STAGE 1 AND 2 ARCHAEOLOGICAL ASSESSMENT GRAVEL PIT EXPANSION, 046365 SOUTHGATE ROAD 04 PART LOT 31, CONCESSION 3 FORMER TOWNSHIP OF PROTON MUNICIPALITY OF SOUTHGATE, GREY COUNTY ORIGINAL REPORT

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Executive Summary

The proponent retained the services of Scarlett Janusas Archaeology Inc. (SJAI) to conduct a Stage 1 and 2 archaeological resource assessment on property proposed for a gravel quarry expansion. For the purposes of this report the property undergoing archaeological assessment will hereafter be referred to as the “Study Area”.

Permission to access the Study Area and to conduct all activities associated with the Stage 1 and 2 archaeological assessment was provided by the proponents. The Study Area is located at 046365 Southgate Road 04, on Part Lot 31, Concession 3, former Township of Proton, Municipality of Southgate, in the County of Grey. The Study Area measures approximately 4.7 hectares.

The Ministry of Natural Resources and Forests required an archaeological assessment for the proposed aggregate quarry. The archaeological assessment was triggered by the Aggregate Resources Act.

Background research indicated that there are no registered archaeological sites within one kilometre of the Study Area. There are no commemorative/historic plaques or heritage designations located within one kilometre of the Study Area. Historic records indicate that the Crown Patent was first issued in 1902, although a series of mortgages had been taken out on the property as early as 1879.

Soils of the Study Area include: Donnybrook sandy loam; Listowel silt loam; and, Muck. Field observations noted that soils were very rocky, with large cobbles and finer gravel and, that the topography of the Study Area was varied with an elevation range between 490-500 meters above sea level. The Study Area is located approximately four kilometres west of the Grand River and six kilometres south of the South Saugeen River, although there are a number of tributaries of both rivers that fall within a kilometer of the Study Area. There are no water sources located directly on the Study Area.

The Stage 1 archaeological assessment indicated that the Study Area exhibits archaeological potential based on its proximity to primary water sources (i.e. The Grand River, and South Saugeen River); secondary water sources (i.e. tributaries and wetlands); elevated topography; and a strong Indigenous and early Euro-Canadian presence in the geographic area.

The Stage 1 and 2 archaeological assessment of the Study Area was conducted under license P027 (Scarlett Janusas, PIF #: P027-0391-2019) on October 18th, 21st and 24th, 2019 under good assessment weather conditions. Approximately 39% of the Study Area was subject to Stage 2 test pitting survey as it consists of an area of trees and level ground along the top of the kame that could not be ploughed. The remaining 61% of the Study Area consists of slope greater than 20 degrees, and areas disturbed from previous quarrying and gravel driveways. No archaeological materials, features or sites were located during the Stage 2 assessment.

Based upon the Stage 1 background research of past and present conditions, and the Stage 2 archaeological assessment, the following is recommended:

- No further archaeological assessment is required for the Study Area;
- The remainder of the lot still may retain archaeological potential and must be subject to a Stage 2 archaeological assessment should any development be proposed for the lot, excepting the Study Area, and,
- Compliance legislation must be adhered to in the event of discovery of deeply buried cultural material or features.

This archaeological assessment has been conducted under the 2011 Standards and Guidelines for Consultant Archaeologists (Ministry of Tourism, Culture and Sport 2011).

Table of Contents

Executive Summary ..... **i**
Project Personnel ..... **v**
1.0 PROJECT CONTEXT **1**
1.1 Development Context 1
1.2 Historical Context 1
1.2.1 Current Environment 1
1.2.2 Prehistory of Study Area 2
1.2.3 Indigenous Historic Period 3
1.2.4 Historic Métis 5
1.2.5 Euro-Canadian Historic Period 5
1.2.5.1 Specific Lot History: Part Lot 31, Concession 3, Proton Township 6
1.2.6 Plaques, Monuments and Designated Properties 7
1.2.7 Determination of Archaeological Potential 7
1.2.8 Rationale for Fieldwork Strategy 7
1.3 Archaeological Context 8
1.3.1 Previously Known Archaeological Resources/Assessments 8
1.3.2 Current Environment – Existing Features 8
1.3.3 Physiography, Bedrock and Topography 8
1.3.4 Prehistoric Shorelines 9
1.3.5 Soils 9
1.3.6 Drainage 9
1.3.7 Vegetation 9
1.3.8 Dates of Fieldwork 9
2.0 FIELD METHODOLOGY **11**
2.1 Stage 1 (Background Research) 11
2.2 Stage 2 (Archaeological Assessment) 11
3.0 RESULTS **13**
3.1 Stage 1 Archaeological Assessment 13
3.2 Stage 2 Archaeological Assessment 13
3.3 Inventory of Documentary Records Made In Field 13
4.0 ANALYSIS AND CONCLUSIONS **14**
5.0 RECOMMENDATIONS **15**
6.0 ADVICE ON COMPLIANCE WITH LEGISLATION **16**

7.0 BIBLIOGRAPHY AND SOURCES 17
8.0 TABLES 20
9.0 MAPS 22
10.0 IMAGES 30
APPENDICES 34
Appendix A – Image Log 34

TABLES

Table 1: Abstract Index for Part Lot 31, Concession 3, Proton Township 20

MAPS

Map 1: Regional Location of Study Area (Grey County 2019) 22
Map 2: Topographic Map of Study Area (Grey County 2019) 23
Map 3: Aerial of Study Area (Grey County 2019) 24
Map 4: Saugeen Lands Before Surrender (Schmalz 1977) 25
Map 5: Section of Map of Ontario First Nations and Treaties (Ontario.ca/treaties) 25
Map 6: 1862 Map of Proton Township 26
Map 7: 1880 Illustrated Historic Atlas Map Section (Belden & Co 1880) 26
Map 8: Location and Direction of Images 27
Map 9: Areas of Archaeological Potential 28
Map 10: Stage 2 Assessment Methodology 29

IMAGES

Image 1: Test-pitting along top of kame (facing NE) 30
Image 2: Gravel kame from S end (facing NW) 30
Image 3: Test-pitting along top of Kame (facing NW) 30
Image 4: Study Area from W side showing slope (facing NE) 30
Image 5: Testing-pitting along top of kame (facing SE) 30
Image 6: Sample test pit (facing N) 30
Image 7: Study Area showing slope (facing NW) 31
Image 8: Study Area showing slope along the kame (facing SE) 31
Image 9: Test-pitting Study Area (facing NW) 31
Image 10: Test-pitting Study Area (facing SE) 31
Image 11: Sample test pit from N end of Study Area (facing N) 31
Image 12: Study Area from N end (facing SE) 31
Image 13: Area of disturbance from previous quarrying (facing SW) 32
Image 14: Test-pitting Study Area (facing SE) 32
Image 15: Study Area showing kame and sloping (facing NW) 32
Image 16: Sloping at S end of Study Area (facing NE) 32
Image 17: Test-pitting Study Area (facing NW) 32
Image 18: Gravel drive at S end of Study Area (facing SE) 32
Image 19: Slope on NE side of Study Area – kame (facing SW) 33
Image 20: Slope on SW side of Study Area – kame (facing NE) 33

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1.0 PROJECT CONTEXT

1.1 Development Context

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Permission to access the Study Area and to conduct all activities associated with the Stage 1 and 2 archaeological assessment was provided by the proponent. The Study Area is located at 046365 Southgate Road 04, on Part Lot 31, Concession 3, former Township of Proton, Municipality of Southgate, in the County of Grey (Maps 1 – 3). The Study Area measures approximately 4.7 hectares.

The Ministry of Natural Resources and Forests required an archaeological assessment for the proposed gravel pit expansion. The archaeological assessment was triggered by the Aggregate Resources Act.

This archaeological assessment has been conducted under the 2011 Standards and Guidelines for Consultant Archaeologists (Ministry of Tourism, Culture and Sport 2011).

1.2 Historical Context

1.2.1 Current Environment

The Study Area measures approximately 859 meters long (southeast-northwest) by approximately 119 metres wide (east-west) at its widest. The Study Area is located approximately four kilometres west of the Grand River and six kilometres south of the South Saugeen River. There are a number of small tributaries of both rivers that run within a kilometer of the Study Area boundaries. There are no water sources located directly on the Study Area. The elevation of the Study Area ranges from between 490-500 metres above sea level (asl). The Study Area consists of a gravel kame moraine (hog's back), gravel driveways, and areas of previous quarrying/extraction. The Study Area has extensive slope, scrub and thickets of young trees.

1.2.2 Prehistory of Study Area

The Paleo-Indian period (ca. 11,000 – 9,500 BP), represents the first human populations in Ontario. These groups were migratory hunter-gatherers that travelled in small kin-based bands that subsisted on megafauna, such as caribou, small mammals, fish and local plant life. These nomadic groups had yet to develop ceramics and are distinguished by distinctive styles of chipped lithic points that developed during this period (Fitzgerald 2016:13-14). During the Paleo-Indian period the climate of the greater Bruce Peninsula experienced environmental changes, and was punctuated by three main episodes.

Between 12,500 - 10,000 BP, the climate in the area was warming, however, from 11,200 - 10,300 BP a colder interval occurred, which later gave way to a second period of cooling from 9,700 - 9,400 BP (ibid: 14). These climatic episodes loosely coincide with technological changes associated with the efforts of these small hunting groups to most effectively survive in a changing environment (i.e. changes in available fauna and flora).

The Early Paleo-Indian period (11,000 - 10,400 BP), and the Late Paleo-Indian period (10,400 - 9,500 BP) are both defined by notch-less and stem-less, lance-(leaf-) shaped projectile points (Fitzgerald 2016:14). Changes in lithic tool styles from the Early-to-Late periods are represented by a shift from points with channel flutes running along the central axis (Early), to those which lack fluting (Late).

Sites from this period are represented solely by lithic assemblages, however due to low population densities and shifting lake levels throughout the period, there is a paucity of archaeological evidence for these groups within the greater Bruce Peninsula. The Ministry of Tourism, Culture and Sport - MTCS (2019) has indicated there are no registered Early or Late Paleo-Indian sites located within a one kilometre radius of the Study Area.

The Archaic period (10,000 - 2,800 BP) is defined by a shift from the notch-less projectile points of the Late Paleo-Indian period to the development of basally-notched projectile points (Fitzgerald 2016:15). Although groups during this period remained nomadic aceramic hunters and gatherers, the raw materials used in tool production became much more diverse, and also included the development of groundstone tools in addition to chipped stone items.

The Archaic period is typically sub-divided into three main facets: Early Archaic (10,000 - 8,000 BP), Middle Archaic (8,000 - 4,500 BP), and Late Archaic (4,500 - 2,800 BP). The Early Archaic period coincides with a period of regional cooling and aridity as well as shifting lake levels and a pine dominated forest environment. Three distinct cultural horizons define the Early Archaic period, including: Side-notched (10,000 - 9,700 BP), Kirk/Nettling Corner-notched (9,800 - 8,900 BP), and LeCroy Bifurcate-based (8,900 - 8,000 BP) projectile point styles (ibid: 16).

During the Middle-Archaic period lake levels continued to rise and the climate warmed which appears to have spawned population growth as a result of an increase in, and diversity of food resources. Coincidentally this period is associated with a wide variety of utilitarian hunting, fishing, woodworking, food preparation, and hide working tools (ibid: 17). There were also many changes in projectile point styles themselves during the Middle-Archaic period.

The Late-Archaic period is one of projectile point style proliferation that is divided into three main complexes, including: Narrow Point (4,500 - 3,800 BP), Broad Point (4,000 - 3,400 BP), and Small Point (3,500 - 2,800 BP) styles (ibid: 17-18). These lithic complexes also have numerous and various sub-types that are attributed to specialized hunting technologies. It was also during the Late-Archaic period that trade and exchange networks began to enlarge, as did habitation and workshop site areas. The MTCS (2019) has indicated there are no sites registered as Early, Middle or Late Archaic period sites within a one kilometre radius of the Study Area.

Although they shared many traits with the earlier Late Archaic period, the Woodland period (2,800 - 350 BP / ca. 800 BC - 1650+ AD) groups are typically defined by the appearance of the first fired ceramics in Ontario (Fitzgerald 2016:18). This period is also further subdivided into Early (2,800 - 2,400 BP), Middle (2,400 - 1,300 BP) and Late (1,300 - 350 BP) facets. These phases are defined by various technological and organizational changes and subsistence practices, as well differing ceramic styles, forms, decorative motifs, and uses. Also, it was during the Early Woodland period that plants were first domesticated (i.e. horticulture and agriculture). Additionally, throughout the Woodland period settlement sizes began to increase and populations became more sedentary. These groups were now comprised of nuclear- and extended-family groups that would congregate in the spring and early summer when food supplies were abundant and reliable. The MTCS (2019) has indicated there are no registered archaeological sites from the Late Woodland period within a one kilometre radius of the Study Area.

1.2.3 Indigenous Historic Period

The Indigenous Historic Period runs from ca. 1700 to 1865 AD. Prior to contact with European settlers and explorers the southeastern portion of Grey County had been inhabited by the Odawa and Petun peoples (Garrad 2014). In 1616 Samuel de Champlain, Father Joseph le Caron, and a group of French explorers entered the region and visited the main village and up to nine additional villages in the region (Champlain 1929). These early accounts named the confederacy as the Petun, or Tobacco people. A more accurate designation would be the Tionontaté, or “people of the place where the hills are” (Garrad and Heidenreich 1978:396).

The Petun and Odawa in the area traded beaver pelts and in general practiced a way of life that did not really change from the pre-contact era. This changed with the establishment of the Mission of the Apostles by the Jesuits in 1639 (Garrad 2014:210). Over the following decade the combination of worsening environmental conditions, smallpox epidemics, and escalating raids from the Five Nation Iroquois placed severe

strains on the extant Petun populations. This culminated with the dispersal of the Petun from the region in 1650. The Odawa also vacated the area in 1650, but eventually returned shortly thereafter (Garrad 1979:29). The Odawa were part of the ancient Three Fires Confederacy of Ojibway, Odawa, and Pottawatomi.

About the year 1696, a fierce battle between the Ojibwa and Iroquois nations took place at Saugeen (present site of Southampton), resulting in the Ojibwa (known as "Chippewa") moving into the area where they remain today. The prelude to the "Battle of Skull Mound" had been shaping throughout the preceding decade as the two nations struggled for fur trade supremacy. Prior to moving into the Saugeen region, the Ojibwa (who called themselves "Anishnabe") lived around Lake Superior and traveled annually to trade with the French at Quebec and Montreal. The Iroquois attacked and killed several Ojibwa trade parties enroute to Quebec prompting a meeting of the Council of Chiefs at Saugeen to discuss the situation. After this meeting, the Iroquois agreed to pay a bale of furs for each man killed and to allow future parties to pass peaceably to Montreal. This arrangement worked well for three years until the Iroquois began once again attacking and killing Ojibwa trade parties on their return journeys. A full-scale war was put off until the following spring, giving each side time to call in their allies. Bloody battles occurred throughout the spring and summer culminating in the vicious meeting at Saugeen in which the Iroquois were defeated and driven south of Lake Ontario. The Ojibwa then retained all territories won during the battles until they surrendered them to the Crown more than a century later. After the defeat of the Iroquois, some Ojibway settled in the Saugeen Territory. [The route taken by the Three Fires to war with the Iroquois at the mouth of the Saugeen parallels the Lake Huron shoreline] (Schmalz 1977).

Throughout the eighteenth century the Saugeen Territory was inhabited by several generations of Ojibway whose immediate territory was threatened neither by war nor by European settlers. Some of these Ojibwa were the Wahbadicks, the Newashes, the Wahwahnoses, and the Metegwob who fished, trapped and hunted along the many rivers, streams and lakes of their lands (Schmalz 1977:2-9). The Chippewas of Saugeen First Nation and the Chippewas of Nawash First Nation share the same traditional territories in southwestern Ontario.

It should also be noted that there were many "foreign" Indigenous settlements of the territory coming from the United States. "Between 1837 and 1840, approximately 2000 Potawatomi refugees from Michigan, Indiana, Illinois, and Wisconsin moved into Ojibway/Chippewa and Odawa communities in southwestern Ontario - including those of the Saugeen Ojibway. As supporters of the British during the War of 1812 and being on the losing side of the 1832 Black Hawk War, the United States insisted that they abandon their traditional territory. The influx into southwestern Ontario resulted in the American Potawatomi immigrants soon outnumbering their Ojibway/Chippewa hosts" (Fitzgerald 2016:30).

The Saugeen Ojibway Nation traditional territories cover the watersheds bounded by the Maitland River and the Nottawasaga River (east of Collingwood on Georgian Bay).

The area includes all the Bruce Peninsula (which was once known as the Saugeen Peninsula), all of Grey and Bruce Counties, and parts of Huron, Dufferin, Wellington and Simcoe Counties.

1.2.4 Historic Métis

The Historic Saugeen Métis are descendants of the Métis who traded at Saugeen. Pierre Piché was considered the first Métis in the area, trading in about 1816. The Ojibwa invited Piché to share the resources within the Saugeen territory, but also required him to "share" in the protection of these same resources and the environment for mutual benefit.

"In 1816-1818, Wampum, strings of beads, was presented to Piché as a tangible reminder, and enduring record, of the historic diplomatic exchange, and the words spoken between the Ojibwe and Métis, that formed their peaceful and sharing relationship in the Saugeen territory" (HSM 2018).

The Historic Saugeen Métis are descended from unions between European traders and indigenous women. The Lake Huron watershed Métis "lived, fished, hunted, trapped and harvested the lands and waters of the Bruce Peninsula, the Lake Huron proper shoreline and its watershed. These are considered the traditional Métis territory.

The contemporary Métis community extends for 275 km of the Lake Huron shoreline, from Tobermory to south of Goderich, and includes the Counties of Bruce, Grey, and Huron.

The MTCS (2019) has indicated there are no registered Métis archaeological sites located within a one kilometre radius of the Study Area.

1.2.5 Euro-Canadian Historic Period

To accommodate British and European immigration, officers of the Crown began their quest to secure lands from the Indigenous people toward the end of the 18th century. Large portions of the Mississauga Tract along the northern shore of Lake Ontario had been obtained in 1792 and the bulk of the Huron Tract south of present-day Bruce County in 1825. Following the War of 1812, settlement pressures prompted the British Government to enter into negotiations with the Odawa to purchase over 500,000 hectares of land south and west of Lake Simcoe. These negotiations were concluded with the Lake Simcoe-Nottawasaga purchase (Treaty 18) in 1818 (Surtees 1994:116). This purchase included those portions of Grey County lying to the east of Artemesia, Euphrasia and St. Vincent townships, and included Proton Township.

On August 9, 1836, after negotiations on Manitoulin Island between the chiefs of the Saugeen Ojibwa and the Government of Upper Canada led by Sir Francis Bond Head, the Crown gained title to approximately 1.5 million acres (~607,028 hectares) of Indigenous land along the shores of Lake Huron (Maps 4 and 5). The "Saugeen Tract Agreement" as it was called, was registered as Crown Treaty # 45 ½ and included the

western portion of Grey County and all of present-day Bruce County except for the peninsula area north of Southampton.

The Township of Proton is located in the southeast part of Grey County. It is one of the more topographically level of the townships, with much low-lying swampy lands. A gravel kame moraine snakes its way north to south along the western side of the township, and it is from this kame moraine that most of the gravel used in the roadways was obtained (Marsh 1931).

Proton was surveyed in two parts. The first, known as the 'old survey' occurred in 1840 along the eastern portion of the township. It bordered the Toronto and Sydenham Road, the two roads allowing for settlement in the area to be more accessible. The government offered the settlers 50 acres (20.2 ha) free, with the idea that the remaining 50 acres (20.2 ha) could be purchased in ten years' time. The first settlers in the township located themselves on lots along the Toronto and Sydenham Road in 1843, and in 1851 the first post office opened in Inistioge (Marsh 1931).

The second survey of Proton Township, which became known as the 'new survey' was conducted by David Gibson, Esq., P.L.S. in 1850. This land was located to the west of the Toronto and Sydenham Road. After it was surveyed, settlers started trickling in, and by 1860 a fair amount of the township had been settled. The first sawmill was erected in 1857, and the first frame barn in 1865. By 1861 the little township had a population of 1440 people. The township of Proton was incorporated on January 1, 1857 (March 1931).

1.2.5.1 Specific Lot History: Part Lot 31, Concession 3, Proton Township

According to the 'Abstract Land Index', the Study Area is located on part of Lot 31, Concession 3 in Proton Township. The first entry into the Abstract Land Index is a mortgage taken out by a Benjamin Lichty and his wife on October 1, 1879 for $1,250. This was for the entire 100 acres (40.5 ha). The next two entries within the Index are for Tax Deeds issued in 1882 and 1884 by the County. Charles K. Willoughby purchased both of these. He first purchased the east half of the property for $15.01, and the then he purchased the west 49 acres (19.8 ha) for $12.25. Charles Willoughby may have been attempting to purchase property to start his own farm as he would only have been in his early twenties at the time. The 1881 Census lists Charles Willoughby (18 years old) as a farmer still living with his father and mother in Proton Township. Charles Willoughby took out a number of mortgages on the property over the next 10 years, suggesting improvements (possibly buildings) to the property. By 1891 the Willoughby's are no longer listed in the Grey County Census records.

The east half of the property had been mortgaged to Elizabeth McLachlan in 1891, and the west half to Robert M. McCune in 1892, and these two passed the mortgages on to John A. Lang and Albert Grey in 1894. The two halves of the lot continued to be passed around through a series of mortgages and quit claims until a Patent for each half of the lot was issued on December 18, 1902 to Mary Ann Rodgers (Rogers). Mary A. Rodgers

appears in the 1901 Census (age 30 years) as the wife of Thomas Rodgers, an Irish farmer located in Proton Township.

By 1940 Mary Ann Rodgers, now a widow, granted the property (100 acres/40.5 ha) to her son William John Rodgers. On December 21, 1977, Lot 31 Concession 3 passed to the remaining Rodgers siblings, Joseph and Lillie, and their spouses. On April 3, 1997, Lillie C. Rodgers transferred the lot to Douglas Rodgers for $2.00. He only kept the lot for the next 25 days before selling it to William Henry Woolley for $45,000.

1.2.6 Plaques, Monuments and Designated Properties

There are no commemorative/historic plaques, monuments or designated properties within a one kilometre radius of the Study Area (OHP 2019; OHT 2019).

1.2.7 Determination of Archaeological Potential

There are a number of variables that are evaluated when determining archaeological potential. These include:

- presence of previously identified archaeological sites,
- water sources (primary, secondary, features indicating past water sources, accessible or inaccessible shoreline),
- elevated topography,
- pockets of sandy soil in heavy soil or rocky ground,
- distinctive land formations,
- resource areas (food or medicinal plants, scarce raw materials, early Euro-Canadian industry),
- non-Aboriginal settlement (monuments, cemeteries),
- areas of early Euro-Canadian settlement;
- early historic transportation routes;
- listed or designated heritage property; and,
- and properties with archaeological potential as identified by local histories or informants.

The Stage 1 archaeological assessment indicated that the Study Area exhibits archaeological potential based on its proximity to primary water sources (i.e. The Grand River and South Saugeen River); secondary water sources (i.e. tributaries and wetlands); elevated topography; and a strong Indigenous and early Euro-Canadian presence in the geographic area.

1.2.8 Rationale for Fieldwork Strategy

The Study Area consists of a gravel kame moraine with extensive slope, scrub and areas of thickets of young trees. There are also areas of previous quarrying and gravel driveways located at the south end of the Study Area. The Study Area was, therefore, subject to a test pitting survey conducted in standardized five metre intervals as the area could not be ploughed and visual assessment of any open areas (previously

extracted). Those areas of with slopes in excess of 20 degrees, as well as areas of deep and extensive disturbance (previous quarrying, gravel driveways) were not subject to archaeological field assessment, other than the visual assessment noted above.

1.3 Archaeological Context

1.3.1 Previously Known Archaeological Resources/Assessments

A search conducted on October 22nd, 2019 through the Ministry of Tourism, Culture and Sport PastPortal site indicated that there are no registered archaeological sites located within a one kilometre radius of the Study Area. A second search was conducted on October 29th, as the area had been enlarged for by the proponent. No registered sites were noted with this change in scope either.

1.3.2 Current Environment – Existing Features

The Study Area consists of a gravel kame moraine (hog's back), gravel driveways, and areas of previous quarrying. The Study Area has extensive slope, scrub and thickets of young trees. There were no extant structures or ruins within the Study Area.

1.3.3 Physiography, Bedrock and Topography

The Study Area lies in the physiographic region known as the Dundalk Till Plain. The Dundalk Till Plain is the 'roof of peninsular Ontario' and comprises an area of 925 square miles (~76,404 hectares). The area is characterized by drumlinoidal swells to the north and west of Dundalk, while the main part of the area is a fluted till plain, with the flutings running southeastward, making the surface appear scored by shallow troughs. The Dundalk Till Plain is bounded by moraines and drumlin fields. With an elevation range of 1,400 – 1,750 feet (426 - 533 m asl), this region forms the watershed from which the headwaters of the Saugeen, Maitland, Grand and Nottawasaga Rivers originate. The plain is characterized by swamps, bogs and poorly drained depressions. The original surveyor of the area simply labeled his map "all swamp" and noted it was some of the "meanest land" he had ever surveyed (Chapman and Putnam 1973:204-209).

The underlying bedrock of the area is the Lockport Guelph formation (Chapman and Putnam 1973:4-5).

The Study Area is a kame moraine. Kames consist of sand and gravel that were deposited by water that was under, in, on or against stagnant glacial ice. They can also be deposited by meltwater along the edges of the ice, or through holes in the ice. In large numbers they produce an irregular, hummocky landscape (Trenhaile 2010). Kame moraine deposits sit well above the surrounding landscape (Images 3, 5, and 7).

The Study Area has an elevation range between 490-500 metres above sea level (Map 2).

1.3.4 Prehistoric Shorelines

About 18,000 years ago, the Laurentide Ice Sheet covered all of southeastern Canada including what is now the County of Grey. Some 5,000 years later, the sheet began to melt and recede northward exposing the Grey-Bruce area. At that time, all of the County of Grey lay submerged under the glacial waters of the lake and, over the next few millennia, the lake waters lashed and beat the land. The waves of Algonquin reworked the sand and gravel deposited by the glaciers and formed terraces with boulders, gravel bars and sand dunes while building a massive leaving behind what is now Lake Huron and Georgian Bay. Glacial Lake Algonquin as well as Lake Nipissing left behind traces of their beaches along both the shores of Georgian Bay as well as Lake Huron.

There are not prehistoric shorelines located within one kilometer of the Study Area (Goldthwait 1910; Chapman & Putnam 1973).

1.3.5 Soils

The Study Area covers three different soil types. The first of these is Donnybrook sandy loam, which is a poorly sorted outwash with good drainage, moderately to very gravelling and with irregular moderate to steep sloping. The second soil is Listowel silt loam, which is a sill based soil with imperfect drainage and has a smooth to gently sloping topography and is only slightly stony. The final soil identified within the Study Area is Muck, which is an organic soil with no stones and poor drainage (Gillespie & Richards 1954). Site observations noted that the soils were gravelly, with some loam and clay, and large cobbles.

1.3.6 Drainage

The Study Area is located within a network of tributaries of both the South Saugeen River and the Grand River, some of which are within one kilometer of the Study Area. The Grand River itself is four kilometers east of the Study Area, while the South Saugeen River lies approximately six kilometers north or the Study Area. There are no water sources located directly on the Study Area.

1.3.7 Vegetation

The Study Area consists of a gravel kame moraine (hog's back), gravel driveways, and areas of previous quarrying. Vegetation within the Study Area included grasses, low-lying scrub, as well as thickets of young deciduous and coniferous trees including cedar, poplar, maple and birch.

1.3.8 Dates of Fieldwork

The Stage 2 archaeological assessment was conducted over three days under good weather and lighting conditions: October 18th 2019, under partly sunny skies, a light breeze and a high of 4; October 21st 2019, under partly sunny skies, a light breeze and a high of 14 degrees Celsius; and, October 24th 2019, under overcast skies, with a light breeze and a high of 6 degrees Celsius.

As per the Ministry of Tourism, Culture and Sports' Standards and Guidelines (2011: Section 2.1, Standard 3) the fieldwork was conducted under the appropriate lighting and weather conditions.

2.0 FIELD METHODOLOGY

2.1 Stage 1 (Background Research)

As part of the background research, an examination of the following was conducted:

- the Site Registration Database (maintained by the Ontario Ministry of Tourism, Culture and Sport) was examined for the presence of known archaeological sites in the project area and within a radius of one kilometer of the project area by contacting the data coordinator of the Ministry of Tourism and Culture;
- reports of previous archaeological fieldwork within a radius of 50 m around the property;
- topographic maps at 1:10 000 (recent and historical) or the most detailed map available;
- historic settlement maps such as the historic atlases;
- available archaeological management/master plans or archaeological potential mapping;
- commemorative plaques or monuments; and,
- any other avenues that assist in determining archaeological potential were examined.

There are no registered archaeological sites within a one kilometre radius of the Study Area (MTCS 2019). There are no commemorative/historic plaques, monuments or heritage designations within a one kilometre radius of the Study Area (OHP 2019; OHT 2019). The County of Grey does not have an archaeological management plan. Topographic and historic maps are presented in the Map Section at varying scales.

2.2 Stage 2 (Archaeological Assessment)

Approximately 39% of the Study Area was subject to Stage 2 test pitting survey as it consists of an area of trees and level ground along the top of the kame that could not be ploughed. The remaining 61% of the Study Area consists of slope greater than 20 degrees (57%), and areas disturbed from previous quarrying and gravel driveways (4%) (Map 10).

The Stage 2 archaeological assessment was conducted over three days under good weather and lighting conditions: October 18th 2019, under partly sunny skies, a light breeze and a high of 4; October 21st 2019, under partly sunny skies, a light breeze and a high of 14 degrees Celsius; and, October 24th 2019, under overcast skies, with a light breeze and a high of 6 degrees Celsius.

All field activities were photo documented and are presented in Images 1 - 20, and Map 8. The test pitting survey was conducted in standardized five metre intervals. All test pits were excavated a minimum of five centimeters into sterile subsoil (when present), and a minimum of 40-50 centimeters into the gravel deposits when subsoil was lacking; and had a minimum of 30 centimeters in diameter. Pit contents were screened through six

millimeter metal mesh. All test pits were backfilled. Areas of previous extraction were subject to a visual assessment in case any deeply buried archaeological remains were located in the remaining soils/rocks.

All field activities were photographed and documented (Map 8, Images 1 – 20).

The archaeological potential of the Study Area is presented in Map 9, and the Stage 2 methodology is illustrated in Map 10.

3.0 RESULTS

3.1 Stage 1 Archaeological Assessment

The Stage 1 archaeological assessment indicated that the Study Area exhibits archaeological potential based on its proximity to primary water sources (i.e. The Grand River, and South Saugeen River); secondary water sources (i.e. tributaries and wetlands); elevated topography; and a strong Indigenous and early Euro-Canadian presence in the geographic area.

3.2 Stage 2 Archaeological Assessment

Approximately 39% of the Study Area was subject to Stage 2 test pitting survey as it consists of an area of trees and level ground along the top of the kame that could not be ploughed. The remaining 61% of the Study Area consists of slope greater than 20 degrees (57%), and areas disturbed from previous quarrying and gravel driveways (4%) (Map 10).

The Stage 2 archaeological assessment was conducted over three days under good weather and lighting conditions: October 18th 2019, under partly sunny skies, a light breeze and a high of 4; October 21st 2019, under partly sunny skies, a light breeze and a high of 14 degrees Celsius; and, October 24th 2019, under overcast skies, with a light breeze and a high of 6 degrees Celsius.

All field activities were photo documented and are presented in Images 1 - 20, and Map 8. The test pitting survey was conducted in standardized five metre intervals. All test pits were excavated a minimum of 5 centimeters into sterile subsoil (when present), and a minimum of 40-50 centimeters into the gravel deposits when subsoil was lacking; and had a minimum of 30 centimeters in diameter. Pit contents were screened through six millimeter metal mesh. All test pits were backfilled. Sporadic visual assessment of previously extracted areas was conducted to determine if there were any deeply buried archaeological remains. The latter is not included in the mapping of methodology as it was sporadic.

All field activities were photographed and documented (Map 8, Images 1 – 20).

The archaeological potential of the Study Area is presented in Map 9, and the Stage 2 methodology is illustrated in Map 10.

3.3 Inventory of Documentary Records Made In Field

Documents made in the field include:

- Daily record log and field notes – 4 pages (double-sided)
- Image log – 1 page (double-sided)
- Digital images – 20 colour images
- Field map showing location and orientation of images taken – 1 page.

4.0 ANALYSIS AND CONCLUSIONS

The Stage 1 archaeological assessment indicated that the Study Area exhibits archaeological potential based on its proximity to primary water sources (i.e. The Grand River, and South Saugeen River); secondary water sources (i.e. tributaries and wetlands); elevated topography; and a strong Indigenous and early Euro-Canadian presence in the geographic area.

No archaeological materials, features or sites were located during the Stage 2 archaeological assessment.

Based on Section 2.2 of the 2011 MTCS Standards and Guidelines, no further archaeological assessment is required for the Study Area. The remainder of the lot still retains archaeological potential and must be subject to Stage 2 archaeological assessment should any development be proposed for the lot.

5.0 RECOMMENDATIONS

Based upon the Stage 1 background research of past and present conditions, and the Stage 2 archaeological assessment, the following is recommended:

- No further archaeological assessment is required for the Study Area;
- The remainder of the lot still may retain archaeological potential and must be subject to a Stage 2 archaeological assessment should any development be proposed for the lot, excepting the Study Area, and,
- Compliance legislation must be adhered to in the event of discovery of deeply buried cultural material or features.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

According to the 2011 Standards and Guidelines (Section 7.5.9) the following must be stated within this report:

This report is submitted to the Minister of Tourism, Culture and Sport 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 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 an 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 sec. 48 (1) of *the Ontario Heritage Act*.

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 require 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 license.

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8.0 TABLES

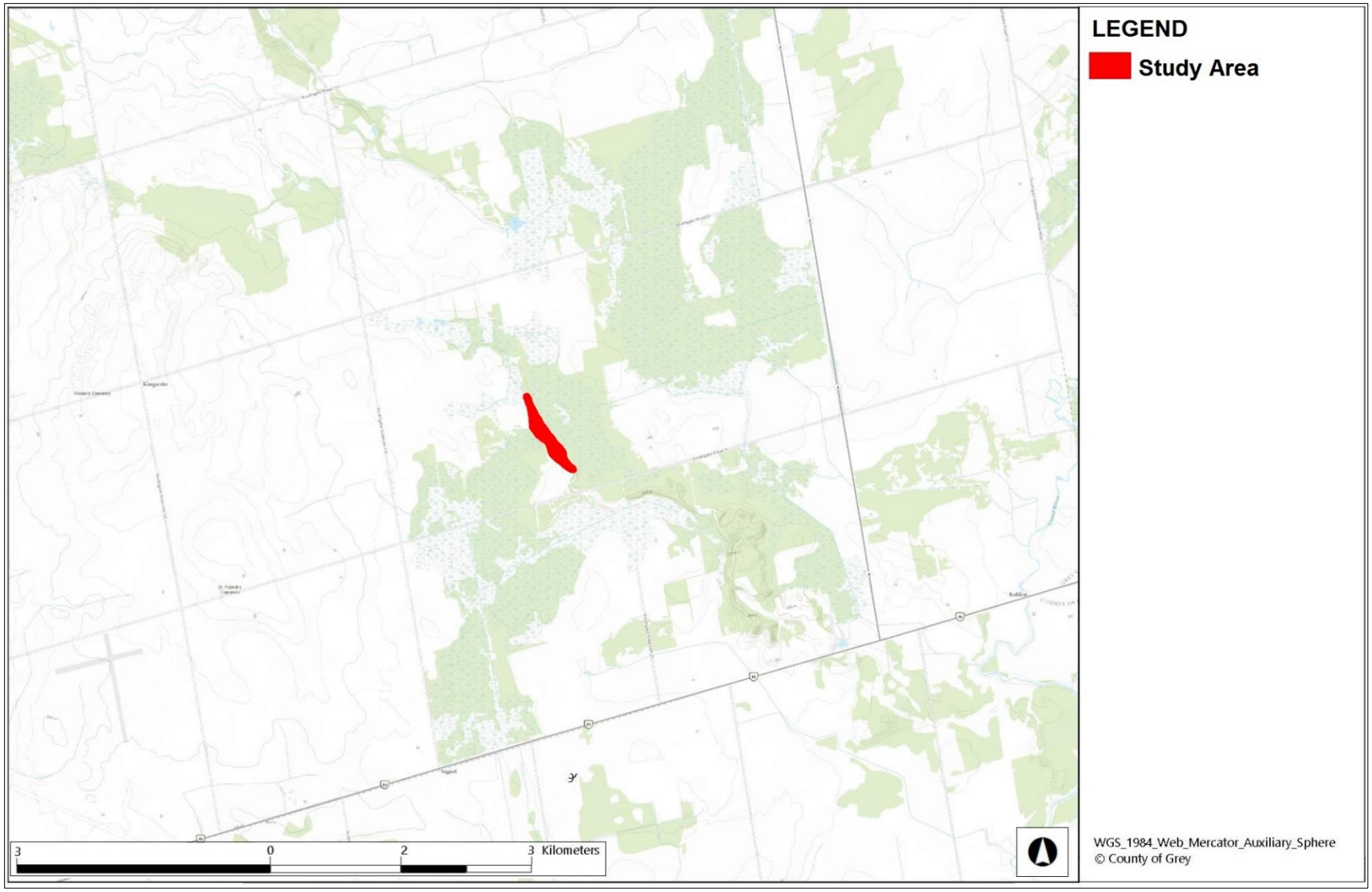
Table 1: Abstract Index for Part Lot 31, Concession 3, Proton Township

Inst #	Inst.	Date	Grantor	Grantee	Comment
2257	M	Oct 1 1879	Benjamin Lichty et ux	John Gordon	$1250 100 acres
3155	Tax Deed	Nov 13 1882	Warden & Treasurer	Chas K. Willoughby	$15.01 E ½
3780	Tax Deed	Nov 28 1884	Warden & Treasurer	Chas K. Willoughby	$12.25 West 49 acres
4907	Agreement to sell	Nov 14 1888	Charles K. Willoughby	John C Lang	$600 E ½ 50 acres
5057	Assign	Apr 18 1889	Charles K. Willoughby	Robert Steel	$500 W ½ 50 acres
5317	QC	28 Apr 1890	Robert Steel	C.K. Willoughby	$900 W ½ 50 acres & Lot 38
5863	Assign	Nov 30 1981	Chas K Willoughby	Elizabeth McLachlan	$1.00 E ½ 50 acres
6015	QC	Nov 28 1892	Chas K Willoughby (unmarried)	John C. Lang	$600 E ½ 50 acres
6102	QC	Apr 1 1892	Chas K Willoughby (unmarried man)	Robert McCune	$400 W ½ 50 acres subj. to amount due Crown
6578	Assign	Nov 21 1894	Elizabeth McLachlan	John Alex. Lang	$150 E ½
6583	QC	Nov 23 1894	Robert M. McCune, bachelor	Albert Gray	$600 W ½ 50 acres
6584	M	Nov 23 1894	Albert Gray	Robert M. McCune	$450 W pt 50 acres
6883	Ass M	Aug 15 1895	Robert M McCune	Waterloo M. Company	$466.49 W pt 50 acres
7655	QC	Jul 11 1898	Albert Grey, et ux	Robert McCune	$1.00 W ½ 50 acres
7687	QC	Mar 7 1898	John A. Lang, et ux	George Y Scott	$400 E ½ 50 acres
8545	Ass of M	Jan 1 1901	Waterloo Mfg. Co	Robert McCune	$1.00 W pt 50 acres not reg in full
	Patent	Dec 18 1902	Crown	Mary Ann Rogers	E ½ 50 acres, SLS
8859	Copy of Patent	Dec 18 1902	Crown	Mary Ann Rogers	$50 E ½ 50 acres
	Patent	Dec 14 1903	Crown	Mary Ann Rodgers	W ½ 50 acres Crown Sale
11177	Offer	May 13 1909	Thomas Rodgers	Huron & Erie LS Co	$400 offer to purchase E ½ 34 Concession 2
11880	Release	Feb 28 1917	Huron & Erie Mortgage Company	Thomas Rodgers and Mary A Rodgers	Premised and $1.00 purpose to release offer dated May 13 1909, also with ?
12446	Oil & Gas Grant	Jun 19 1919	Thomas Rodgers	Great Northern Oil Co	Agreement - 250 acres with other lands ? Thos, Rodgers signs
15409	Grant	Aug 17 1940	Mary Ann Rodgers (widow)	Wm J. Rodgers	Assump. of Mort ? $1.00 100 acres sub to M

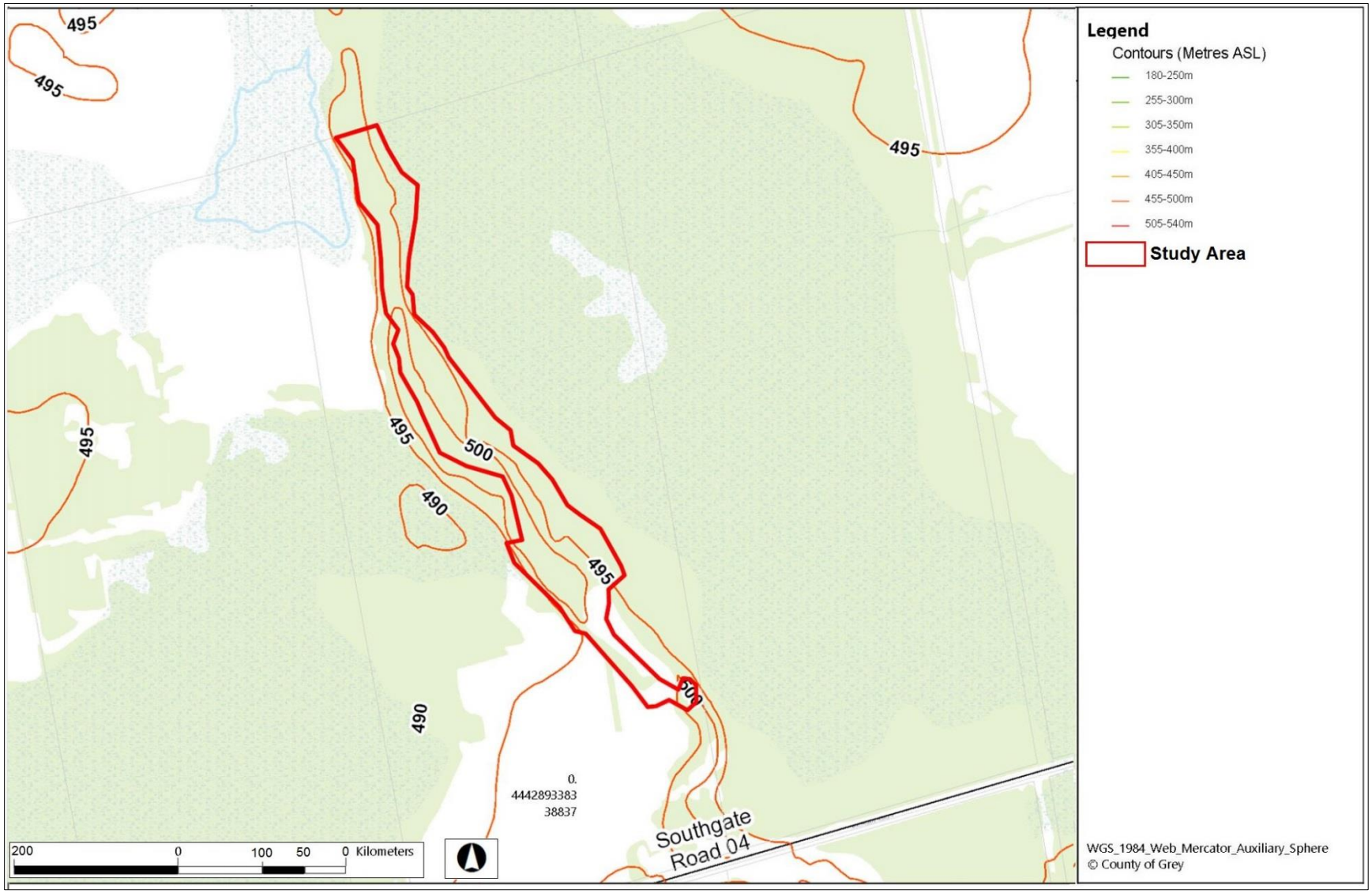
Inst #	Inst.	Date	Grantor	Grantee	Comment
4???3	Grant	16 Sept 1963	Lawrence Robson, admin exor's Vanessa McIntosh (dec'd and John Rodgers)	Melville Robson, his wife Ethel Robson, joint tenants	$2200, right of way and lot 30
60504	Consent	Mar 14 1968	Treasurer of Ontario	Estate of William John Rodgers	
70034	Estate Tax Consent	Mar 21 1968	Estate of William John Rodgers		
103451	Deed	Apr 29 1977	Joseph Thomas Rodgers and Lillie May Wagner, and Marlene Watt, and William Nicholson Jr and Ronald Nicholson and Mary Francis and Ethel Robson and Lorna Stewart and Harry McIntosh and John McIntosh	Joseph Thomas Rodgers and Lillie May Wagner, and Marlene Watt, and William Nicholson Jr and Ronald Nicholson and Mary Francis and Ethel Robson and Lorna Stewart and Harry McIntosh and John McIntosh	Other consid'n and $2.00 100 acres
104863	Deed	Dec 21 1977	Joseph Thomas Rodgers, et ux	Joseph Thomas Rodgers and Lillie L Rodgers, his wife and Douglas E Rodgers	Other consid'n and $2.00 100 acres
380511	Transfer	Apr 3 1997	Lillie C. Rodgers	Douglas Rodgers	$2.00 All
380512	Deposit	Apr 2 1997	See Deposit No 380512		All
381316	Transfer	Apr 28 1997	Douglas Rodgers	William Henry Woolley	$45000.00 All
381317	Deposit	Apr 28 1997	See Deposit No 381317		All & OL
534394	Transfer	Jan 12 2007	William Henry Woolley	William Henry Woolley, Dianne Edna Woolley at JT	$1.00 All

9.0 MAPS

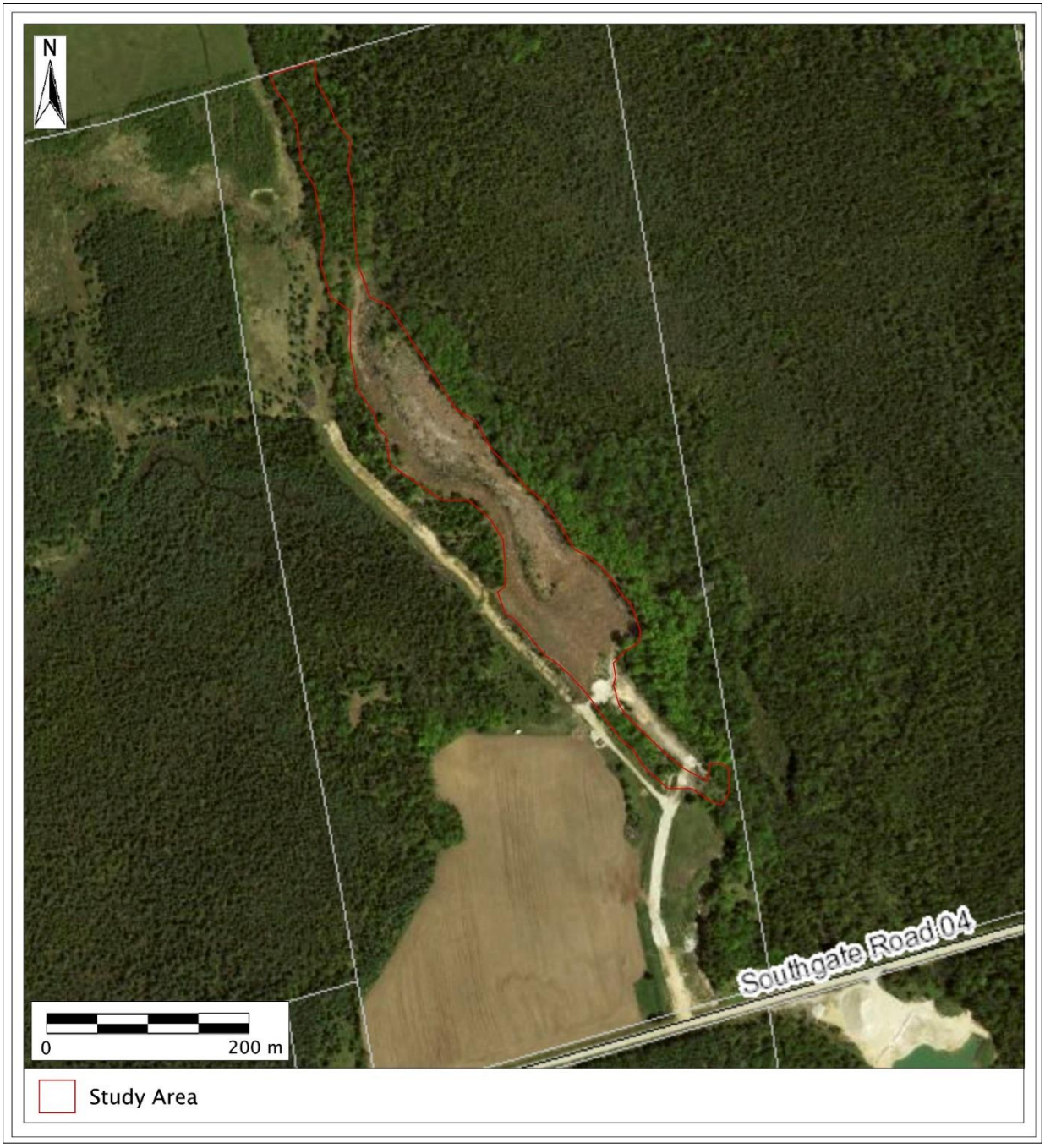
Map 1: Regional Location of Study Area (Grey County 2019)



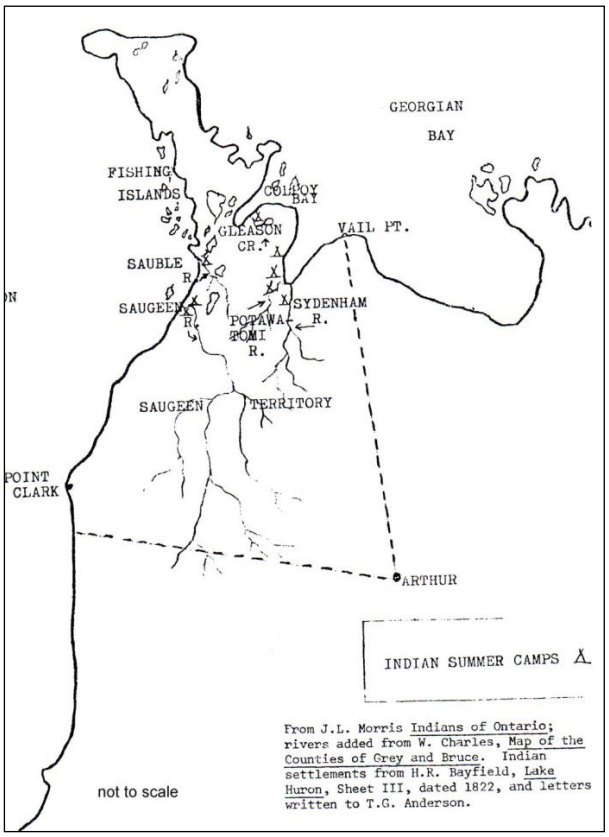
Map 2: Topographic Map of Study Area (Grey County 2019)



Map 3: Aerial of Study Area (Grey County 2019)

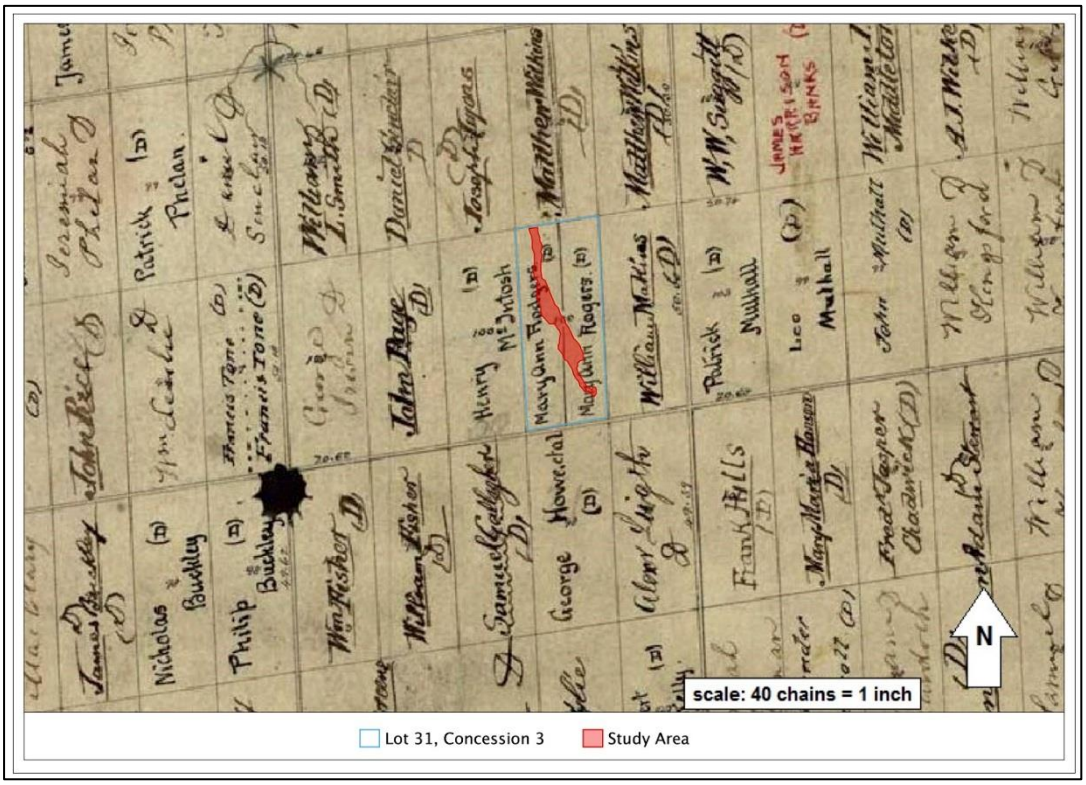


Map 4: Saugeen Lands Before Surrender (Schmalz 1977)

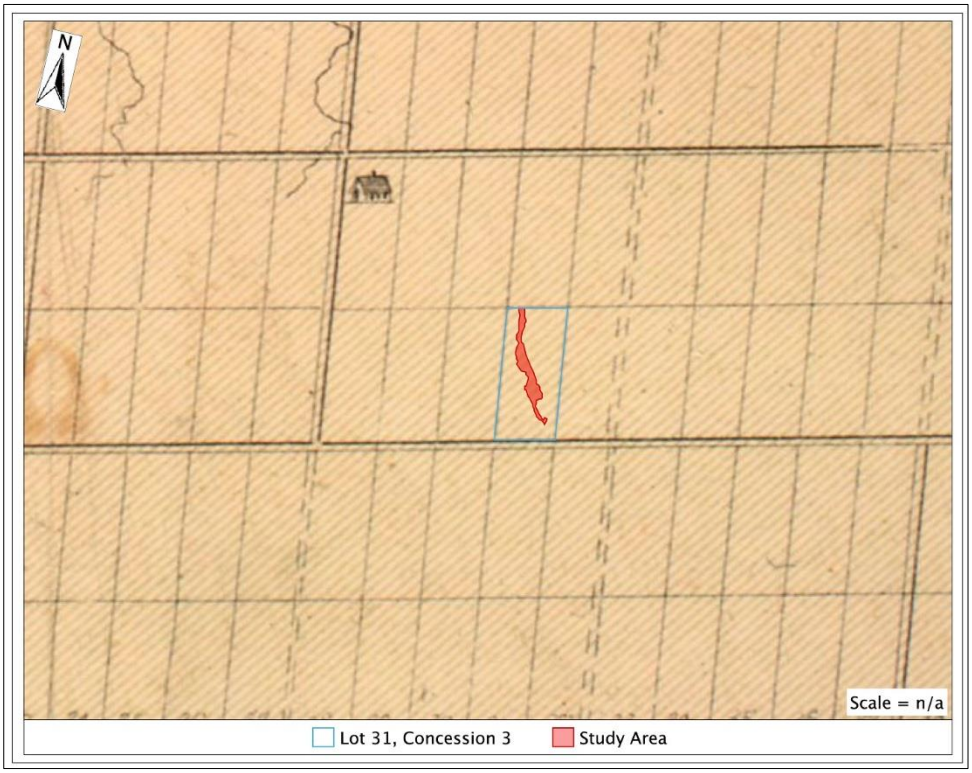


Map 5: Section of Map of Ontario First Nations and Treaties (Ontario.ca/treaties)

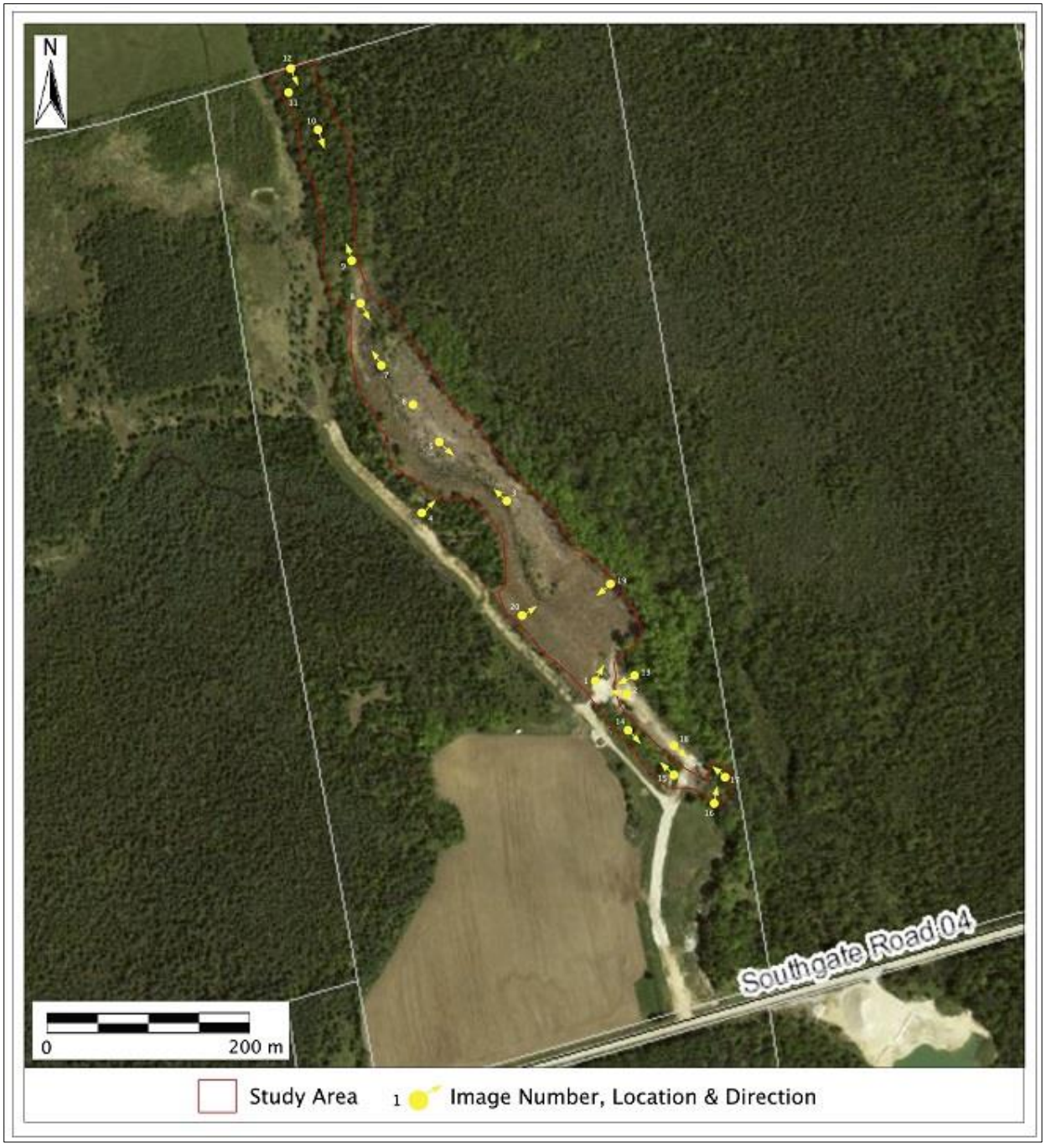
Map 6: 1862 Map of Proton Township



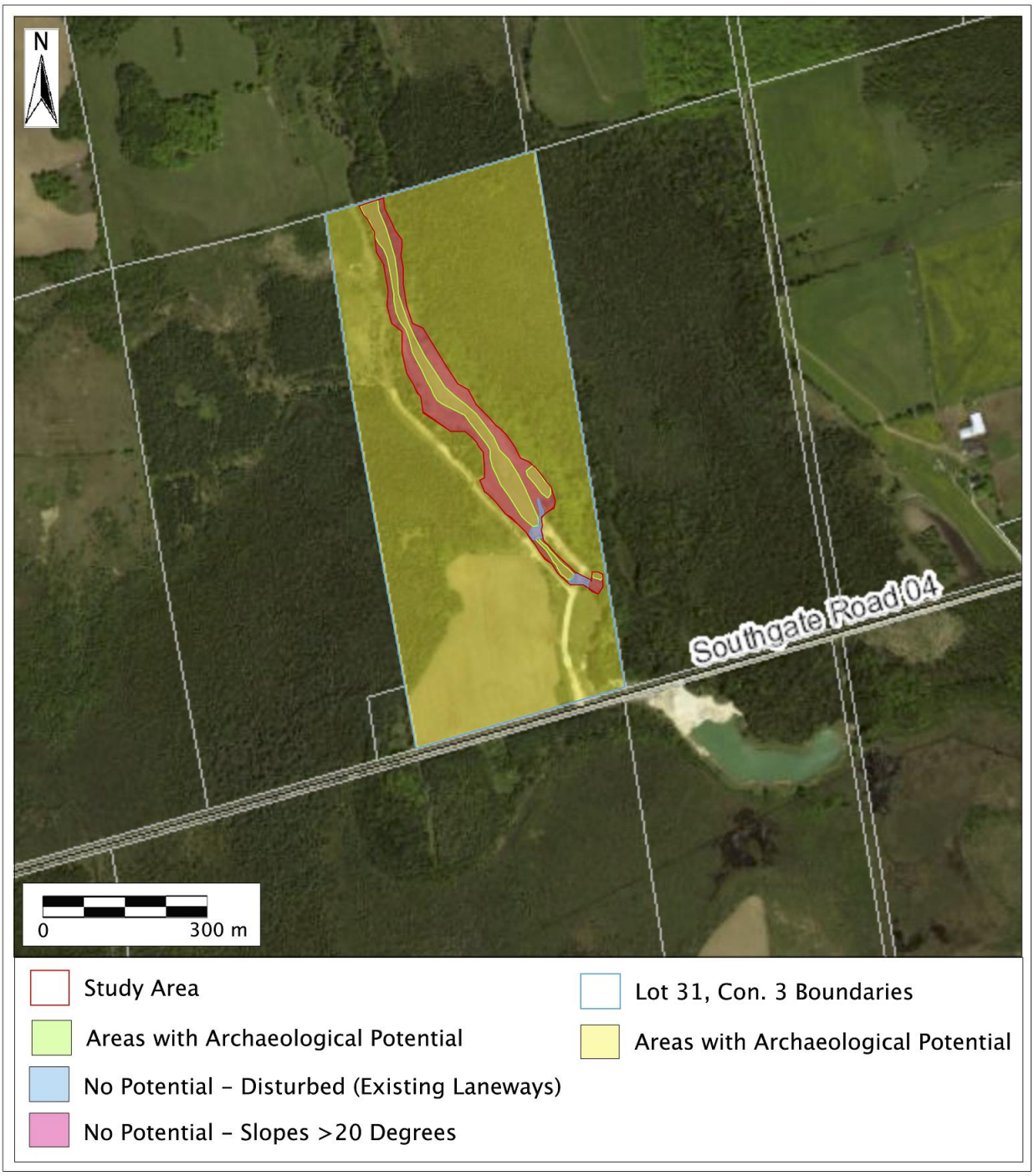
Map 7: 1880 Illustrated Historic Atlas Map Section (Belden & Co 1880**)**



Map 8: Location and Direction of Images



Map 9: Areas of Archaeological Potential



Map 10: Stage 2 Assessment Methodology

10.0 IMAGES

Image 1: Test-pitting along top of kame (facing NE)

Image 2: Gravel kame from S end (facing NW)

Image 3: Test-pitting along top of Kame (facing NW)

Image 4: Study Area from W side showing slope (facing NE)

Image 5: Testing-pitting along top of kame (facing SE)

Image 6: Sample test pit (facing N)

Image 7: Study Area showing slope (facing NW)

Image 8: Study Area showing slope along the kame (facing SE)

Image 9: Test-pitting Study Area (facing NW)

Image 10: Test-pitting Study Area (facing SE)

Image 11: Sample test pit from N end of Study Area (facing N)

Image 12: Study Area from N end (facing SE)

Image 13: Area of disturbance from previous quarrying (facing SW)

Image 14: Test-pitting Study Area (facing SE)

Image 15: Study Area showing kame and sloping (facing NW)

Image 16: Sloping at S end of Study Area (facing NE)

Image 17: Test-pitting Study Area (facing NW)

Image 18: Gravel drive at S end of Study Area (facing SE)

Image 19: Slope on NE side of Study Area – kame (facing SW)

Image 20: Slope on SW side of Study Area – kame (facing NE)

APPENDICES

Appendix A – Image Log

Image #	Description	Direction
1	Test-pitting along top of kame	NE
2	Gravel kame from S end	NW
3	Test-pitting along top of Kame	NW
4	Study Area from W side showing slope	NE
5	Testing-pitting along top of kame	SE
6	Sample test pit	N
7	Study Area showing slope	NW
8	Study Area showing slope along the kame	SE
9	Test-pitting Study Area	NW
10	Test-pitting Study Area	SE
11	Sample test pit from N end of Study Area	N
12	Study Area from N end	SE
13	Area of disturbance from previous quarrying	SW
14	Test-pitting Study Area	SE
15	Study Area showing kame and sloping	NW
16	Sloping at S end of Study Area	NE
17	Test-pitting Study Area	NW
18	Gravel drive at S end of Study Area	SE
19	Slope on NE side of Study Area – kame	SW
20	Slope on SW side of Study Area – kame	NE