Stage 1 & 2
Archaeological Assessment

William Street and Part of Albert Street
& Part of Firstbrook Avenue
Registered Plan 327
Part of Lot 14 Concession 4
Geographic Township of Tiny
Simcoe County

Prepared for:
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Tiny, Ontario
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Licensee: Shane McCartney
PIF: P321-0125-2020
Original Report

Earthworks Archaeological Services Inc.
2365 Watts Road,
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June 15, 2020

Executive Summary

Earthworks Archaeological Services Inc. was retained to conduct a Stage 1 & 2 archaeological assessment of a 5.42 hectare area located on William Street and Part of Albert Street and Part of Firstbrook Avenue Registered Plan 327, and part of Lot 14, Concession 4 in the Geographic Township of Tiny, Simcoe County, Ontario. The assessment is undertaken as part of a Plan of Subdivision Application and is being conducted as part of the requirements defined in Section D.5.6.2 of *The Township of Tiny Official Plan*, which states that development and site alteration shall only be permitted on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal and documentation, or by preservation on site

The study area contains evidence of archaeological potential. The location of the study area within 100 metres of present-day County Road 6, a historically mapped transportation route, indicates the potential to recover Euro-Canadian archaeological resources. In summary, a Stage 2 archaeological assessment was determined to be required in order to identify and document any archaeological material that may be present. A portion of the study area is a ploughed agricultural field, and as a result, a combined test pit and pedestrian survey was determined to be required.

The Stage 2 archaeological assessment of the study area was conducted on May 12, 2020 under PIF #: P321-0125-2020, issued to Shane McCartney, M.A. (P321). The weather during the survey was sunny and mild. The study area was ploughed and had been weathered by heavy rainfall. The topsoil was completely exposed, with an estimated surface visibility of 80% of the ploughed ground surface. At no time were weather or lighting conditions detrimental to the observation or recovery of archaeological material. Approximately 78% of the study area was assessed through a pedestrian survey. Pedestrian survey transects were spaced at maximum intervals of 5 metres apart. Approximately 3% of the study area was not assessed due to it being subject to subsurface disturbance from the construction of a barn and gravel entryways, all of which were not assessed. The remaining 19% of the study area was assessed through a test pit survey. Test pits were spaced at maximum intervals of 5 metres apart. Each test pit was excavated by hand to 30 centimetres in diameter and were excavated into the first 5 centimetres of subsoil. Depth varied between 25 and 35 centimetres. Each test pit was examined for stratigraphy, cultural features, or evidence of fill, and all soil was screened through wire mesh of 6 millimetre width. All test pits were backfilled. The soil stratigraphy consisted of a medium brown sandy loam topsoil horizon overlaying a medium orange sandy loam subsoil . No archaeological material was identified during the course of the survey.

Based on the results of the Stage 1 background investigation and the subsequent Stage 2 test pit survey and pedestrian survey, the study area is considered to be free of archaeological material. Therefore, no additional archaeological assessments are recommended.

The Ministry of Heritage, Sport, Tourism and Culture Industries is requested to review this report and provide a letter indicating their satisfaction that the fieldwork and reporting for this archaeological assessment are consistent with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences, and to enter this report into the Ontario Public Register of Archaeological Reports

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Project Personnel

Managing Director:	**Anthony Butler, M.Sc. (P310)**
Licensed Archaeologist:	**Shane McCartney, M.A. (P321)**
Licensed Field Director:	**Michael Golloher, M.Sc. (R1037)**
Field Technician:	**Brian Ellis (A1220)**
Report Production:	**Michael Golloher, M.Sc. (R1037)**
Technical Review:	**Shane McCartney, M.A. (P321)**
Graphics:	**Shane McCartney, M.A. (P321)**

1.0 Project Context

1.1 Development Context

Earthworks Archaeological Services Inc. was retained by West Ridge Development Corporation to conduct a Stage 1 & 2 archaeological assessment of a 5.42 hectare area located on William Street and Part of Albert Street and Part of Firstbrook Avenue Registered Plan 327, and part of Lot 14, Concession 4 in the Geographic Township of Tiny, Simcoe County, Ontario (Maps 1 and 2). The assessment is undertaken as part of a Plan of Subdivision Application and is being conducted as part of the requirements defined in Section D.5.6.2 of *The Township of Tiny Official Plan*, which states that development and site alteration shall only be permitted on lands containing archaeological resources or areas of archaeological potential if the significant archaeological resources have been conserved by removal and documentation, or by preservation on site (Township of Tiny 2018:100).

The objectives of the Stage 1 & 2 archaeological assessment, as outlined by the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), are as follows:

- To provide information about the property's geography, history, previous archaeological fieldwork and current land condition
- To evaluate the property's archaeological potential.
- To document archaeological resources located on the property
- To determine whether any identified archaeological resources require further assessment
- To recommend Stage 3 assessment strategies for any archaeological sites determined to require additional assessment.

As part of this assessment, background research was conducted in Earthworks corporate library, the Simcoe County Land Registry Office (LRO #51), and the Federal Canadian Census located online at Library and Archives Canada.

Permission to access the property was provided by Shayne Large of West Ridge Development Corporation.

1.2 Historic Context

1.2.1 Pre-Contact Indigenous History

Table 1 provides a breakdown of the general culture history of southern Ontario, as based on Ellis and Ferris (1990)

Table 1: Pre-Contact Indigenous Culture History of Southern Ontario

Culture Period	Diagnostic Artifacts	Time Span (Years B.P.)	Detail
Early Paleo-Indian	Fluted Projectile Points	11,000-10,400	Nomadic caribou hunters
Late Paleo-Indian	Hi-Lo, Holcombe, Plano Projectile Points	10,400-10,000	Gradual population increase
Early Archaic	Nettling and Bifurcate Points	10,000-8,000	More localized tool sources
Middle Archaic	Brewerton and Stanly-Neville Projectile Points	8,000-4,500	Re-purposed projectile points and greater amount of endscrapers
Narrow Point Late Archaic	Lamoka and Normanskill Projectile Points	4,000-3,800	Larger site size
Broad Point Late Archaic	Genessee, Adder Orchard Projectile Points	3,800-3,500	Large bifacial tools. First evidence of houses
Small Point Late Archaic	Crawford Knoll, Innes Projectile Points	3,500-3,100	Bow and Arrow Introduction
Terminal Archaic	Hind Projectile Points	3,100-2,950	First evidence of cemeteries
Early Woodland	Meadowood Points, Cache Blades, and pop-eyed birdstones	2,950-2,400	First evidence of Vinette I Pottery
Middle Woodland	Pseudo-scallop shell	2,450-1550	Burial Mounds
	Princess Point pottery	1550-1100	First evidence of corn horticulture
Late Woodland	Levanna Point	1,100-700	Early longhouses
	Saugeen Projectile Points	700-600	Agricultural villages
	Nanticoke Notched Points	600-450	Migrating villages, tribal warfare

1.2.2 Post-Contact Indigenous History

The study area is located in what is referred to as “Huronia”, an area stretching between Lake Simcoe and Georgian Bay, which was inhabited by the Iroquoian speaking Huron-Wendat in the early 17th century. In 1610 Etienne Brule was sent to live among the Huron by Samuel Champlain where he establishes fur trade and military alliances with groups within Huronia. Recollect Catholic missionaries, led by Father Joseph Le Caron, established the first Christian Missions in the area of Huronia in 1615. The Recollects were replaced by the Jesuits, who established the first interior French settlement of Ste. Marie on the Wye River in 1639 (Ontario Archives 2020). Jesuit census records indicate that the Huron confederacy consisted of 32 active villages, with eight historic clans made up of approximately 20 000 individuals (Heidereich 1978:370-371). Historic sources indicate that Huron-Wendat villages were generally short lived, with habitation of between 8 to 30 years due to the depletion of local resources and soil fertility (Ramsden 1990: 374). Champlain and other early French writers described Huronia as mostly cleared lands indicating the extensive agricultural activity which had occurred in the area over a multitude of generations (Heidereich 1978:369). Over the succeeding decade a combination of worsening environmental conditions, smallpox epidemics, and escalating raids from the Five Nation Iroquois placed severe strains on the Huron-Wendat populations, which culminated in the dispersal of the Huron-Wendat from the region following the abandonment or destruction of all Huron villages east of Ste Marie by Mid 1649 (ibid 387). The area was settled by Ojibwa groups in the 1700’s, and following the War of 1812, settlement pressures prompted the British Government to enter into negotiations with the Ojibwa (Chippawa) to purchase over five hundred thousand hectares of land south and west of Lake Simcoe. These negotiations were concluded with the Lake Simcoe Purchase of 1818 (Surtees 1994:115-116).

1.2.3 European Settlement History

After the Jesuit settlements were abandoned in the 1640’s the area remained unsettled by European colonists until the early 19th century. Tiny and the surrounding townships in the area were initially surveyed by James G. Chewett in 1820. Louis DesCheneux, a Drummond Islander is generally referred to as the first European settler of the township establishing a homestead east of Lafontaine in 1830 (Hunter 1909:220). After DesCheneux, a large influx of French immigrants from Quebec settled in the township, and they were followed by a group of Irish immigrants who settled in an area called St. Patrick’s (present day Perkinsfield). The Corporation of the Township of Tiny and Tay was established in 1850 under the Baldwin Act but were separated in 1869.

Wyevale was founded in 1871 and was named after the Wye River. The settlement area contained several mills and a post office which opened in 1879. In the same year the North Simcoe Railway Line was established, primarily to transport the abundant white pine and hardwood resources found in the area (Township of Tiny 2020). The railways line, which at one time was located just east of the study area, permitted the hamlet of Wyevale to expand to a population of about 310 by 1889 (Union Publishing Co. 1889: A137). Wyevale has remained a crossroads hamlet in Tiny Township until the present day.

1.2.4 Land Use History of Study Area

The study area is located in the northern half of Lot 14, Concession 4 in the Geographic township of Tiny which was granted to William Hall of Orillia in 1871 and sold to Orson Dodge in the same year. Neither Hogg's 1871 *Map of Simcoe County* nor the *Illustrated Historical Atlas of the County of Simcoe* list any landowner in the northern half of Lot 14 Concession 4 in Tiny Township (Map 3). The census of 1871 also does not indicate any agricultural activity occurring on Lot 14 Concession 4 at this time. The Honorable William E. Dodge of North York sold the northern portion of the lot, in which our study area sits, to John Davidson in 1875. In the same year an easement was granted by Davidson to the North Simcoe Railway Company which once ran adjacent to the eastern edge of the study area. In a number of transactions between 1879 and 1882 Davidson sold the northern portion of the Lot to William Belding. Belding was known to have owned and operated a mill just south of the village of Wyevale (Township of Tiny 2020). Belding sold the NW portion of the Lot to David Easton in 1884. The Easton holdings on the Lot were sold off and subdivided through a number of transactions during the first half of the 20th Century. Analysis of historic topographic maps indicate the study area has remained as agricultural land through to the present day (Map 4).

1.2.5 Historic Plaques

As per Section 1, Standard 1.1 of the Standards and Guidelines for Consultant Archaeologists, Earthworks consulted local historical plaques in order to inform archaeological potential and assessment strategies. No local plaques were found which related to the history of the current study area.

1.3 Archaeological Context

1.3.1 Current Conditions

The study area consists of a flat agricultural field, a small barn with surrounding manicured lawn, and a small mixed woodlot (Images 1 thru 12).

1.3.2 Natural Environment

The study area is situated within a sand plain (Map 5) of the Simcoe Uplands physiographic region of Ontario, a series of broad, rolling Precambrian till plains which are separated by steep, flat valleys, indicating they were once islands found within Lake Algonquin. Soils in the region

consist mainly of loose sandy loam, which suffer from wind erosion in cleared areas (Chapman and Putnam 1984: 182-183).

Surficial geological mapping indicates the area is mainly sand reworked by the shallow waters of Lake Algonquin (Map 6) and soil survey mapping indicates the study area contains Wyevale Sandy Loam (Map 7), a grey, non-calcareous gravel outwash of the Podzol Great Soil Group with good drainage (Hoffman and Richards 1984).

The nearest potable water source to the study area is a small tributary of the Wye River located approximately 1.2 kilometres southeast of the study area. The Wye River originates around the Town of Elmvale south of the study area and drains into Georgian Bay through the Wye Marsh approximately 11.8 kilometres northeast of the study area.

The study area is located within the Barrie District of the Lake Simcoe – Rideau Ecoregion, which itself is situated within the Mixedwood Plains Eco-zone. This region encompasses 6,311,957 hectares and contains a diverse array of flora and fauna. It is characterized by diverse hardwood forests dominated by sugar maple, American beech, white ash, eastern hemlock, and numerous other species are found where substrates are well developed on upland sites. Lowlands, including rich floodplain forests, contain green ash, silver maple, red maple, eastern white cedar, yellow birch, balsam fir, and black ash. Peatlands (some quite large) occur along the northern edge and in the eastern portion of the ecoregion, and these contain fens, and rarely bogs, with black spruce and tamarack

> *Characteristic mammals include white-tailed deer, Northern raccoon, striped skunk, and woodchuck. Wetland habitats are used by many species of water birds and shorebirds, including wood duck, great blue heron, and Wilson's snipe. Open upland habitats are used by species such as field sparrow, grasshopper sparrow, and eastern meadowlark. Upland forests support populations of species such as hairy woodpecker, wood thrush, scarlet tanager, and rose-breasted grosbeak. Reptiles and amphibians found in this ecosystem include American bullfrog, northern leopard frog, spring peeper, red-spotted newt, snapping turtle, eastern gartersnake, and common watersnake. Characteristic fish species in the ecoregion include the white sucker, smallmouth bass, walleye, northern pike, yellow perch, rainbow darter, emerald shiner, and pearl dace.*
>
> (Crins et al. 2009:48-49).

1.3.3 Known Archaeological Sites

A search of registered archaeological sites within the MHSTC Archaeological Sites Database was conducted. No archaeological sites have been recorded within a one kilometer radius of the study area. According to the MHSTC digital database no archaeological assessments have been carried out within 50 meters of the study area.

1.4 Summary

As documented in Section 1.0 the study area contains evidence of archaeological potential. The location of the study area within 100 metres of present-day County Road 6, a historically mapped transportation route, indicates the potential to recover Euro-Canadian archaeological resources. In summary, a Stage 2 archaeological assessment was determined to be required in order to identify and document any archaeological material that may be present. A portion of the study area is a ploughed agricultural field, and as a result, a combined test pit and pedestrian survey was determined to be required.

2.0 Field Methods

The Stage 2 archaeological assessment of the study area was conducted on May 12, 2020 under PIF #: P321-0125-2020, issued to Shane McCartney, M.A. (P321). The weather during the survey was sunny and mild. The study area was ploughed and had been weathered by heavy rainfall. The topsoil was completely exposed, with an estimated surface visibility of 80% of the ploughed ground surface (Image 13). At no time were weather or lighting conditions detrimental to the observation or recovery of archaeological material.

Approximately 78% of the study area was assessed through a pedestrian survey (Image 14). Pedestrian survey transects were spaced at maximum intervals of 5 metres apart.

Approximately 3% of the study area was not assessed due to it being subject to subsurface disturbance from the construction of a barn and gravel entryways, all of which were not assessed.

The remaining 19% of the study area was assessed through a test pit survey (Image 15). Test pits were spaced at maximum intervals of 5 metres apart. Each test pit was excavated by hand to 30 centimetres in diameter and were excavated into the first 5 centimetres of subsoil. Depth varied between 25 and 35 centimetres. Each test pit was examined for stratigraphy, cultural features, or evidence of fill, and all soil was screened through wire mesh of 6 millimetre width. All test pits were backfilled. The soil stratigraphy consisted of a medium brown sandy loam topsoil horizon overlaying a medium orange sandy loam subsoil (Image 16). No archaeological material was identified during the course of the survey.

3.0 Record of Finds

Table 2 provides an inventory of the documentary record generated in the field.

Table 2: Information Inventroy of Documentation Record

Document	Location	Description
Field Notes	Earthworks Office Project File	1 page of notes
Photographs	Earthworks Office Project File	26 digital photographs,
Field Map	Earthworks Office Project File	1 page

4.0 Analysis and Conclusions

A Stage 1 & 2 Archaeological Assessment was conducted on a 5.42 hectare area located on William Street and Part of Albert Street and Part of Firstbrook Avenue Registered Plan 327, and part of Lot 14 Concession 4 in the Geographic Township of Tiny, Simcoe County, Ontario. A Stage 2 pedestrian survey and test pit survey was conducted on May 12, 2020

The Stage 2 archaeological survey did not yield any evidence of archaeological material. As a result, no additional archaeological assessments are required

5.0 Recommendations

Based on the results of the Stage 1 background investigation and the subsequent Stage 2 test pit and pedestrian survey, the study area is considered to be free of archaeological material, and no additional archaeological assessments are recommended.

The MHSTCI is requested to review this report and provide a letter indicating their satisfaction that the fieldwork and reporting for this archaeological assessment are consistent with the Ministry's 2011 *Standards and Guidelines for Consultant Archaeologists* and the terms and conditions for archaeological licences, and to enter this report into the Ontario Public Register of Archaeological Reports

6.0 Advice on Compliance with Legislation

This report is submitted to the Ministry of Heritage Sport Tourism and Culture Industries 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 Heritage Sport Tourism and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

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 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 Archaeology 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 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

7.0 References

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Union Publishing Company

1889 *Union Publishing Co's Farmers and Business Directory for the Counties of Muskoka, Ontario, Simcoe, Victoria and Durham for 1889*. Union Publishing Co. Ingersoll.

8.0 Images

Image 1: Study Area Conditions. Facing Southwest.

Image 2: Study Area Conditions. Facing Northeast.

Image 3: Study Area Conditions. Facing Northwest.

Image 4: Study Area Conditions. Facing Southwest.

Image 5: Study Area Conditions. Facing Northwest.

Image 6: Study Area Conditions. Facing Northeast.

Image 7: Study Area Conditions. Facing Northeast.

Image 8: Study Area Conditions. Facing Southeast.

Image 9: Study Area Conditions. Facing Southeast.

Image 10: Study Area Conditions. Facing South.

Image 11: Study Area Conditions. Facing North.

Image 12: Study Area Conditions. Facing West.

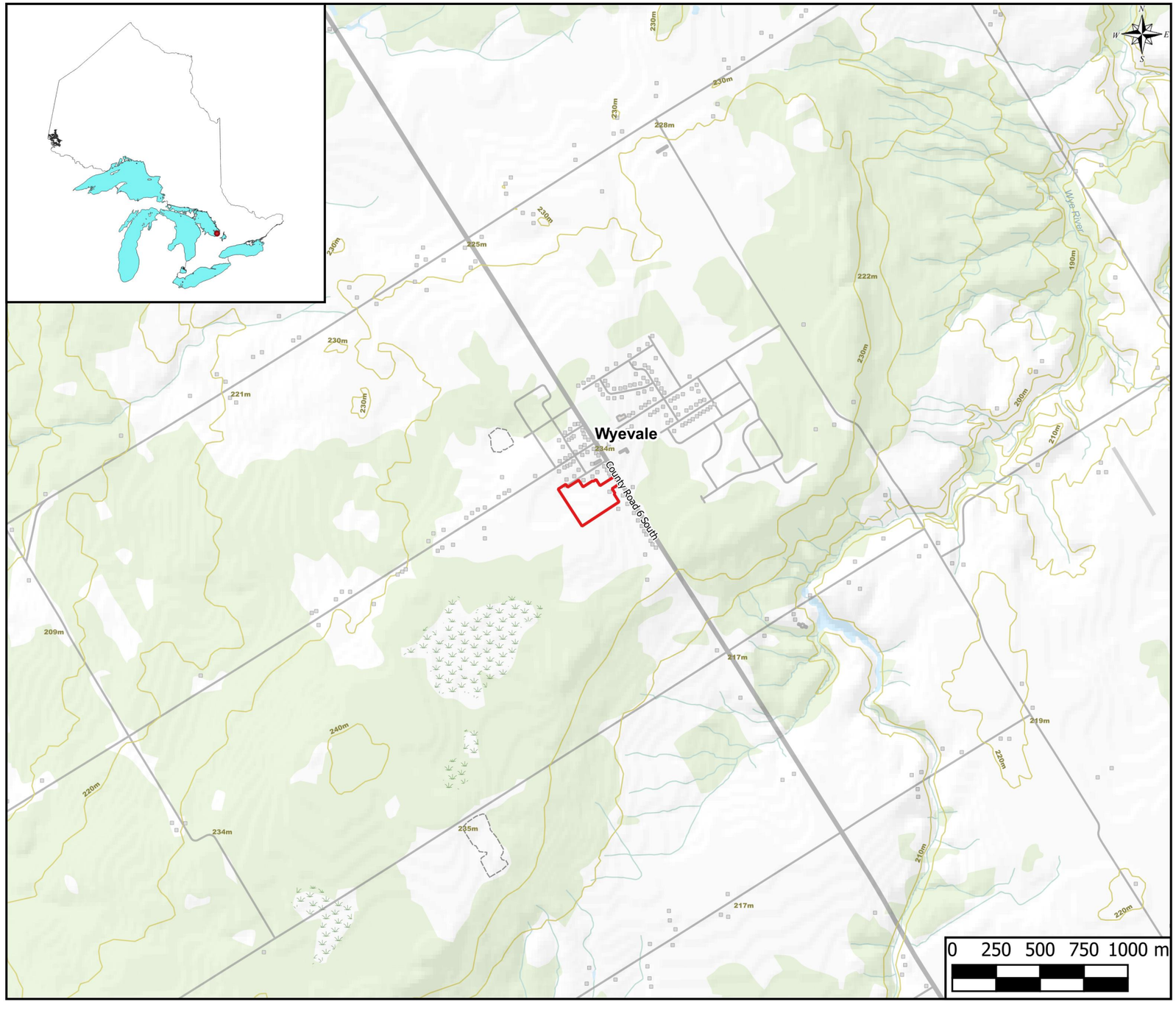
Image 13: Pedestrian Survey Surface Visibility.

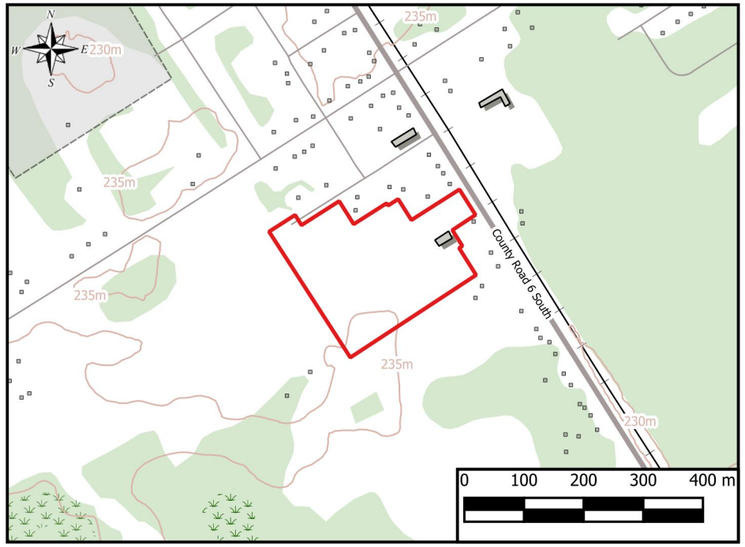
Image 14: Pedestrian Survey in Progress. Facing Northeast.

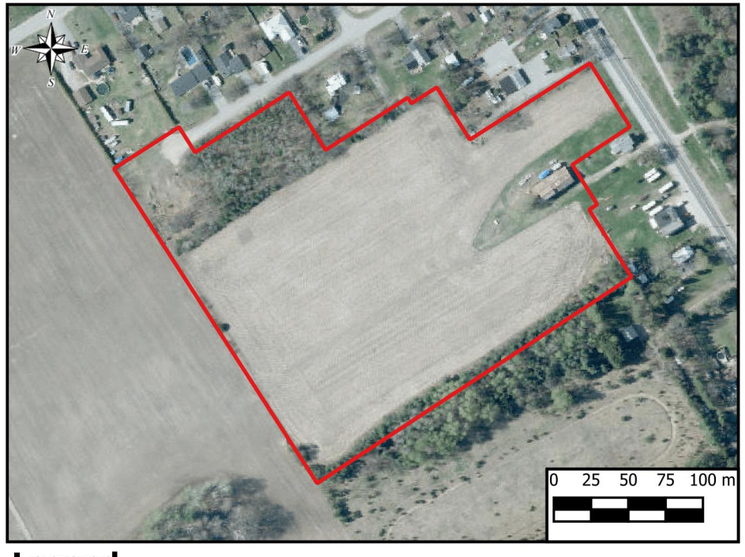
Image 15: Test Pit Survey in Progress. Facing Northwest.

Image 16: Open Test Pit showing Subsurface Stratigraphy.

9.0 Maps







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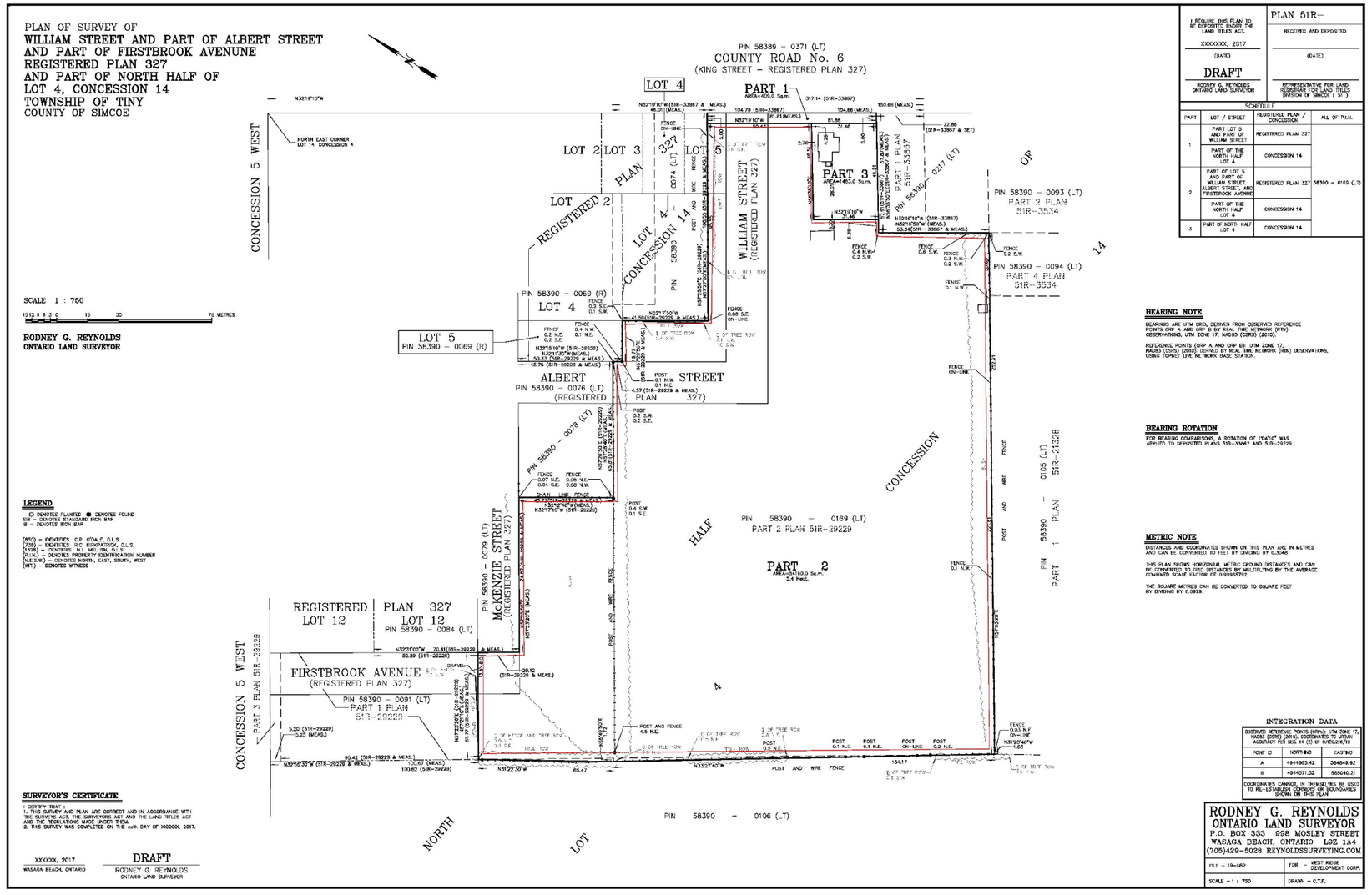
Study Area

Reference:
Canvec Data. Scale 1:50000
Ontario Basic Mapping. Scale 1:10000
Esri Basemap

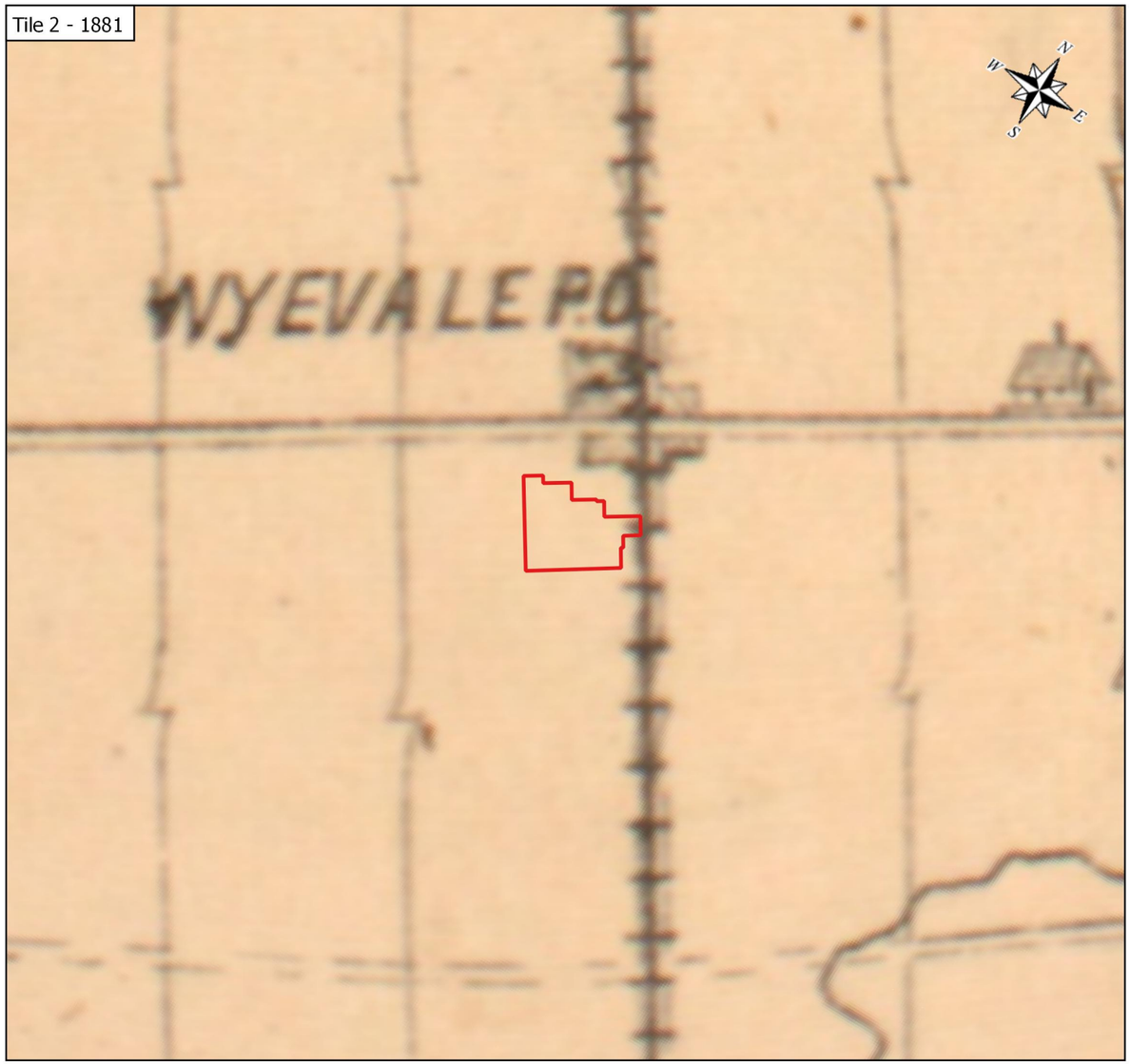
Map 1: Regional Map



Map 2: Site Plan

Tile 1 - 1871

Tile 2 - 1881



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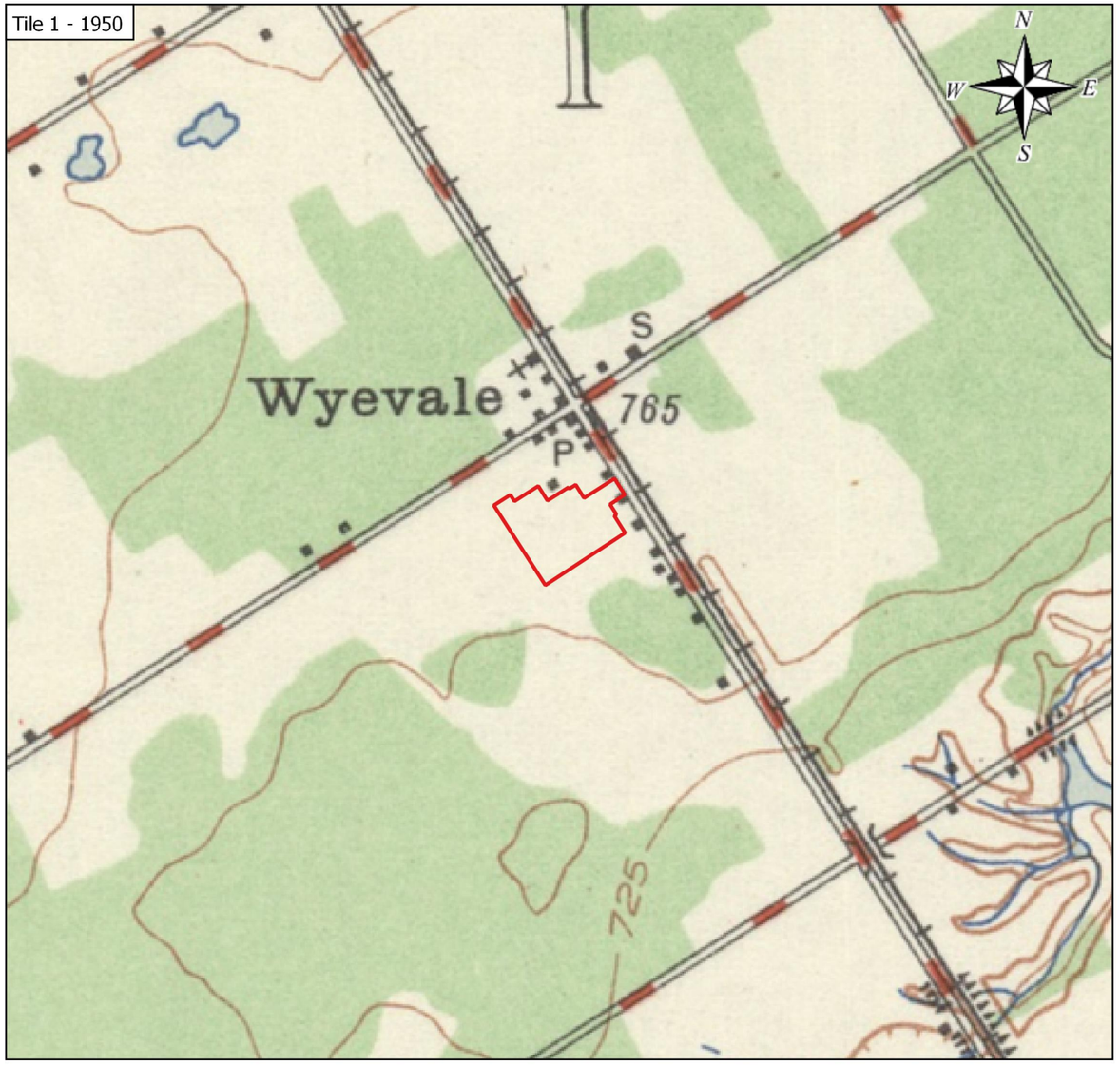
Study Area

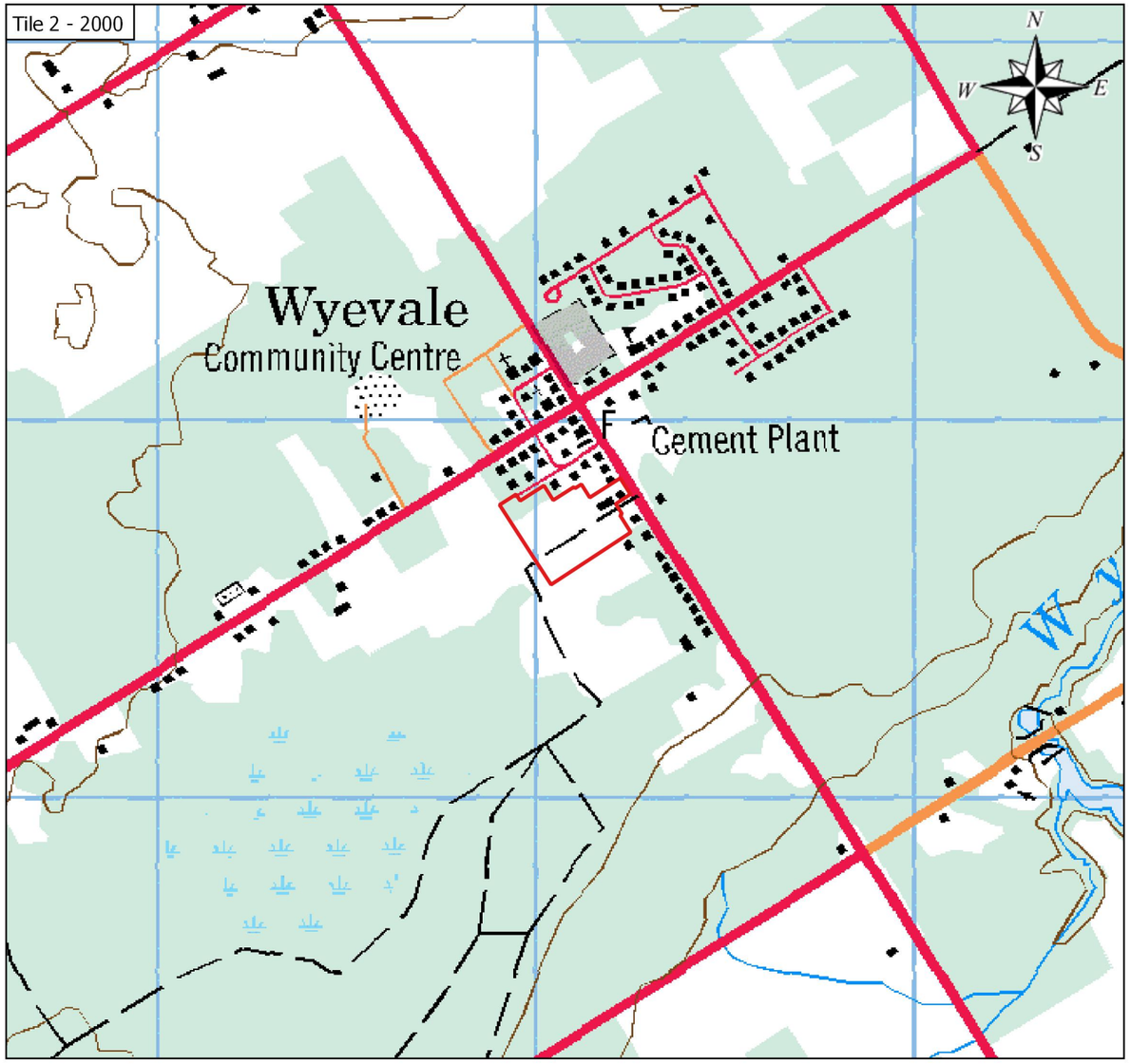
Not to Scale

Tile 1 - Hogg's Map of the County of Simcoe. Compiled and Published by John Hogg, Collingwood, Ont. 1871.

Tile 2 - Illustrated historical atlas of the county of Simcoe, Ont. H. Belden & Co. 1881.

Map 3: Nineteenth Century Historic Mapping





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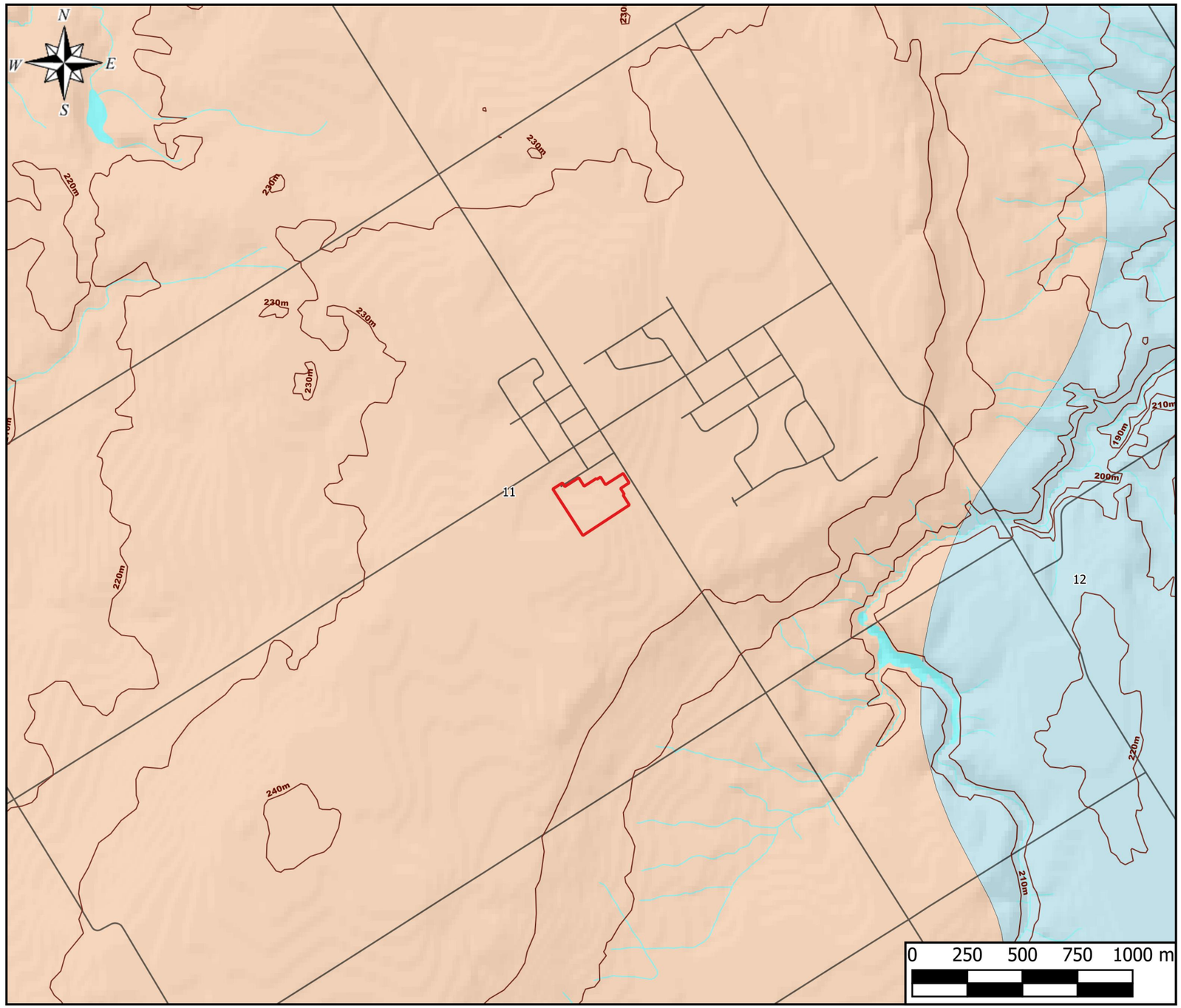
Study Area

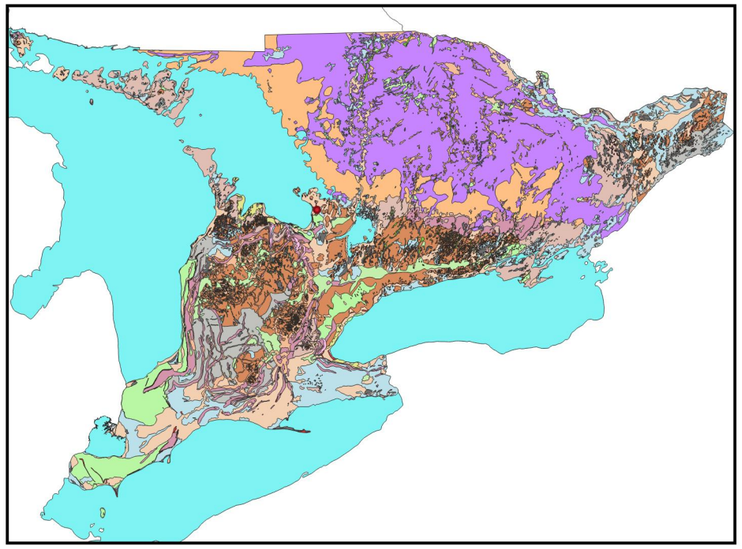
0 100 200 300 400 m

Tile 1 - Canada, Department of National Defence. Orr Lake, Ontario. 1:63,360. Map Sheet 031D12, [ed.1], 1950.

Tile 2 - Canada, Natural Resources Canada. Elmvale, Ontario. 1:50,000. Map Sheet 31 D/12, ed. 6, 2000.

Map 4: Twentieth Century Topographic Mapping



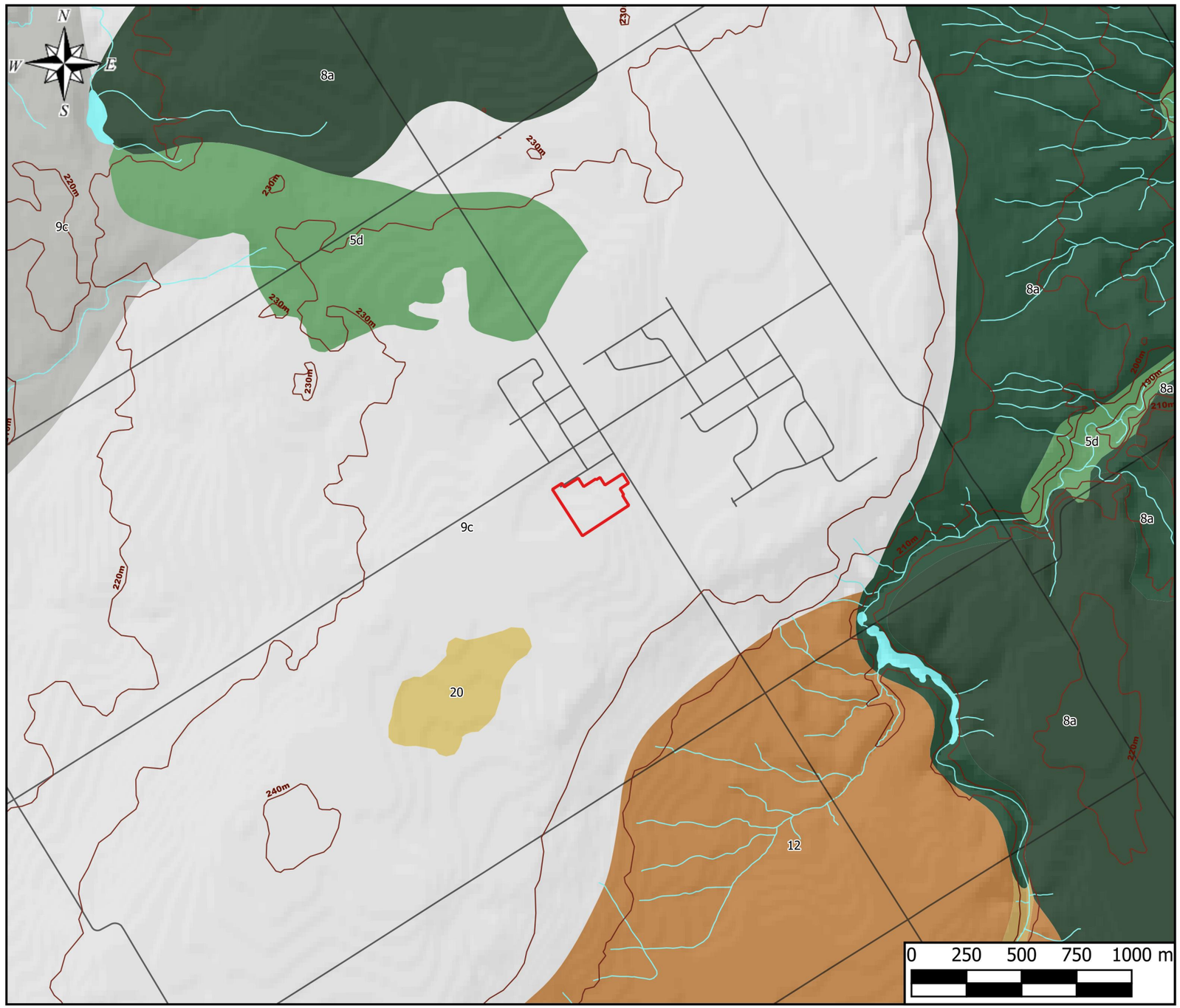


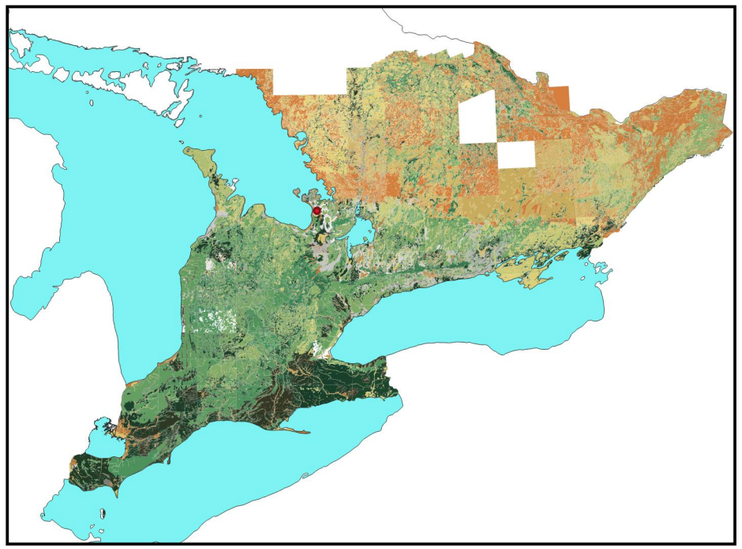
Legend

- Study Area
- Road Network
- 11 - Sand Plains
- 12 - Clay Plains

Base Data:
Chapman, L.J. and Putnam, D.F. 2007. Physiography of southern Ontario; Ontario Geological Survey, Miscellaneous Release—Data 228.

Map 5: Physiographic Landforms





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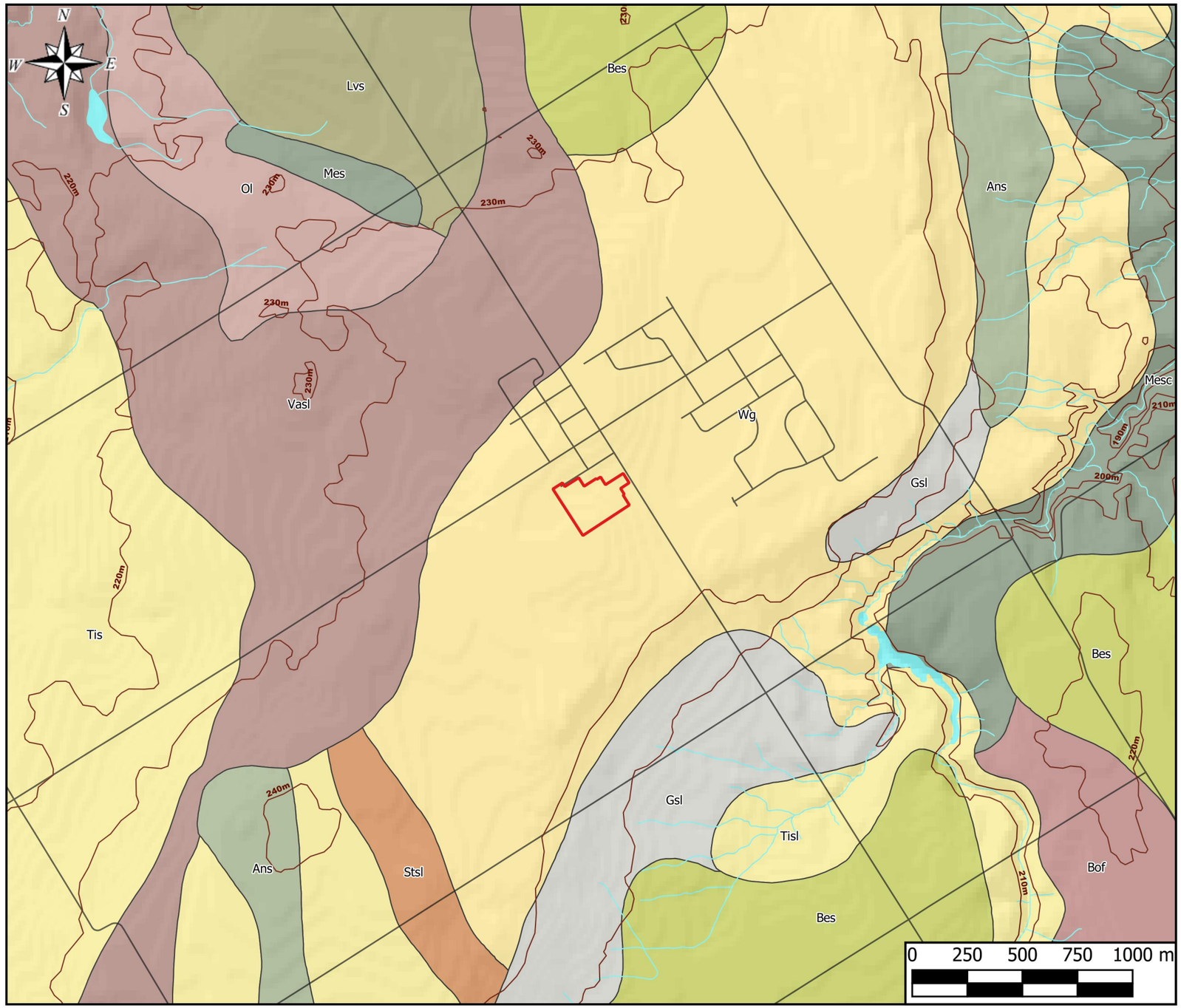
- Study Area
- Road Network
- 5d - Fluted Surface, Moderate Relief Partly Subdued By Lacustrine Action
- 8a - Clay, Minor Silt
- 8a - Silt, Clayey To Sandy
- 9c - Mainly Sand, Reworked By Shallow Waters Of Lake Algonquin
- 9c - Shallow Water Sand Deposits With Minor Fine Gravel
- 12 - Sand And Silt With Very Minor Gravel Present In Elevated Stream Terraces
- 19 - Silt, Sand, Very Minor Gravel Present On Floodplains, Local Exposures Of Eroded Till
- 20 - Mud, Muck, Peat; Inadequately Drained Basins

Base Data:
Ontario Geological Survey 2010. Surficial geology of Southern Ontario; Ontario Geological Survey, Miscellaneous Release--Data 128-REV ISBN 978-1-4435-2483-4

Map 6: Surficial Geology

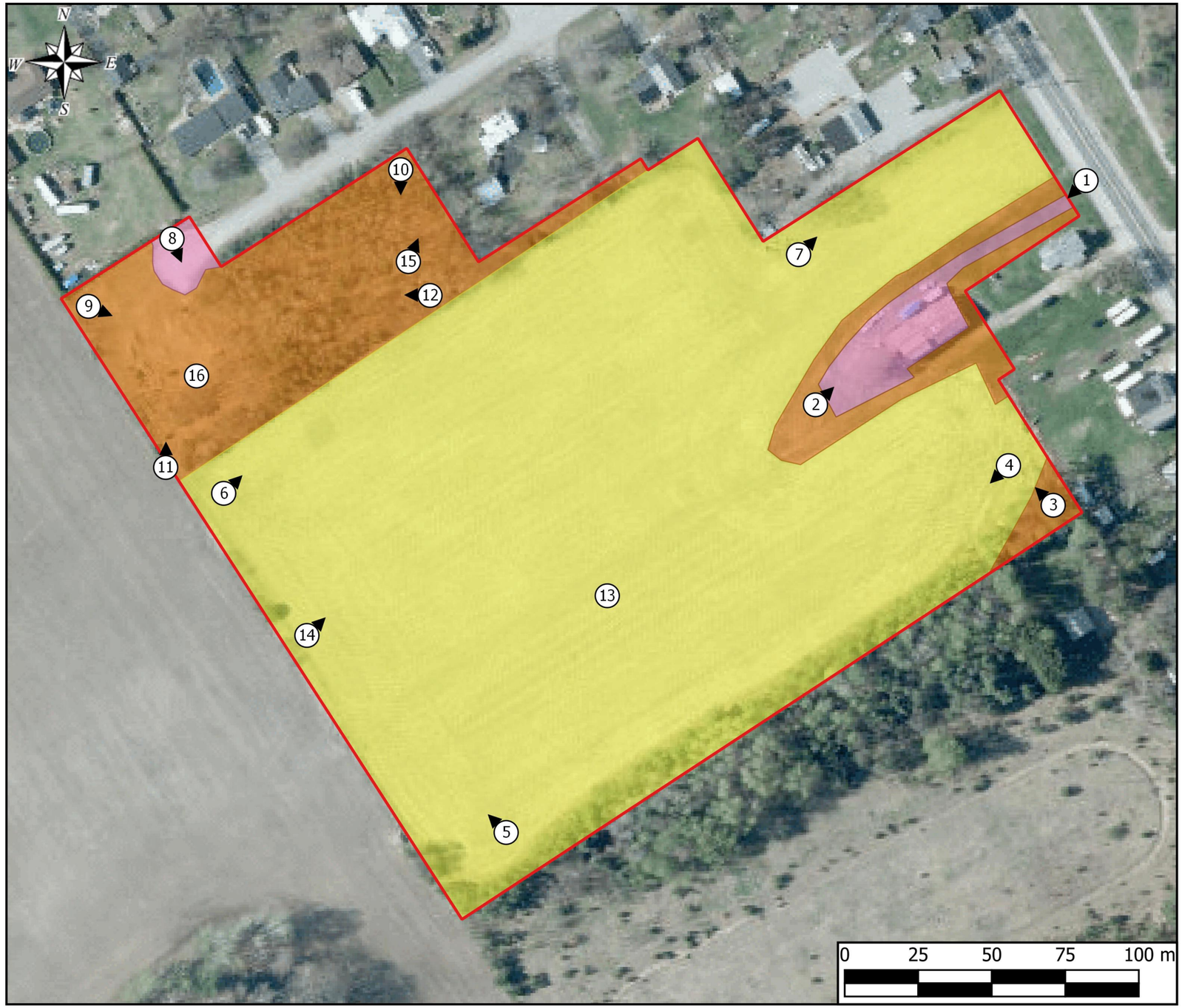


Legend

- Study Area
- Road Network
- Ans - Alliston Sandy Loam
- Bes - Berrien Sandy Loam
- Bof - Bookton Fine Sandy Loam
- Gsl - Granby Sandy Loam
- Lvs - Lovering Silty Clay Loam
- Mes - Medonte Silt Loam
- Mesc - Medonte Silty Clay Loam
- Ol - Otonabee Loam
- Stsl - Sargent Gravelly Sandy Loam
- Tis - Tioga Loamy Sand
- Tisl - Tioga Sandy Loam
- Vasl - Vasey Sandy Loam
- Wg - Wyevale Gravelly Sandy Loam

Reference:
Soil Map of Simcoe County. Soil Survey Report No. 29. Scale 1:63,360

Map 7: Regional Soil Map



Legend

- Study Area
- Area Subject to Pedestrian Survey at 5 metre intervals
- Area Subject to Test Pit Survey at 5 metre intervals
- Area of Subsurface Disturbance - Not Assessed
- (#) Photo Location and Direction

Reference:
Esri Basemap

Map 8: Stage 2 Assessment Results