outwash deposits were deposited along its flanks. The eastern arm of the Gibraltar Moraine follows the edge of the Niagara Escarpment to the Pretty River Valley (one of several meltwater river valleys that cut into the face of the escarpment in glacially-enlarged or re-entrant valleys), where the moraine becomes obscured in a mass of ice-contact stratified drift (ARIP#87 1991:10). The tills of this area tend to be loamy, containing numerous dolomitic boulders. The hook of the Gibraltar Moraine (as with the nearby Singhampton and Banks Moraines) contains gravel and sand deposits with a high proportion of silt, as numerous kames were formed while these areas were being evacuated by the Georgian Bay ice lobe. The topographic expression of these deposits is subdued in this area, where the ice-contact material adjoins hummocky stagnation moraine, as these features have been modified by meltwater erosion.

A geological map of the region containing the study area shows that the subject property is situated on an ice-contact deposit of sub-stratified to stratified gravel and sand (with minor amounts of till) associated with the Gibraltar Moraine (Figure 3). This feature appears to be bordered to the northeast by a kame deposit of sandy-silty till. The geological map suggests that this deposit has been shaped by glaciofluvial processes, as glaciofluvial terrace escarpments as shown as running through the study area (possibly stemming from a pro-glacial drainage pattern emptying into the Pretty River Valley).

Local post-glacial pond deposits are preserved above the Escarpment in a few scattered locations. Many existing lakes and numerous swamp areas that have persisted since late glacial time also represent ponding near the ice margin.

2.2 TOPOGRAPHY

The topography of the study area is typical of the complex moraine and kame deposits found within the hook of the Gibraltar Moraine. Here, the landscape is undulating, with a number of moderately steep slopes (Figure 2). Elevations range from a high of approximately 510 m to a low of 501 m, providing ca. 9 m of relief within the subject property.

2.3 DRAINAGE

The study area is located in an area of uplands near the eastern edge of the Niagara cuesta, between the Blue Mountains and Beaver River watersheds, where a number of creeks and rivers rise (primarily through spring-fed tributaries) and flow down the face of the escarpment (through steep re-entrant valleys) before draining off to the north into Georgian Bay. These waterways include the Silver and Black Ash Creeks to the northeast, the Pretty River to the east, Mill Creek to the west, and Black's Creek and the Beaver River to the south.

2.4 SOILS

The 1954 soil survey of Collingwood Township identifies the soils contained within the study area as Osprey Loam, which is classed as a Brown Forest and Grey-Brown Podzolic intergrade (Gillespie and Richards 1954) (Figure 4). This soil type, which is found on well-drained irregular moderately to steeply sloping terrain, has developed over a parent material of calcareous tills, gravels, and sands, and are described as very stony. The characteristics restricting the use of the Osprey series for growing crops include stoniness (limestone boulders dot the surface and are found throughout the soil matrix) and unfavourable topography (where the shallow depth of the upper portions of the weathered profile enhance the vulnerability of this solum to erosion on steeper slopes) (Gillespie and Richards 1954).

2.5 VEGETATION

The study area is located within the Great Lakes – St. Lawrence Forest region, which is a transitional zone between the southern deciduous forests and the northern coniferous boreal forests (Helleiner 1983). At the time of the YNAS site visit in 2007, the southeastern portion of the study area (ca. 4.3 ha) was wooded, with trees species dominated by sugar maple, beech, basswood, white elm, yellow birch, white ash, and balsam.

2.6 CURRENT LAND USE

At the time of the 2007 YNAS field investigations, the majority of the study area (northern and western portions) was in use as cultivated agricultural fields, with the exception of a ca. 4.3 ha forested area along the property's southern boundary.

3.0 ARCHAEOLOGICAL AND HISTORIC BACKGROUND RESEARCH AND ARCHAEOLOGICAL/HERITAGE POTENTIAL

3.1 ARCHAEOLOGICAL BACKGROUND RESEARCH

A search of the MOC's archaeological database has revealed that there are two recorded archaeological sites within a 2.0 km radius of the study area. A brief description of each is provided below.

A single Innes projectile point, made of Flint Ridge chert, was discovered during the course of an archaeological assessment of a property located on the southwest corner of the intersection of Highway 19 and 2nd Line (Archaeological Services Inc. 2005). The site was assigned the Borden Number BcHb-58. The point, the only artifact found in this location (and probably representing a hunting loss), has been dated to between 2500 and 500 B.C., within a period of time archaeologists refer to as the Late Archaic. The find was located on a flat, grassy area representing a former beach ridge of glacial lake Algonquin (though the lake would have long since receded from the area by the Late Archaic).

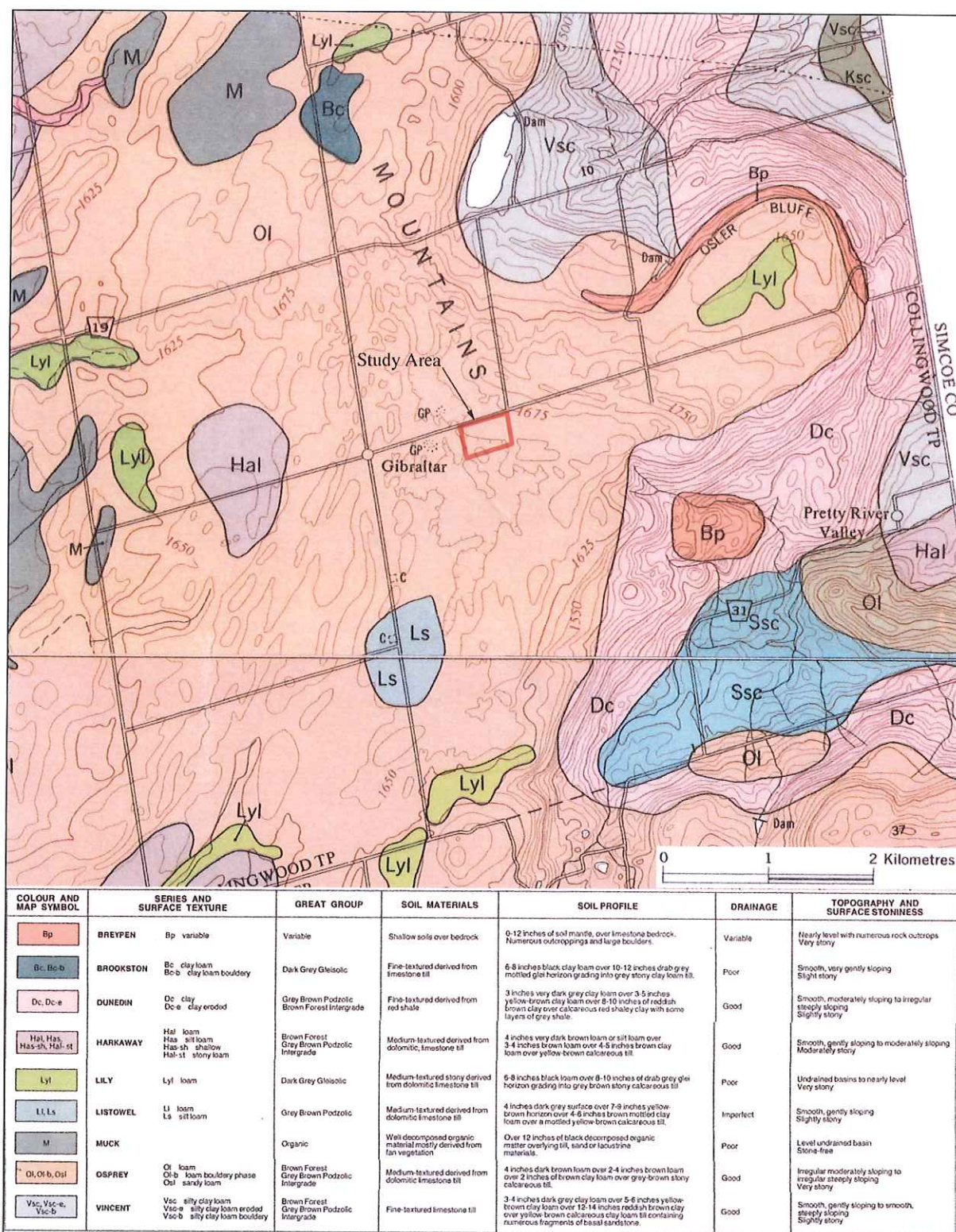


FIGURE 4

PORTION OF A SOIL MAP OF GREY COUNTY SHOWING THE BOUNDARIES OF THE STUDY AREA (SOURCE: GILLESPIE AND RICHARDS 1954)

On the same property, a scatter of mid-19th century materials was found by ASI staff. These materials included 85 pieces of architectural debris, bone, and ceramics (identified pieces included: refined white earthenwares decorated with underglaze green and flow blue transferprint motifs, undecorated and decorated ironstone wares with underglaze brown transferprint decoration, and Rockingham wares), and have been interpreted as belonging to a 19th century Euro-Canadian settlement on the property. This site was registered with the MOC as the Ferguson site (and was assigned the Borden number BcHb-59).

The relative paucity of identified archaeological sites within this region is largely related to the lack of archaeological research in the area as opposed to an absence of archaeological/heritage resources, as it is likely that this region has supported human occupation since the retreat of the Wisconsin glacier some 12,000 to 10,000 years ago. In fact, the oldest artifact discovered in Collingwood Township thus far is a fluted point fragment, named the MacMurchy Fluted Point, which dates to approximately 10,000 years ago (near the end of a period of time archaeologists refer to as the Paleo-Indian period) (Shannon 1979:23). This artifact was discovered in 1946, in an old stream bed in the first concession, and represents the base of a fluted spear point. The stone showed signs of having been carried in water, and it has been suggested that it may have been washed down from the Blue Mountains. Though there is little else in the way of concrete evidence of Paleo-Indian occupation of this area, this evidence may be forthcoming with further development and associated archaeological investigation in this region. Indeed, sites of this age are relatively rare throughout the whole of North America. There is, however, considerable evidence of the occupation of this area by Native groups from Archaic times up until the settlement of the township by Europeans (the original surveyor of the township, Charles Rankin, noted two "Indian clearings" while surveying the area; Shannon 1979:17), with a number of known archaeological sites and finds dating from widely different time periods (e.g. the late 16th to mid-17th century village of Ekarenniondi and the nearby spiritual site of the same name) (Shannon 1979).

3.2 HISTORIC BACKGROUND RESEARCH

The principal treaty by which the Crown obtained the land now contained within Grey County was negotiated with the Ojibwa (Chippewas) peoples who held acknowledged rights to this area in 1818 (Treat No. 18).

It was not until 1833, however, that Collingwood Township was initially surveyed (laid out into lots and concessions as a prelude to settlement) by Charles Rankin, then the deputy provincial surveyor. Originally, the new township was to be named Alta, however, the name was changed to Collingwood the following year. The new township was created to help the Crown meet its obligations to provide sufficient land for Crown Grants to retiring military and naval personnel, and the children of the United Empire Loyalists. Townships in this area were typically thirty lots deep and twelve concessions wide (Shannon 1979:15), with lots of 200 acres (consisting of a frontage of 120 rods on the concession line and a depth of 266.66 rods). Usually a side road was placed after every third lot, and a concession road between every other concession. The alternate

concession lines, which were not opened, were called “blind lines”. On the basis of this configuration, the standard township was ten miles wide and just over eleven miles deep. Given the irregularity of the Georgian Bay shoreline, Rankin attempted to create a township of average size while allowing for the angle of the shoreline (Figure 5).

Following the survey of Collingwood Township, there was a period of about 14 years before settlement really began on any substantial scale (Shannon 1979:39). The delay is likely attributable to the government policies that allowed abuses connected with the Clergy Reserves and the accumulation of large acreages by speculators. Grants of 200 acres were made of much of the land of Collingwood Township in 1835-36. Three classes of people were eligible, soldiers and sailors, the children of United Empire Loyalists, and men who joined the militia. By these policies, large grants of land were made to members of the Family Compact, and to people of wealth and influence. Very few of the people who were given land had any interest in moving to the bush to become pioneer farmers, and consequently they sold their rights. By these two routes, much of the land passed into the hands of speculators and was sold and resold with prices typically climbing with each sale.

Despite these delays, by the mid-1840's, the settlement of Collingwood Township was well underway, though the earliest Euro-Canadian settlement in this region was concentrated in the northern section of the township, close to the shore of Georgian Bay. Roads were constructed to connect the fledgling settlements to the more settled portions of southern Ontario. The opening of the Northern Railway in the winter of 1854-55 further integrated the northern parts of Grey County, including Collingwood Township, with the south. In the vicinity of the study area, a community called "Gibraltar" grew up in the first nine or ten lots in concession 4 and 5, on either side of the fourth line (Figure 5). At the end of the nineteenth century, the community had two churches, a post office, a school, and a blacksmith shop. It is estimated that as early as the mid-1850's there were seven families living in this area (Shannon 1979). As with many similar small rural hamlets, Gibraltar's population started into a slow decline in the first half of the twenty-first century, and there are now few visible traces of its existence. The last fifty years have seen many changes in Collingwood Township as agricultural trends towards mechanization, larger farm operations, and specialization have altered the makeup of the countryside.

Lot 6, Concession 4

A search of the relevant land title documents reveals that the chain of ownership on the subject property goes back as far as 1864. In that year, Lot 6, totaling 200 acres in size, was deeded by Christopher Robinson et al. to William C. Gwynne for the sum of \$1,000.00 (along with other lands). William and his wife sold the property to John W. Gwynne that same year, for the same price (also with other lands). Shortly thereafter, John and his wife sold the lot to Edgar J. Jarvis for a consideration of \$500.00. Jarvis quickly turned the property over, selling the north half (totaling 100 acres) to Amos Smalley for the sum of \$600.00. The 1872 revised assessment rolls of Collingwood Township list Smalley as an occupant of the northern half of Lot 6 (Figure 5). In 1873, the Smalley's sold the property to John Duncan for \$500.00. Three years later, Duncan sold the land to John Andrew for \$847.00. While Duncan's name does not appear in association with the lot on the 1880 map of Collingwood Township in the Illustrated Historical Atlas of Grey and Bruce Counties (Belden & Co. 1880), it is important to note that these historical atlas maps were produced by subscription and only the homes and names of those who paid for the recognition tended to be recorded. In 1885, the property

was sold to Hugh Cameron for the sum of \$870.00. This part of the lot stayed in the ownership of the Camerons until Hugh's death in 1921, when it was sold to John Fletcher for a consideration of \$4,400.00. In 1947, following the death of Fletcher, the land passed into the ownership of Gordon Conn for the sum of \$2,225.00. Ownership of the area to be licensed remained in the hands of the Conn family until 2004, when it came into the possession of the current owners, Eden Oak Aggregates Inc..

3.3 *ARCHAEOLOGICAL/HERITAGE POTENTIAL*

The potential for the presence of significant prehistoric archaeological/heritage resources within the boundaries of the study area ranges from low to non-existent. While one recorded prehistoric archaeological site is known to be present in the vicinity of the study area, this site appears to represent an isolated hunting loss and is not indicative of a higher potential for the presence of significant archaeological resources within the subject property. Though a number of important waterways rise in the vicinity of the study area, these are predominantly spring-fed streams that descend the face of the escarpment through steep-sided valleys, and are not navigable. The closest water sources to the study area consist of two small, stagnant wetlands (one to the north, the other to the south) between 200 and 230 m from the boundaries of the subject property. In addition, while a number of native trails are recorded in descriptions and accounts of the early development of Collingwood Township (Shannon 1979), none of these known trails appears to pass in close proximity to the subject property.

The potential for the presence of significant historic archaeological/heritage resources within the boundaries of the study area ranges from moderate to low. While a search of the relevant land title documents revealed that the chain of ownership for Lot 6, Concession 4, goes back to 1864, the rapid exchanges characterizing the early chain of ownership for the land is suggestive of the rampant land speculation that characterized the opening of new townships in Ontario, and it is unlikely that the land was actually settled until it was purchased by Amos Smalley in 1868. This interpretation is supported by the fact that neither the 1851 or 1861 census returns, nor the 1864 assessment roll for the Township contain records of the property having been settled before this time (Shannon 1979). Although a 1938 aerial photograph of the study area reveals no trace of any structures or associated settlement features (e.g. laneways) indicating that a residence or farmstead were present within the confines of the study area (Plate 2), it is likely that Smalley and his family resided somewhere in the north half of Lot 6, although possibly to the west of the present study area. As mentioned above, although the 1880 H. Belden & Co map does not preclude the possibility that the property was settled. If the remains of a house and/or farmstead are present in the study area, it is likely that they would be found in close proximity to the road (Sideroad 6).



PLATE 2

1938 AERIAL PHOTOGRAPH OF THE STUDY AREA SHOWING THE
BOUNDARIES OF THE PROPERTY AND EXISTING CONDITIONS (SOURCE:
NAPL 1938)



PLATE 3 PANORAMIC VIEW OF PEDESTRIAN SURVEY OF PLOUGHED FIELD IN THE NORTHWESTERN PORTION OF THE STUDY AREA, FACING SOUTHWEST



PLATE 4 PANORAMIC VIEW OF PEDESTRIAN SURVEY OF PLOUGHED FIELD IN THE SOUTHWESTERN PORTION OF THE STUDY AREA, FACING NORTHWEST

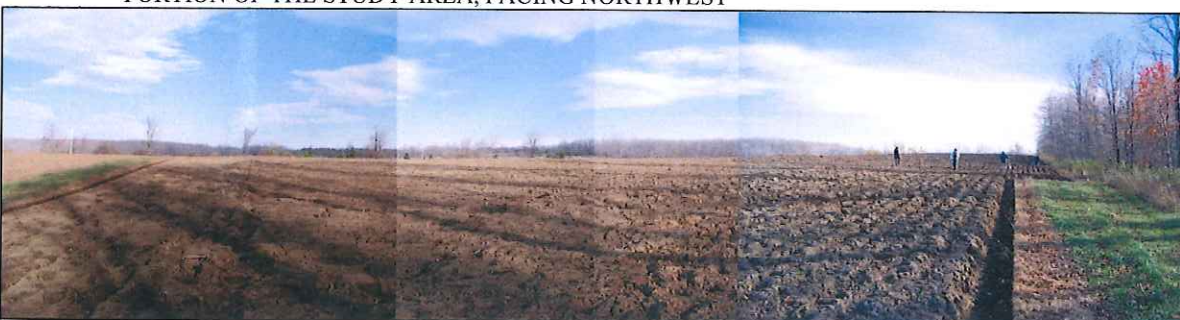


PLATE 5 PANORAMIC VIEW OF PEDESTRIAN SURVEY OF PLOUGHED FIELD IN THE NORTHEASTERN PORTION OF THE STUDY AREA, FACING NORTHEAST

4.0 SURVEY METHODS AND RESULTS

4.1 *SURVEY METHODS*

Given that the review of the background research discussed above suggests a moderate potential for the presence of a ca. 1870 period farmstead (associated with what was likely the original settlement of the north half of Lot 6, Concession 4), all ploughed portions of the northern portion of the study area, consisting of two fields separate fields totaling approximately 5.8 ha in size, were pedestrian surveyed at 5 m intervals (Figure 6; Plates 3-5). Both fields had been well-ploughed (a high degree of topsoil turnover) and weathered by rains prior to the survey, and ground surface visibility conditions were

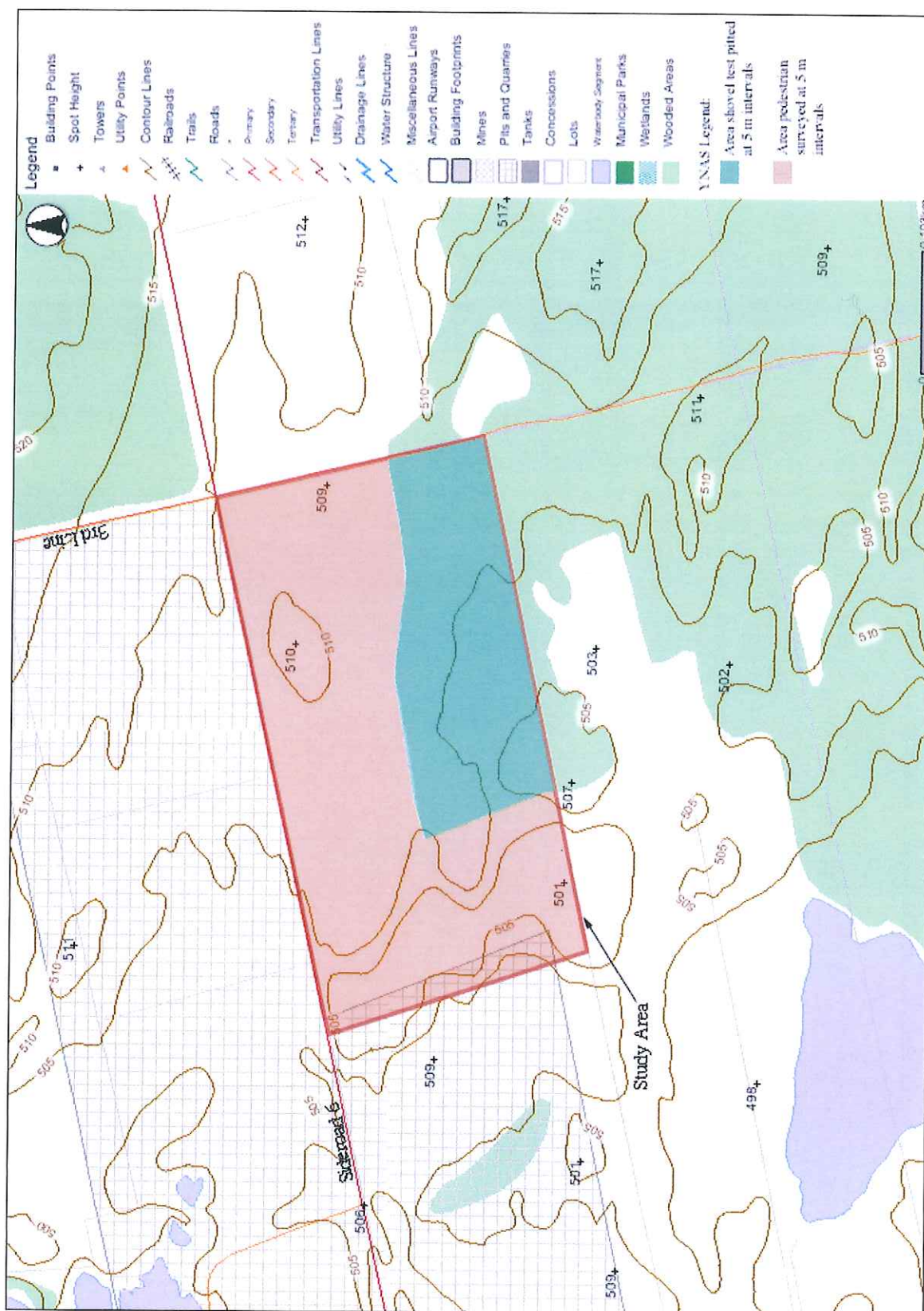


FIGURE 6 MAP SHOWING THE METHODS USED IN THE ARCHAEOLOGICAL SURVEY OF THE STUDY AREA



PLATE 6 VIEW OF SHOVEL TESTING IN THE WOODLOT ALONG THE SOUTHERN BOUNDARY OF THE STUDY AREA, FACING SOUTHEAST (NOTE CLEARED LANEWAY)



PLATE 7 VIEW OF SHOVEL TESTING IN THE WOODLOT ALONG THE SOUTHERN BOUNDARY OF THE STUDY AREA, FACING NORTHWEST



PLATE 8 VIEW OF ABANDONED SHACK IN THE WOODLOT ALONG THE SOUTHERN BOUNDARY OF THE STUDY AREA, FACING NORTH



PLATE 9 VIEW OF ABANDONED SHACK IN THE WOODLOT ALONG THE SOUTHERN BOUNDARY OF THE STUDY AREA, FACING SOUTHWEST

excellent. In addition, the woodlot along the southern boundary of the study area was shovel tested at 10 m intervals (Figure 6; Plates 6 & 7).

During all fieldwork, although the sky was overcast, lighting conditions were sufficient to ensure a high degree of visibility, providing near optimal conditions for the identification of archaeological resources.

4.2 SURVEY RESULTS

During the course of shovel-testing the wooded area in the southeastern portion of the study area, a small shack was found (Plates 8 & 9). The building appears to have been built out of scrap material within the past 20 years and likely served as a shelter/camp for people using the area for recreational activities (snow-mobiling, hunting, hiking, skiing) in the area (the study area borders the Pretty River Valley Provincial Park). A homemade woodstove (using steel barrel) was found sitting outside of the

building, along with a variety of modern refuse. At the time of the 2007 YNAS survey of the area, the building had clearly been abandoned and was in a poor state of repair. A rough laneway had been cut through the woodlot, providing access to the shack, as well as to a fenced off pasture off the southern boundary of the subject property. No further settlement remains were found during the survey.

In addition, a small number of beehive frames were present in the study area at the time of the 2007 YNAS field investigations. These were located near the northwestern corner of the woodlot and appear to represent a small, hobby apiary.

While these features attest to the use of this property in a modern mixed farming operation and as a recreational camp/shelter, they do not represent any significant archaeological/heritage value.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 *CONCLUSIONS*

On the basis of the archaeological and historic background research described above, as well as the 2007 YNAS field investigations, no evidence of the existence of significant prehistoric or historic archaeological/heritage resources was found within the confines of the study area.

5.2 *RECOMMENDATIONS*

It is therefore recommended that MOC issue a clearance of the archaeological/heritage condition in order to permit the project proponent, Eden Oak Aggregates Inc., to continue with the proposed Gibraltar Pit expansion.

Should deeply buried archaeological/heritage remains be found on the property during site preparation and/or extraction activities, MOC should be notified immediately.

In the event that human remains are encountered during site preparation and/or extraction activities associated with the proposed development of the study area, the project proponent should immediately contact both MOC and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer and Commercial Relations at (416) 326-9382.

REFERENCES

ARIP#87

- 1991 Aggregate Resources Inventory of Collingwood Township, Grey County. Ontario Geological Survey. Aggregate Resource Inventory Paper 87. Prepared by Staff of the Engineering and Terrain Geology Section, Ontario Geological Survey, Ministry of Northern Development and Mines.

Chapman, L. J., and D. F. Putnam

- 1984 *The Physiography of Southern Ontario*. Ontario Geological Survey, Special Volume 2. Ministry of Natural Resources. Government of Ontario, Toronto.

Gillespie, J. E., and N. R. Richards

- 1954 Soil Survey of Bruce County. Report No. 17 of the Ontario Soil Survey. Experimental Farms Service, Canada Department of Agriculture, and the Ontario Agricultural College, Guelph.

Government of Ontario

- 1990 The Environmental Assessment Act, R.S.O. 1990, c. E.18. Queen's Printer, Toronto.

- 1990 The Heritage Act, R.S.O. 1990, c. O.18. Queen's Printer, Toronto.

- 1990 The Planning Act, R.S.O. 1990, c. P.13. Queen's Printer, Toronto.

Helleiner, Frederick M.

- 1983 *Regions of Central Canada: A Geographical Transect from Southern Ontario to Northeastern Ontario and Northwestern Quebec*. Occasional Paper 9. Department of Geography, Trent University, Peterborough.

Ministry of Government and Consumer Services (MGCS)

- n.d. Land Title Documents for Part Lot 6, Concession IV, Township of Collingwood, County of Grey. Land Registry Office, Owen Sound.

Ministry of Culture (MOC)

- n.d. Search of the Computer Database for Archaeological Sites on Record Within a 2.0 km Radius of the Study Area.

- 1993 Archaeological Assessment Technical Guidelines (Stage 1-3 Reporting Format). Prepared by staff with the Ministry of Culture. Ministry of Culture, Tourism & Recreation, Cultural Programs Branch, Archaeology & Heritage Planning, Toronto.

- 2006 Final Draft: Standards and Guidelines for Consultant Archaeologists. Prepared by staff with the Ministry of Culture. Cultural Programs Branch, Archaeology and Planning Unit.

NTS (National Topographic System)

1993 41 A/8 (Collingwood), 5th edition. Canada Centre for Mapping, Department of Energy, Mines, and Resources. (Scale: 1:50,000).

Shannon, Bill (editor)

1979 *An Illustrated History of Collingwood Township*. Bennett Press, Craigleith.

APPENDIX I

YORK NORTH ARCHAEOLOGICAL SERVICES INC.

1264 Bathurst Street, Peterborough, Ontario, K9H 6X8

Telephone: [office] (705) 742-7301, [Gordon Dibb's cell] (705) 768-1724

[Patricia Dibb's cell] (705) 768-1002; Fax: (705) 740-9095; Email: ynas@cogeco.net

GORDON DIBB: owner and senior researcher associated with York North Archaeological Services has been involved in archaeological fieldwork in Ontario since 1974. In 1986 he completed his M.A at Trent University, producing a fieldwork-based thesis on the Late Palaeo-Indian occupation of the Keswick-Queensville area of southcentral Ontario. Gordon Dibb has been licensed by the Province of Ontario to conduct archaeology since 1978.

PATRICIA DIBB: owner and senior researcher associated with York North Archaeological Services has been involved in archaeological fieldwork in Ontario since 1978. She has completed an Honours Bachelors of Science in Anthropology at Trent University. Patricia Dibb has been licensed by the Ministry of Culture since 2005 and holds a Professional License.

Since 1974-78, both Gordon and Patricia Dibb have been involved in archaeological field projects that have spanned the gauntlet of southern Ontario prehistory, ranging from Early Palaeo-Indian (10,500 ybp) to Historic Euro-Canadian (mid-20th century) in scope. Prior to starting Y.N.A.S in 1987, Gordon and Patricia Dibb directed field projects (both independently funded and for institutions such as the Royal Ontario Museum, and the Metropolitan Toronto and Region Conservation Authority) that have included both survey and excavation related research.

Both Patricia and Gordon Dibb are members of the Association of Professional Archaeologists. Gordon Dibb is a member of the Champlain Society, the Ontario Archaeological Society, and the Trent Valley Archives Group.

Listed below are examples of a number of projects that Y.N.A.S. has conducted over the past decade.

[1] HIGHWAY AND/OR BRIDGE ASSESSMENTS:

- County of Peterborough (County 2 Road)
- County of Peterborough and The Greer Galloway Group Inc. (Bridgenorth By-Pass)
- The Greer Galloway Group Inc. (The Parkway Widening Project)
- The Greer Galloway Group Inc. (4 Bridge Assessments between GERALTON and Longlac) With Old and In the Way.
- The Greer Galloway Group Inc. (Orangeville By-Pass)
- The Greer Galloway Group Inc. (Highway 26, Simcoe County)
- The Greer Galloway Group Inc. (Vandorf Sideroad & St. John's Sideroad, R.M. York)
- The Greer Galloway Group Inc. (Bancroft/Crowe River Bridge Replacement)

[2] GRAVEL AND/OR CLAY PITS & STONE QUARRIES:

- Township of Mariposa (Oakwood Pit)
- Township of Percy (Chang Pit)
- Township of Smith-Ennismore (Lakefield Pit)
- CBM (Cannington Pit Assessment)
- Sargeant Aggregates Ltd. (Mitigation of 3 Archaeological Sites in Oro and Flos Townships)
- Cliff Varcoe Ltd. (Dalston and Oro Pits)
- James Dick Construction Ltd. (Caledon and Oro Quarry and Pit)
- Royel Paving Ltd. (Cameron Pit, Glamorgan Quarry)
- Floyd Preston Sand and Gravel (Bethasda Pit)
- Doughty Aggregates (Lakefield Pit, Preston Pit)
- Gerald Finlay Construction (Harwood Pit)
- Hart Pit (Richmond Township)
- Warren Paving Ltd. (Haldimand, Cramahe and Hope Townships)
- Warren Paving Ltd. (Proposed Kirkfield Expansion)
- 5 Wayside Pits for MTO in Victoria and Durham Counties
- Regis Resources (Vermiculite Quarry, Cavendish Township)
- Young Pit (Manvers Township)
- Lloyd Squire Pit (Oro Township)
- Lamb Quarry (Ramara Township)

[3] PUBLIC INTEREST GROUPS

- Lakefield Marsh Association
- Georgina Against Garbage (Assessment of Area Proposed for Potential Landfill)

[4] ARCHAEOLOGICAL MASTER PLANS

- East Gwillimbury (Prepared Historical Section and Directed Field Research)

[5] SUBDIVISION ASSESSMENTS (PRIVATE SECTOR)

- Cambrian Holdings (Baysville)
- Runnymede Development Corp. (6 Projects - Pickering)
- John Boddy Developments (Pickering)
- O'Shanter Development Co. (Pickering/Ajax)
- Claudex Inc. (Port Sydney)
- Bill Waterhouse Developments (Dorset)
- Metrus Development (Keswick)
- Northland Planning (Doe Lake, Muskoka and Garden Island, Lake Nipissing)
- C. Fortier (North Bay)
- Greenwood Bros. (Pittsburg)
- International Trillium (Gravenhurst)
- CN/CP (McTier)
- Bigwin Resort and Dev. Corp. (Bigwin Island)
- Tribute Homes (2 Projects, Ajax)
- Victorian Homes (Claremont)
- Cougs Investments (Ajax)
- J. Paxton (Ennismore and Uxbridge)
- G. Meharg (Tyrone)
- Aitcheson and Bolotenko (Oshawa)
- Ontario Independent Crematoriums (Bowmanville)
- Barry Bryan Associates (Brooklin)

[6] **MUNICIPAL WATERSYSTEM UPGRADES:**

- The Greer Galloway Group Inc.
 - Washburn Island
 - Bicroft
 - Grafton
 - Carrying Place
 - Oshawa Zone 3 Reservoir
 - Clarington Reservoir
 - Wilberforce

[7] **PROVINCIAL AGENCIES:**

- Ministry of Government Services:
 - Darch Subdivision (Bowmanville)
 - OPP Station (Campbellford)
 - Phases 1-2 of Portage Place Subdivision (Peterborough)
 - MNR Site Clean-up (Peterborough)