

**Appendix 'C'
Stage 1 Archaeological Assessment**



23 April 2018

STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Town of The Blue Mountains, Town-Wide Water Distribution System Master Plan

ORIGINAL REPORT

Submitted to:

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Executive Summary

The Executive Summary highlights key points from the report only; for complete information and findings, as well as the limitations, the reader should examine the complete report.

A Stage 1 archaeological assessment was conducted for J.L. Richards & Associates Ltd. (the Client) on behalf of the Town of The Blue Mountains (end Client), by Golder Associates Ltd. (Golder), to inform a Municipal Class EA for a Town-wide Water Distribution Master Plan. The Town of The Blue Mountains municipal boundary measures approximately 28,700 ha, and encompasses the hamlets, villages, and towns that now make up the Town of The Blue Mountains (the Study Area). Additional detailed information related to identified urban areas within the larger Study Area is the focus of this assessment. These urban areas collectively represent the “Project Area” associated with the Town-wide Water Distribution Master Plan Project (the Project).

The objective of the Stage 1 assessment was to compile all available information about the known and potential archaeological resources within the Study Area and to provide direction for the protection, management and/or recovery of these resources with the Project Area, consistent with Ministry of Tourism, Culture and Sport (MTCS) guidelines (MTCS 2011).

Based on the background research provided in this report, which was confirmed during an inspection of the municipality, there is moderate to high archaeological potential within the Project Area and many properties are considered to have archaeological potential. In addition, other properties are known to contain recorded sites with further cultural heritage value or interest. Combining the data from background research and the field reconnaissance, and accounting for inclusion of areas in proximity to critical water sources and waterways, a model was developed to inform a more complete understanding of the inventory of recorded archaeological and heritage resources. The resulting predictive model indicates the locations where known archaeological sites exist and as-yet unrecorded archaeological sites are most likely to be found.

Given the findings of the Stage 1 archaeological assessment of the Study Area, the following recommendations are made:

- 1) Portions of the Study Area that have archaeological potential, as illustrated in Map 5 and detailed Project Area mapping (Maps 6 to 20) are recommended for Stage 2 archaeological assessment prior to ground disturbance associated with future developments.
- 2) Portions of the Study Area identified as disturbed (previous construction and/or grading activities) may not have had all potentially archaeological soils removed, particularly within the more urbanized Project Area. The Stage 1 property inspection was not sufficiently rigorous to remove areas of previous disturbance from the archaeological potential model as illustrated in Maps 5 to 20. Additional Stage 2 archaeological assessment is required to make determinations about the severity of previous impacts as they relate to archaeological potential assessments.
- 3) All Stage 2 archaeological assessment should be conducted by a licensed consultant archaeologist and follow the requirements set out in the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).



STAGE 1 ARCHAEOLOGICAL ASSESSMENT

The MTCS is requested to review, and provide a letter indicating their satisfaction with the results and recommendations presented herein, with regard to the 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.



Study Limitations

Golder has prepared this report in a manner consistent with the level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied is made.

This report has been prepared for the specific site, design objective, developments and purpose described to Golder by the Client. The factual data, interpretations, and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations, and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the Client, Golder may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder. The report, all plans, data, drawings and other documents as well as electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder. The Client acknowledges that electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder's report or other work products.

Unless otherwise stated, the suggestions, recommendations, and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study, if any, comply with those identified in the Ministry of Tourism, Culture and Sport's 2011 *Standards and Guidelines for Consultant Archaeologists*.



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1.0 PROJECT CONTEXT

1.1 Development Context

A Stage 1 archaeological assessment was conducted for J.L. Richards & Associates (the Client) on behalf of the Town of The Blue Mountains (end Client), by Golder Associates Ltd. (Golder), to inform a Municipal Class EA, under the *Environmental Assessment Act*, for a Town-wide Water Distribution Master Plan. The Town of The Blue Mountains (TBM) municipal boundary comprises the 'Study Area' which measures approximately 28,700 ha. TBM encompasses rural and forested areas along with several previously independent hamlets, villages, and towns that now comprise the Town of The Blue Mountains, in the Township of Collingwood, Grey County, Ontario. TBM is in the process of planning upgrades to municipal water distribution infrastructure within identified urban areas and this Stage 1 archaeological assessment is intended to inform both the planning process and next steps for future archaeological assessments (e.g., Stage 2 archaeological assessment) that may be required as specific developments proceed.

The urban areas within the larger Study Area are the focus of this Stage 1 archaeological assessment. These urban areas collectively represent the "Project Area" associated with the Town-wide Water Distribution Master Plan Project. Urban areas within the Study Area are located in lower elevation areas along the shore of Georgian Bay and include: Lora Bay, Thornbury East and West, Clarksburg, Camperdown, Craigleith, and Swiss Meadows.

Table 1: Communities within The Town of The Blue Mountains

Community Name	Geographic Area	Composition of the Community	Earliest Known European Occupation
Banks	Niagara Escarpment	Rural/ Agricultural/ Residential	Pre-1870s
Camperdown	Niagara Escarpment	Rural/ Agricultural/ Residential	Late 19 th century
Castleglen Estates	Niagara Escarpment	Residential	1893
Christie Beach	Coastal	Residential	Unknown
Clarksburg	Beaver Valley	Residential	1850s
Craigleith	Niagara Escarpment	Resort/Residential	Early 19 th century
Duncan	Niagara Escarpment	Rural/ Agricultural/ Residential	Mid- to late 19 th century
Gibraltar		Rural/ Agricultural/ Residential	Mid- to late 19 th century
Heathcote	Beaver Valley	Rural/ Agricultural/ Residential	1844
Kolapore	Niagara Escarpment	Rural/ Agricultural/ Residential with Logging Industry	1860s
Little Germany	Niagara Escarpment	Rural/ Agricultural/ Residential	Late 19 th century
Lora Bay	Coastal	Residential	1851
Loree	Niagara Escarpment	Rural/ Agricultural/ Residential	Late 19 th century
Ravenna	Beaver Valley	Rural/ Agricultural/ Residential	Late 1840s



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Community Name	Geographic Area	Composition of the Community	Earliest Known European Occupation
Sandhill	Niagara Escarpment	Residential	Recent housing development with 19 th century church/schoolhouse
Slabtown	Beaver Valley	Rural/ Agricultural/ Residential	1840s-1850s
Swiss Meadows	Niagara Escarpment	Resort	Mid- 20 th century
Thornbury	Beavery Valley	Urban / Residential	Early- to mid-19 th century
Victoria Corners	Beaver Valley	Rural/ Agricultural / Residential	1850s

1.1.1 Objectives

In compliance with the provincial standards and guidelines set out in the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011), the objectives of the Stage 1 archaeological assessment are as follows:

- To provide information about the Study Area's geography, history, previous archaeological fieldwork and current land conditions;
- To evaluate in detail the Study Area's archaeological potential to support recommendations for Stage 2 archaeological assessment, where future proposed developments overlap with areas of archaeological potential; and
- To recommend appropriate strategies for Stage 2 archaeological assessment.

To meet these objectives Golder archaeologists employed the following research strategies:

- A review of relevant archaeological, historical, and environmental literature pertaining to the Study Area and Project Area;
- A review of the land use history, including pertinent historical maps;
- An examination of the Ontario Archaeological Sites Database (OASD) to determine the presence of known archaeological sites in and around the Study Area; and
- An inquiry with the MTCS to determine previous archaeological assessments conducted within and near the Study Area.

The Stage 1 archaeological assessment was conducted under professional archaeological licence P243, issued to Carla Parslow of Golder by the MTCS (PIF#: P243-0380-2017). Golder personnel conducted a field reconnaissance from public spaces in the Study Area on 6 December 2017.



1.2 Historical Context

1.2.1 Post-Contact Indigenous Resources

The post-contact Indigenous occupation of southern Ontario was heavily influenced by the dispersal of various Iroquoian- and Algonkian-speaking peoples by the New York State Iroquois at the end of the 17th century and beginning of the 18th century (Schmalz 1991). The nature of the settlement sizes, population distributions, and material culture of these nations shifted as European settlers encroached upon their territory. However, despite this shift, “written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian [and Algonkian] systems of ideology and thought” (Ferris 2009:114). As a result, Indigenous peoples of southern Ontario have left behind archaeologically significant resources throughout southern Ontario which show continuity with past peoples, even if this connection has not been recorded in historical Euro-Canadian documentation. There are two Indigenous villages south of the community of Craigeleith. The Plater-Martin (BdHb-1) site was occupied between the 1630s and 1650s and was the capital of the Petun Deer Nation. The Plater-Fleming (BdHb-2) site was occupied by the Petun and Odawa tribes and was the starting point of the south migration of the Wyandot Nation (see Section 1.3.3.4). Traces of later Ojibwa occupation can also be found in the Craigeleith area, as the Ojibwa settled in the area in the early 1700s, before early settlers arrived and displaced the Ojibwa further east and west (see Section 1.3.4, Table 4).

Indigenous inhabitants of Georgian Bay experienced an era of discontinuity during the early-contact period as the Petun, the Huron, and the Odawa tribes succumbed to the mounting pressure associated with raiding parties of Iroquois beginning in the late 1640s. The added pressures placed upon these groups from the sudden influx of European settlement, as well as the displacement of the Iroquois from lower Georgian Bay later in the early 18th century, all contributed to an ever-evolving cultural landscape as populations shifted due to regional conflicts, the fur trade and European expansion (Reimer and Chartrand 2000). The Métis, who are a distinct Aboriginal people with a unique history, culture, and language, also have traditional territory in Ontario that includes the area surrounding the current Study Area. The Métis in Southern Ontario originate from contact between French explorers and Indigenous people from the first half of the 1700s. Métis settlements, which emerged as an outgrowth of the fur trade, were established along the waterways and throughout the watersheds that surround the Great Lakes. Between 1815 and 1828, many Métis moved from the Drummond Island area of northern Ontario to areas around southern Georgian Bay and Lake Huron, including present day Kincardine, Owen Sound, Penetanguishene, and Parry Sound (Burley et al. 1991; Métis Nation of Ontario 2017).

The study area is situated within the historical Geographic Township of Collingwood, Grey County, now the Town of The Blue Mountains, Grey County, Ontario. The study area is within lands that enter the Euro-Canadian historical record as part of Treaty Number 18 made with the Chippewas on 17 October 1818. As detailed in the below passage, Treaty Number 18 is described as:

“...a provisional agreement made the 17th day of October, 1818, between the Honourable William Claus on behalf of His Majesty the King and the Principal Men of the Chippewa Nation of Indians, inhabiting the northern parts of the unpurchased lands, within the Home District, on consideration of a yearly payment of twelve hundred pounds by His Majesty to the Chippewa Indians, the said tract being described as follows: Bounded by the District of London on the west, by Lake Huron



on the north, by the Penetanguishene purchase (made in 1815) on the east; by the south shore of Kempenfeldt Bay; the western shore of Lake Simcoe and Cooks Bay and the Holland River to the north west angle of the Township of King.”

Morris 1943:23

1.2.2 Grey County, Township of Collingwood

The County of Grey was established in 1852, including townships from neighbouring Simcoe and Wellington Counties; it remained slightly bound to its neighbours until January 1854 at which point a County courthouse and jail had been established and its status as a ‘provisional’ county (of the Count of Wellington) could be removed. The Town of The Blue Mountains is located in Grey County, Ontario, and is situated on the south shore of Nottawasaga Bay. In 2001, the Town was formed through the amalgamation of several towns and villages within the County.

The historical Township of Collingwood was first surveyed in 1833 by Charles Rankin and initially went by the name of ‘Alta’ (Marsh 1931). An early settler (Captain Morberly) was dissatisfied with its given name and so applied for it to be changed; it became ‘Collingwood’, so named for an Admiral in the navy. As was the case in many other counties, the initial land grantees did not actually come to settle their land and so the task of populating the County was left to land speculators who then sold the lots on to prospective settlers.

During his survey of what would become Collingwood Township, Charles Rankin found a bay-side location where he built his own log home near Thornbury in 1834. Rankin was joined that year by Richard McGuire who established his family farm on the baseline of Thornbury; these two men and their families made up the entirety of the official Euro-Canadian township population until a third family (Lunan) arrived and settled permanently near Craigeleith (Marsh 1931). Around 1839 a road was being constructed that would eventually link Barrie to Meaford that allowed for a slightly easier passage through the Township for prospective settlers.

The town plot survey of Thornbury was completed in 1852; at that point in time the Town was limited to a few dwellings and a saw mill run by Samuel Olmstead. A grist mill was soon added and by 1855 there was also a store and post office. With these developments the Town grew to a population of 100 by 1857 (Marsh 1931, Thornbury 2011). The first introduction of rail travel to the area was when the Northern Railway arrived in Collingwood in 1856, rail travel would be expanded again in 1872 when a line from Collingwood to Meaford was established (Collingwood Connections 2011).

The European settlement of Craigeleith began in the 1840s. Craigeleith’s early industry included logging and lumber along with stone quarry operations. In addition, an early and unsuccessful attempt was made to extract oil from the shales of the Niagara Escarpment. Andrew Craig Fleming was one of Craigeleith’s earliest settlers and commissioned the construction of a railway spur to service the family’s sawmill and furniture factory in Craigeleith. When local timber was exhausted, they began rafting logs down from a bush lot on the north shore of Georgian Bay. Andrew’s son, Sir Sandford Fleming, ran a quarry where he built Craigeleith House, named after an Edinburgh quarry. By 1864, the Flemings had set up several stores, a post office, and an inn called the Collingwood House near the railway station in the new Craigeleith Heritage Depot. Sir Sandford Fleming was one of the more prominent citizens and was nicknamed “The Father of Standard Time” as he helped contribute to the establishment of standard time.



In 1872, a notable event occurred in Craigeleith, with the sinking of the steamer, the “Mary Ward”. It was traveling from Sarnia to Collingwood when it ran aground on Milligan’s Reef, two kilometers off shore. This event is commemorated by Ward’s Road which marks Craigeleith’s western boundary. The wreck was discovered in 1966 and documented as an archaeological site (BdHc-16).

By the mid-19th century, the makeup of the Township of Collingwood was exclusively Anglo-Celtic, with the majority of inhabitants coming from Scotland, and a few from other areas such as Canada West, England, Ireland, and the United States. Due to the large number of Anglo-Celtic inhabitants, there was strong influence of the Order of the Orange in Canada, which is a product of the rivalry between Catholic-Irish and Protestant-British ethnic groups. While originally made up of Irish-born Protestant immigrants and soldiers, the Orange Order in Canada accepted English, Scottish, German, and First Nations members, as well as some United Empire Loyalists (Wilcox 2007). The Order increased in numbers quickly, likely due to the influx of immigrants from Britain and surrounding areas settling in the Township of Collingwood. There are several Order of the Orange lodges located close to Ravenna (Map 2, Image 20), which was an important commercial and service center due to its use as a way-stop for travelers using the Government Road (Old Mail Road) and its use as the meeting place of the Township Councils. The Order was able to utilize these social connections to further their movement. The Orange Order was popular in Canada as it provided significant mutual aid (Wilcox 2007). Financial support was provided to members during hard times such as illness and death, and social support was offered through lodges and meetings. This support system helped to cultivate a sense of community for settlers and farmers and city dwellers. Though membership is low, there is still evidence of the Order in the Township of Collingwood, especially in Ravenna, where an old Lodge house remains.

1.3 Archaeological Context

1.3.1 The Natural Environment

The natural environment is important to understanding terrain, soil, vegetation, and climatic conditions that influence archaeological potential for pre-contact archaeological resources. The Study Area overlaps three distinct physiographic regions: “Horseshoe Moraines”, “Beaver River”, and “Simcoe Lowlands” physiographic regions (Chapman and Putnam 1984). Each of these physiographic regions is described below:

Horseshoe Moraines

From the edge of the escarpment in the Town of Caledon the moraines trend somewhat west of the Niagara Escarpment forming a belt of moderately hilly relief....Associated with the moraines is a system of old spillways with broad gravel terraces and swampy floors.....Good cross-sections of this landscape may be seen along Highway 7 from Rockwood to Georgetown.

(Chapman and Putnam, 1984:128)

Beaver River

The Beaver Valley is a small physiographic region that runs between Thornbury and Flesherton along the path of the Beaver River which flows into Georgian Bay...it is a steep-sided, broad-bottomed, open valley with geological features such as drumlins being a noted rarity. The Beaver Valley, although small, includes variable and complex landforms such as cliffs, lake plains, beaches, and moraines.

(Chapman and Putnam 1984:122-123)



Simcoe Lowlands

The Simcoe Lowlands cover an area of about 1,100 square miles. They fall naturally into two major divisions separated by the uplands of Simcoe County. To the west are the plains, lying between 580 feet and 750 feet a.s.l., draining into Nottawasaga Bay mostly by way of the Nottawasaga River....To the east is the lowland surrounding Lake Simcoe, lying mostly between 718 and 850 feet a.s.l....These two basins are connected at Barrie by a flat-floored valley... Both the lowlands and transverse valleys were flooded by Lake Algonkian and are bordered by shorecliffs, beaches, and bouldery terraces. Thus they are floored by sand, silt and clay.

(Chapman and Putnam 1984:177)

The soils of the Study Area consist predominately of Osprey loam, Dunedin clay, and Vincent silty clay loam. Osprey loam can be found in irregular, moderately sloping areas to irregular steeply sloping areas; this soil exhibits good drainage and can be very stony (Hoffman and Acton 1974). Whereas Dunedin clay can be found in smooth, moderately sloping to irregular steeply sloping areas; this soil exhibits good drainage and can be slightly stony (Hoffman and Acton 1974). Vincent silty clay loam can be found in smooth, gently sloping to smooth areas; this soil exhibits good drainage and is slightly stony (Hoffman and Acton 1974). Overall, these soil types likely would have been suitable for indigenous agricultural practices. Due to the size of the Study Area, multiple soil types can be identified, they are summarized in Table 2 below. Potable water sources are present within Study Area, more notable sources include Lake Huron, which forms the northern boundary of TBM; and the Beaver River which flows through the northwest portion of the Study Area, along with other smaller tributary drainages, wetland complexes, and other smaller watercourses.

Table 2: Soil Types Found Within Study Area

Soil Type	Slope Description	Drainage Description
Brighton sand over gravel	Gently sloping, essentially stone free	Good
Granby Sand	Smooth, gently sloping to moderately sloping, moderately stone free	Poor
Vincent Silty Clay Loam	Smooth, gently sloping to smooth, slightly stony	Good
Harkaway Loam	Smooth, gently sloping to moderately sloping, moderately stony	Good
Kemble Imperfect	Smooth, very gently sloping to smooth, slightly stony	Imperfect
Listowel Imperfect	Smooth, gently sloping, slightly stony	Imperfect
Muck organic	Level, undrained basin, stone free	Poor
Lily loam	Undrained basins to nearly level, very stony	Poor
Breyden	Nearly level with numerous rock outcrops, very stony	Variable
Saugeen silty clay loam	Smooth, moderately sloping, essentially stone free	Good
Osprey loam	Irregular moderately sloping to irregular steeply sloping, very stony	Good
Dunedin clay	Smooth, moderately sloping to irregular steeply sloping, slightly stony	Good



1.3.2 General Overview of the Pre-Contact Period in Grey County

The cultural chronology of Grey County is briefly summarized in Table 3.

Table 3: Cultural Chronology for Grey County, based on Ellis and Ferris (eds.) (1990)

Table with 4 columns: Period, Characteristics, Time Period, and Comments. Rows include Early Paleo, Late Paleo, Early Archaic, Middle Archaic, Late Archaic (Lamoka, Broad Points, Small Points), Early Woodland, Middle Woodland, Late Woodland (Princess Point Complex, Early Ontario Iroquoian, Middle Ontario Iroquoian, Late Ontario Iroquoian), Contact Indigenous, and Late Historical.

1.3.3 Pre-Contact Indigenous Documentation

Previous archaeological assessments and research has demonstrated that Grey County was intensively occupied by pre-contact Indigenous communities from the Paleo period up to the time of contact. The following subsections outline the cultural or temporal periods recognized for southern Ontario more generally.

1.3.3.1 Paleo Period

The first human occupation of southern Ontario began just after the end of the Wisconsin Glacial period. Although there was a complex series of ice retreats and advances which played a large role in shaping the local topography, southwestern Ontario was finally ice free by 12,500 years ago. The first human settlement can be traced back 11,000 years, when this area was settled by Native groups that had been living south of the Great Lakes.

Our current understanding of Early Paleo period (circa 9000-8400 BC) settlement patterns suggest that small bands, consisting of probably no more than 25-35 individuals, followed a pattern of seasonal mobility extending over large territories (Ellis and Deller 1990:54). One of the most thoroughly studied of these groups followed a seasonal round that extended from as far south as Chatham to the Horseshoe Valley north of Barrie. Early Paleo sites tend to be located in elevated locations on well-drained loamy soils.

Many of the known sites were located on former beach ridges associated with Lake Algonquin, the post-glacial lake occupying the Lake Huron/Georgian Bay basin. There are a few extremely large Early Paleo sites, such as one located close to Parkhill, Ontario, which covered as much as six hectares (Ellis and Deller 1990:51).



It appears that these sites were formed when the same general locations were occupied for short periods of time over the course of many years. Given their placement in locations conducive to the interception of migratory mammals such as caribou, it has been suggested that they may represent communal hunting camps (Ellis and Deller 1990:51). There are also smaller Early Paleo camps scattered throughout the interior of southwestern Ontario, usually situated adjacent to wetlands. The most recent research suggests that population densities were very low during the Early Paleo period (Ellis and Deller 1990:54). Because this is the case, Early Paleo sites are exceedingly rare.

While the Late Paleo period (8400-8000 BC) is more recent, it has been less well researched, and is consequently more poorly understood. By this time the environment of southwestern Ontario was coming to be dominated by closed coniferous forests with some minor deciduous trees (Ellis and Deller 1990:60). It seems that many of the large game species that had been hunted in the early part of the Paleo period had either moved further north, or as in the case of the mastodons and mammoths, become extinct (Ellis and Deller 1990).

As in the early Paleo period, late Paleo period peoples covered large territories as they moved about in response to seasonal resource fluctuations. On a province wide basis, Late Paleo projectile points are far more common than Early Paleo materials, suggesting a relative increase in population (Ellis and Deller 1990:62).

The end of the Paleo period was heralded by numerous technological and cultural innovations which may be best explained in relation to the dynamic nature of the post-glacial environment and region-wide population increases.

1.3.3.2 Archaic Period

During the Early Archaic period (8000-6000 BC), the jack and red pine forests that characterized the Late Paleo period environment were replaced by forests dominated by white pine with some associated deciduous trees (Ellis et al. 1990:68-69). One of the more notable changes in the Early Archaic period is the appearance of side and corner-notched projectile points.

Other significant innovations include the introduction of ground stone tools such as celts and axes, suggesting the beginnings of a simple woodworking industry (Ellis and Deller 1990:65). The presence of these often large and not easily portable tools suggests there may have been some reduction in the degree of seasonal movement, although it is still suspected that population densities were quite low, and band territories large.

During the Middle Archaic period (6000-2500 BC) the trend to more diverse toolkits continued, as the presence of net sinkers suggest that fishing was becoming an important aspect of the subsistence economy. It was also at this time that "bannerstones" were first manufactured (Ellis et al. 1990:65). Bannerstones are carefully crafted ground stone devices that served as a counterbalance for "atlatls" or spear-throwers. Another characteristic of the Middle Archaic is an increased reliance on local, often poor quality chert resources for the manufacturing of projectile points. It seems that during earlier periods, when groups occupied large territories, it was possible for them to visit a primary outcrop of high quality chert at least once during their seasonal round. However, during the Middle Archaic, groups inhabited smaller territories that often did not encompass a source of high quality raw material. In these instances, lower quality materials which had been deposited by the glaciers in the local till and river gravels were utilized.

This reduction in territory size was probably the result of gradual region-wide population growth which led to the infilling of the landscape (Ellis et al. 1990:67). This process resulted in a reorganization of Native subsistence practices, as more people had to be supported from the resources of a smaller area.



During the latter part of Middle Archaic, technological innovations such as fish weirs have been documented as well as stone tools especially designed for the preparation of wild plant foods. It is also during the latter part of the Middle Archaic period that long distance trade routes began to develop, spanning the north-eastern part of the continent. In particular, native copper tools manufactured from a source located northwest of Lake Superior were being widely traded (Ellis et al. 1990:66). By 3500 BC the local environment had stabilized in a near modern form (Ellis et al. 1990:69).

During the Late Archaic (2500-900 BC) the trend towards decreased territory size and a broadening subsistence base continued. Late Archaic sites are far more numerous than either Early or Middle Archaic sites, and it seems that the local population had expanded. It is during the Late Archaic that the first true cemeteries appear (Ellis et al. 1990:66). Before this time individuals were interred close to the location where they died. During the Late Archaic, if an individual died while his or her group happened to be at some distance from their group cemetery, the bones would be kept until they could be placed in the cemetery. Consequently, it is not unusual to find disarticulated skeletons, or even skeletons lacking minor elements such as fingers, toes or ribs, in Late Archaic burial pits.

The appearance of cemeteries during the Late Archaic has been interpreted as a response to increased population densities and competition between local groups for access to resources. It is argued that cemeteries would have provided strong symbolic claims over a local territory and its resources. These cemeteries are often located on heights of well-drained sandy/gravel soils adjacent to major watercourses (Ellis et al. 1990).

This suggestion of increased territoriality is also consistent with the regionalized variation present in Late Archaic projectile point styles. It was during the Late Archaic that distinct local styles of projectile points appear. Also, during the Late Archaic, the trade networks which had been established during the Middle Archaic continued to flourish. Native copper from northern Ontario and marine shell artifacts from as far away as the mid-Atlantic coast are frequently encountered as grave goods (Ellis et al. 1990:117; Ellis et al. 2009:824-825). Other artifacts such as polished stone pipes and banded slate gorgets also appear on Late Archaic sites. One of the more unusual and interesting of the Late Archaic artifacts is the "birdstone" (Ellis et al. 1990:111). Birdstones are small, bird-like effigies usually manufactured from green banded slate.

1.3.3.3 Woodland Period

The Early Woodland period (900-200 BC) is distinguished from the Late Archaic period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. The first pots were very crudely constructed, thick walled, and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil (Spence et al. 1990:137). These vessels were not easily portable, and individual pots must not have enjoyed a long use life. There have also been numerous Early Woodland sites located at which no pottery was found, suggesting that these poorly constructed, undecorated vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of this rather limited ceramic technology, the life-ways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have "pop-eyes" which protrude from the sides of their heads (Spence et al. 1990:129).



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Likewise, the thin, well-made projectile points produced during the terminal part of the Archaic period continue in use. However, the Early Woodland variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance.

The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shell during the Early Woodland period (Spence et al. 1990:129). During the last 200 years of the Early Woodland period, projectile points manufactured from high quality raw materials from the American Midwest begin to appear in southern Ontario (Spence et al. 1990:138).

In terms of settlement and subsistence patterns, the Middle Woodland (200 BC - AD 900 AD) provides a major point of departure from the Archaic and Early Woodland periods. While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish were becoming an even more important part of the diet (Spence et al. 1990:151). Some Middle Woodland sites have produced literally thousands of bones from spring spawning species such as walleye and sucker. Nuts such as acorns were also being collected and consumed (Spence et al. 1990:134). In addition, Middle Woodland peoples relied much more extensively on ceramic technology. Middle Woodland vessels are often decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable.

It is also at the beginning of the Middle Woodland period that rich, densely occupied sites appear on the valley floor of major rivers. Middle Woodland sites are significantly different in that the same location was occupied off and on for as long as several hundred years. Because this is the case, rich deposits of artifacts often accumulated.

Unlike earlier seasonally utilized locations, these Middle Woodland sites appear to have functioned as base camps, occupied off and on over the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed from at least Middle Archaic times, and provides a prelude to the developments that follow during the Late Woodland period.

The Late Woodland period began with a shift in settlement and subsistence patterns involving an increasing reliance on corn horticulture (Fox 1990:185; Smith 1990; Williamson 1990:312). Corn may have been introduced into southwestern Ontario from the American Midwest as early as AD 600 (Fox 1990:174; Williamson 1990:312). However, it did not become a dietary staple until at least three to four hundred years later. Others have more recently espoused or accepted a Late Woodland beginning around AD 500 with the appearance or development of the Princess Point Complex (e.g., Crawford and Smith 2002; see also Martin 2004, 2008).

The first agricultural villages in southwestern Ontario date to the 10th century (Williamson 1990:291). Unlike the riverine base camps of the Middle Woodland period, these sites are located in the uplands, on well-drained sandy soils.

Categorized as "Early Ontario Iroquoian" (AD 900-1300), many archaeologists believe that it is possible to trace a direct line from the Iroquoian groups which inhabited southwestern Ontario at the time of first European contact, to these early villagers.



Village sites dating between AD 900 and 1300, share many attributes with the historically reported Iroquoian sites, including the presence of longhouses and sometimes palisades. However, these early longhouses were actually not all that large, averaging only 12.4 metres (m) in length (Dodd et al. 1990:349; Williamson 1990:304-305). It is also quite common to find the outlines of overlapping house structures, suggesting that these villages were occupied long enough to necessitate re-building. The Jesuits reported that the Huron moved their villages once every 10-15 years, when the nearby soils had been depleted by farming and conveniently collected firewood grew scarce (Pearce 2010). It seems likely that Early Ontario Iroquoians occupied their villages for considerably longer, as they relied less heavily on corn than did later groups, and their villages were much smaller, placing less demand on nearby resources.

Judging by the presence of carbonized corn kernels and cob fragments recovered from sub-floor storage pits, agriculture was becoming a vital part of the Early Ontario Iroquoian economy. However, it had not reached the level of importance it would in the Middle and Late Ontario Iroquoian periods. There is ample evidence to suggest that more traditional resources continued to be harvested, and comprised a large part of the subsistence economy. Seasonally occupied special purpose sites relating to deer procurement, nut collection, and fishing activities, have all been identified (Williamson 1990:317). While beans are known to have been cultivated later in the Late Woodland period, they have yet to be identified on Early Ontario Iroquoian sites (Williamson 1990:291).

The Middle Ontario Iroquoian period (AD 1300-1400) witnessed several interesting developments in terms of settlement patterns and artifact assemblages. Changes in ceramic styles have been carefully documented, allowing the placement of sites in the first or second half of this 100-year period. Moreover, villages, which averaged approximately 0.6 hectares in extent during the Early Ontario Iroquoian period, now consistently range between one and two hectares.

House lengths also change dramatically, more than doubling to an average of 30 m, while houses of up to 45 m have been documented. This radical increase in longhouse length has been variously interpreted. The simplest possibility is that increased house length is the result of a gradual, natural increase in population (Dodd et al. 1990:323, 350, 357; Smith 1990). However, this does not account for the sudden shift in longhouse lengths around AD 1300. Other possible explanations involve changes in economic and socio-political organization (Dodd et al. 1990:357). One suggestion is that during the Middle Ontario Iroquoian period small villages were amalgamating to form larger communities for mutual defence (Dodd et al. 1990:357). If this was the case, the more successful military leaders may have been able to absorb some of the smaller family groups into their households, thereby requiring longer structures.

This hypothesis draws support from the fact that some sites had up to seven rows of palisades, indicating at least an occasional need for strong defensive measures. There are, however, other Middle Ontario Iroquoian villages which had no palisades present (Dodd et al. 1990:358). More research is required to evaluate these competing interpretations.

The lay-out of houses within villages also changes dramatically by AD 1300. During the Early Ontario Iroquoian period villages were haphazardly planned at best, with houses oriented in various directions. During the Middle Ontario Iroquoian period villages are organized into two or more discrete groups of tightly spaced, parallel aligned, longhouses.



It has been suggested that this change in village organization may indicate the initial development of the clans which were a characteristic of the historically known Iroquoian peoples (Dodd et al. 1990:358).

Initially at least, the Late Ontario Iroquoian period (AD 1400-1650) continues many of the trends which have been documented for the preceding century. For instance, between AD 1400 and 1450 house lengths continue to grow, reaching an average length of 62 m.

After AD 1450, house lengths begin to decrease, with houses dating between AD 1500-1580 averaging only 30 m in length. Why house lengths decrease after AD 1450 is poorly understood, although it is believed that the even shorter houses witnessed on historic period sites can be at least partially attributed to the population reductions associated with the introduction of European diseases such as smallpox (Lennox and Fitzgerald 1990:405, 410).

Village size also continues to expand throughout the Late Ontario Iroquoian period, with many of the larger villages showing signs of periodic expansions. The Late Middle Ontario Iroquoian period and the first century of the Late Ontario Iroquoian period was a time of village amalgamation.

One large village situated in London expanded one-fifth of its size (Anderson 2009) and one village north of Toronto have been shown to have expanded on no fewer than five occasions (Ramsden 1990:374-375). These large villages were often heavily defended with numerous rows of wooden palisades, suggesting that defence may have been one of the rationales for smaller groups banding together.

After AD 1525 communities of pre-contact Indigenous people of the Late Ontario Iroquoian period who had formerly lived throughout southwestern Ontario as far west as the Chatham area moved further east to the Hamilton area. During the late 1600s and early 1700s, the French explorers and missionaries reported a large population of Iroquoian peoples clustered around the western end of Lake Ontario. They called these people the "Neutral", because they were not involved in the on-going wars between the Huron and the League Iroquois located in upper New York State.

1.3.3.4 Post-Contact Period - The Petun

The Blue Mountains region south of Nottawasaga Bay has seen intermittent occupation by many different Indigenous groups since the last ice age, however the area was occupied at the time of European contact by a collection of Iroquoian tribes closely related to the Huron-Wendat collectively known as the Petun; a name given to them by the first French explorers meaning "tobacco people" (Garrad 1997; ASI 2013). Although the Petun only occupied the Blue Mountain region for approximately 70 years (Garrad 2010), they left a lasting archaeological impression in the material culture that has been discovered thus far in the Blue Mountains

One specific example of the indelible legacy of archaeological material culture they left behind is the archaeological sites known as Plater-Martin and Plater-Flemming. Several archaeological excavations have taken place in a variety of different locations around the properties associated with these twin village sites, possibly dating back as far as the 19th century when Sir Sanford Flemming purchased the land (Garrad 2010), however the most notable excavations were carried out in 1952 by Mr. E. H. Thomas, in 1975-76 by Mr. Charles Garrad and in 1989-90 by Archaeological Services Inc. (ASI) (ASI 2013). Working off of the previous known locations of middens and wide-spread refuse piles from Mr. E.H. Thomas' excavations in 1952, Charles Garrad's investigation of the Plater-Martin Site in the 1970s yielded the location of 4 additional middens and over 20,000 artifacts; strangely enough there was a complete absence of any settlement patterns (ASI 2013). As is noted in the 1990 ASI report entitled *An Archaeological Resource Assessment of the Plater-Martin Site (BdHb-1): Phase 2 Report. Collingwood Township*



Grey County., the reason for the lack of settlement patterns may be attributed to a combination of deep ploughing practices into the subsoil or the extensive erosion of the topsoil. The report also mentions that a more likely scenario for the lack of settlement patterns may be attributed to the relatively small size of the areas that Garrad tested, and the fact that the area investigated may have fallen between the major settled segments of the village (ASI 1990). A snap-shot of recovered artifacts from the Garrad and ASI investigations reveals a site rich in cultural remains and includes, but is not limited to, decorated ceramic vessel fragments, ceramic pipe fragments, a huge variety of lithic material and tools made from predominantly Kettle Point and Collingwood chert. A varied assortment of other chert types, limestone, quartzite and granite were also being utilized. In addition, a wide assortment of beads, metallic utilitarian and decorative objects, as well as carved animal effigies were also discovered (ASI 2013). With the nearby village sister site of Plater-Flemming, this area has been recognized as vital to the understanding of the dynamic arrangement of settlements as well as the trade and cultural interaction between Indigenous groups and the Jesuit Missionaries/European traders and explorers in the 17th century.

Interestingly, both sites may reside on land purchased by Sir Sandford Fleming in his father's name in 1854 (Garrad 2010). Although his exact archaeological aspirations are unclear, it is known that Sir Sandford Fleming had previously printed and distributed a questionnaire dated 12 June 1852 asking people to record the location of Indian Remains known to them with an emphasis on "entrenchments, mounds and earthworks" (Fleming 1852). This would seem to indicate that he held a genuine interest in learning more about the Petun people and increases the likelihood that he investigated the sites on his land prior to planting an apple orchard. As Garrad indicates in his 2010 OAS paper entitled *Researching the Petun...*

"In conversation with me, the late Edward H. Thomas indicated that Fleming had stated that if he had not been an engineer, he would have been an archaeologist. I have been unable to find any reference to support this claim; indeed at the time Sir Daniel Wilson, Chair of English and History at university College Toronto, was the only archaeologist in Ontario (killan 1998). It is interesting, however, that the first person to have learned an appreciative awareness of the archaeological heritage of Petun Country may have been Sir Sandford Flemming." (Garrad 2010)

1.3.4 Previous Archaeological Research

In order for an inventory of archaeological resources to be compiled, the registered archaeological site records kept by the MTCS were consulted. In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MTCS.

Fifty-seven archaeological sites are registered within the Study Area and within one kilometre of the Municipal limits of the Town of The Blue Mountains (Table 4, Map 2). A considerable amount of archaeological research has been undertaken in the region and has resulted in discovery of an array pre-contact archaeological resources with a variety of cultural affiliations. Recorded archaeological sites have been subject to differing levels of archaeological research and are situated in different land ownership situations. Recorded archaeological site locations were mapped using a 300 m buffer from the central datum point provided by MTCS from their Archaeological Sites Database (Map 2).



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Table 4: Registered Historical and Pre-contact Archaeological Sites within 1 km of the Study Area

Site Number	Name	Site Type	Study Area/ Project Area	Site Visits	Cultural Affiliation	Status and Current Use
BdHc-9	Anderson	-	Study Area	01/06/19 82	-	Further CHVI
BdHc-8	von Bitter	Other: camp/campsite	Study Area	01/09/19 79	Aboriginal, Petun, Euro-Canadian.	-
BdHc-7	O'Neil	Other: camp/campsite; village	Clarksburg	01/06/19 78 01/12/19 84	-	-
BdHc-6	Ferguson	-	Thornbury West	01/12/19 66	-	-
BdHc-5	MacDairmid	-	Thornbury West/ Clarksburg	01/12/19 66	-	-
BdHc-4	Almond	Unknown	Clarksburg	01/12/19 65	Aboriginal, Iroquoian, Lalonde	Further CHVI
BdHc-3	Goff-Idle	-	Study Area	01/12/19 65	Aboriginal, Iroquoian, Lalonde	-
BdHc-27	Camperdown II	homestead	Camperdown	14/06/20 10	Euro-Canadian	Further CHVI, woodlot
BdHc-26	Camperdown I	homestead	Camperdown	14/06/20 10	Euro-Canadian	Further CHVI, woodlot
BdHc-23	Mill Pond	-	Thornbury East	01/04/20 09	-	-
BdHc-21	Blue Mountain	Other: camp/campsite; cabin	Study Area	01/05/20 03	Aboriginal	Further CHVI
BdHc-20	Camplin 1	Unknown	Study Area	01/05/19 94	Aboriginal	-
BdHc-2	Fulford	Other: camp/campsite	Study Area	01/12/19 62	Iroquoian, Lalonde	-
BdHc-19	Wesley Reid	-	Study Area	01/04/19 88	-	-



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Site Number	Name	Site Type	Study Area/ Project Area	Site Visits	Cultural Affiliation	Status and Current Use
BdHc-18	Hunter's Holes	-	Study Area	01/04/19 88	Aboriginal, Euro-Canadian	Further CHVI
BdHc-17	Goldsmith Site	-	Study Area	01/07/19 87	Aboriginal	-
BdHc-16	Mary Ward	wreck	Study Area	01/12/19 66	Euro-Canadian	-
BdHc-15	Craigleith Shale Oil Works	manufacturing	Craigleith	01/12/19 66	Euro-Canadian	-
BdHc-14	Indian Brook	Unknown	Camperdown	01/10/19 78	Petun	-
BdHc-13	Timmer	Other: camp/campsite	Study Area	01/07/19 84	Aboriginal	Further CHVI
BdHc-12	Bullfrog	Unknown	Study Area	01/10/19 84	Aboriginal	-
BdHc-11	Knott	-	Study Area	01/10/19 83	-	-
BdHc-10	Anderson Quarry	-	Study Area	01/10/19 82	-	-
BdHc-1	Field-Ardiel	Other: camp/campsite	Study Area	01/12/19 66	Aboriginal	-
BdHb-8	P3/P4/P5/P6/P7/P8	camp / campsite; camp / campsite	Craigleith	14/09/20 15 18/07/20 16	Blackduck, Odawa	Further CHVI, Woodlot; agricultur al, other
BdHb-6	P1	camp / campsite; camp / campsite	Craigleith	14/09/20 15 18/07/20 16	Aboriginal, Euro-Canadian	Further CHVI, Vacant; abandon ed agricultur al
BdHb-4	Gary Reid	Other: camp/campsite_	Craigleith	01/04/20 00	Other	-



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Site Number	Name	Site Type	Study Area/ Project Area	Site Visits	Cultural Affiliation	Status and Current Use
BdHb-3	GOODCHILD	burial	Craigleith	01/01/1974	Odawa, Petun	-
BdHb-2	Plater-Fleming	house; village; settlement	Craigleith	01/12/1973 01/12/1984 01/01/1996 01/12/2010 14/09/2015	Euro-Canadian, Odawa, Petun; Huron-Wendat	Further CHVI, Agricultural; Overgrown former agricultural
BdHb-1	Plater-Martin	village	Craigleith	01/04/1996 01/01/1974	Euro-Canadian, Petun	Further CHVI
BcHc-9	Rockhaven	-	Study Area	-	-	-
BcHc-8	Five Springs Quarry	-	Study Area	-	-	-
BcHc-7	Thomson Workshop	Other: tool manufacturing	Study Area	01/05/1982	Aboriginal	-
BcHc-6	Krystal Acres Quarry	-	Study Area	01/06/1982	-	-
BcHc-5	Binette	Other: tool manufacturing	Study Area	01/06/1982	Aboriginal	-
BcHc-4	Buxton	Other: tool manufacturing	Study Area	01/04/1981	Aboriginal	-
BcHc-3	McNichol	Other: tool manufacturing	Study Area	01/10/1980	Aboriginal	-
BcHc-2	von Bitter	-	Study Area	-	-	-
BcHc-14	Red Wing	Unknown	Study Area	01/05/1994	Aboriginal	-
BcHc-13	Thomson NW	-	Study Area	01/10/1989	Aboriginal	Agricultural



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Site Number	Name	Site Type	Study Area/ Project Area	Site Visits	Cultural Affiliation	Status and Current Use
BcHc-11	Ramble	-	Study Area	01/05/19 85	-	-
BcHc-10	Watson Workshop	-	Study Area	01/05/19 84	-	-
BcHc-1	Kaake	-	Study Area	01/12/19 35 01/12/19 77	-	-
BcHb-59	Ferguson	house	Study Area	01/05/20 04	Euro-Canadian	Further CHVI
BcHb-58	-	findspot	Study Area	01/05/20 03	Aboriginal	No Further CHVI
BcHb-57	Howard	house	Study Area	01/05/20 05	Euro-Canadian	Further CHVI
BcHb-56	Robinson-Allen	house; midden	Study Area	01/05/20 05 01/07/20 06	Euro-Canadian	Further CHVI
BcHb-50	Windrose	homestead	Study Area	01/10/20 03	Euro-Canadian	No Further CHVI; Agricultural
BcHb-35	Ekarenniondi	Other: rock art	Study Area	-	Aboriginal, Algonkian, Petun	-
BcHb-34	CURRIE, JOHN S.	Other: unknown_ Unknown	Craigleith	01/01/19 74	-	-
BcHb-33	RYKERT	burial	Study Area	01/01/19 69	Aboriginal, Petun	-
BcHb-27	Haney Cook	village	Craigleith	01/12/19 73	Algonkian, Euro-Canadian, Petun	-
BcHb-26	MACMURCHY	-	Study Area	01/01/19 53	Other	-



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Site Number	Name	Site Type	Study Area/ Project Area	Site Visits	Cultural Affiliation	Status and Current Use
BcHb-25	MCALLISTER	village	Study Area	01/01/1974 12/08/2015	Euro-Canadian, Aboriginal, Petun	Further CHVI; Agricultural; Residential
BcHb-25	MCALLISTER	village	Study Area	15/10/2015	-	No Further CHVI
BcHb-24	BUCKINGHAM	burial	Study Area	01/01/1974 01/06/1996	Aboriginal, Petun	-
BcHb-22	PRETTY RIVER	village	Study Area	01/01/1974 01/01/1996	Euro-Canadian, Petun	Further CHVI

*CHVI denotes further Cultural Heritage Value and Interest



2.0 FIELD METHODS

2.1 Existing Conditions

A Stage 1 property inspection was conducted on 6 December 2017 under archaeological consulting licence P243-0380-2017, issued to Carla Parslow of Golder. Mr. Shawn Bayes (R356) of Golder acted as the licensed field supervisor who conducted the property inspection, as per Section 12 of the MTCS' 2013 *Terms and Conditions for Archaeological Licences*, issued in accordance with clause 48(4)(d) of the *Ontario Heritage Act*.

The weather during the Stage 1 property inspection was overcast with average seasonal temperatures of two degrees Celsius and light snow in the afternoon. Lighting conditions and the open nature of the Study Area afforded an excellent setting to conduct a high-level assessment. Field conditions were favourable for identifying areas of archaeological potential that may require Stage 2 archaeological assessment. Also included in the field assessment were select built heritage locations and specific identified structures and landmarks that hold cultural heritage value. The Stage 1 property inspection was not comprehensive, but can be considered representative of the Study Area and the Project Area (Table 1; Map 1).

The primary population centre within TBM is Thornbury, situated on the shores of Georgian Bay, and its inland suburb of Clarksburg (Map 1) to the south. Other small communities situated along Georgian Bay, within TBM include Christie Beach and Lora Bay to the northwest along with Camperdown and Craigeith to the southeast. These communities occupy a region that is set on the edge of where the Niagara Escarpment meets the waters of Georgian Bay, specifically the area where the Beaver River and other small tributaries flow off the escarpment and out into Nottawasaga Bay. These communities, and Swiss Meadows, along with the surrounding area comprise the Project Area for this assessment.

The vast majority of TBM exists south of Highway 26 comprising the small neighbourhoods and communities of Banks, Sandhill, Castle Glen Estates, Duncan, Gibraltar, Swiss Meadows, Heathcote, Kolapore, Little Germany, Loree, Ravenna, Red Wing, Slabtown, Victoria Corners and portions of the west end of Collingwood (Map 1). These communities are spread out over a shifting rural landscape comprised of rolling hills, high peaks, and sheer cliffs. Mature hardwood forest stands between agricultural fields and fruit orchards. Terrain is less favourable in the southern portion of the Study Area and is occupied by marshes and associated drainages intermixed with low-lying mixed wood forests.

The identification and reconnaissance of specific pieces of property that could hold potential for archaeological resources was not practical for this Stage 1 archaeological assessment. However, the identification and photographic documentation of areas with potential for pre-contact and historical archaeological resources was conducted. Field assessment included visiting many of the communities in Study Area and the surrounding natural and cultural landscapes that they exist within. In addition, identification of the local built heritage and associated infrastructure indicates that there are potential significant historical resources scattered across the Study Area, but clustered in the Project Area. This Stage 1 archaeological assessment contributes to a better understanding of the historical cultural landscape within the Project Area but is limited by the duration of the field program and lack of property-specific evaluations necessary to meet regulatory requirements for future development plan approvals.



2.2 Property Survey Methods

The Study Area covers approximately 287 km² or 28,700 ha (Map 1). It is bordered to the north by the waters of Georgian Bay, to the west by the Municipality of Meaford, to the south by the Municipality of Grey Highlands and to the east by the Town of Collingwood. This high-level Stage 1 assessment was conducted by vehicle tour and involved driving the entire length of all the major roads, and a selection of back roads within the municipality. Photographic documentation of a representative sample of accessible features within the various small communities was conducted. Photographs were acquired for locations exhibiting archaeological potential and features that contribute to the general character of the Study Area. In addition, photographic documentation of all encountered changes in the natural environment as well as the evolving land use, both past and present, was also undertaken to gain a more complete understanding of the history of the region and to start to develop a broader understanding of the archaeological resource potential held within.

Special consideration and attention was focused on the community of Clarksburg, as it has been identified as holding a higher density of century homes, heritage buildings, and landmarks. The first settlers into Clarksburg were the Marsh family, followed by William Clark. William Marsh built his first home on the south-east side of the village in the 1850s. He was a farmer, a merchant and the founder of Clarksburg. William Clark operated a woollen mill on the river. The village was named after Clark and the main street carries the name of Marsh. In 1860 a woollen mill and flour mill were erected and the Beaver Valley Inn was used as a boarding place for the workers at the woollen mill. The Inn is believed to be standing in its original location to this day.

Clarksburg's first school was constructed in 1863 followed by Hillcrest school being constructed in 1892, which is believed to be standing to this day. Sometime around 1890, a bicycle rim factory operated in Clarksburg, shipping products across Canada and to several European countries. Interestingly, a bicycle club was established in Thornbury and Clarksburg that grew to several hundred members around that time. Clarksburg also had a grain mill, a mercantile, an armory, a curling rink, and a hotel.

The Black Bridge, a concrete bowstring arch bridge, is a designated heritage structure spanning the Beaver River on the 30th Sideroad. The steel truss bridge and the Clendenan Reservoir at the historic mill site are also notable features as the mill dates back to Clendenan, the second owner is located just south of the village. It was the first source of electricity for Clarksburg when a power house was installed in 1910. However, its use as a mill site dates back to 1862 and David N. Cumming one of the most important early settlers in the area. The downtown of Clarksburg is a glimpse into the past with a number of historical commercial blocks remaining in the business district. The main street as it extends northward through Clarksburg and into West Thornbury, contains many late 19th and early 20th century residences and churches, as do the neighbouring streets. A walking tour of the main streets and paths along the Beaver River was undertaken and thoroughly documented.

An inventory of documentary records related to the Stage 1 archaeological assessment is provided in Table 5.



Table 5: Inventory of Documentary Records

Document Type	Current Location of Document	Additional Comments
Field Notes	Golder office in Whitby	5 pages in project file
Hand Drawn Maps	Golder office in Whitby	1 map stored in project file
Maps Provided by Client	Golder office in Whitby	1 map stored in project file
Digital Images	Golder office in Whitby	138 Images stored digitally in project file

2.2.1 Property Inspection

The northern extent of the Study Area was assessed first. Commencing the driving tour at the Blue Mountain Ski area (Images 1 and 2), the landscape shifts quickly from the suburban, infrastructure-heavy ski village with large modern chalets and hotels, to the shores of Georgian Bay where the elevation drops very sharply down off the escarpment to the surface of the lake. This area is dotted with cottages and homes that share equal attention on both the mountain slopes and the lake. Ontario Highway 26 runs northwest – southeast through the Project Area and is the main artery along the shoreline, it connects the various communities of Craigeleith, Camperdown, Thornbury, Lora Bay, and Christie Beach.

Craigeleith is a small residential community comprised of both small older cottages and ski chalets as well as new homes. Craigeleith is situated on the shores of Nottawasaga Bay where sandy soils and rocky outcrops are prevalent. The vegetation is primarily planted and well-manicured, although several stands of semi-mature pine and mature mixed forest with dense undergrowth were noted. The shore area is dominated by scrubby water loving plants like dogwoods and willows. This type of environment is predominant along the length of the highway from Craigeleith to Christie Beach. Craigeleith is home to both the Craigeleith Provincial Park, with its sand and shale beach and biking trails as well as the Craigeleith Depot (Images 3 and 4); a historically significant train station dating back to 1878 which currently operates as a museum and community interpretation centre.

Moving northwest into the area around Camperdown, the landscape remains gently sloped down off the escarpment, but takes on a noticeably more natural quality (Image 5). The highway is lined in sections by mature mixed woods and dotted with houses. In some areas, like the Peasemash Nature Preserve, there is a shift to lower lying terrain in roadside areas where willows, cattails, and other water-loving species dominate.

A small neighbourhood called Sandhill is situated on the outskirts of Camperdown, a few kilometres south of Highway 26. Driving up the steep hillside of the escarpment on Grey County Road 40, Sandhill sits atop a sandy ridge and has seen a lot of recent development in the form of new large homes. This area is a great example of the many new housing developments that have slowly started spreading out from the nearby ski resort communities. There is one small historical church/schoolhouse that may hold historical value and is evidence that the settlement of Sandhill has historical roots (Image 6).

Entering into the village of Thornbury the landscape shifts dramatically. Natural lakeside dotted with cottages shifts to a suburban landscape; albeit with a mixture of new and old elements. There are several locations around the Town Hall that have seen recent rejuvenation and re-purposing of historical places. Thornbury Cidery building (Image 7) was originally an apple processing facility. A wooden building was constructed in the late 1800s but burnt down in the 1920s and was rebuilt in the 1930s. It was converted into a modern Cidery in 2007



(D'Amato 2017). The Thornbury Dam, now used as a fishway and for power generation (Image 9), and the old mill sites located on the Town Hall property (Image 8) are perfect examples of redeveloped properties that still hold archaeological potential. Thornbury with its harbour, historical mills, and other businesses in the main downtown area along with the nearby community of Clarksburg, together hold a vast amount of potential to reveal significant archaeological sites and warrant further archaeological assessment where new developments are proposed.

The far northwest extent of the Study Area is occupied by the Lora Bay portion of the Project Area, including Christie Beach. This area has more agricultural lands closer to the highway, with a slightly undulating landscape sloping away to the north and eventually meeting the lake. Having left the outskirts of Thornbury, the Christy Beach and Lora Bay area is once again less urban and returns to a rural cottage type setting. The open flat agricultural fields and sandy, well drained hilltops covered in mature forest would have potential for historic and pre-contact archaeological resources (Image 10).

The west limit of the Study Area extends south along the Blue Mountains-Meaford Townline Road, Grey County Road 13 and the Blue Mountains-Euphrasia Townline, bisecting the communities of Heathcote and Duncan on the way to the settlement of Little Germany at the southwest corner of the Study Area. This portion of the Study Area has a multitude of rivers, creeks, and small tributaries that criss-cross the through it. This area exhibits the dynamic nature of the Blue Mountain region's watershed. Small creeks seemingly branch off in all directions to feed the fertile loam that characterizes the rural agricultural setting of the area. The 1881 Historic Map (Map 3) reveals a landscape focussed on logging and agriculture, with saw and grist mills playing an integral economic role as centrepieces of each small community situated beyond the Project Area.

The main tributary coursing through the Study Area is the Beaver River; it flows northeast to Georgian Bay through the Project Area within Clarksburg and East/ West Thornbury. The smaller waterways of Indian Brook, Silver Creek, and the Pretty River, all contribute to a network of flowing water that remains largely navigable and is rich resource for fish, birds and mammals. Each of these waterways would have been favoured for their food resources, but also likely acted as transportation corridors for travel and movement of goods for both Indigenous and later, European settlers.

Special consideration and attention must be placed on all lands within 300 m of critical water sources (spring, ponds/lakes) and watercourses (rivers, creeks, brooks, etc.) when attempting to determine the potential for archaeological resources. Map 4 shows the main rivers and creeks of the Study Area, as well as some of the smaller tributaries; a 300 m buffer has been applied to the lands around these waterways and represents a zone within which the potential for discovering archaeological sites, both Aboriginal and European, are exponentially higher compared to lands more distant to water sources. The importance of, and proximity to, fresh water is a primary factor in attempting to build an archaeological potential model, and understanding where populations of people would have congregated, perhaps even decided to settle more permanently in the past.

The central portion of the Study Area can be characterized as the high rolling hills and plateau atop the escarpment (Image 11). This entire central portion of the Study Area is sparsely populated compared to the Project Area. Within this large agricultural zone exists the communities of Banks, Sandhill, Castle Glen Estates, Gibraltar, Swiss Meadows, Kolapore, Loree, Ravenna, Red Wing, Slabtown, and Victoria Corners. Throughout the driving tour of the main roads and backroads in this vast open landscape, the dynamic shifts between agricultural fields and untouched forest stand in stark contrast to one another. Portions of the landscape that were dry enough and capable of being harvested of timber and turned into arable land have been cleared and farmed, with the exception



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of a few pockets of mature forest. The landscape typically conforms to an agricultural setting with gentle slopes and mature forest left standing on the most extreme slopes, peaked hilltops and around low-lying areas (Image 15).

Each plot of land appears quite large, and the dearth of roadside housing in many areas suggests that the subdividing of larger plots has not predominated in the area. Each small community, or hamlet, encountered seems to have the same typical characterization with a small number of houses and perhaps a historical church all clustered around a main intersection. Farmsteads are dispersed a good distance apart down each of the roads that extend from the communities in every direction. Long stretches of straight road are lined with fruit orchards (Image 14), as well as agricultural fields previously in corn, soy, winter wheat, and other cash crops. Where visible from the roadside (e.g., Loree and Ravenna), the soils in many of the tilled fields appears to be a sandy loam, well drained and fertile. Rocky outcroppings were not observed, nor evidence of the anaemic sand and shale type soils that characterize the Project Area.

Loree is a diffuse community of several houses spread out over a large agricultural area and is at the low end of the population density spectrum for a neighbourhood. Loosely centred at the corners of Side Road 21 and 6th Line, this small community is set amongst the dynamically undulating terrain of the north end of the escarpment; it is far hillier here than to the south. With sloped agricultural fields, small creeks and tributaries meandering through the landscape, and a good amount mature hardwood forests left standing, the potential for discovering historical and pre-contact archaeological resources is high (Image 16). In particular, due to the increase in mature hardwood forest left standing on the high well drained hilltops, the potential for discovering undisturbed pre-contact sites is also great.

Ravenna is another great example of a typical small community in the Study Area. Unlike Loree, Ravenna radiates more evenly out from the main four corners, with a tight cluster of homes around the intersection of Grey County Road 119 and Grey County Road 2. With a historical church (Image 13) at the north end and a small diner/general store to the south, and several historical homes (Image 12) and farmsteads in closer proximity to one another, the neighbourhood of Ravenna has a slightly higher population density than most of the smaller neighbourhoods in the region. Being more centrally located on top of the escarpment, Ravenna is set in a gently rolling agricultural landscape, and does not see the dramatic shifts in elevation seen in northern communities like Loree. Agriculture has transformed the natural landscape in and around Ravenna, mature tree lines demarcate property divisions and the banks of small meandering watercourses, but the vast majority of the landscape is open farm fields. It is difficult to discern which watercourses are natural and which have been engineered to accommodate farming practices, however given the number of small watercourses and the seemingly well drained nature of many of the fields in the area, it would be prudent to consider this area as having archaeological potential.

Leaving the top of the escarpment and descending back down to lower elevations, the tour of the Study Area draws to a conclusion along the meandering drive through the twists and turns of the Pretty River Valley. The valley leads out toward the south end of the Town of Collingwood. This southwest corner of the Study Area is different than other areas explored thus far. The vast agricultural fields and gently rolling terrain that dominated the central areas, has been replaced by dramatic hills that rise and fall on steep angles highlighting the glacial processes that created this environment. Higher elevations are covered primarily by hardwood forests and lower elevations are densely packed with mature cedars, other softwoods, and a mixture of fast flowing creeks and boggy marshes (Images 17 and 18). The area of the Pretty River Valley is a provincial park. It remains a natural setting despite the occasional household at the roadside and evidence of past logging activity. A network of cross-country skiing and hiking trails lead off in many directions from Pretty River Road, the main artery through the park



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giving great access to the area, and the presence of some curious landmarks such as the decaying remains of an old concrete and stone bridge over the Pretty River give a glimpse to the past land use within the park (Image 19).



3.0 ANALYSIS AND CONCLUSIONS

3.1 Archaeological Potential

Archaeological potential is established by determining whether any features or characteristics indicating archaeological potential are located on, or nearby, the Project Area. Features and characteristics that indicate archaeological potential are defined within Section 1.3.1 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011:17-18) and include:

- Previously identified archaeological sites.
- Water sources:
 - Primary water sources (e.g., lakes, rivers, streams, creeks).
 - Secondary water sources (e.g., intermittent streams and creeks; springs; marshes; swamps).
 - Features indicating past water sources (e.g., glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels, shorelines of drained lakes or marshes, and cobble beaches).
 - Accessible or inaccessible shoreline (e.g., high bluffs, swamps or marsh fields by the edge of a lake, sandbars stretching into marsh).
- Elevated topography (eskers, drumlins, large knolls, plateaux).
- Pockets of well drained sandy soil, especially near areas of heavy soil or rocky ground.
- Distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases.
- Resource areas including:
 - Food or medicinal plants.
 - Scarce raw minerals (e.g., quartz, copper, ochre or outcrops of chert).
 - Early Euro-Canadian industry (fur trade, logging, prospecting, mining).
- Areas of early Euro-Canadian settlement including:
 - Early military or pioneer settlement (e.g., pioneer homesteads, isolated cabins, farmstead complexes).
 - Early wharf or dock complexes, pioneer churches and early cemeteries.
- Early historical transportation routes (e.g., trails, passes, roads, bridges, railways, portage routes).
- Property listed on a municipal register or designated under the *Ontario Heritage Act* or that is a federal, provincial or municipal historic landmark or site.
- Property that local histories or informants have identified with possible archaeological sites, historical events, activities or occupations.



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Many of the above features of archaeological potential have a buffer assigned to them, extending the zone of archaeological potential beyond the physical feature. The following buffers are commonly accepted by the MTCS and specifically indicated in Section 1.4 of the *Standards and Guidelines for Consultant Archaeologists* (MTCS 2011:20-21).

- 300 m buffer: previously identified archaeological site; water sources; areas of early Euro-Canadian settlement; or locations identified through local knowledge or informants.
- 100 m buffer: early historical transportation route.
- No buffer, potential is restricted to the physical limits or the feature: elevated topography, pockets of well-drained sandy soil, distinctive land formations, resources areas, listed or designated properties and landmark properties.

Features of archaeological potential found on or in the vicinity of the Study Area include: previously identified archaeological sites, historical transportation routes (i.e., trails, roads, and railways), water sources and areas of early Euro-Canadian settlement.

3.1.1 Archaeological Integrity

A negative indicator of archaeological potential is extensive below-grade land disturbance. This includes widespread earth movement activities that would have removed or relocated any archaeological resources to such a degree that their information potential and cultural heritage value or interest has been lost.

Activities that are recognized to cause sufficient disturbance to remove archaeological potential include: quarrying, major landscaping involving grading below topsoil, building footprints and infrastructure development. Activities including agricultural cultivation, gardening, minor grading and landscaping do not necessarily remove archaeological potential (MTCS 2011:18). The current Study Area contains some areas with extensive below-grade land disturbance. However, the Stage 1 property inspection was not sufficiently rigorous to allow for omission of specific areas/properties within the Study Area/ Project Area from future archaeological assessment work.

3.1.2 Potential for Pre- and Post-Contact Indigenous Resources

Following the criteria outlined above in Section 3.1, and considering there are 57 recorded pre-contact Indigenous sites in the Study Area, there is potential for archaeological resources throughout TBM.

Map 5 illustrates areas of observed and modelled archaeological potential within the Study Area. Maps 6 through 20 provide detailed mapping showing the areas of archaeological potential within the Project Area. Areas with archaeological potential are recommended for Stage 2 archaeological assessment.

3.1.3 Potential for Historic Euro-Canadian Resources

Following the criteria outlined above in Section 3.1 the Study Area is determined to have archaeological potential for historical Euro-Canadian sites given the presence of several historical communities and buildings as well as the proximity of historical transportation routes and the presence of historical plaques and monuments.

While areas of previous disturbance eliminate the potential for the recovery of archaeological resources (Section 1.3.5.1), areas with no previous disturbance or only surficial previous disturbance retain their archaeological potential. Map 5 illustrates areas of archaeological potential within the Study Area. Maps 6 through



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20 provide detailed mapping showing the areas of archaeological potential within the Project Area. Areas with archaeological potential are recommended for Stage 2 archaeological assessment.

3.2 Conclusion

Based on the background research provided in this report and confirmed by the high-level property inspection of the Study Area, there is moderate to high archaeological potential within the Study Area. Furthermore, many properties within the Project Area are considered to have archaeological potential or contain recorded sites with further cultural heritage value or interest.

Combining the data from background research and the property inspection, and accounting for inclusion of areas in proximity to critical water sources and waterways, a model was developed to inform a more complete understanding of the inventory of recorded archaeological and heritage resources. The resulting predictive model indicates locations where as-yet unrecorded archaeological sites are most likely to be found (Map 5 through 20). Considering the size of the Project Area and the focus of the Project on the urban areas, a series of overlapping detailed maps are provided to illustrate the archaeological potential model by the urban areas that comprise the Project Area.

Table 6: Project Area - Detailed Archaeological Potential Mapping for Urban Areas

Project Area/ Urban Area	Map Title	Map Number
Lora Bay	Lora Bay Detail 1 of 2	Map 6
	Lora Bay Detail 2 of 2	Map 7
Thornbury East	Thornbury East Detail 1 of 1	Map 8
Thornbury West	Thornbury West Detail 1 of 1	Map 9
Clarksburg	Clarksburg Detail 1 of 1	Map 10
Camperdown	Camperdown Detail 1 of 4	Map 11
	Camperdown Detail 2 of 4	Map 12
	Camperdown Detail 3 of 4	Map 13
	Camperdown Detail 4 of 4	Map 14
Craigeleith	Craigeleith Detail 1 of 5	Map 15
	Craigeleith Detail 2 of 5	Map 16
	Craigeleith Detail 3 of 5	Map 17
	Craigeleith Detail 4 of 5	Map 18
	Craigeleith Detail 5 of 5	Map 19
Swiss Meadows	Swiss Meadows Detail 1 of 1	Map 20



4.0 RECOMMENDATIONS

Given the findings of the Stage 1 archaeological assessment of the Study Area, the following recommendations are made:

- 1) Portions of the Study Area that have archaeological potential, as illustrated in Map 5 and detailed Project Area mapping (Maps 6 to 20) are recommended for Stage 2 archaeological assessment prior to ground disturbance associated with future developments.
- 2) Portions of the Study Area identified as disturbed (previous construction and/or grading activities) may not have had all potentially archaeological soils removed, particularly within the more urbanized Project Area. The Stage 1 property inspection was not sufficiently rigorous to remove areas of previous disturbance from the archaeological potential model as illustrated in Maps 5 to 20. Additional Stage 2 archaeological assessment is required to make determinations about the severity of previous impacts as they relate to archaeological potential assessments.

All Stage 2 archaeological assessment should be conducted by a licensed consultant archaeologist and follow the requirements set out in the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Areas recommended for further Stage 2 archaeological assessment should be subject to investigation by pedestrian survey as the preferred method. Pedestrian survey is conducted when ploughing is viable, usually in agricultural settings (MTCS 2011 Section 2.1.1 Standard 1). For pedestrian survey, archaeologists will walk a ploughed agricultural or fallow field spaced at 5 m intervals. In order to conduct the pedestrian assessment of agricultural or fallow lands, it is required that the area be ploughed, disked, and allowed to weather (MTCS 2011 Section 2.1.1 Standard 2 and 3) such that the opportunity to observe artifacts is at an acceptable level to both the archaeologist and the MTCS. According to MTCS stipulations, areas of no till farming also must be ploughed prior to Stage 2 archaeological assessment. The MTCS further stipulates that all areas subject to ploughing must provide a minimum surface visibility of 80%. Should any artifacts be recovered during the Stage 2 pedestrian survey, they will be collected, and their location will be recorded using a hand-held GPS and survey intervals will be reduced to one metre for a 20 m radius around the area where artifacts are recovered.

All other areas unable to be ploughed and brought to a condition favourable for pedestrian survey should be subject to test pit survey. Test pit survey involves digging test holes at 5 m intervals across a given property. Each test pit excavated by shovel should be at least 30 cm in diameter, into the subsoil by 5 cm and examined for any stratigraphy or indication of cultural features or fill activities prior to being backfilled (MTCS 2011 Section 2.1.2 Standard 5 and 6). All soil should be screened through six-millimetre hardware cloth and all artifacts collected and labelled according to their associated test pit (MTCS 2011 Section 2.1.2 Standard 7 and 8). Should artifacts be identified during the Stage 2 test pit survey it may be necessary to intensify testing intervals to 2.5 m, and excavate a one-metre square unit.



5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

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 O.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Tourism, Culture and Sport, a letter will be issue by the Ministry stating that there are no further concerns with regards 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 licenced 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 licenced archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating 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 representative of a new archaeological site or sites and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ministry of Consumer Services is also immediately notified.



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7.0 IMAGES 1 THROUGH 19 ON PROCEEDING PAGES.



Image 1: Blue Mountain Ski Village, facing east. Modern homes and hotels in Alpine architectural style typical of the area.

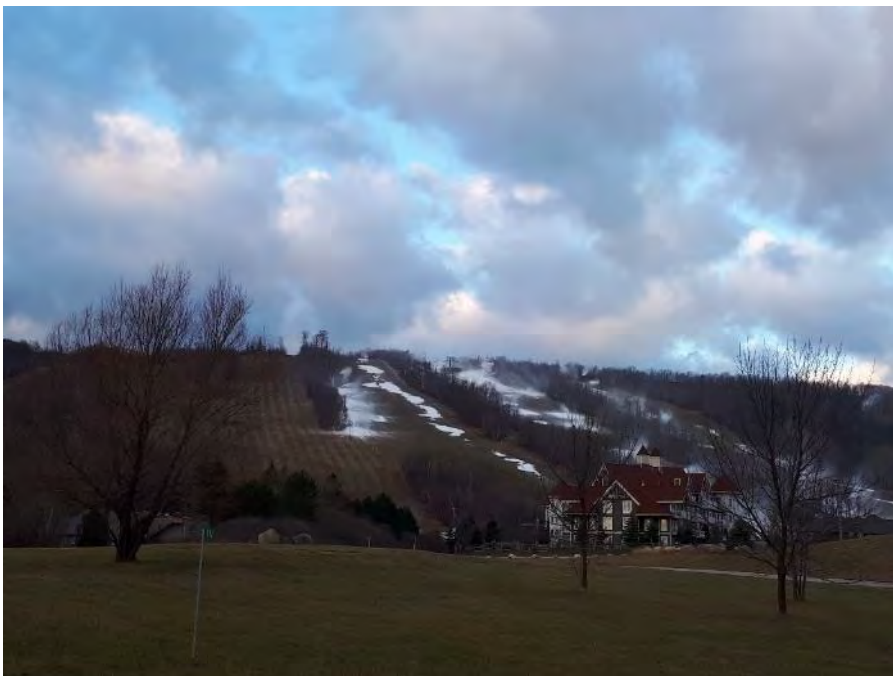


Image 2: Blue Mountain Ski slopes, facing northwest.



Image 3: Craigleith Depot, facing north-northeast.



Image 4: Craigleith Beach, sand and shale beach area at the Provincial Park, facing north-northeast.



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Image 5: Camperdown area, facing southwest. Mountains give way to flat Georgian bay shoreline area. Area is sloped down off the mountainside.



Image 6: Older church or schoolhouse in Sandhill, facing northwest.



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Image 7: Thornbury Cidery building, facing north.



Image 8: Old train trestle/bridge that has been recently refurbished by the town, facing north.



Image 9: Hydro Dam and fishway in Thornbury, facing west.



Image 10: Farm field near Christie Beach, facing northwest.



Image 11: Atop the escarpment on the Blue Mountains-Meaford Townline Road, facing east.



Image 12: Ravenna centre, facing west. Small historical houses clustered around the four corners of Grey County Road 119 and Grey County Road 2.



Image 13: Stone church in Ravenna, facing north.



Image 14: Typical stretch of road in the central area of TBM, facing north. Roads are lined with fruit orchards and farm fields.



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Image 15: Typical landscape of gentle rolling terrain indicative of the top of the escarpment, central Blue Mountains area, facing southeast.



Image 16: The sparsely populated community of Loree, facing south.



Image 17: Marshy low-lying terrain in parts of the Pretty River Valley Provincial Park, facing southeast.



Image 18: Densely packed soft-wood forests in the low-lying areas within the Pretty River Valley, facing west.

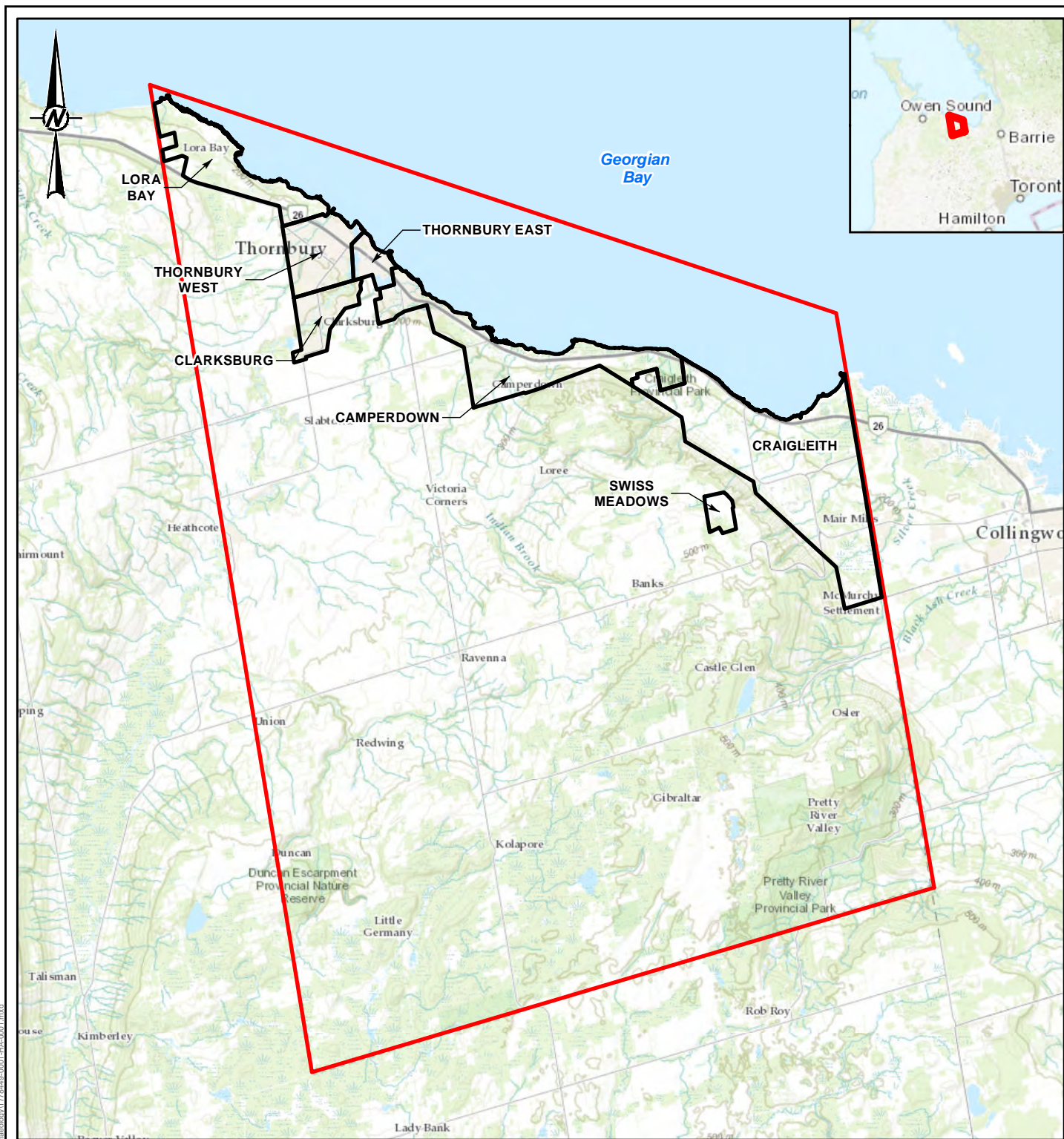


Image 19: Unmarked old Stone and concrete bridge crossing the Pretty River, facing south-southwest.



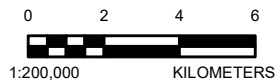
8.0 MAPS

Maps 1 through 20 on proceeding pages.



LEGEND

- Study Area
- Urban Area Boundary



NOTE(S)

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REFERENCE(S)

1. BASE DATA - MNR/LR OBTAINED 2017
2. ARCHAEOLOGICAL SITES - MTCS - ONTARIO ARCHAEOLOGICAL SITES DATABASE (PAST PORTAL)
3. TRAIL DATA - ONTARIO TRAILS PROJECT
4. SERVICE LAYER CREDITS: SOURCES: ESRI HERE, DELORME, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEBCO, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

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PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE

STUDY AREA OVERVIEW

CONSULTANT



YYYY-MM-DD 2018-04-20

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PREPARED RM/PR

REVIEWED CO

APPROVED CP

PROJECT NO.
1778449

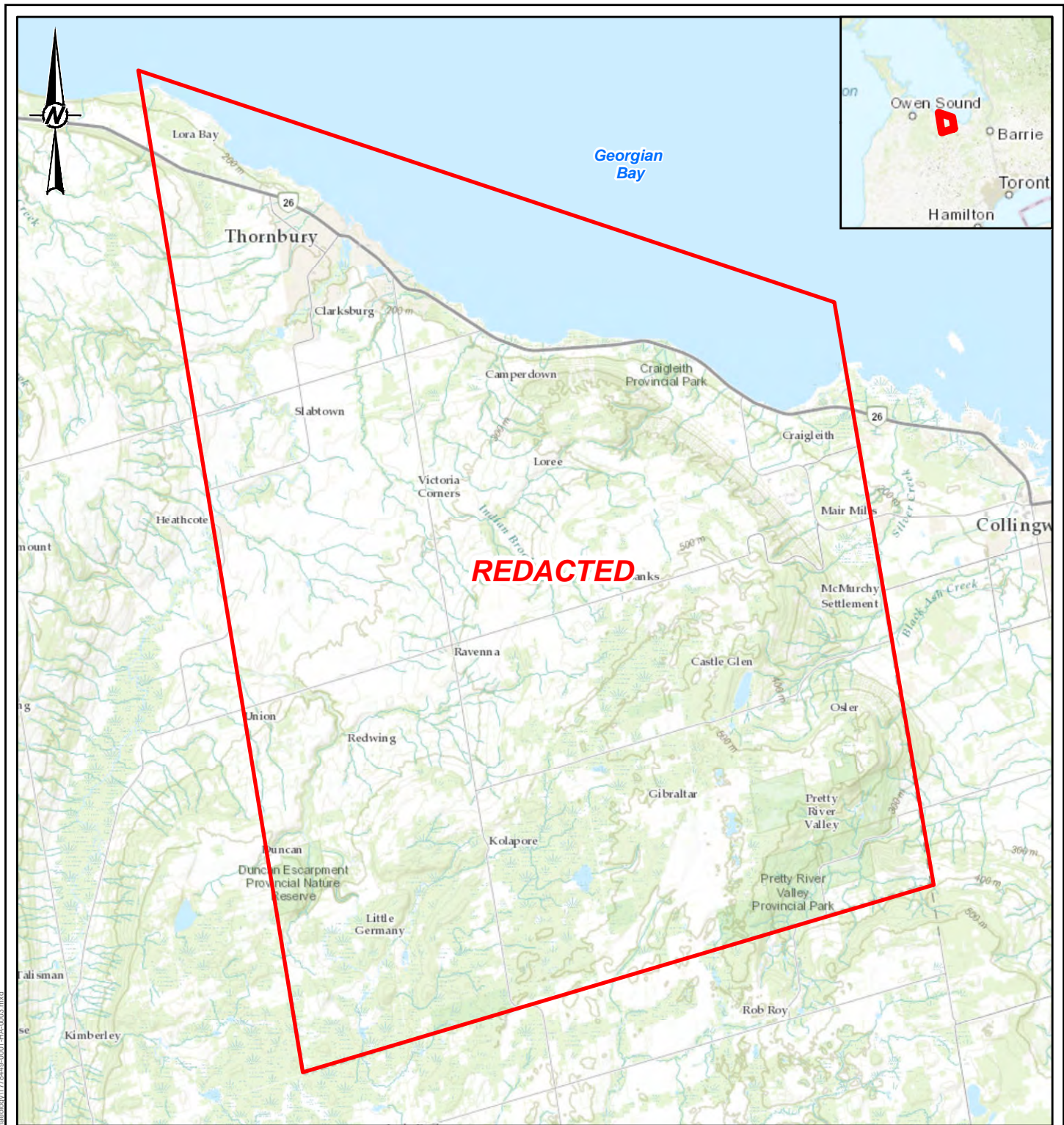
CONTROL
0001

REV.

FIGURE
1

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LEGEND

Study Area



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PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE

ARCHAEOLOGICAL SITES, DESIGNATED PROPERTIES, FIELD RECONNAISSANCE, INFORMANT DATA, AND HISTORICAL HERITAGE

CONSULTANT

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APPROVED	CP



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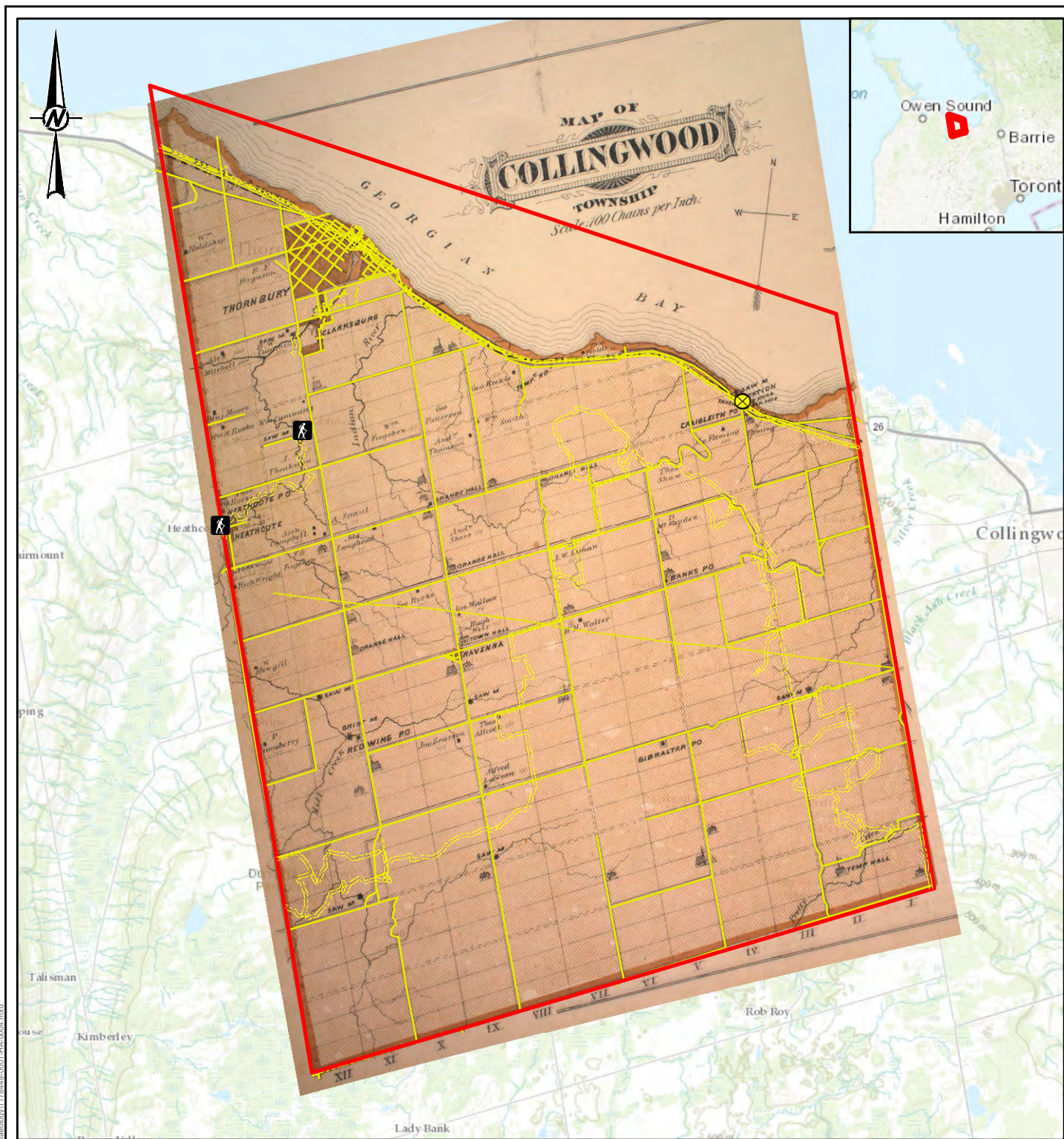
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FIGURE
2

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LEGEND

- Railway
- Ontario Trail Sites
- Ontario Trails
- Road
- Bridge
- Railway
- Trail
- Portage
- Study Area



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STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE

HISTORICAL TRANSPORTATION ROUTES IN THE STUDY AREA

CONSULTANT



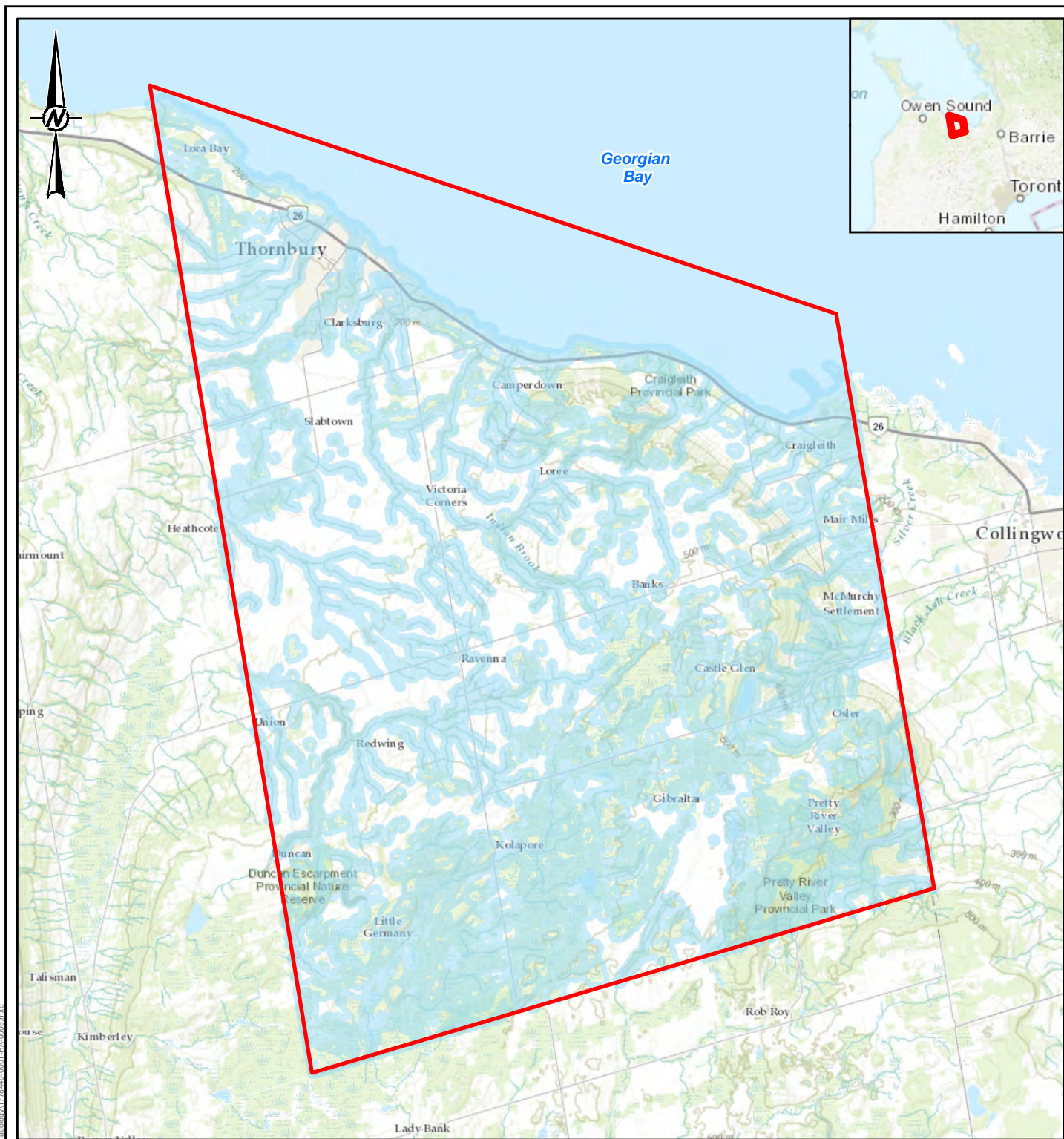
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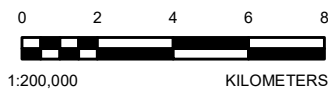
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FIGURE
3



LEGEND

- ▭ Study Area
- ▭ Water-based Archaeological Potential



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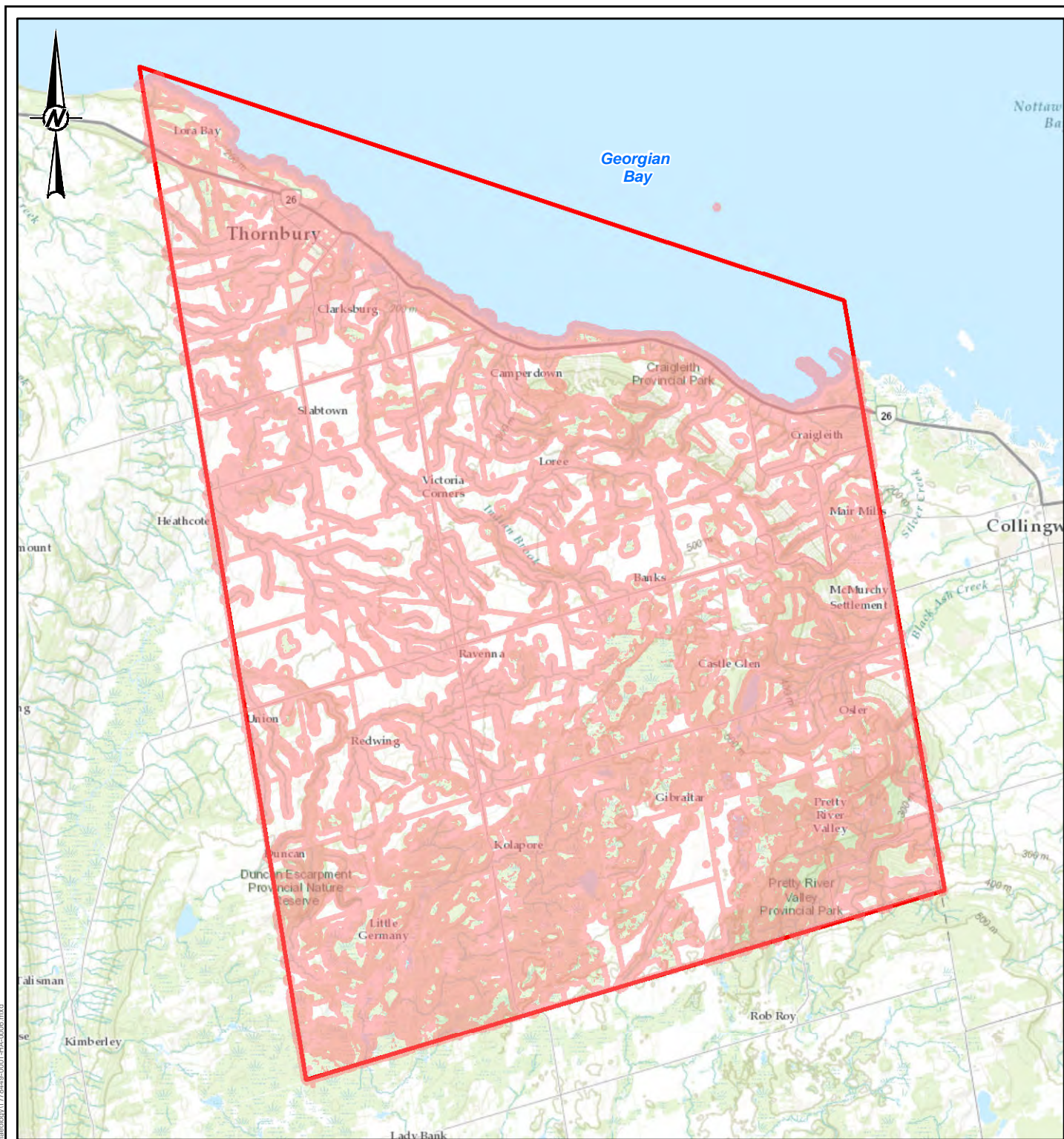
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STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE
WATER-BASED ARCHAEOLOGICAL POTENTIAL

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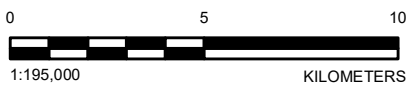
PROJECT NO.	CONTROL	REV.	FIGURE
1778449	0001	-	4

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LEGEND

- Study Area
- Archaeological Potential



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STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE
COMPILED ARCHAEOLOGICAL POTENTIAL MODEL

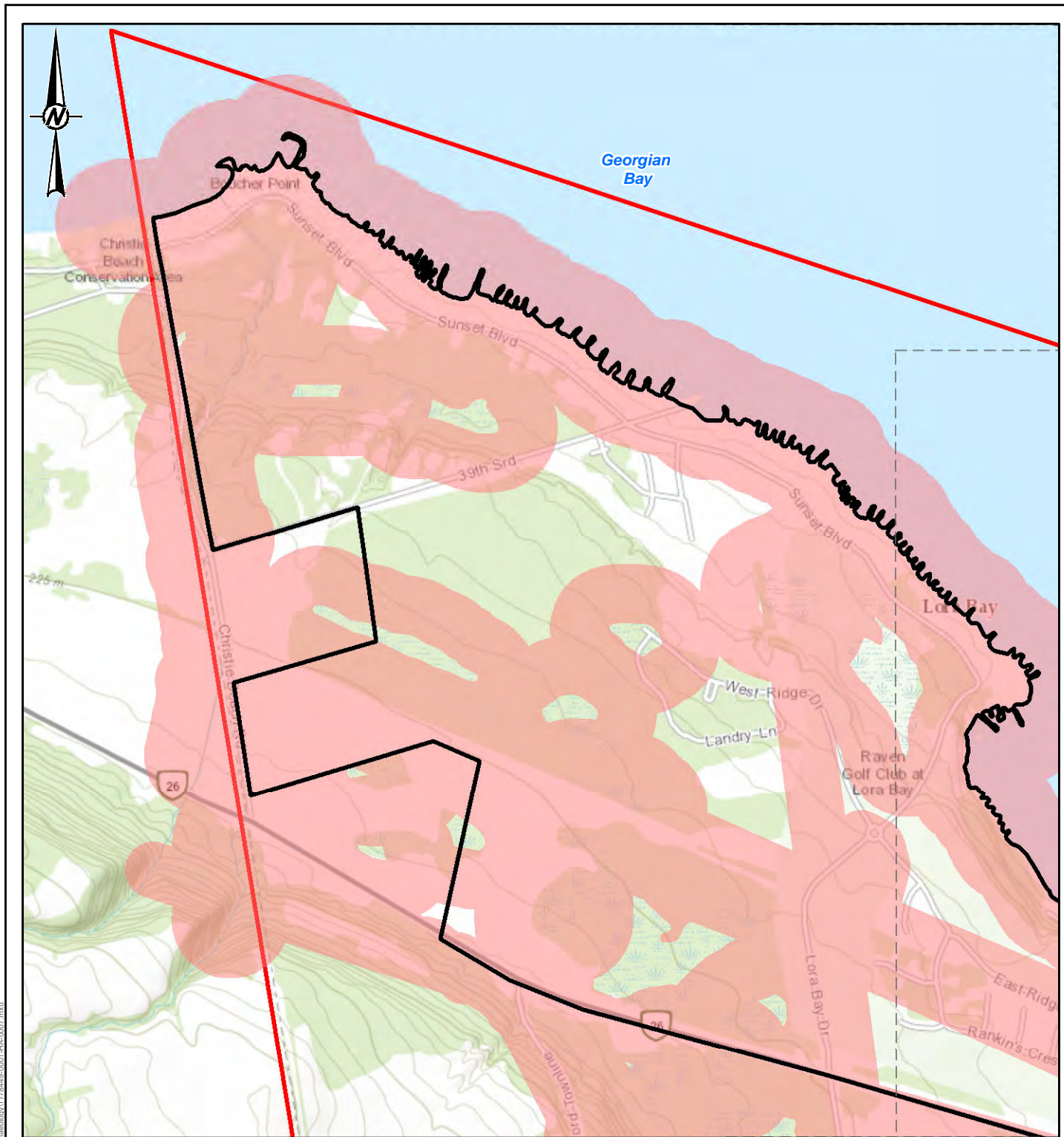
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PROJECT NO. 1778449	CONTROL 0001	REV. -	FIGURE 5
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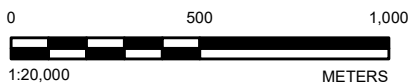
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LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE

LORA BAY DETAIL 1 OF 2

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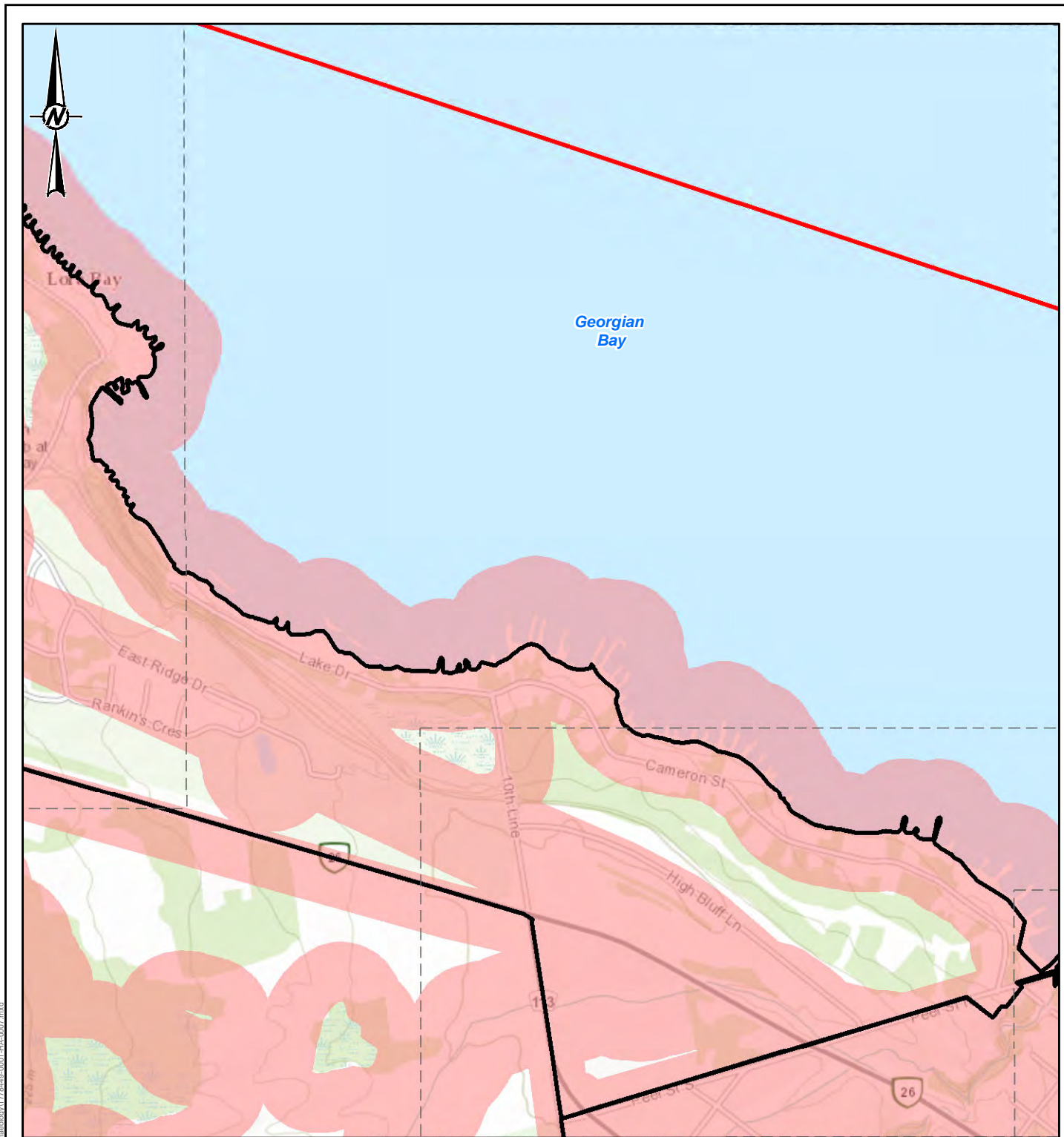
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
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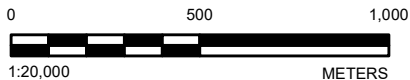
FIGURE

6



LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE

LORA BAY DETAIL 2 OF 2

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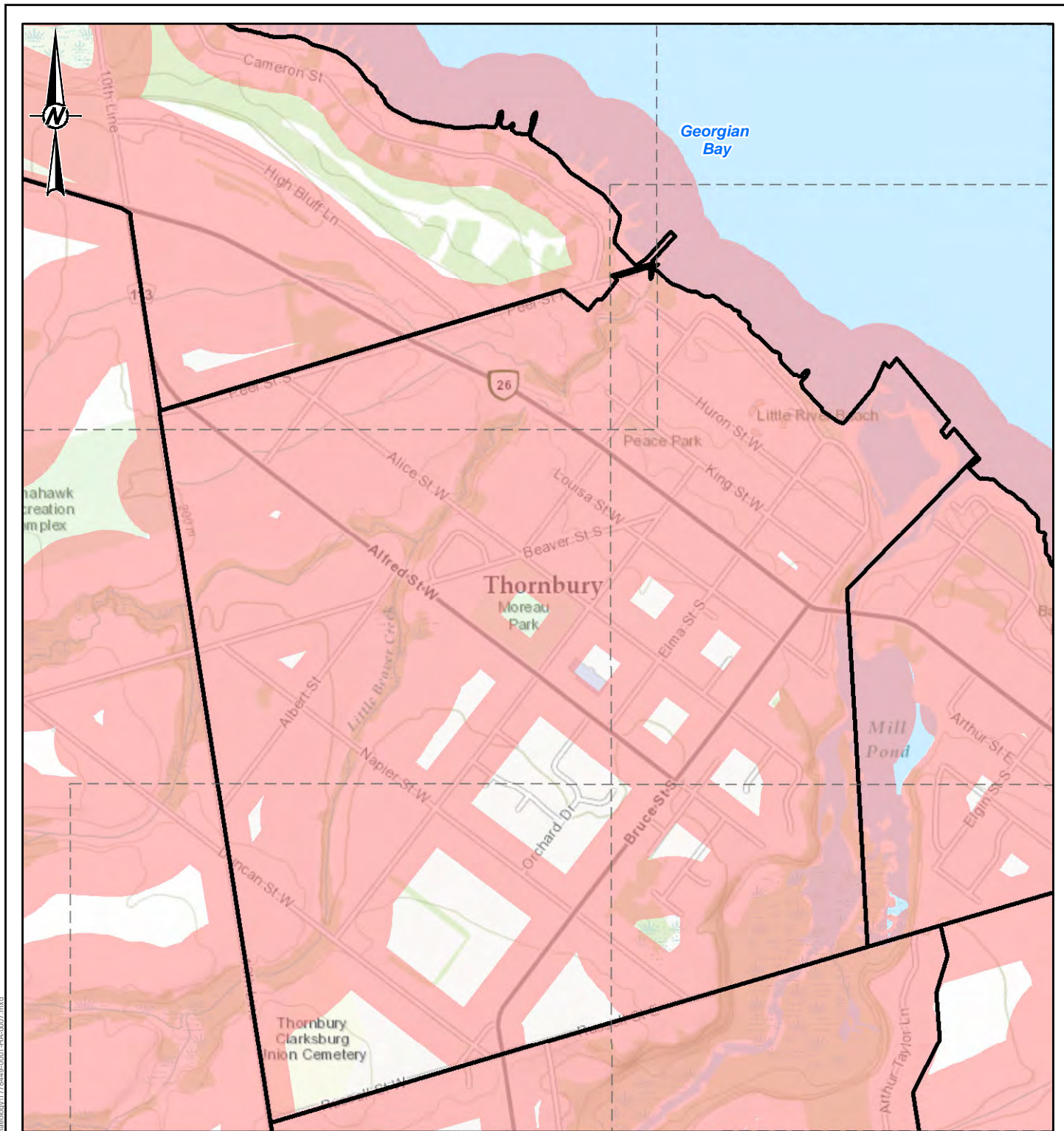
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FIGURE
7

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LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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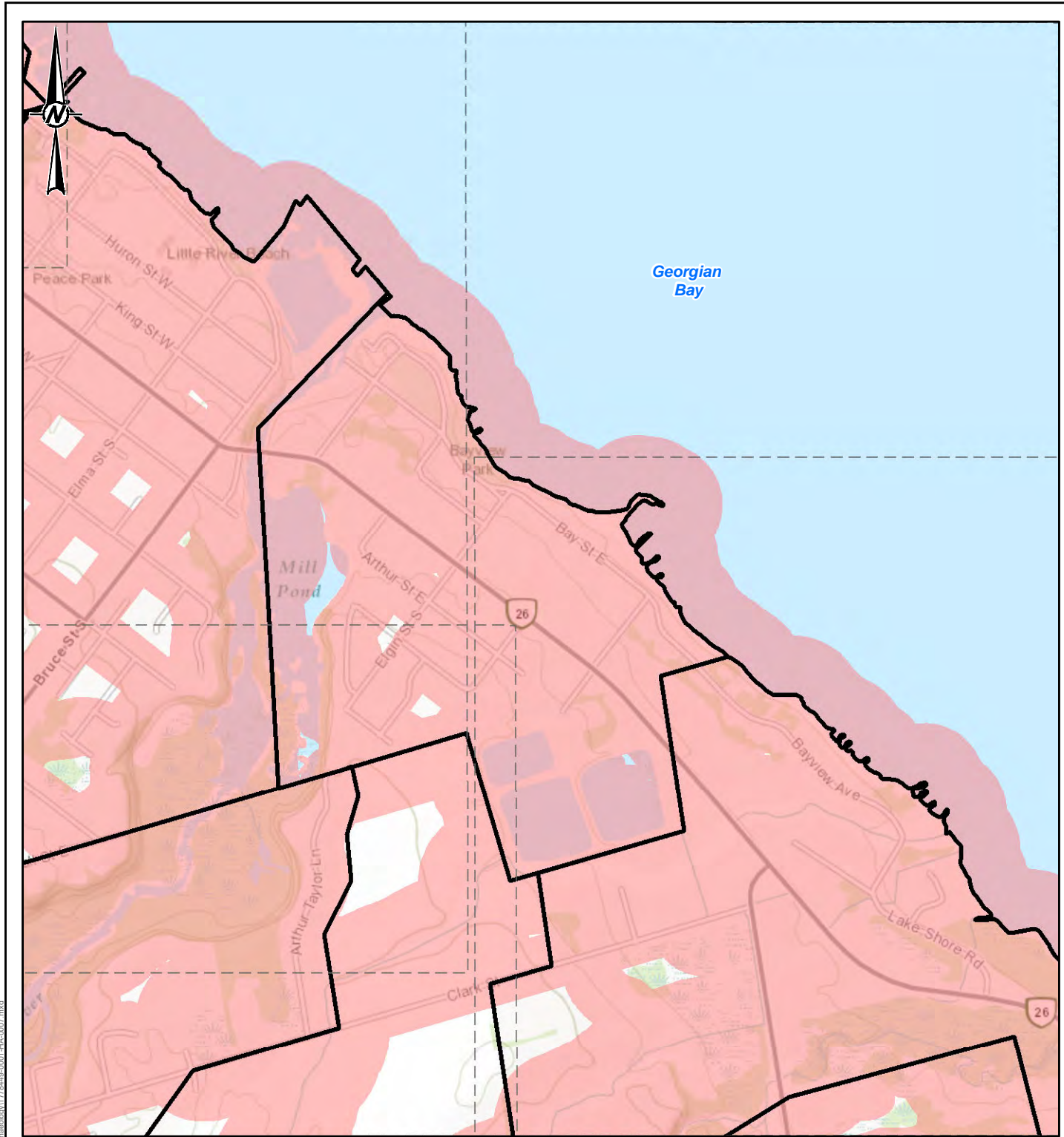
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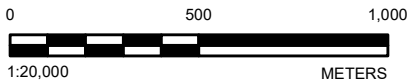
FIGURE

8



LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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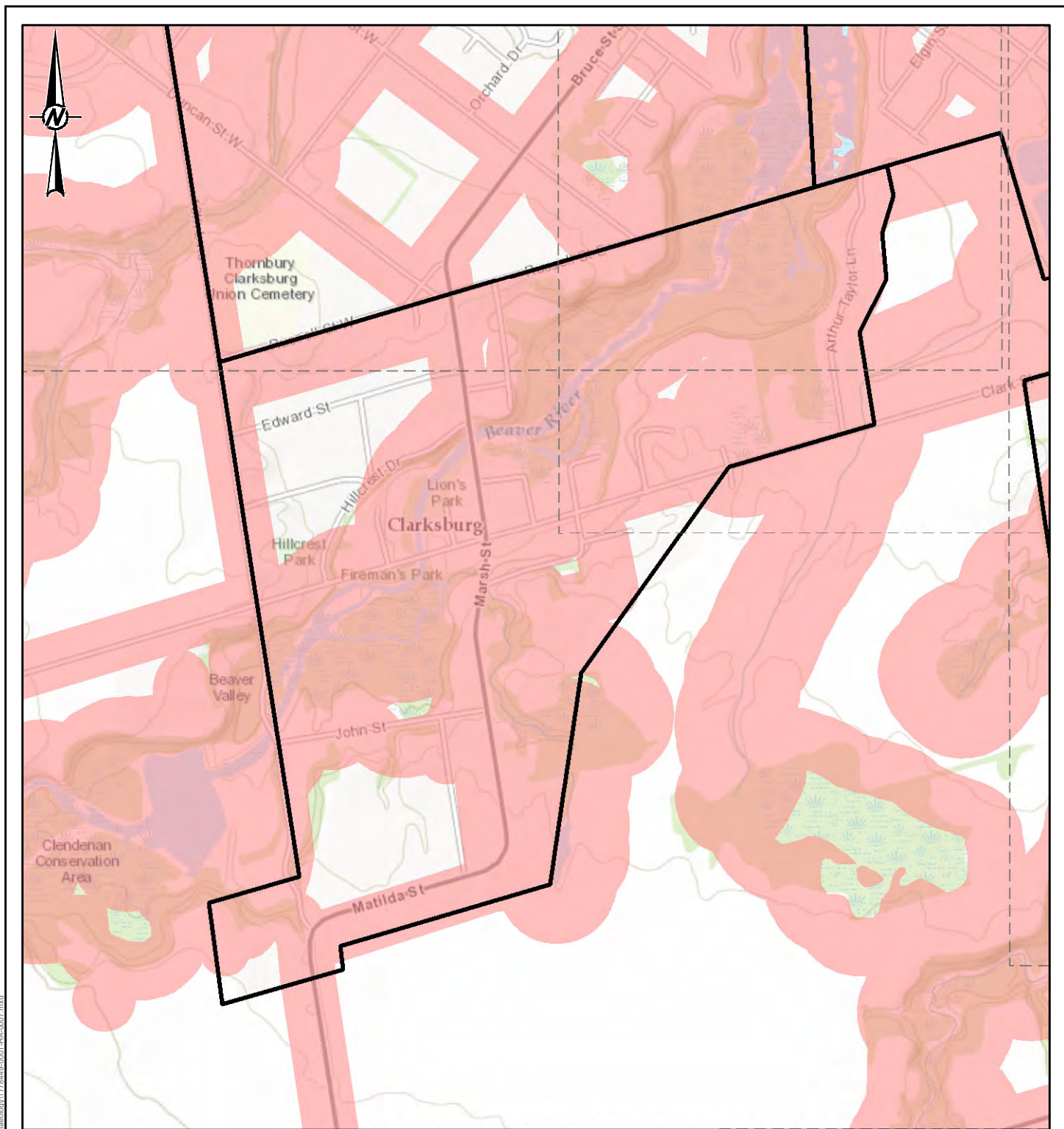
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THORNBURY EAST DETAIL 1 OF 1

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PROJECT NO.	CONTROL	REV.	FIGURE
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LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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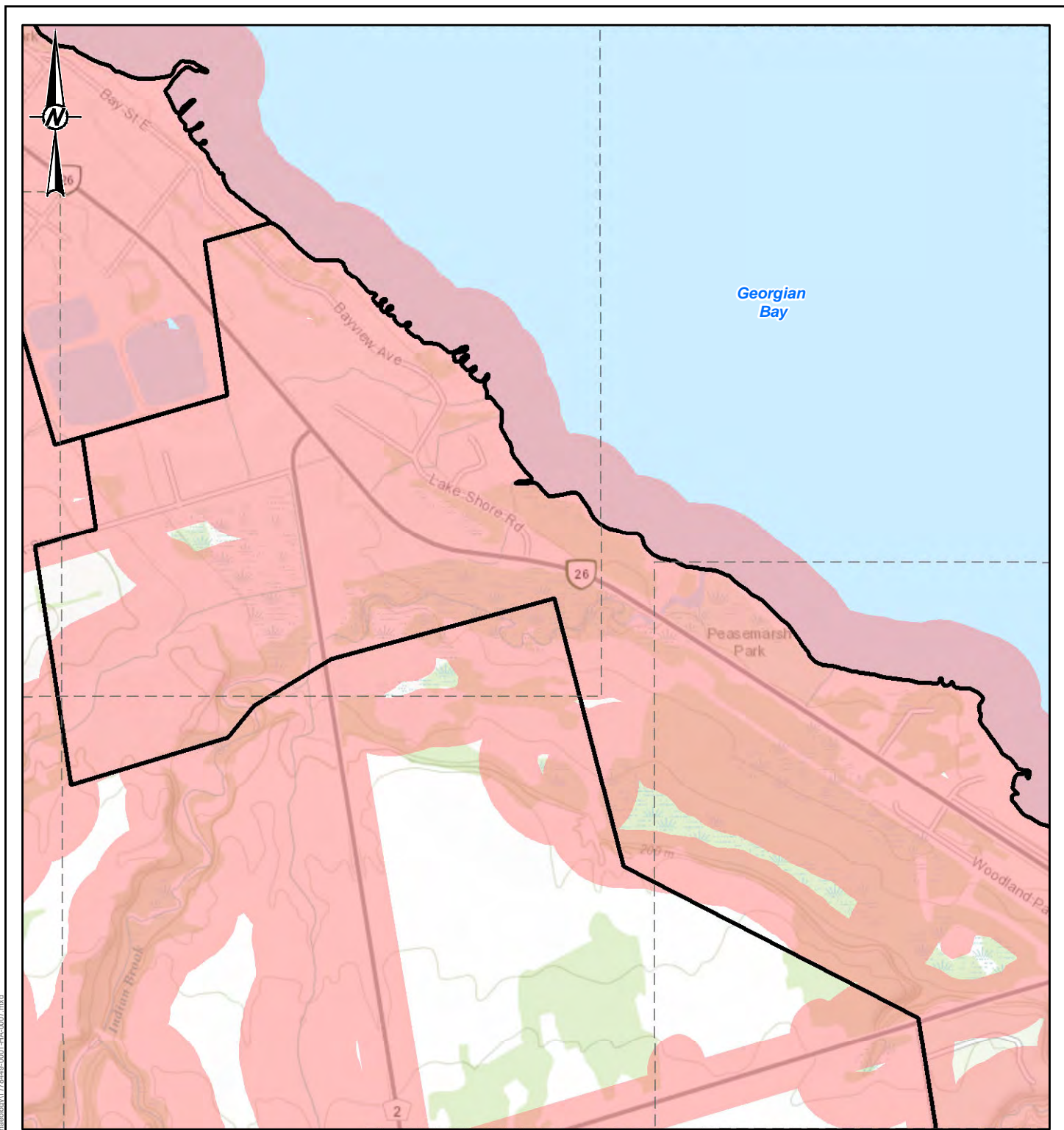
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FIGURE
10

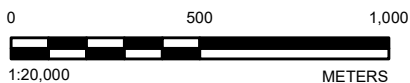
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LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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TITLE

CAMPERDOWN DETAIL 1 OF 4

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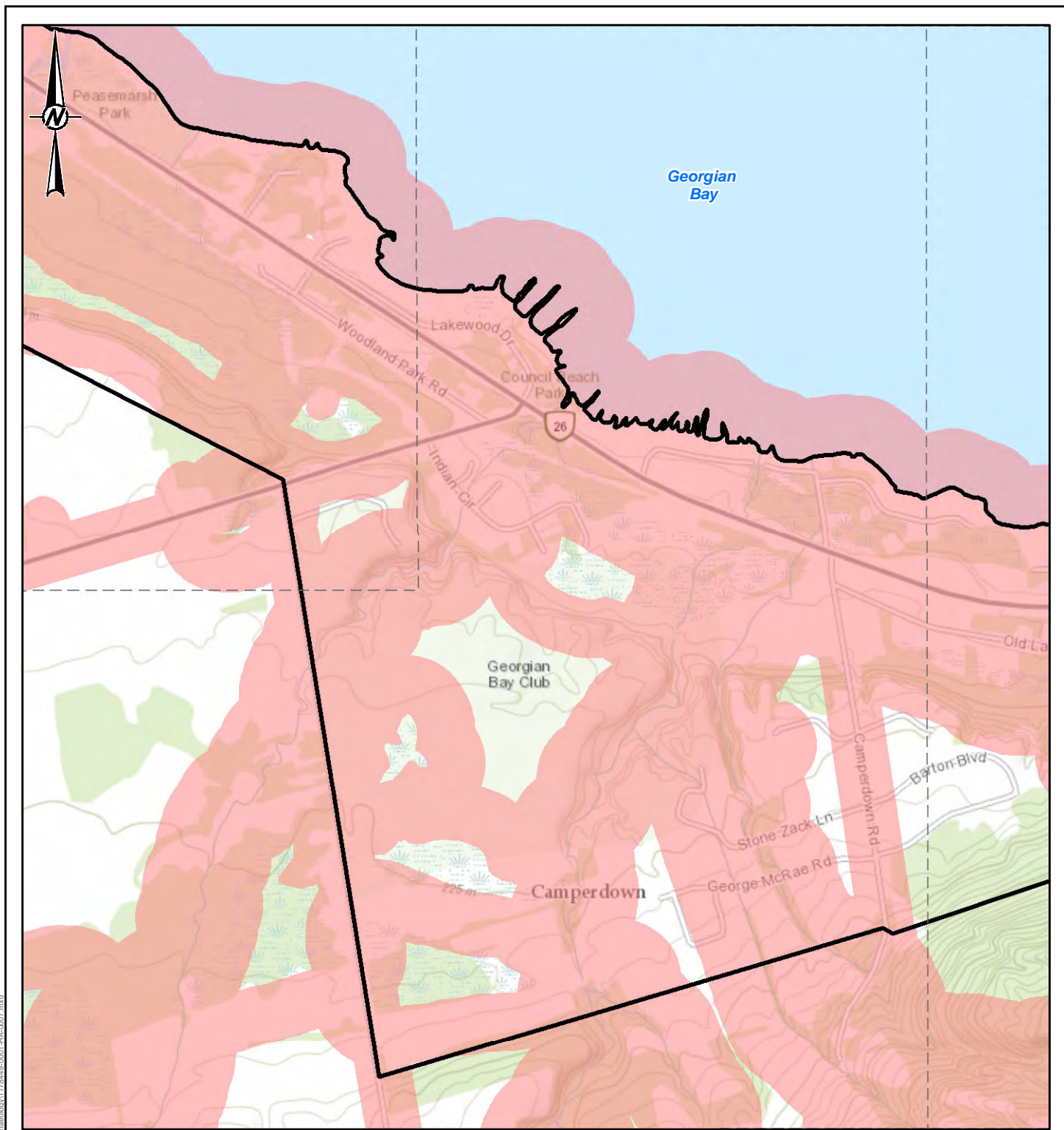
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FIGURE
11

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LEGEND

- Urban Area Boundary
- Study Area
- Archaeological Potential



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STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE

CAMPERDOWN DETAIL 2 OF 4

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FIGURE

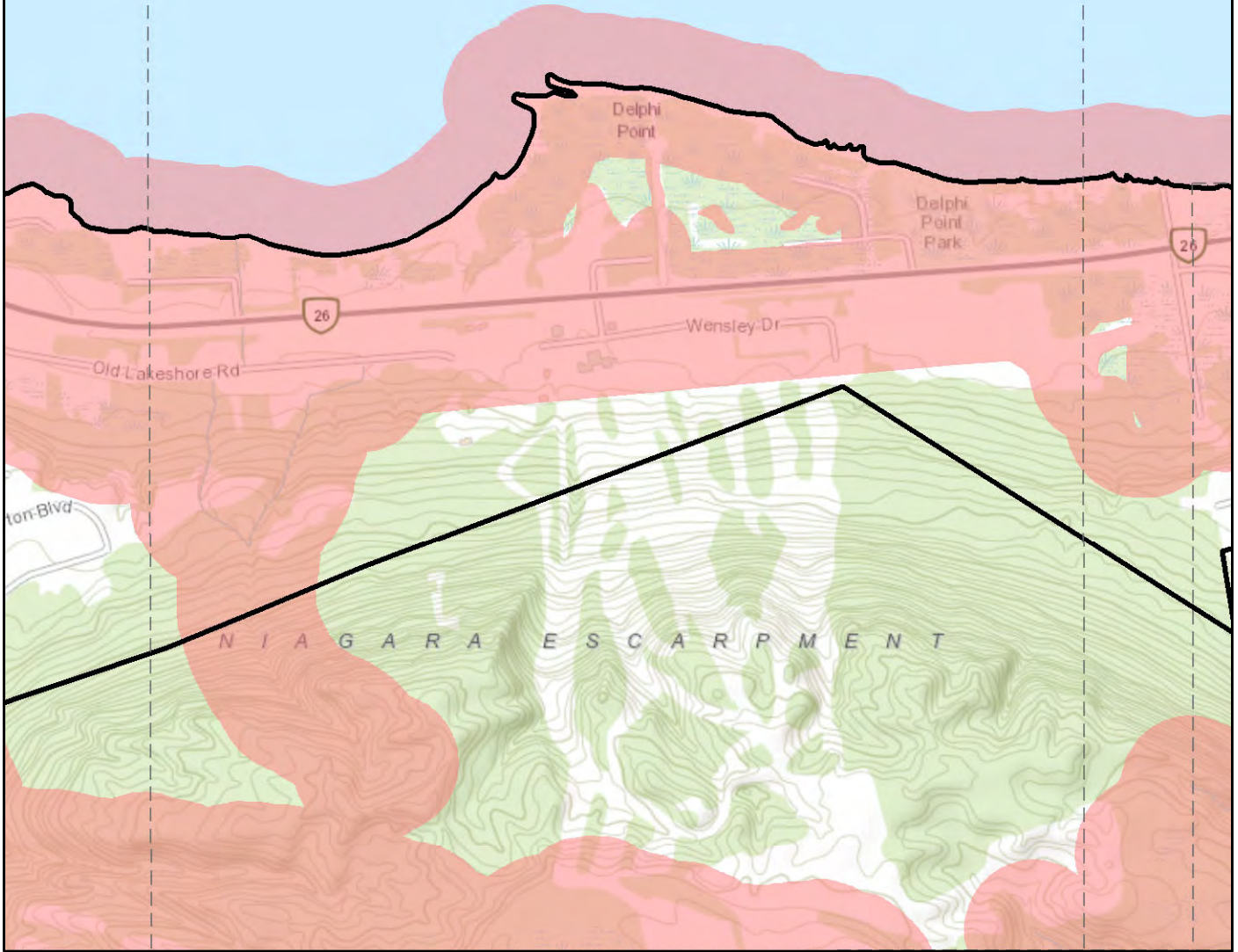
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Georgian Bay



LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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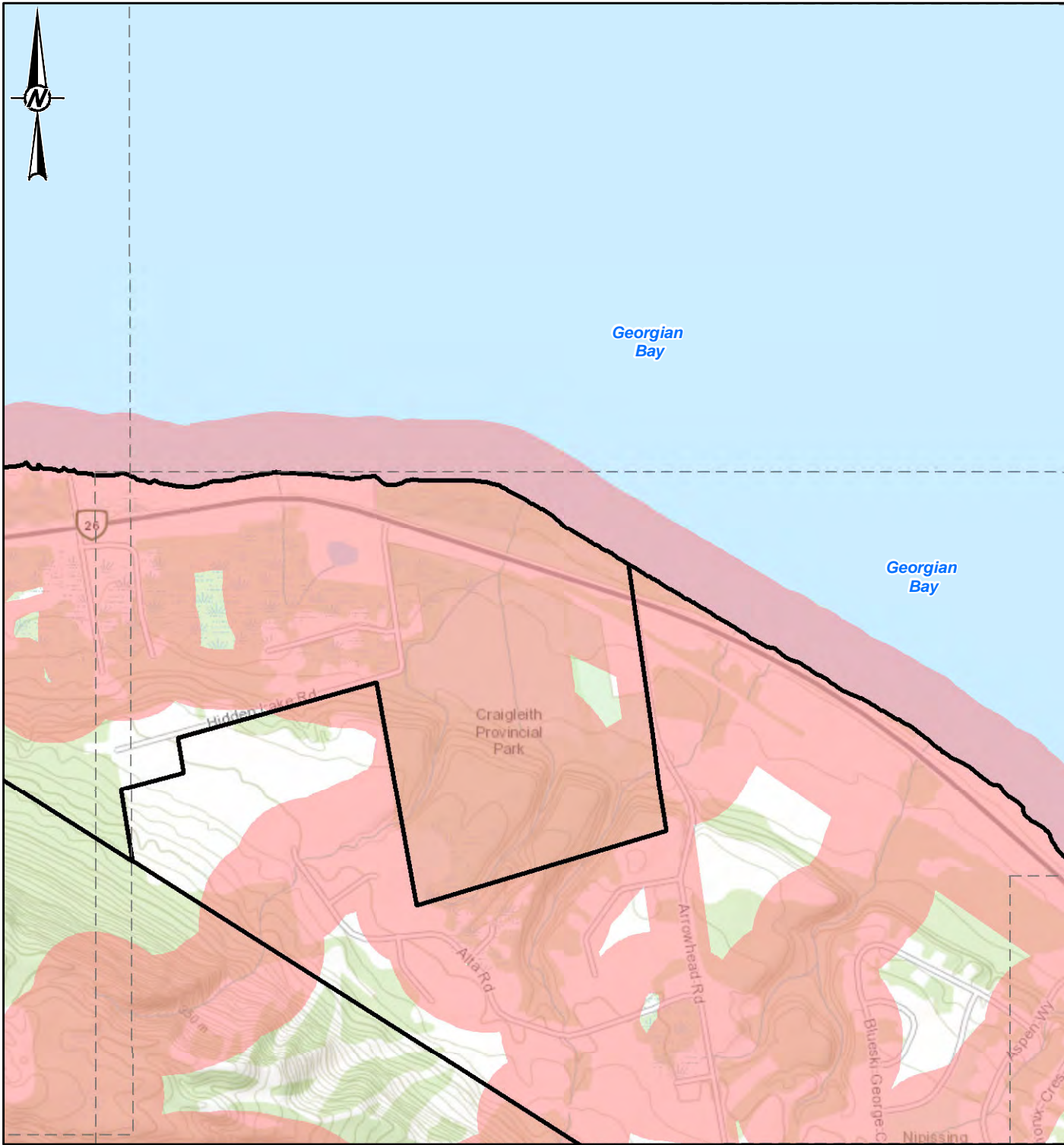
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STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE
MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE
CAMPERDOWN DETAIL 3 OF 4




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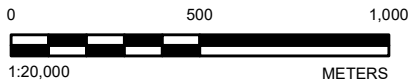
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LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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4. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, DELORME, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDONANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

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PROJECT

STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE

CAMPERDOWN DETAIL 4 OF 4

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YYYY-MM-DD 2018-04-20

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PREPARED RM/PR

REVIEWED CO

APPROVED CP

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1778449

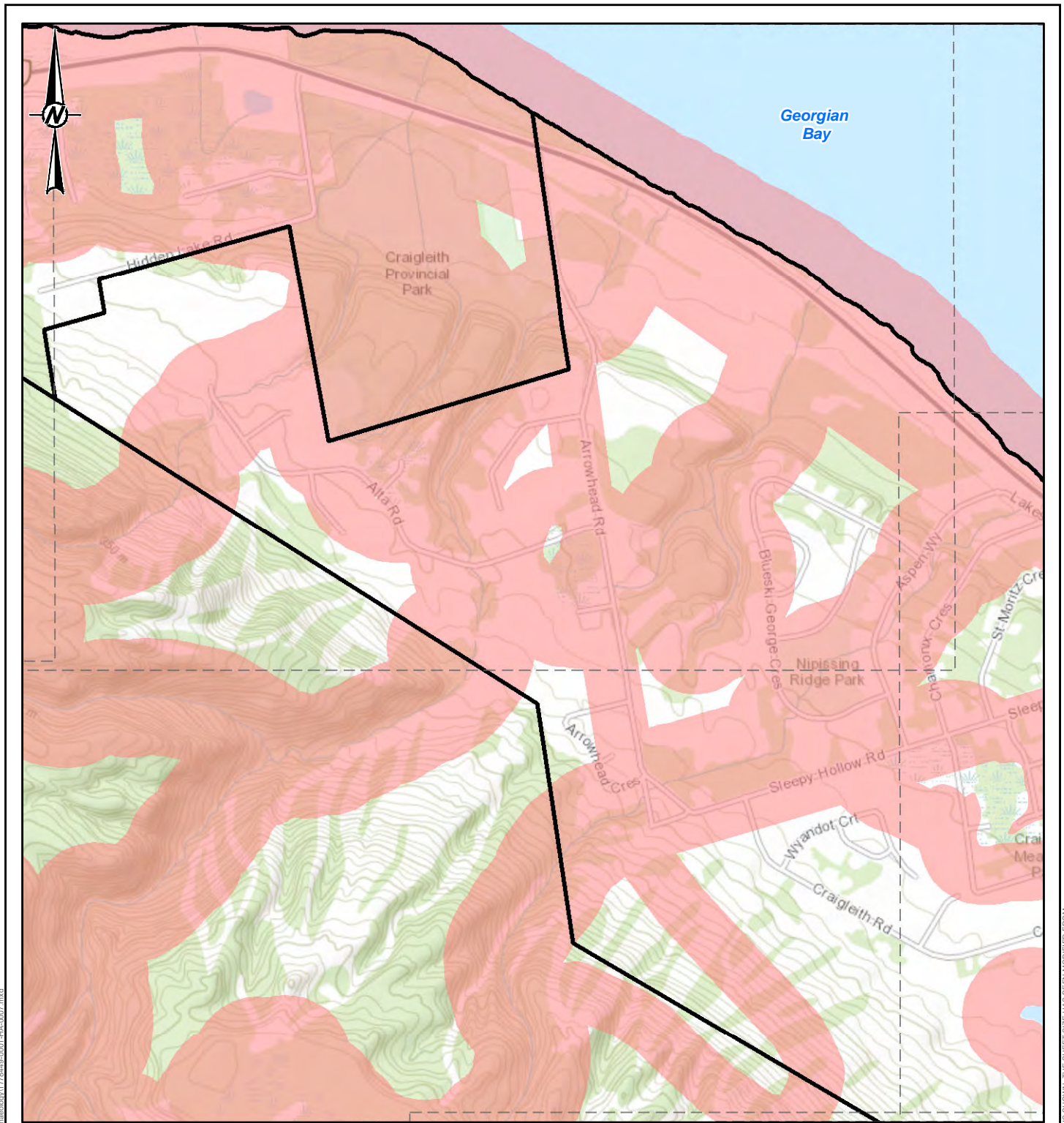
CONTROL
0001

REV.
-

FIGURE
14

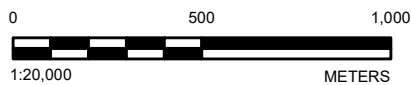
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LEGEND

- Urban Area Boundary
- Study Area
- Archaeological Potential



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1. BASEDATA - MINRF LIO, OBTAINED 2017
2. ARCHAEOLOGICAL SITES - MITCS - ONTARIO ARCHAEOLOGICAL SITES DATABASE (PAST PORTAL)
3. TRAIL DATA - ONTARIO TRAIL'S PROJECT
4. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, DELORME, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

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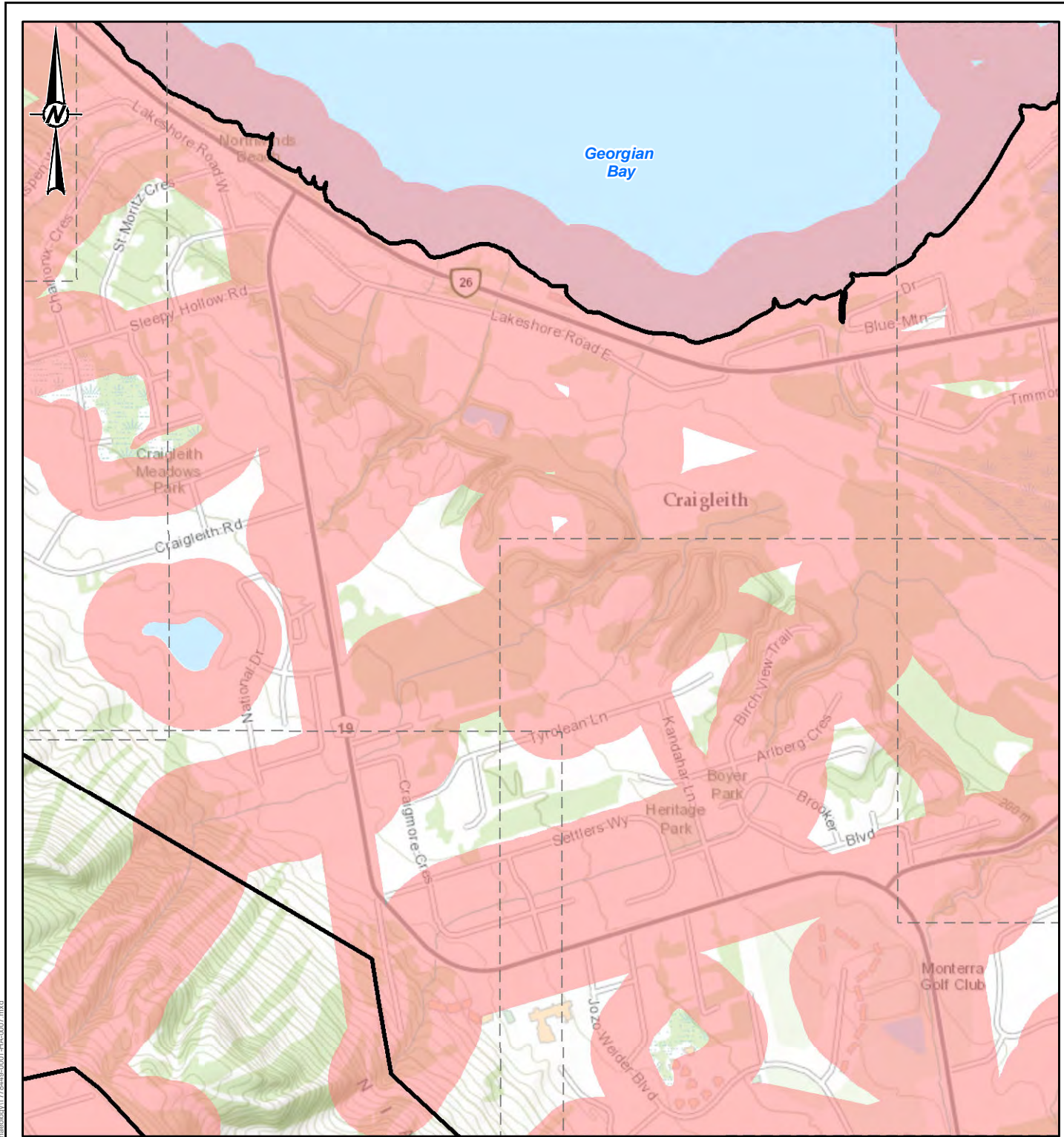
TITLE
CRAIGLEITH DETAIL 1 OF 5

CONSULTANT	YYYY-MM-DD	2018-04-20
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	APPROVED	CP




PROJECT NO.	CONTROL	REV.	FIGURE
1778449	0001	-	15

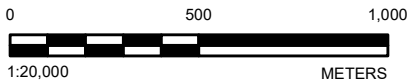
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LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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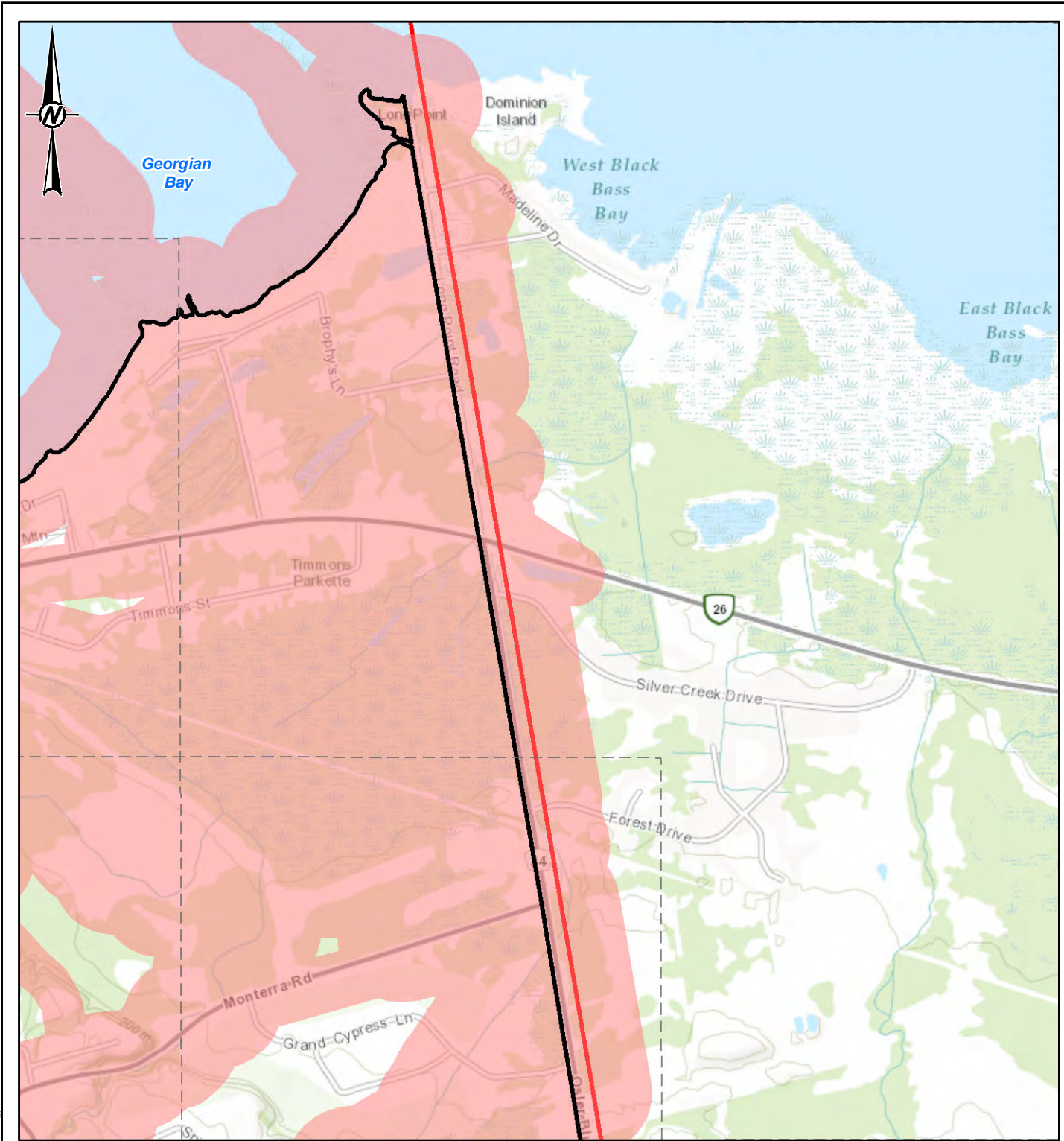
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 STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE
CRAIGLEITH DETAIL 2 OF 5

CONSULTANT		YYYY-MM-DD	2018-04-20
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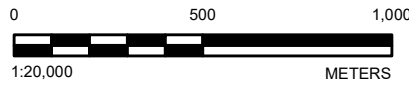
PROJECT NO.	CONTROL	REV.	FIGURE
1778449	0001	-	16

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LEGEND

- Urban Area Boundary
- Study Area
- Archaeological Potential



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1. BASEDATA - MINRF LIO, OBTAINED 2017
2. ARCHAEOLOGICAL SITES - MTCIS - ONTARIO ARCHAEOLOGICAL SITES DATABASE (PAST PORTAL).
3. TRAIL DATA - ONTARIO TRAILS PROJECT
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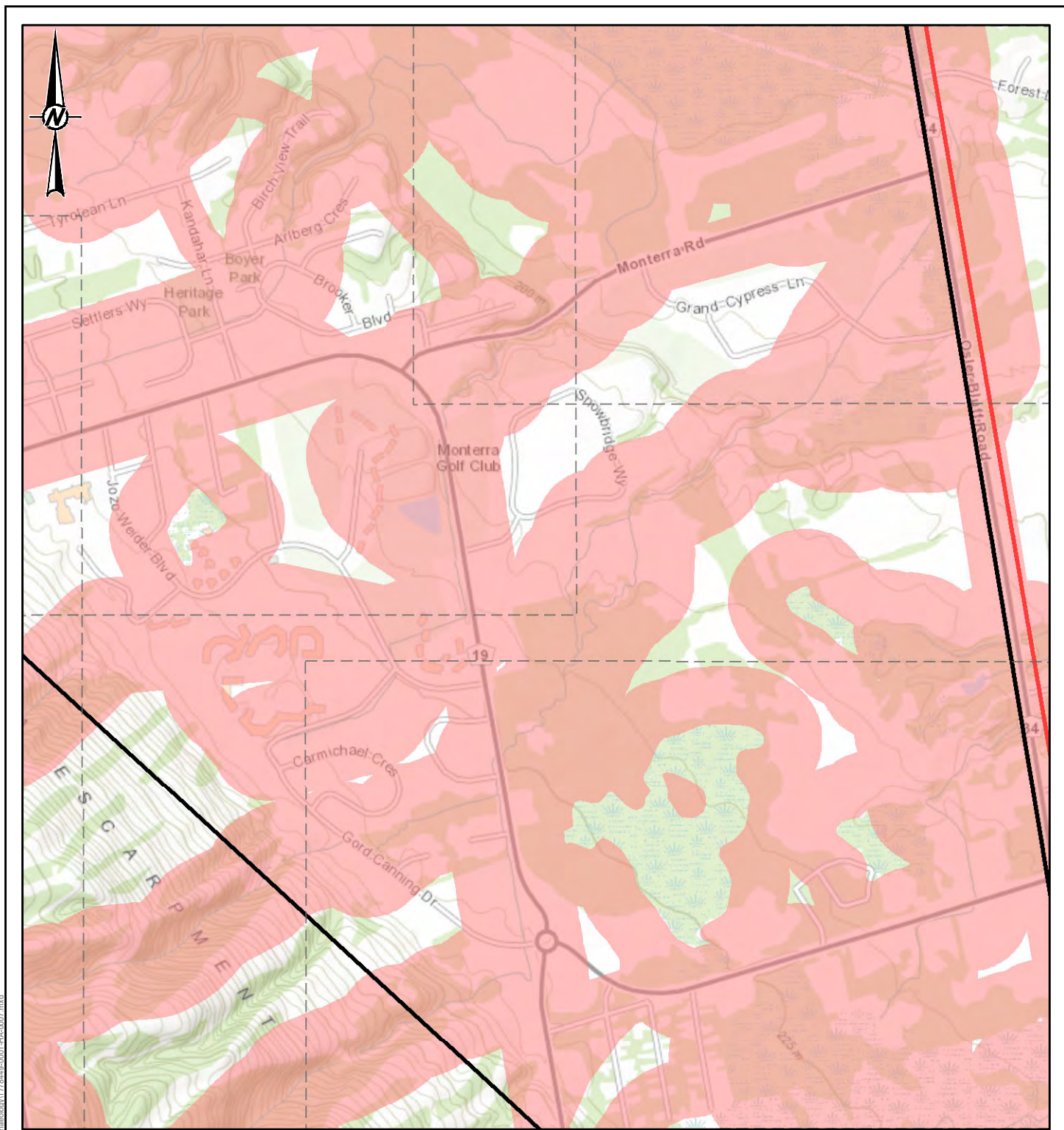
PROJECT
 STAGE 1 ARCHAEOLOGICAL ASSESSMENT - TOWN OF THE BLUE MOUNTAINS, TOWN-WIDE WATER DISTRIBUTION SYSTEM MASTER PLAN

TITLE
 CRAIGLEITH DETAIL 3 OF 5

CONSULTANT	YYYY-MM-DD	2018-04-20
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PROJECT NO.	CONTROL	REV.	FIGURE
1778449	0001	-	17

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LEGEND

- Urban Area Boundary
- Study Area
- Archaeological Potential



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3. TRAIL DATA - ONTARIO TRAILS PROJECT
4. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, DELORME, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

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TITLE

CRAIGLEITH DETAIL 4 OF 5

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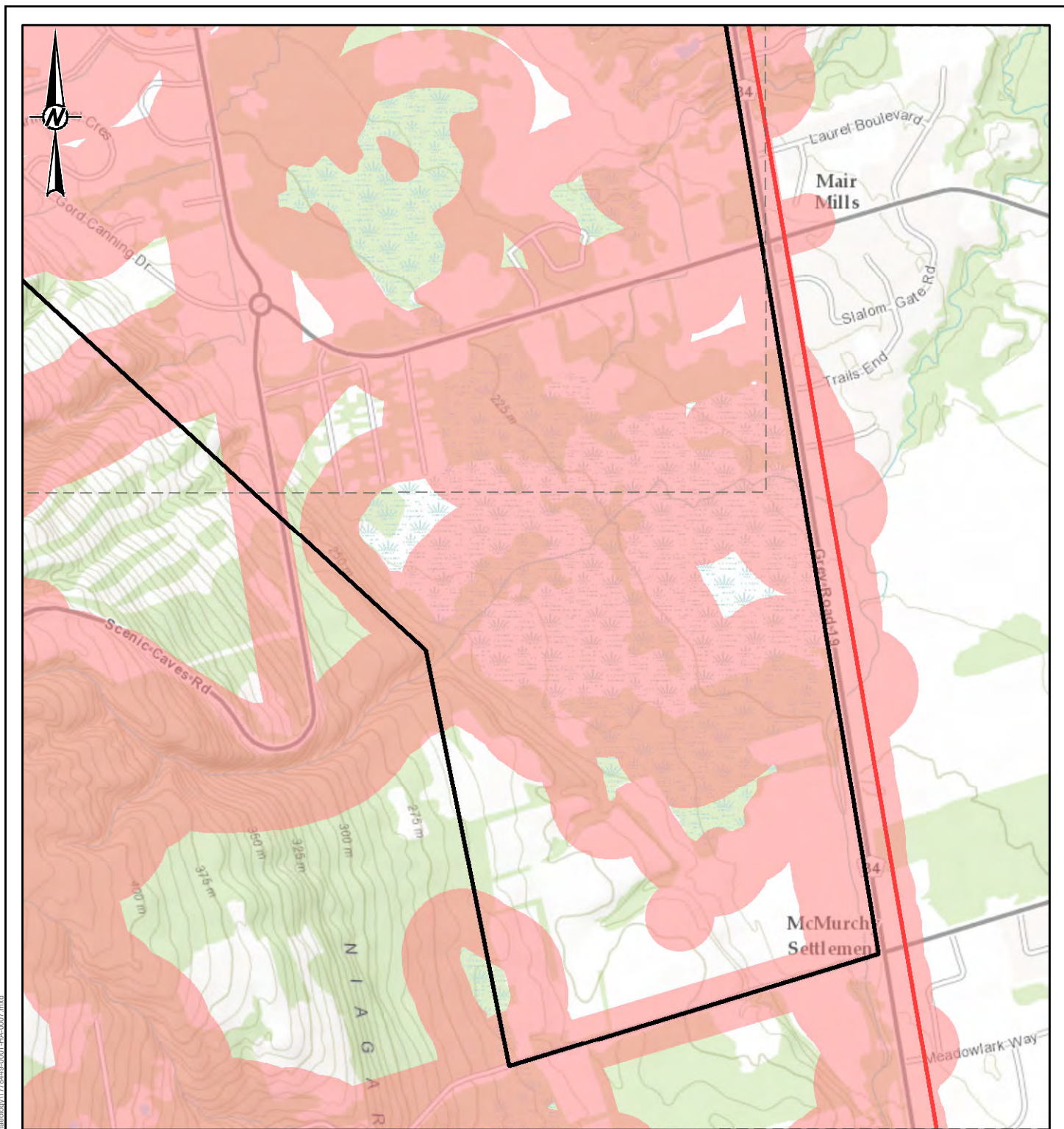
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FIGURE

18



LEGEND

-  Urban Area Boundary
-  Study Area
-  Archaeological Potential



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2. ARCHAEOLOGICAL SITES - MITCS - ONTARIO ARCHAEOLOGICAL SITES DATABASE (PAST PORTAL).
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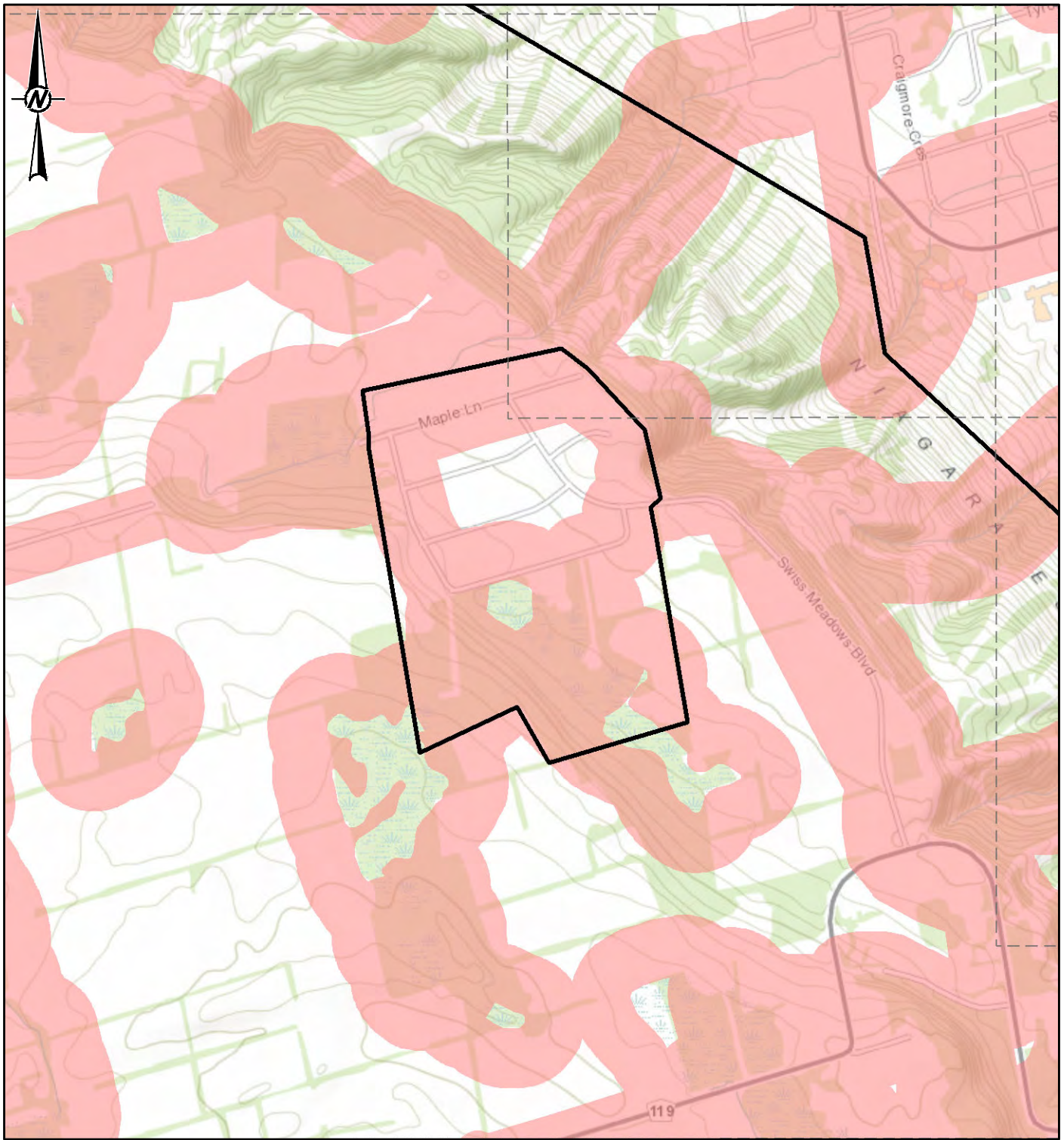
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FIGURE

19

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LEGEND

- Urban Area Boundary
- Study Area
- Archaeological Potential



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FIGURE 20

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STAGE 1 ARCHAEOLOGICAL ASSESSMENT

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A handwritten signature in black ink, appearing to read 'CO'.

Casey O'Neill, Hons. BSc, RPCA
Senior Archaeologist

A handwritten signature in black ink, appearing to read 'Carla Parslow'.

Carla Parslow, PhD
Associate, Senior Archaeologist

CO/CP/lih/wlm

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