

Appendix F

Archaeological Assessments & Cultural Heritage Evaluation Reports

Stage 1 Archaeological Assessment Meaford Wastewater Treatment Plant Expansion (Lot 14, Concession 4, Former St. Vincent Township, Grey County) Municipality of Meaford, Grey County

Original Report

Prepared for:

Ainley Group

195 County Court Boulevard, Suite 300

Brampton ON L6W 4P7

Archaeological Licence: P383 (Williams)

PIF P383-0299-2021

Archaeological Services Inc. File: 21EA-199

23 February 2022



Executive Summary

Archaeological Services Inc. (ASI) was contracted by Ainley Group to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of an addendum to the Environmental Assessment conducted for the potential expansion of the Wastewater Treatment Plant (W.W.T.P.). This project involves the expansion of the W.W.T.P. located at 35 Grant Avenue.

The Stage 1 background study determined that there are no previously registered archaeological sites located within the Study Area. The property inspection determined that the off leash dog park and southern half of the Study Area requires Stage 2 test pit survey. The remainder of the Study Area has been subject to deep soil disturbances due to construction of the W.W.T.P. components and does not retain archaeological potential.

The following recommendations are made:

- 1 Parts of the Study Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit at five metre intervals, where appropriate. Stage 2 is required prior to any proposed construction activities on these lands;
- 2 The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance. These lands do not require further archaeological assessment; and,
- 3 Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.



Project Personnel

- **Senior Project Manager:** Lisa Merritt, MSc. (P094) Partner, Director, Environmental Assessment Division
- **Project Coordinator:** Katrina Thach, Hon. BA (R1225), Associate Archaeologist, Project Coordinator, Environmental Assessment Division
- **Project Director:** Blake Williams, MLitt (P383), Lead Archaeologist, Project Manager, Environmental Assessment Division
- **Project Manager:** Johanna Kelly, MSc (P1017), Associate Bioarchaeologist, Project Manager, Environmental Assessment Division
- **Field Director:** Blake Williams
- **Report Preparation:** Johanna Kelly
- **Graphics:** Andrew Clish, BES (P046), Senior Archaeologist, Senior Field Director, Laboratory and Fieldwork Services, Operations Division
- **Report Reviewer:** Lisa Merritt



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1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by Ainley Group to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of an addendum to the Environmental Assessment conducted for the potential expansion of the Wastewater Treatment Plant (W.W.T.P.). This project involves the expansion of the W.W.T.P. located at 35 Grant Avenue.

The scope for this Stage 1 includes the property boundary for the W.W.T.P. located at 35 Grant Avenue (Figure 1).

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (Ontario Heritage Act, R.S.O. c. O.18, 1990, as amended in 2019) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (M.H.S.T.C.I., 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (Environmental Assessment Act, R.S.O., 1990 as amended 2020) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (Municipal Class Environmental Assessment, 2000, as amended 2015).

Grey County does not have an Archaeological Management Plan.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment and property inspection was granted by Ainley Group on November 1, 2021.

1.1.1 Treaties and Traditional Territories

The Study Area is within the Nottawasaga Purchase (Treaty 18), a provisional agreement sometimes called the Lake Simcoe-Nottawasaga Treaty, signed on



October 17, 1818, by representatives of the Government of Upper Canada and the Anishinaabe (Ministry of Indigenous Affairs, 2020; Williams Treaties First Nations, 2021). Treaty 18 encompassed 1,592,000 acres of land between the District of London in the west, Lake Huron in the north, the west limit of the Penetanguishene Purchase (1815) in the east, and the west shore of Lake Simcoe, Cook's Bay, and the Holland River in the northwest. In exchange for the land, the Crown agreed to pay an annual sum of £1200 in goods at the "Montreal price" (Crown-Indigenous Relations and Northern Affairs, 2016; Ministry of Indigenous Affairs, 2020). The Nottawasaga Purchase territory includes the present-day communities of Wasaga, Bradford, and Collingwood.

1.2 Historical Context

1.2.1 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (B.P.) (Ferris, 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 B.P., the environment had progressively warmed (Edwards & Fritz, 1988) and populations now occupied less extensive territories (Ellis & Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 B.P.; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Brown, 1995, p. 13; Ellis et al., 1990, 2009).



Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 B.P. and exchange and interaction networks broaden at this time (Spence et al., 1990, pp. 136, 138) and by approximately 2,000 B.P., evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al., 1990, pp. 155, 164). By 1,500 B.P. there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolithic evidence for maize in central New York State by 2,300 B.P. - it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch & Williamson, 2013, pp. 13–15). As is evident in detailed Anishinaabek ethnographies, winter was a period during which some families would depart from the larger group as it was easier to sustain smaller populations (Rogers, 1962). It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 B.P., lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (C.E.), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson, 1990, p. 317). By 1300-1450 C.E., this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al., 1990, p. 343). By the mid-sixteenth century these small villages had coalesced into larger communities (Birch et al., 2021). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

By 1600 C.E., the communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. In the 1640s, the traditional enmity between the Haudenosaunee and the Huron-Wendat (and their Algonquian allies such as the Nipissing and Odawa) led to the dispersal of the Huron-Wendat. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along



the trade routes inland from the north shore of Lake Ontario. By the 1690s however, the Anishinaabeg were the only communities with a permanent presence in southern Ontario. From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there was no interruption to Anishinaabeg control and use of southern Ontario.

In Bruce and Grey Counties, archaeological evidence is indicative of some residential stability related to the practice of agriculture (Rankin, 2000). The archaeological evidence of Huron-Wendat/ Tionontaté material culture on Odawa sites, the proximity of contemporary Huron-Wendat and Tionontaté and Odawa sites to each other, and the historically documented alliance between the Odawa and the Neutral Nations are all indicative of cooperation between Algonquian and Iroquoian populations in Bruce and Grey Counties (Fox, 1990).

The Odawa are first described in 1615 when Samuel de Champlain encountered a group of Odawas at the mouth of the French River (Biggar, 1922). The Odawa were an Algonquian Nation who occupied Bruce County, Grey County and Manitoulin Island. The Odawa subsisted primarily from fishing but also practiced horticulture and were extensively involved in trade. They were known to co-reside with Iroquoian populations (Thwaites, 1896). The oral tradition from Nawash and Saugeen suggests that the ancestors of the Saugeen Ojibway Nation occupied the area as early as 7,500 years ago.

The Tionontaté were closely related to the Huron-Wendat and lived in the area west of Huronia within the current Town of The Blue Mountains, Grey County, Ontario. The seventeenth-century French explorers who encountered these peoples dubbed them the Petun, or “tobacco people,” due to their reputation of growing large amounts of tobacco. They lived in large, palisaded villages (averaging 1.7 ha), temporary hunting and fishing camps, cabin sites, and small hamlets with a material culture characterized by globular-shaped ceramic vessels, ceramic pipes, bone/antler awls and beads, ground and chipped stone tools, and copper objects. The population peaked at approximately 30,000 people during the late 15th century, however by the early sixteenth century Tionontaté territory contracted and the north shore of Lake Ontario was almost abandoned. (Garrad, 2014; Ramsden, 1990, pp. 363–378; Warrick, 2000, pp. 446–454, 2008).



The region of Bruce and Grey Counties is not specifically addressed in the contemporary documentary sources; however, the later dispersal of the Haudenosaunee from the region in the late seventeenth century is confirmed by Ojibway oral tradition (Copway, 1850).

1.2.2 Post-Contact Settlement

Historically, the Study Area is located in the Former St. Vincent Township, Grey County in Lot 14, Concession 4.

The S & G stipulates that areas of early Euro-Canadian settlement (pioneer homesteads, isolated cabins, farmstead complexes), early wharf or dock complexes, pioneer churches, and early cemeteries are considered to have archaeological potential. Early historical transportation routes (trails, passes, roads, railways, portage routes), properties listed on a municipal register or designated under the Ontario Heritage Act or a federal, provincial, or municipal historic landmark or site are also considered to have archaeological potential.

For the Euro-Canadian period, the majority of early nineteenth century farmsteads (i.e., those that are arguably the most potentially significant resources and whose locations are rarely recorded on nineteenth century maps) are likely to be located in proximity to water. The development of the network of concession roads and railroads through the course of the nineteenth century frequently influenced the siting of farmsteads and businesses. Accordingly, undisturbed lands within 100 metres of an early settlement road are also considered to have potential for the presence of Euro-Canadian archaeological sites.

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed Indigenous pathways and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006).



Meaford

The Township of St. Vincent, in which Meaford is situated, was formally surveyed in 1835 by Charles Rankin. The first Euro-Canadian settlement in what would become the Town of Meaford occurred in 1838. Meaford was originally named Peggy's Landing for Peggy Miller, wife of the first settler David Miller. The Millers' pioneer cabin served as a stopping place for early travellers. A village was laid out in 1845 and was named for Meaford Hall, the English estate of Admiral Sir John Jervis, Earl of St. Vincent. The township of St. Vincent also commemorates the Earl's name. Early industry in Meaford relied heavily on lumbering, fisheries, and agriculture, facilitated by the ease of transportation afforded by the creation of the Northern Railway in 1855. Meaford was incorporated into a town in 1874 nearing a population of 1, 000 (Mika & Mika, 1983).

Meaford established itself as an important fishing port in Georgian Bay and the fish, as well as the agricultural and industrial produce of the region, drew many commercial vessels to Meaford's docks in the late nineteenth century. The establishment of fruit orchards in the area after the turn of the century proved to be another draw to the area as ships made stops to pick up fruits for transport throughout the Great Lakes region (White, 2022).

Three historical figures once called the municipality home. Canadian artist and friend of the Group of Seven, Tom Thomson spent his childhood growing up in the village of Leith. Tom is buried at the Leigh Church, near his boyhood home (South Georgian Bay Tourism, 2022). Author Margaret Marshall Saunders visited Meaford in 1892 and wrote a novel based on a true story about a local dog who had been rescued from a cruel owner by a local miller. *Beautiful Joe* has since sold over 7 million copies and the famous dog is buried in Beautiful Joe Park (Beautiful Joe Heritage Society, 2021a; Dougherty & Binstead, 2015). In 1934, Saunders was granted Canada's highest civilian award at the time, Commander of the Most Excellent Order of the British Empire (Beautiful Joe Heritage Society, 2022). American naturalist and author John Muir moved to Meaford during the American Civil war. When he returned to the United States he helped form the Sierra Club and is credited as the father of the United States National Park system (South Georgian Bay Tourism, 2022).



Meaford was incorporated as a municipality in 2001, when it amalgamated with St. Vincent and Sydenham townships, with a population of 11,100.

1.2.3 Map Review

The 1855 Rankin Map of the Counties of Grey and Bruce (Rankin, 1855), 1880 *Illustrated Historical Atlas of Grey County* (H. Belden & Co., 1880), 1945 topographic mapping (Department of National Defence, 1945), 1979 topographic mapping (Department of Energy, Mines and Resources, 1979), and 1999 National Topographic Survey mapping (Natural Resources Canada, 1999) were examined to determine the presence of historic features within the Study Area during the nineteenth and twentieth centuries (Figure 2 to Figure 6).

Nineteenth century mapping shows the early core of Meaford as located to the northwest of the Study Area (Figure 2 and Figure 3). The Study Area was located in a rural context and is shown as being located very close to the shoreline of Georgian Bay.

Early twentieth century topographic mapping show the Study Area remained in a relatively undeveloped context, as seen in 1945 (Figure 4). The land within the Study Area is undeveloped at this time, with trees illustrated surrounding the Study Area. Development has expanded towards the Study Area from the previously shown historical core of Meaford. Aiken Street is pictured however does not yet reach the Study Area and terminates to the west of the northwest corner of the Study Area at this time. The W.W.T.P. was constructed in 1969 (Ainley Group, 2015) and is indicated on 1979 mapping by two structures labelled as 'Sewage' (Figure 5). Aiken Street is shown to follow it's present day alignment across the north boundary of the Study Area before turning north towards the shoreline. Aiken Street serves as the boundary for the increased development that has taken place in Meaford since the 1940s. Houses line the waterfront to the northeast of the Study Area. The W.W.T.P. had expanded by the end of the twentieth century the W.W.T.P. had expanded to six structures within the Study Area, labelled as 'Water Treatment Plant' (Figure 6).



1.2.4 Aerial and Orthoimagery Review

Historical aerial imagery from 1954 (Hunting Survey Corporation Limited, 1954), 2006, 2010, and 2015 (Grey County, 2021) indicates that the Study Area was agricultural land prior to the construction of the W.W.T.P. in 1969.

A review of available Google satellite imagery since 2005 show the installation of fencing around the grassed area in the northwest corner of the Study Area to create the off leash dog park between 2010 and 2015 (Image 14 and Image 15).

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the M.H.S.T.C.I. through “Ontario’s Past Portal”; published and unpublished documentary sources; and the files of ASI.

1.3.1 Current Land Use and Field Conditions

The Study Area is located at 35 Grant Avenue, on the south side of Grant Avenue, at Aiken Street. It currently consists of the W.W.T.P. and an off leash dog park in the northern half of the Study Area. Green space occupies the southern half.

The W.W.T.P. was constructed in 1969 and started service in 1970 (Ainley Group, 2015). According to the *Water and Wastewater Servicing Master Plan* (Ainley Group, 2015), the W.W.T.P. has undergone a number of upgrades and modifications since 1969 including:

- New Aerobic Digester and Storage tanks (1996)
- Mechanical Aerators replaced with a fine bubble Aeration System (2005)
- Chlorination replaced with UV Disinfection (2005)
- Fine Screen with an auger and bagging systems at the Inlet Works (2005)
- Septage Receiving station added (2005)



The plant is accessed off Grant Avenue by a paved driveway leading to paved circulation routes providing access to the facilities. The plant has experienced significant grading and landscaping during construction to accommodate the facilities and utilities required for operation. Artificial berms create drainage ditches along the northern boundary of the plant. There is a grade change along the east boundary which has created a small ditch that drains via a metal culvert beneath Grant Avenue. A grade change is evident along the southern boundary of the W.W.T.P., where the facility meets the green space.

Beautiful Joe dog park opened in 2013 (Beautiful Joe Heritage Society, 2021b). The land within the off leash dog park is fairly flat and level terrain. The park consists of a gravel parking lot and two fenced in areas which contain planted trees. Running water is available via a water line and spigot along the inner fence line.

The south half of the property is partly forested and partly grassed. A fine stone path is located in the grassed area, indicating a recreational path, but no evidence of disturbance was identified during the field survey.

A hydro-electric box was noted during field survey along the north boundary of the property and a fire hydrant, sewer line, and water station are located in the off leash dog park area. Given the nature of the facility it is likely that buried utilities are located on the property however existing utility data was not available to confirm at the time of reporting.

1.3.2 Geography

In addition to the known archaeological sites, the state of the natural environment is a helpful indicator of archaeological potential. Accordingly, a description of the physiography and soils are briefly discussed for the Study Area.

The S & G stipulates that primary water sources (lakes, rivers, streams, creeks, etc.), secondary water sources (intermittent streams and creeks, springs, marshes, swamps, etc.), ancient water sources (glacial lake shorelines indicated by the presence of raised sand or gravel beach ridges, relic river or stream channels indicated by clear dip or swale in the topography, shorelines of drained



lakes or marshes, cobble beaches, etc.), as well as accessible or inaccessible shorelines (high bluffs, swamp or marsh fields by the edge of a lake, sandbars stretching into marsh, etc.) are characteristics that indicate archaeological potential.

Water has been identified as the major determinant of site selection and the presence of potable water is the single most important resource necessary for any extended human occupation or settlement. Since water sources have remained relatively stable in Ontario since 5,000 BP (Karrow & Warner, 1990, p. Figure 2.16), proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location.

Other geographic characteristics that can indicate archaeological potential include elevated topography (eskers, drumlins, large knolls, and 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. There may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings. Resource areas, including; food or medicinal plants (migratory routes, spawning areas) are also considered characteristics that indicate archaeological potential (S & G, Section 1.3.1).

The Beaver Valley physiographic region is comprised of a 124 square-metre area stretching from Georgian Bay at Thornbury in the north, to just north of Flesherton in the south (Chapman & Putnam, 1984: 122). It is 35 kilometers wide in the north, stretching between Griersville Rock and the Blue Mountain Peaks, and narrows to less than three kilometers in width in the south. The land within the valley contains several tributary streams and one “fair-sized stream, Indian Brook” (Chapman & Putnam, 1984: 122). In the north, the streams cut through the shale to form juvenile valleys. The Study Area is situated in the north of the Beaver Valley physiographic region, where the valley’s plain ends near Georgian Bay at a steep bluff of the Nipissing Great Lakes (Chapman & Putnam, 1984: 123). To the north are several gravel beach strands and strips of boulder pavement derived from former till.



The terrain of the Beaver Valley is marked by stony pastures and gravelly soils, but also areas of deep silt and fine sandy loam.

Figure 9 depicts surficial geology for the Study Area (Ontario Geological Survey, 2010). The surficial geology mapping demonstrates that the Study Area is underlain by coarse-textured lacustrine deposits of sand, gravel, minor silt and clay.

Figure 10 shows drainage within the Study Area. This mapping demonstrates that soils in the Study Area consist of Granby, a poorly draining Dark Grey Gleisolic sand, and Brighton, a well draining Grey Brown Podzolic sand.

The Study Area is located approximately 115 metres from the present day shoreline of Georgian Bay.

1.3.3 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (O.A.S.D.) maintained by the M.H.S.T.C.I. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The Study Area under review is located in Borden block *BdHd*.

According to the O.A.S.D., one previously registered archaeological site is located within one kilometre of the Study Area, but not within 50 metres (M.H.S.T.C.I., 2022). A summary of the site is provided below in Table 1.



Table 1: Registered Sites within One Kilometre of the Study Area

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
BdHd-3	Beamer	Precontact	Unknown	n/a - Entered into the database based on reported finds in the vicinity.

1.3.4 Previous Archaeological Assessments

According to the background research, no previous reports detail fieldwork within 50 metres of the Study Area:

2.0 Field Methods

A Stage 1 property inspection must adhere to the S & G, Section 1.2, Standards 1-6, which are discussed below. The entire property and its periphery must be inspected. The inspection may be either systematic or random. Coverage must be sufficient to identify the presence or absence of any features of archaeological potential. The inspection must be conducted when weather conditions permit good visibility of land features. Natural landforms and watercourses are to be confirmed if previously identified. Additional features such as elevated topography, relic water channels, glacial shorelines, well-drained soils within heavy soils and slightly elevated areas within low and wet areas should be identified and documented, if present. Features affecting assessment strategies should be identified and documented such as woodlots, bogs or other permanently wet areas, areas of steeper grade than indicated on topographic mapping, areas of overgrown vegetation, areas of heavy soil, and recent land disturbance such as grading, fill deposits and vegetation clearing. The inspection should also identify and document structures and built features that will affect assessment strategies, such as heritage structures or landscapes, cairns, monuments or plaques, and cemeteries.



The Stage 1 archaeological assessment property inspection was conducted under the field direction of Blake Williams (P383) of ASI, on December 3, 2021, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Study Area. It was a systematic visual inspection from publicly accessible lands only and did not include excavation or collection of archaeological resources. Fieldwork was conducted when weather conditions were deemed clear with good visibility (partly cloudy with seasonal temperatures), per S & G Section 1.2., Standard 2. Field observations are compiled onto the existing conditions of the Study Area in Section 8.0 (Figure 11) and associated photographs are presented in Section 7.0 (Image 1 to Image 13).

3.0 Analysis and Conclusions

The historical and archaeological contexts have been analyzed to help determine the archaeological potential of the Study Area. Results of the analysis of the Study Area property inspection and background research are presented in Section 3.1.

3.1 Analysis of Archaeological Potential

The S & G, Section 1.3.1, lists criteria that are indicative of archaeological potential. The Study Area meets the following criteria indicative of archaeological potential:

- Previously identified archaeological sites (See Table 1);
- Water sources: primary, secondary, or past water source (Georgian Bay);
- Proximity to early settlements (Meaford); and
- Well-drained soils (Brighton).

According to the S & G, Section 1.4 Standard 1e, no areas within a property containing locations listed or designated by a municipality can be recommended for exemption from further assessment unless the area can be documented as disturbed. A Municipal Heritage Register was not available online for consultation. No structures are located within the Study Area which may have potential for Cultural Heritage Value or Interest.



These criteria are indicative of potential for the identification of archaeological resources, depending on soil conditions and the degree to which soils have been subject to deep disturbance.

The property inspection determined that parts of the Study Area exhibit archaeological potential. These areas will require Stage 2 archaeological assessment prior to any construction activities. According to the S & G Section 2.1.2, test pit survey is required on terrain where ploughing is not viable, such as wooded areas, properties where existing landscaping or infrastructure would be damaged, overgrown farmland with heavy brush or rocky pasture, and narrow linear corridors up to 10 metres wide (Images 5, 8-13; Figure 11: areas highlighted in green).

The remainder of the Study Area has been subjected to deep soil disturbance events due to construction of the W.W.T.P. and associated components. According to the S & G Section 1.3.2 these areas do not retain archaeological potential (Images 1-8, 10, and 13; Figure 11: areas highlighted in yellow) and do not require further survey.

3.2 Conclusions

The Stage 1 background study determined that there are no previously registered archaeological sites located within the Study Area. The property inspection determined that the off leash dog park and southern half of the Study Area requires Stage 2 test pit survey. The remainder of the Study Area has been subject to deep soil disturbances due to construction of the W.W.T.P. components and does not retain archaeological potential.

4.0 Recommendations

The following recommendations are made:

- 1 Parts of the Study Area exhibit archaeological potential. These lands require Stage 2 archaeological assessment by test pit at five metre intervals, where appropriate (Figure 11: areas highlighted in green). Stage 2 is required prior to any proposed construction activities on these lands;



- 2 The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance. These lands do not require further archaeological assessment; and,
- 3 Should the proposed work extend beyond the current Study Area, further archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.

NOTWITHSTANDING the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Cultural Programs Unit of the Ministry of Heritage, Sport, Tourism and Culture Industries should be immediately notified.

The above recommendations are subject to Ministry approval and it is an offence to alter any archaeological site without Ministry of Heritage, Sport, Tourism and Culture Industries concurrence. No grading or other activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of M.H.S.T.C.I. approval has been received.



5.0 Legislation Compliance Advice

ASI advises compliance with the following legislation:

- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the Ontario Heritage Act, RSO 2005, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation, and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with 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 licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the Ontario Heritage Act.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 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.

- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the Ontario Heritage Act and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.



6.0 Bibliography and Sources

Ainley Group. (2015). *Water and Wastewater Servicing Master Plan*.

<https://www.meaford.ca/en/our-government/resources/Documents/OP2015-06-Water-and-Wastewater-Servicing-Master-Plan.pdf>

ASI, (Archaeological Services Inc.). (2006). *Historical Overview and Assessment of Archaeological Potential Don River Watershed, City of Toronto*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Beautiful Joe Heritage Society. (2021a). *Beautiful Joe*. <https://beautifuljoe.org/>

Beautiful Joe Heritage Society. (2021b). *Leash Free Dog Park*.
<https://beautifuljoe.org/leash-free-dog-park/>

Beautiful Joe Heritage Society. (2022). *About the Author*.
<https://beautifuljoe.org/the-author/>

Biggar, H. P. (1922). *The Works of Samuel De Champlain* (Vol. 6). The Champlain Society.

Birch, J., Manning, S. W., Sanft, S., & Conger, M. A. (2021). Refined Radiocarbon Chronologies for Northern Iroquoian Site Sequences: Implications for Coalescence, Conflict, and the Reception of European Goods. *American Antiquity*, 86(1), 61–89.

Birch, J., & Williamson, R. F. (2013). *The Mantle Site: An Archaeological History of an Ancestral Wendat Community*. Rowman & Littlefield Publishers, Inc.

Brown, J. (1995). On Mortuary Analysis – with Special Reference to the Saxe-Binford Research Program. In L. A. Beck (Ed.), *Regional Approaches to Mortuary Analysis* (pp. 3–23). Plenum Press.

Chapman, L. J., & Putnam, F. (1984). *The Physiography of Southern Ontario* (Vol. 2). Ontario Ministry of Natural Resources.



Copway, G. (1850). *The Traditional History and Characteristic Sketches of the Ojibway Nation*. Charles Gilpin.

Crown-Indigenous Relations and Northern Affairs. (2016). *Lake Simcoe-Nottawasaga Treaty No. 18*. Treaty Texts – Upper Canada Land Surrenders.
<https://www.rcaanc-cirnac.gc.ca/eng/1370372152585/1370372222012#ucls17>

Department of Energy, Mines and Resources. (1979). *Owen Sound Sheet 41A/10* [Map].

Department of National Defence. (1945). *Owen Sound Sheet* [National Topographic System].

Dodd, C. F., Poulton, D. R., Lennox, P. A., Smith, D. G., & Warrick, G. A. (1990). The Middle Ontario Iroquoian Stage. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 321–360). Ontario Archaeological Society Inc.

Dougherty, F., & Binstead, D. (2015). *Meaford*.
<https://www.thecanadianencyclopedia.ca/en/article/meaford>

Edwards, T. W. D., & Fritz, P. (1988). Stable-Isotope Palaeoclimate Records from Southern Ontario, Canada: Comparison of Results from Marl and Wood. *Canadian Journal of Earth Sciences*, 25, 1397–1406.

Ellis, C. J., & Deller, D. B. (1990). Paleo-Indians. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 37–64). Ontario Archaeological Society Inc.

Ellis, C. J., Kenyon, I. T., & Spence, M. W. (1990). The Archaic. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 65–124). Ontario Archaeological Society Inc.

Ellis, C. J., Timmins, P. A., & Martelle, H. (2009). At the Crossroads and Periphery: The Archaic Archaeological Record of Southern Ontario. In T. D. Emerson, D. L. McElrath, & A. C. Fortier (Eds.), *Archaic Societies: Diversity and Complexity across the Midcontinent*. (pp. 787–837). State University of New York Press.



Ferris, N. (2013). Place, Space, and Dwelling in the Late Woodland. In M. K. Munson & S. M. Jamieson (Eds.), *Before Ontario: The Archaeology of a Province* (pp. 99–111). McGill-Queen's University Press.

<http://www.jstor.org/stable/j.ctt32b7n5.15>

Fox, W. (1990). The Odawa. In *The Archaeology of Southern Ontario to A.D. 1650* (Vol. 5, pp. 457–473). Ontario Archaeological Society.

Garrad, C. (2014). *Petun to Wyandot: The Ontario Petun from the Sixteenth Century* (J. Pilon & W. Fox, Eds.). Canadian Museum of History and University of Ottawa Press.

Grey County. (2021). *Simple Imagery Viewer*.

<https://geo.grey.ca/Geocortex/WebViewer/?app=791490bb4b0f403ca76b2cb98560934b>

H. Belden & Co. (1880). Grey County (Ontario Map Ref#17). In *Illustrated Atlas of the Dominion of Canada*.

Hunting Survey Corporation Limited. (1954). *Digital Aerial Photographs* [Map].
<https://mdl.library.utoronto.ca/collections/air-photos/1954-air-photos-southern-ontario/index>

Karrow, P. F., & Warner, B. G. (1990). The Geological and Biological Environment for Human Occupation in Southern Ontario. In *The Archaeology of Ontario to A.D. 1650* (pp. 5–36). London Chapter, Ontario Archaeological Society.

M. H. S. T. C. I., (Ministry of Heritage, Sport, Tourism and Culture Industries). (2011). *Standards and Guidelines for Consultant Archaeologists*. Cultural Programs Branch, Ontario Ministry of Tourism and Culture.

M.H.S.T.C.I. (2022). *Ontario's PastPortal*. PastPortal.
<https://www.pastport.mtc.gov.on.ca>

Ontario Heritage Act, R.S.O. c. O.18, (1990).



Mika, N., & Mika, H. (1983). *Places In Ontario: Their Name Origins and History, Part III, N-Z*. Mika Publishing Company.

Ministry of Indigenous Affairs. (2020). *Map of Ontario Treaties and Reserves*. Government of Ontario. <https://www.ontario.ca/page/map-ontario-treaties-and-reserves#t16>

Environmental Assessment Act, R.S.O., (1990).

Municipal Class Environmental Assessment, (2000).

Natural Resources Canada. (1999). *Owen Sound Sheet 41A/10* [Map].

Ontario Geological Survey. (2010). *Surficial geology of Southern Ontario. Miscellaneous Release—Data 128 – Revised*. [Map].
http://www.geologyontario.mndm.gov.on.ca/mndmaccess/mndm_dir.asp?type=pub&id=MRD128-REV

Ramsden, P. G. (1990). The Hurons: Archaeology and Culture History. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 361–384).

Rankin. (1855). *Map of the Counties of Grey and Bruce* [Map].

Rankin, L. (2000). *Interpreting Long-term Trends in the Transition to Farming: Reconsidering the Nodwell Site, Ontario, Canada*. British Archaeological Reports.

Rogers, E. S. (1962). *The Round Lake Ojibwa* (Occasional Paper 5). Royal Ontario Museum.

South Georgian Bay Tourism. (2022). *Municipality of Meaford*.
<https://southgeorgianbay.ca/meaford/>

Spence, M. W., Pihl, R. H., & Murphy, C. (1990). Cultural Complexes of the Early and Middle Woodland Periods. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650*. Ontario Archaeological Society Inc.



Thwaites, R. G. (1896). *The Jesuit Relations and Allied Documents: Travel and Explorations of the Jesuit Missionaries in New France, 1610-1791; the Original French, Latin, and Italian Texts, with English Translations and Notes* (Vol. 1–73). Burrows Brothers.

Warrick, G. (2000). The Precontact Iroquoian Occupation of Southern Ontario. *Journal of World Prehistory*, 14(4), 415–466.

Warrick, G. (2008). *A Population History of the Huron-Petun, A.D. 500–1650*. Cambridge University Press.

White, P. (2022). *Meaford Ontario: The Early Years*. History-Articles.Com.
<https://www.history-articles.com/meaford-ontario.html>

Williams Treaties First Nations. (2021). *Pre-Confederation Treaties* [Chippewas and Mississaugas Williams Treaties First Nations].
<https://williamstreatiesfirstnations.ca/pre-confederation-treaties/>

Williamson, R. F. (1990). The Early Iroquoian Period of Southern Ontario. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 291–320). Ontario Archaeological Society Inc.



7.0 Images

7.1 Field Photography



Image 1: Buried utilities and gravel parking lot within the off leash dog park, disturbed, no potential.



Image 2: Wastewater Treatment Plant, disturbed, no potential.



Image 3: Artificial ditches, culvert, and berms, disturbed, no potential.



Image 4: Ditching and buried utilities, disturbed, no potential.



Image 5: Buried water utilities within the dog park are disturbed, no potential. These require locates to identify exact alignments. The remainder of the dog park requires Stage 2 survey.



Image 6: Grading along west boundary of Wastewater Treatment Plant, disturbed, no potential.



Image 7: Wastewater Treatment Plant drainage and facility components, disturbed, no potential.



Image 8: Buried water utilities within the dog park are disturbed, no potential. These require locates to identify exact alignments. The remainder of the dog park requires Stage 2 survey.



Image 9: Dog park, requires Stage 2 survey.



Image 10: Grassed lawn in the foreground requires Stage 2 survey, Wastewater Treatment Plant beyond fencing is disturbed, no potential.



Image 11: Grassed lawn and wooded land require Stage 2 survey.



Image 12: Rcreational path through the wooded area, requires Stage 2 survey.



Image 13: Grassed foreground requires Stage 2 survey, Wastewater Treatment Plant beyond fencing is disturbed, no potential.

7.2 Historical Imagery



Image 14: 2010 aerial imagery showing grassed field to the west of the Wastewater Treatment Plant.



Image 15: 2015 aerial imagery showing fencing erected around dog park as well as development of parking area and tree plantings.

8.0 Maps

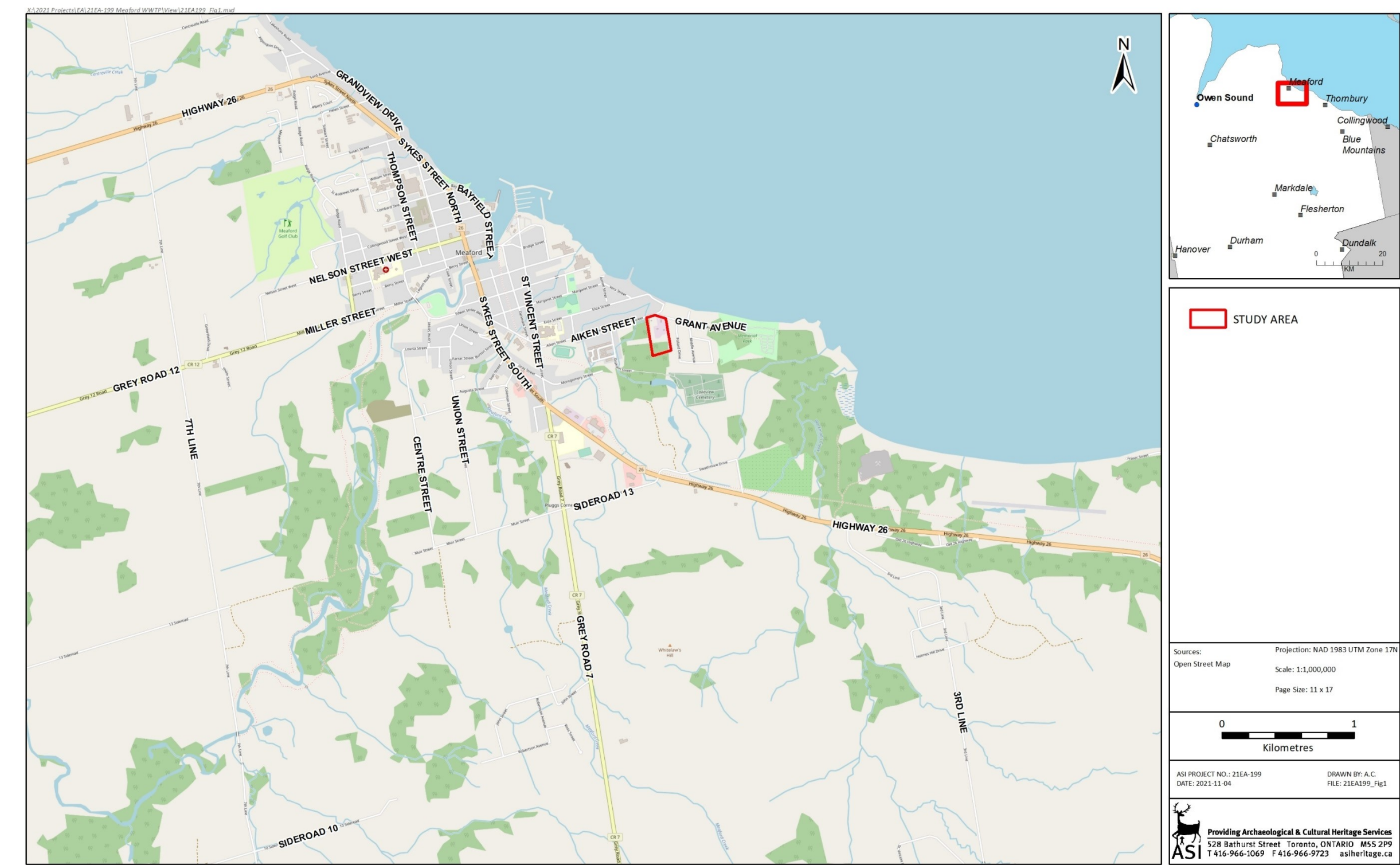


Figure 1: Meaford Wastewater Treatment Plant Study Area



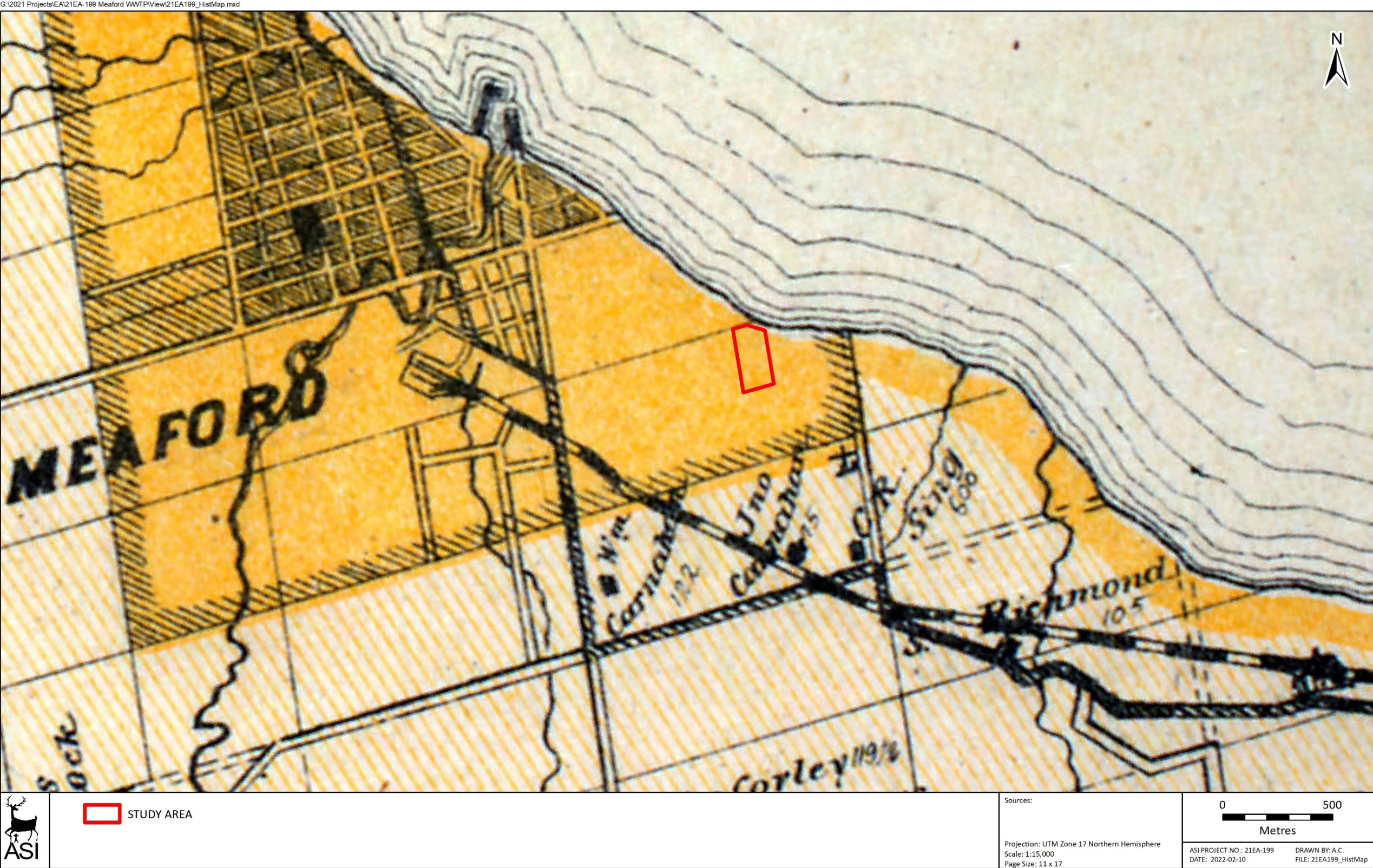


Figure 2: Study Area (Approximate Location) Overlaid on the 1855 Rankin Map of the Counties of Grey and Bruce





Figure 3: Study Area (Approximate Location) Overlaid on the 1880 Illustrated Historical Atlas



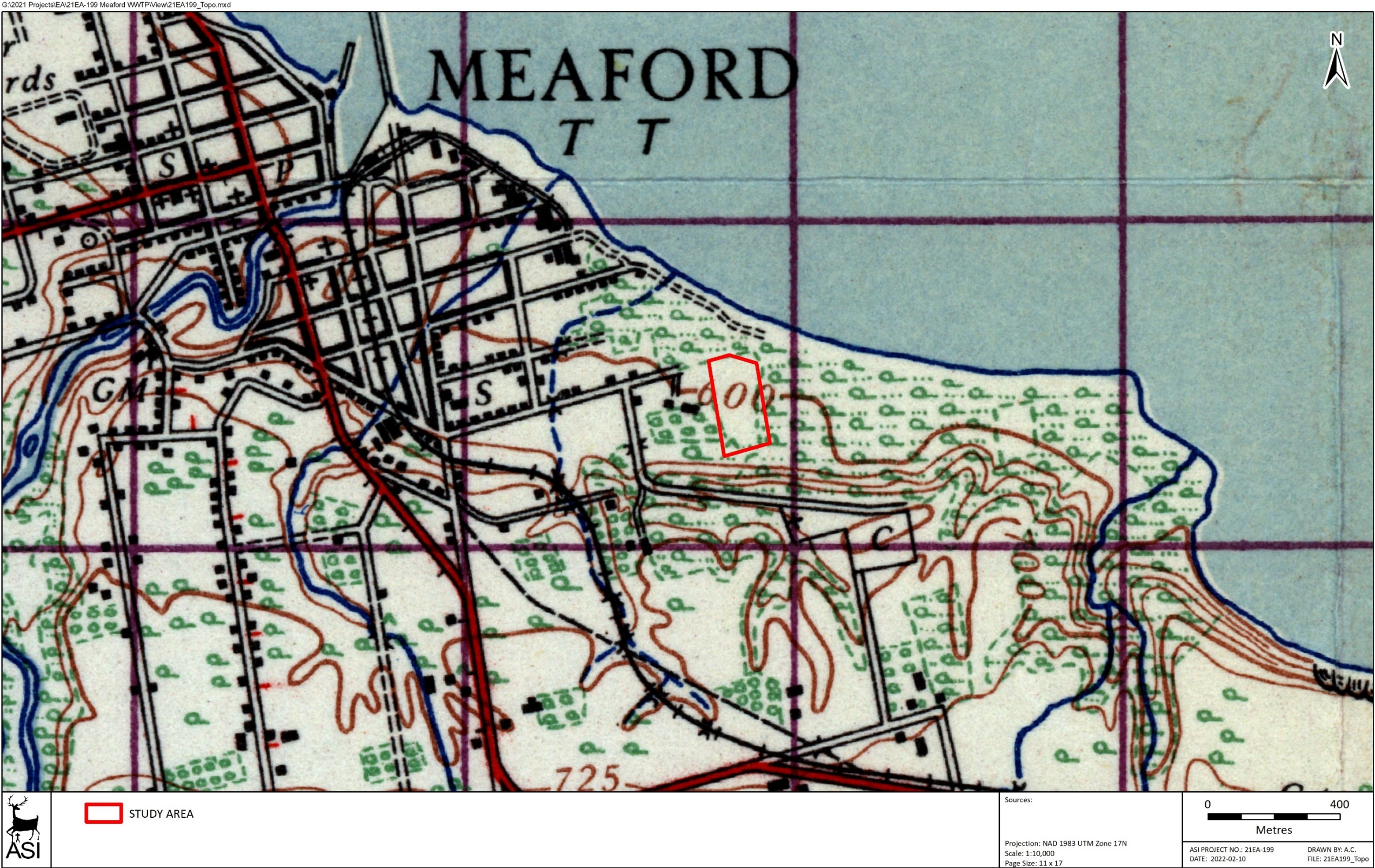


Figure 4: Study Area (Approximate Location) Overlaid on 1945 Topographic Mapping



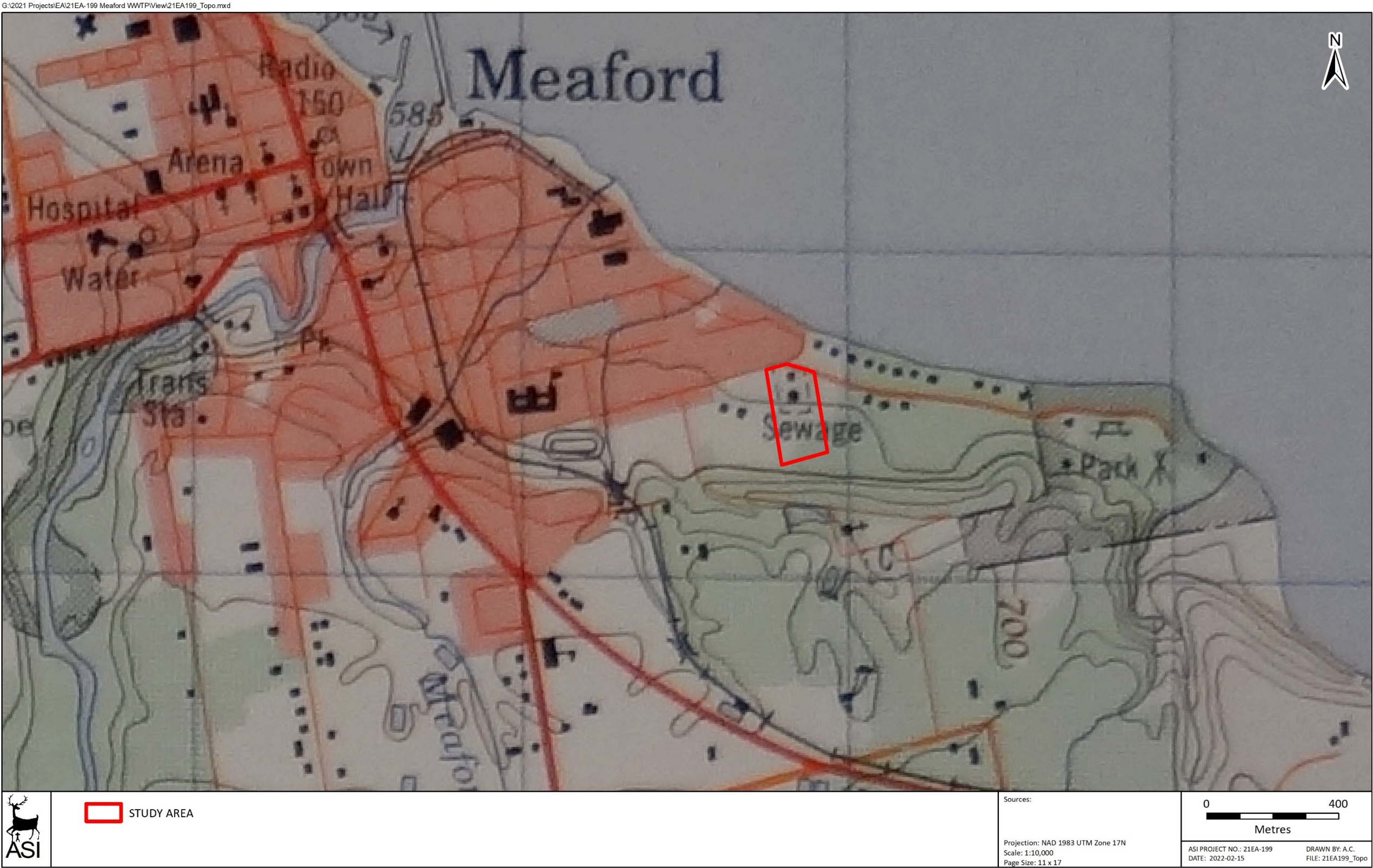


Figure 5: Study Area (Approximate Location) Overlaid on 1979 Topographic Mapping



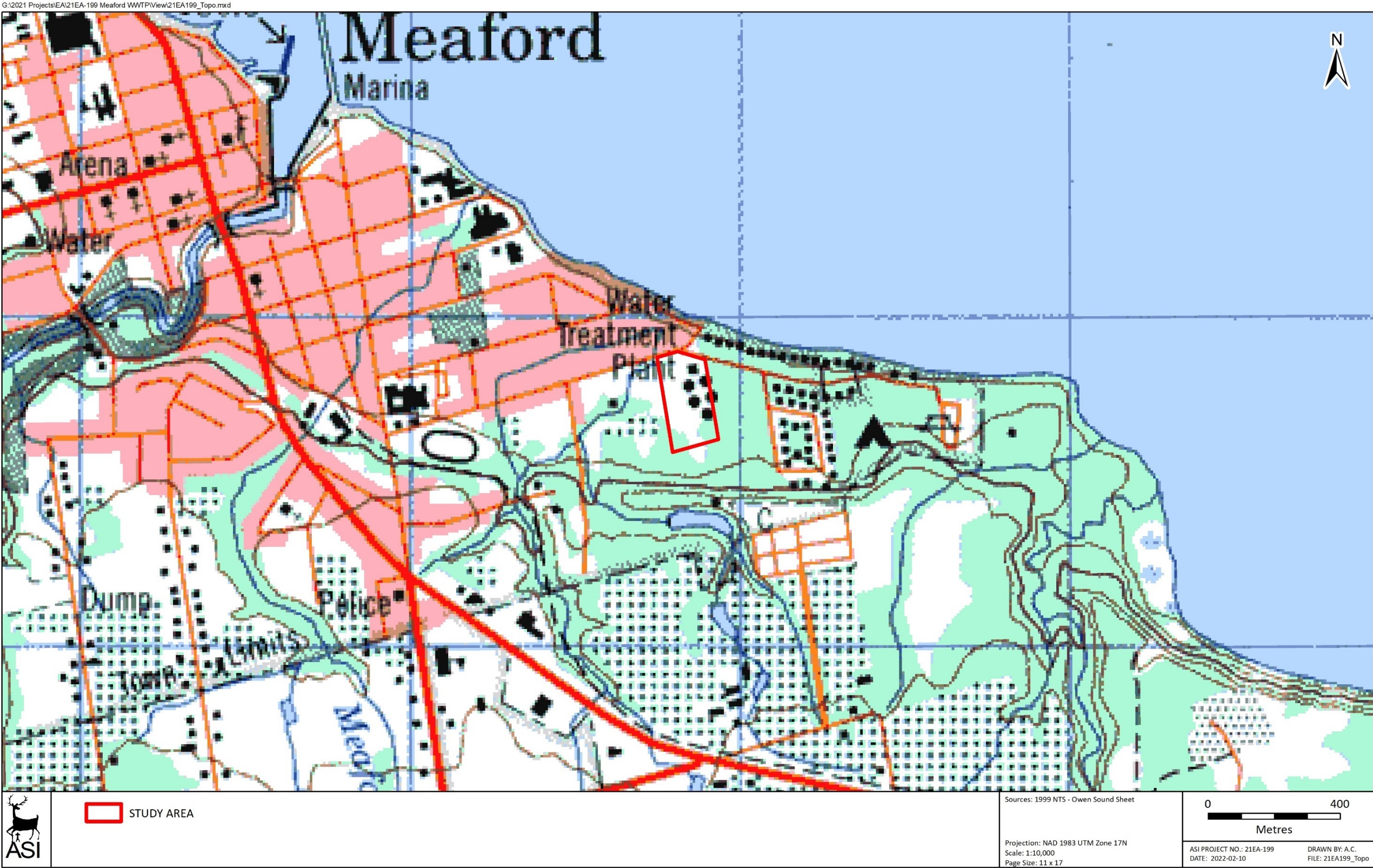


Figure 6: Study Area (Approximate Location) Overlaid on 1999 National Topographic Survey Mapping





Figure 7: Study Area (Approximate Location) Overlaid on 1954 Aerial Photography





Figure 8: Study Area (Approximate Location) Overlaid on 2021 Aerial Photography



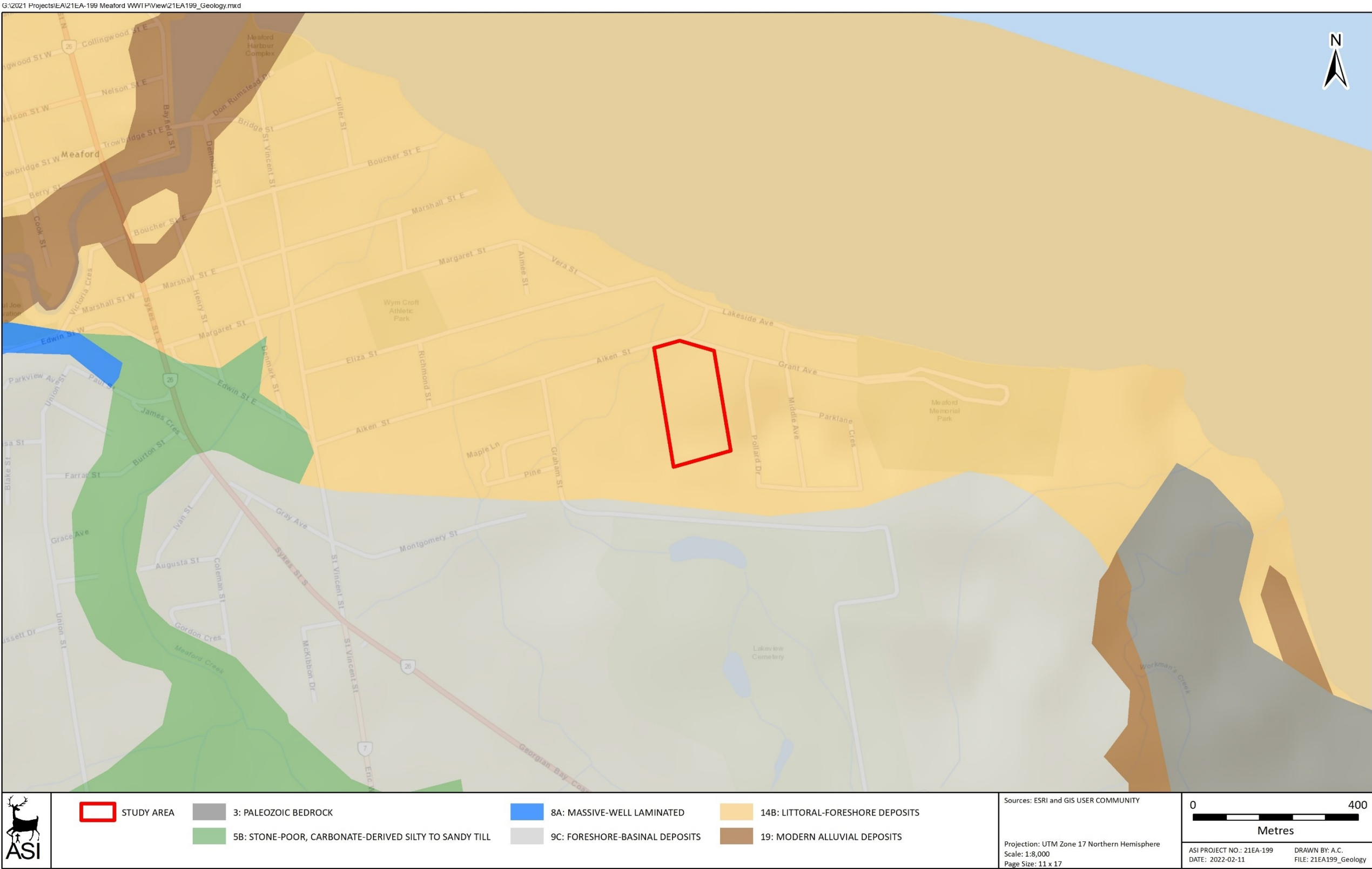


Figure 9: Study Area – Surficial Geology





Figure 10: Study Area – Soil Drainage





Figure 11: Meaford Wastewater Treatment Plant Stage 1 Results

Stage 2 Archaeological Assessment Meaford Wastewater Treatment Plant Expansion Part of Lot 14, Concession 4 (Geographical Township of St. Vincent, Grey County) Municipality of Meaford, Grey County

Original Report

Prepared for:

Ainley Group

195 County Court Boulevard, Suit 300
Brampton ON L6W 4P7

Archaeological Licence: P383 (Williams)

PIF P383-0334-2022

Archaeological Services Inc. File: 22EA-065

28 November 2022



Executive Summary

Archaeological Services Inc. (ASI) was contracted by Ainley Group, on behalf of the Municipality of Meaford to conduct a Stage 2 Archaeological Assessment as part of the Meaford Wastewater Treatment Plant Expansion. This project involves the expansion of the Wastewater Treatment Plant located at 35 Grant Avenue in the Municipality of Meaford.

A Stage 1 assessment for the Meaford Wastewater Treatment Plant Expansion project was previously completed by ASI in 2022 (P383-0299-2021). Background research and a property inspection determined that portions of the Study Area retained archaeological potential and Stage 2 test pit survey was recommended.

The Stage 2 property survey was conducted from July 11-12, 2022, in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists* by test pit survey. Approximately 1.6 percent of the Study Area (0.01 hectares) was previously assessed without further recommendations and not subject to Stage 2 assessment. Approximately 11 percent of the Study Area (0.08 hectares) was found to contain natural topsoil and was subject to test pit survey at five metre intervals, and 87.4 percent of the Study Area (0.68 hectares) did not contain natural topsoil and was subject to judgmental test pit survey at 10 metre intervals.

No archaeological resources were encountered during the course of the Stage 2 Archaeological Assessment for the Meaford Wastewater Treatment Plant Expansion. The Study Area does not require further archaeological assessment.



Project Personnel

- **Senior Project Manager:** Lisa Merritt, MSc (P094) Partner, Director, Environmental Assessment Division
- **Division Coordinator:** Katrina Thach, BA Hons (R1225), Associate Archaeologist, Division Coordinator, Environmental Assessment Division
- **Project Administrator:** Catherine Kitchen, BA, Archaeologist, Project Administrator, Environmental Assessment Division
- **Project Director and Project Manager:** Blake Williams, MLitt (P383), Lead Archaeologist, Project Manager, Environmental Assessment Division
- **Field Director:** Jacob Roberts, BA Hons (R1291), Archaeologist, Field Director, Environmental Assessment Division
- **Field Archaeologists:** William Hayward Johns, BDes; Justine Tenzer
- **Report Preparation:** Blake Williams
- **Graphics:** Peter Bikoulis, PhD, Archaeologist, GIS Technician, Operation Division; Jonas Fernandez, MSc (R281), Lead Archaeologist, Manager - Geomatics, Operations Division; Carolyn Nettleton, BA, Archaeologist, GIS Technician, Operation Division
- **Report Review:** Jessica Lytle, MSc (P1066), Lead Archaeologist, Technical Writer and Fieldwork Coordinator, Environmental Assessment Division; Lisa Merritt



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1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by Ainley Group, on behalf of the Municipality of Meaford to conduct a Stage 2 Archaeological Assessment as part of the Meaford Wastewater Treatment Plant Expansion (Figure 1). This project involves the expansion of the Wastewater Treatment Plant located at 35 Grant Avenue in the Municipality of Meaford.

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (*Ontario Heritage Act*, R.S.O. c. O.18, 1990, as amended in 2021) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI), formerly the Ministry of Tourism and Culture (MTC, 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (Environmental Assessment Act, R.S.O., 1990 as amended 2021) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the Municipal Engineers' Association document *Municipal Class Environmental Assessment* (Municipal Class Environmental Assessment, 2000, as amended 2015).

In addition, this Stage 2 assessment has been commissioned to satisfy the recommendations of the previous Stage 1 assessment (ASI, 2022: P383-0299-2021) that was undertaken as part of the Meaford Wastewater Treatment Plant Expansion Municipal Class Environmental Assessment in the Municipality of Meaford.

ASI has been actively engaging with Indigenous communities who have expressed an interest in the archaeological work within the Study Area for this project on behalf of the Municipality of Meaford. A representative from the Saugeen Ojibway First Nation were present on site and participated during the Stage 2 property survey. No concerns were expressed during the execution of the



fieldwork. A detailed account of all First Nations engagement can be found in the *Supplementary Documentation: Indigenous Engagement* document associated with this report.

Authorization to access and carry out all activities necessary for the completion of this Stage 2 assessment was granted by Ainley Group on May 5, 2022.

1.1.1 Treaties and Traditional Territories

The Study Area is within the Nottawasaga Purchase (Treaty 18), a provisional agreement sometimes called the Lake Simcoe-Nottawasaga Treaty, signed on October 17, 1818, by representatives of the Government of Upper Canada and the Anishinaabe (Ministry of Indigenous Affairs, 2020; Williams Treaties First Nations, 2021). Treaty 18 encompassed 1,592,000 acres of land between the District of London in the west, Lake Huron in the north, the west limit of the Penetanguishene Purchase (1815) in the east, and the west shore of Lake Simcoe, Cook's Bay, and the Holland River in the northwest. In exchange for the land, the Crown agreed to pay an annual sum of £1200 in goods at the "Montreal price" (Crown-Indigenous Relations and Northern Affairs, 2016; Ministry of Indigenous Affairs, 2020). The Nottawasaga Purchase territory includes the present-day communities of Wasaga, Bradford, and Collingwood.

1.2 Historical Context

A comprehensive review of the precontact Indigenous and Euro-Canadian occupations of the Meaford region is presented in the Stage 1 report (ASI 2022, pp. 7–13). To summarize, background research indicates that the general vicinity of the Study Area has been attractive to human settlement for thousands of years, primarily by Indigenous people and more recently by Euro-Canadian settlers. Historically, the Study Area corridor is within Lot 14, Concession 4 in the Former St. Vincent Township, Grey County, Ontario.

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area,



its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MHSTCI through *Ontario's Past Portal*; published and unpublished documentary sources; and the files of ASI.

1.3.1 Current Land Use and Field Conditions

The Study Area comprises the lands of 35 Grant Avenue within the Municipality of Meaford and includes the Meaford Wastewater Treatment Plant, a dog park, and a scrubby woodlot. The Wastewater Treatment Plant was originally constructed in 1969 and includes access roads, wastewater infrastructure, and manicured lawns surrounded by fencing. On the west side of the Wastewater Treatment Plant is the fenced and manicured Beautiful Joe Off Leash Dog Park with an associated gravel parking lot. A scrubby woodlot is located to the south of the Wastewater Treatment Plant.

The area surrounding the Study Area supports low density residential developments intermixed with natural woodlots. In addition, Georgian Bay is located approximately 120 metres north of the Study Area.

The Stage 2 survey for the Meaford Wastewater Treatment Plant Expansion project was conducted from July 11-12, 2022, under the field direction of Jacob Roberts (R1291).

1.3.2 Geography

A comprehensive summary of the geology and physiography of Grey County is presented in the Stage 1 report (Archaeological Services Inc., 2022). To summarize, the Study Area is situated within the Beaver Valley physiographic region of southern Ontario (Chapman & Putnam, 1984). The Beaver Valley physiographic region is comprised of a 124 square-metre area stretching from Georgian Bay at Thornbury in the north, to just north of Flesherton in the south (Chapman & Putnam, 1984: 122). It is 35 kilometers wide in the north, stretching between Griersville Rock and the Blue Mountain Peaks, and narrows



to less than three kilometers in width in the south. The Study Area is situated in the north where the valley's plain ends near Georgian Bay at a steep bluff of the Nipissing Great Lakes (Chapman & Putnam, 1984: 123). To the north are several gravel beach strands and strips of boulder pavement derived from former till.

The terrain of the Beaver Valley is marked by stony pastures and gravelly soils, but also areas of deep silt and fine sandy loam. The soils in the Study Area consist of Granby, a poorly draining Dark Grey Gleisolic sand, and Brighton, a well draining Grey Brown Podzolic sand.

The Study Area is located approximately 120 metres from the present-day shoreline of Georgian Bay.

1.3.3 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MHSTCI. This database contains archaeological sites registered within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on latitude and longitude. A Borden block is approximately 13 kilometres east to west, and approximately 18.5 kilometres north to south. Each Borden block is referenced by a four-letter designator, and sites within a block are numbered sequentially as they are found. The Study Area under review is located in Borden block *BdHd*.

According to the Ontario Archaeological Sites Database, two previously registered archaeological sites are located within one kilometre of the Study Area, neither of which are located within 50 metres (MHSTCI 2022). A summary of the sites is provided below Table 1.



Table 1: Registered Sites within One Kilometre of the Study Area

Borden Number	Site Name	Temporal/ Cultural Affiliation	Site Type	Researcher
BdHd-3	Beamer	Precontact Indigenous	Unknown	Unknown 1977
BdHd-6	Moore	Precontact Indigenous	Unknown	Unknown 1977

1.3.4 Previous Archaeological Assessments

According to the background research, one previous report detail fieldwork within 50 metres of the Study Area.

Reports within the Study Area

(ASI 2022) Stage 1 Archaeological Assessment Meaford Wastewater Treatment Plant Expansion (Lot 14, Concession 4, Former St. Vincent Township, Grey County) Municipality of Meaford, Grey County. P383-0299-2021. ASI file 21EA-199.

In 2022 ASI conducted a Stage 1 Archaeological Assessment for the Meaford Wastewater Treatment Plant Expansion project. This Stage 1 project overlaps with the entirety of the current Stage 2 Study Area. Stage 1 background research and a property inspection determined that some of the project area exhibits archeological potential. These lands were recommended for Stage 2 archaeological assessment by test pit survey at five metre intervals prior to any proposed impacts.

2.0 Field Methods

The Stage 2 Study Area comprises the lands at 35 Grant Avenue, on the south side of Grant Avenue, at Aiken Street in the Municipality of Meaford (Figure 1). It measures approximately 160 metres by 78 metres in size and covers an area of 0.77 hectares (Figures 1-2).



The Stage 2 property survey was conducted under the field direction of Jacob Roberts (R1291) from July 11-12, 2022, in accordance with the *Ontario Heritage Act* and the S & G, Section 2. During the field assessments, weather and lighting conditions permitted good visibility and were in accordance with the S & G, Section 2.1, Standard 3. During the time of survey, conditions were seasonal with sunny and partly sunny skies and temperatures of 20-25 degrees Celsius. Photographs of all field conditions were taken (Images 1-10), and the location and direction of each photograph is mapped in Figures 1-2.

As per Section 2.1 of the S & G, all lands were within areas where ploughing was not possible or viable and therefore subject to test pit survey. According to Section 2.1.2, Standard 2 of the S & G, any undisturbed areas requiring test pit survey within 300 metres of any feature of archaeological potential must be subject to systematic assessment at five metre intervals. Test pits were placed at five metre intervals until disturbance was encountered, and then judgmentally increased to ten metres intervals as per S & G Section 2.1.8. All test pits were excavated following the S & G Section 2.1.2 Standards 5-9. All test pits were excavated by hand to a minimum of 30 centimetres in diameter and into the first five centimetres of subsoil. Each test pit was examined for stratigraphy, cultural features, and evidence of fill. Test pit fill was screened through six-millimetre mesh to facilitate artifact recovery. Afterwards, all test pits were backfilled, and their locations were recorded on field maps. Any factors that precluded the excavation of test pits (e.g., excessive slope, drainage, exposed bedrock, previous disturbance) were noted, and the areas were mapped and photographed.

Fieldwork was conducted using a Samsung Galaxy S4 tablet running Esri Collector software equipped with a sub-metre Trimble Catalyst Global Navigation Satellite System in conjunction with project mapping provided by Ainley Group and the Municipality of Meaford to ensure the assessment remained within the Study Area limits.

2.1 Areas of No Archaeological Potential

Approximately 1.6 percent of the Study Area (0.01 hectares) was previously assessed without further recommendations and not subject to Stage 2 assessment as per S & G Section 2.1, Standard 2.c (ASI 2022: P383-0299-2021).



2.2 Test Pit Survey

Approximately 11 percent of the Study Area (0.08 hectares) was found to contain natural topsoil (A-horizon) and was subject to test pit survey at five metre intervals following S & G Section 2.1.2, Standards 1-9. The areas subject to test pit survey at five metre intervals include the western edge of the Study Area which is a mixture of scrubland along the tree line with a dense woodlot to the west (Figure 2; Images 8-10).

Undisturbed stratigraphy in the Study Area is characterized by approximately 27 centimetres of dark brown (10YR 3/3) loamy sand topsoil (A-horizon) overlying a yellowish brown (10YR 5/6) sand subsoil (B-horizon) (Image 10).

Approximately 87.4 percent of the Study Area (0.68 hectares) did not contain natural topsoil (A-horizon) and was subject to judgmental test pit survey at 10 metre intervals to confirm previous disturbance following S & G Section 2.1.8, Standards 1-2. The areas subject to judgmental test pit survey include the fenced Beautiful Joe Off Leash Dog Park and manicured lawn that surround the existing plant (Figure 2; Images 1-7).

Disturbed stratigraphy in the Study Area is characterized by 25-29 centimetres of redeposited dark very dark (10YR 4/2) to a very dark brown (10 YR 2/2) silty sand topsoil (A-horizon) containing pebbles, atop a yellowish-brown (10YR 5/6) to dark yellowish-brown sand (10YR 5/1) layer that varied from 11-21 centimetres. In the centre and south areas, a light yellow (10YR 6/4) to yellow (10YR 7/6) sandy subsoil was encountered at a depth of 36-48 centimetres (Images 4 and 6). In the north at a depth of 50 centimetres a very dark brown (10YR 2/2) loamy sand layer was encountered atop a brown (10YR 5/3) sandy subsoil (Image 2).

2.3 Stage 2 Assessment Results Summary

A summary of the Stage 2 assessment results for the Meaford Wastewater Treatment Plant Expansion Project can be found in Table 2 below.

Table 2: Stage 2 Survey Results Summary



Survey Method	Area	Description	Images
Not assessed due to previous assessment; no further work recommended	0.01 hectares (1.6 percent)	ASI 2022 (P383-0299-2021)	Not applicable
Test pit survey; five metre intervals	0.08 hectares (11.0 percent)	Scrubland; Woodlot	8-10
Judgmental test pit survey; 10 metre intervals	0.68 hectares (87.4 percent)	Fenced dog park; Landscaped lawns	1-7

3.0 Record of Finds

No archaeological resources were encountered during the course of the Stage 2 Archaeological Assessment for the Meaford Wastewater Treatment Plant Expansion.

3.1 Inventory of Documentary and Material Record

The documentation related to this archaeological assessment will be curated by ASI until such a time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner(s), the MHSTCI, and any other legitimate interest groups.

Table 3 provides an inventory and location of the documentary and material record for the project in accordance with the S & G, Sections 6.7 and 7.8.2.3.



Table 3: Inventory of Documentary and Material Record

Material	Location	Comments
Digital field notes, field maps, GPS logs, etc.	Archaeological Services Inc., 528 Bathurst Street, Toronto, Ontario, M5S 2P9	Stored in ASI project folder 22EA-065; GPS and digital information stored on ASI network servers
Digital field photography	Same as above	Files stored on ASI network servers
Digital research, analysis, and reporting materials	Same as above	Files stored on ASI network servers

4.0 Analysis and Conclusions

ASI was contracted by Ainley Group, on behalf of the Municipality of Meaford, to conduct a combined Stage 1 and 2 Archaeological Assessment for the potential expansion of the Wastewater Treatment Plant located at 35 Grant Avenue, Meaford (Figure 1). This project involves the expansion of the Wastewater Treatment Plant located at 35 Grant Avenue in the Municipality of Meaford.

A Stage 1 assessment for the Meaford Wastewater Assessment Plant Expansion project was previously completed by ASI in 2022 (P383-0299-2021). Background research and a property inspection determined that portions of the Study Area retained archaeological potential and Stage 2 test pit survey was recommended.

The Stage 2 property survey was conducted from July 11-12, 2022, in accordance with the *Ontario Heritage Act* and the S & G by test pit survey. Approximately 1.6 percent of the Study Area (0.01 hectares) was determined to have been previously assessed (ASI, 2022) and did not require Stage 2 survey (Figure 2). The remaining 98.4 percent of the Study Area (0.76 hectares), comprising



woodlots and scrubland, was subject to test pit survey at five metre intervals, and landscaped grassland was subject to judgmental test pit survey at 10 metre intervals to confirm previous disturbance (Figure 2; Images 1-10). No archaeological resources were encountered during the Stage 2 survey, and no further archaeological assessment is recommended.

5.0 Recommendations

In light of these results, the following recommendations are made:

1. The Study Area does not require further archaeological assessment; and
2. Should the proposed work extend beyond the current Study Area, or should changes to the project design or temporary workspace requirements result in the inclusion of previously un-surveyed lands, these lands should be subject to a Stage 2 archaeological assessment.

NOTWITHSTANDING the results and recommendations presented in this study, ASI notes that no archaeological assessment, no matter how thorough or carefully completed, can necessarily predict, account for, or identify every form of isolated or deeply buried archaeological deposit. In the event that archaeological remains are found during subsequent construction activities, the consultant archaeologist, approval authority, and the Archaeology Programs Unit of the MHSTCI should be immediately notified.

The above recommendations are subject to Ministry approval, and it is an offence to alter any archaeological site without MHSTCI concurrence. No grading or other activities that may result in the destruction or disturbance of any archaeological sites are permitted until notice of MHSTCI approval has been received.

6.0 Legislation Compliance Advice

ASI advises compliance with the following legislation:



- This report is submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, RSO 2005, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological field work and report recommendations ensure the conservation, preservation, and protection of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the Ministry stating that there are no further concerns with 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 licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological field work on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
- Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 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.
- Archaeological sites recommended for further archaeological field work or protection remain subject to Section 48(1) of the *Ontario Heritage Act*



and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.



7.0 Bibliography and Sources

- Archaeological Services Inc. (2022). Stage 1 Archaeological Assessment Meaford Wastewater Treatment Plant Expansion (Lot 14, Concession 4, Former St. Vincent Township, Grey County) Municipality of Meaford, Grey County (P383-0299-2021). Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.
- Chapman, L. J., & Putnam, F. (1984). The Physiography of Southern Ontario (Vol. 2). Ontario Ministry of Natural Resources.
- Crown-Indigenous Relations and Northern Affairs. (2016). Lake Simcoe-Nottawasaga Treaty No. 18. Treaty Texts – Upper Canada Land Surrenders. <https://www.rcaanc-cirnac.gc.ca/eng/1370372152585/1370372222012#ucls17>
- Ontario Heritage Act, R.S.O. c. O.18, (1990).
- Ministry of Heritage, Sport, Tourism and Culture Industries. (2022). Ontario's Past Portal. PastPortal. <https://www.pastport.mtc.gov.on.ca>
- Ministry of Indigenous Affairs. (2020). Map of Ontario Treaties and Reserves. Government of Ontario. <https://www.ontario.ca/page/map-ontario-treaties-and-reserves#t16>
- Environmental Assessment Act, R.S.O., (1990).
- MTC, (Ministry of Tourism and Culture). (2011). Standards and Guidelines for Consultant Archaeologists. Cultural Programs Branch, Ontario Ministry of Tourism and Culture.
- Municipal Class Environmental Assessment, (2000).
- Williams Treaties First Nations. (2021). Pre-Confederation Treaties [Chippewas and Mississaugas Williams Treaties First Nations]. <https://williamstreatiesfirstnations.ca/pre-confederation-treaties/>



8.0 Images



Image 1: Test pit survey occurring withing dog park at 10 metre intervals



Image 2: Disturbed test pit profile



Image 3: Judgmental test pit survey at 10 metre intervals in progress



Image 4: Disturbed test pit profile



Image 5: Judgmental test pit survey at 10 metre intervals in progress



Image 6: Disturbed test pit profile



Image 7: Judgmental test pit survey at 10 metre intervals in progress



Image 8: Test pit survey occurring within treed area at five metre intervals



Image 9: Test pit survey occurring within treed area at five metre intervals



Image 10: Natural test pit profile

9.0 Maps



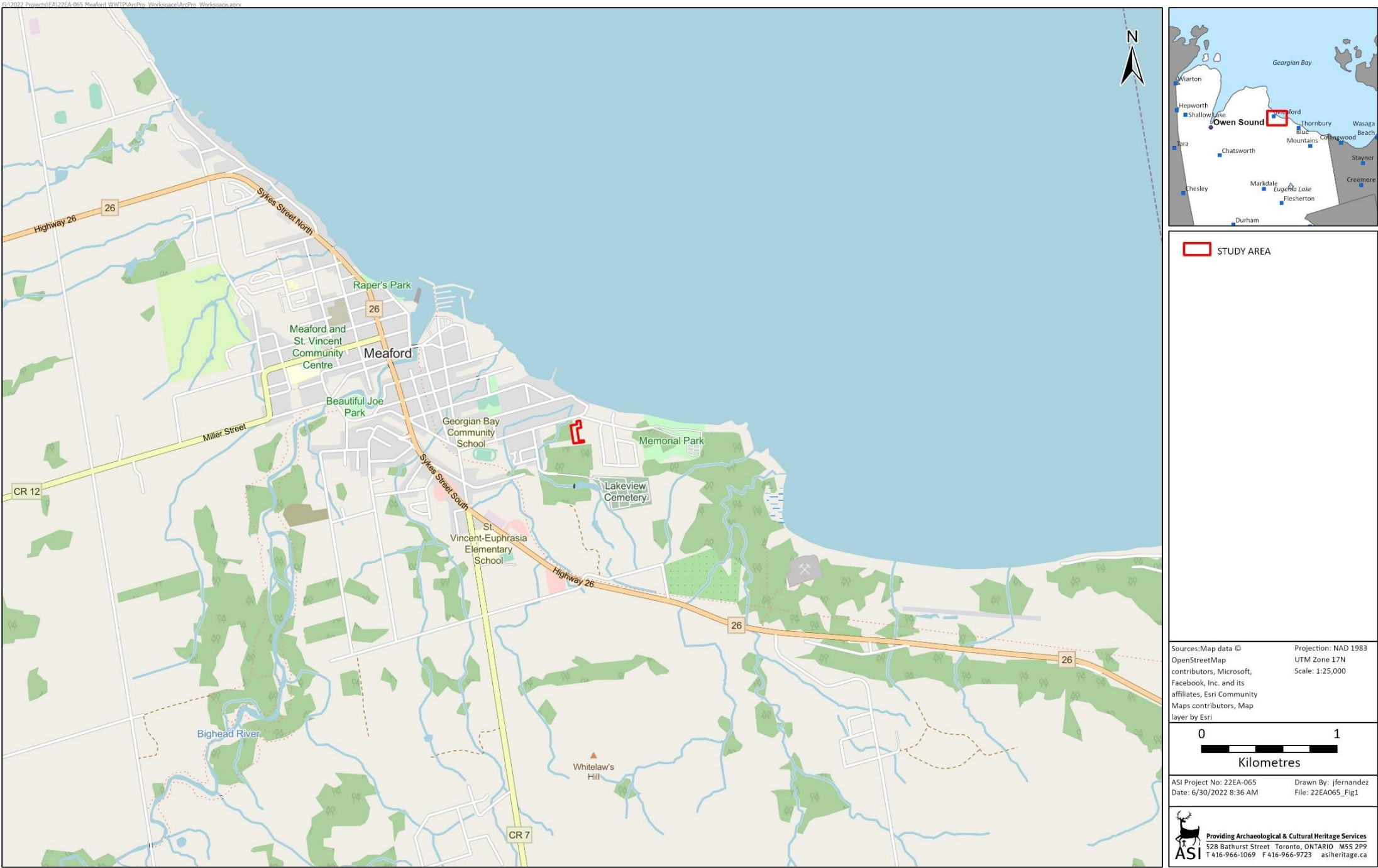


Figure 1: Location of the Study Area





Figure 2: Stage 2 Archaeological Assessment Results for the Meaford Wastewater Treatment Plant Expansion

Cultural Heritage Evaluation Report

35 Grant Avenue

Waste Water Treatment Plant Expansion

Municipality of Meaford, Ontario

Draft Report

Prepared for:

Ainley Group

195 County Court Boulevard, Suite 300
Brampton, ON L6W 4P7

Archaeological Services Inc. File: 22CH-061

September 2022 (Revised November 2022)



Executive Summary

Archaeological Services Inc. was contracted by Ainley Group on behalf of the Municipality of Meaford to conduct a Cultural Heritage Evaluation Report (C.H.E.R.) for the Waste Water Treatment Plant (W.W.T.P.) property at 35 Grant Avenue in the Municipality of Meaford, Ontario. The C.H.E.R. is being undertaken as part of the Waste Water Treatment Plant Expansion, Municipality of Meaford Municipal Class Environmental Assessment. The property consists of an existing W.W.T.P. and includes various structures and infrastructure. The property has no existing cultural heritage recognition and is not protected under the provisions of the *Ontario Heritage Act*. As structures on the subject W.W.T.P. are greater than 40 years old, the property requires a C.H.E.R. (Ministry of Tourism, Culture and Sport, 2016) to determine cultural heritage value or interest.

This report includes an evaluation of the cultural heritage value of the property as determined by the criteria in Ontario Regulation 9/06 of the *Ontario Heritage Act*. This evaluation determined that the property does not have design and physical, historical and associative, or contextual value.

The following recommendations are proposed:

1. The proponent should submit this report for review and comment to planning staff at the Municipality of Meaford, the Ministry of Citizenship and Multiculturalism, and to any other relevant stakeholder that has an interest in the heritage of the subject property. Any feedback will be incorporated into this report prior to finalization. The final report should be submitted to the Municipality of Meaford Public Library for archival purposes.



Report Accessibility Features

This report has been formatted to meet the Information and Communications Standards under the *Accessibility for Ontarians with Disabilities Act, 2005* (A.O.D.A.). Features of this report which enhance accessibility include: headings, font size and colour, alternative text provided for images, and the use of periods within acronyms. Given this is a technical report, there may be instances where additional accommodation is required in order for readers to access the report's information. If additional accommodation is required, please contact Annie Veilleux, Manager of the Cultural Heritage Division at Archaeological Services Inc., by email at aveilleux@asiheritage.ca or by phone 416-966-1069 ext. 255.



Project Personnel

- **Senior Project Manager:** Lindsay Graves, M.A., C.A.H.P., Senior Cultural Heritage Specialist, Assistant Manager - Cultural Heritage Division
- **Project Coordinator:** Jessica Bisson, B.F.A. (Hon.), Dipl. Heritage Conservation, Project Administrator – Cultural Heritage Division
- **Project Manager:** John Sleath, M.A., Cultural Heritage Specialist, Project Manager - Cultural Heritage Division
- **Field Review:** John Sleath
- **Report Production:** John Sleath
- **Graphics Production:** Jonas Fernandez, M.S.c., Manager, Geomatics - Operations Division
- **Report Reviewer(s):** Lindsay Graves and Michael Wilcox, P.h.D., Historian - Cultural Heritage Division



Glossary

Built Heritage Resource (B.H.R.)

Definition: "...a building, structure, monument, installation or any manufactured remnant that contributes to a property's cultural heritage value or interest as identified by a community, including an Indigenous community. built heritage resources are located on property that may be designated under Parts IV or V of the *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers" (Ministry of Municipal Affairs and Housing, 2020, p. 41).

Cultural Heritage Landscape (C.H.L.)

Definition: "...a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *Ontario Heritage Act*, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms" (Ministry of Municipal Affairs and Housing, 2020, p. 42).

Significant

Definition: With regard to cultural heritage and archaeology resources, significant means "resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the *Ontario Heritage Act*. While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation" (Ministry of Municipal Affairs and Housing, 2020, p. 51).



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1.0 Introduction

Archaeological Services Inc. was contracted by Ainley Group on behalf of the Municipality of Meaford to conduct a Cultural Heritage Evaluation Report (C.H.E.R.) for the Waste Water Treatment Plant (W.W.T.P.) property at 35 Grant Avenue in the Municipality of Meaford, Ontario (Figure 1). The C.H.E.R. is being undertaken as part of the Waste Water Treatment Plant Expansion, Municipality of Meaford Municipal Class Environmental Assessment. The property consists of an existing W.W.T.P., constructed in 1969, and includes various structures and infrastructure related to its function to treat municipal waste water before it is discharged into Georgian Bay. The property has no existing cultural heritage recognition and is not protected under the provisions of the *Ontario Heritage Act*. As structures on the subject W.W.T.P. are greater than 40 years old, the property requires a C.H.E.R. (Ministry of Tourism, Culture and Sport, 2016) to determine cultural heritage value or interest.

1.1 Project Overview

The W.W.T.P. Expansion, Municipality of Meaford Municipal Class Environmental Assessment involves the expansion of the existing W.W.T.P. to account for future development in the area by increasing capacity for waste water treatment. The proposed expansion includes the construction of additional biosolids treatment and storage areas, aeration tanks, pump stations, clarifiers, odour control structures, tertiary treatment areas with ultraviolet disinfection, effluent pumps, and other ancillary structures on the western portion of the existing treatment plant site. The existing digester and ultraviolet disinfection channel on the east portion of the site are proposed to be demolished. Landscaping berms at the north of the treatment plant adjacent to Grant Avenue are anticipated to be constructed to decrease public visibility of the site.

1.2 Legislation and Policy Context

Pursuant to the *Environmental Assessment Act* (Ministry of the Environment 1990), applicable infrastructure projects are subject to heritage assessment



and/or evaluation to identify built heritage resources and cultural heritage landscapes and to determine related impacts on identified heritage properties (Ministry of Transportation, 2007). Infrastructure projects have the potential to impact built heritage resources and cultural heritage landscapes in a variety of ways such as loss or displacement of resources through removal or demolition and the disruption of resources by introducing physical, visual, audible, or atmospheric elements that are not in keeping with the resources and/or their setting.

The analysis used throughout the cultural heritage evaluation process addresses built heritage resources and cultural heritage landscapes under other various pieces of legislation and their supporting guidelines. These policies form the broad context which frame this assessment, and are included as relevant to this undertaking based on professional opinion and with regard for best practices:

- *Environmental Assessment Act* (Environmental Assessment Act, R.S.O., 1990);
- *Ontario Heritage Act* (Ontario Heritage Act, R.S.O. c. O.18, 1990 [as Amended in 2021], 1990);
- *Ontario Heritage Tool Kit* (M.T.C.S., 2006).

1.3 Approach to Cultural Heritage Evaluation Reports

The scope of a C.H.E.R. is guided by the *Ontario Heritage Tool Kit* (M.T.C.S., 2006). Generally, C.H.E.R.s include the following components:

- A general description of the history of the subject property as well as detailed historical summaries of property ownership and building(s) development;
- A description of the cultural heritage landscapes and built heritage resources that are under evaluation in this report;
- Representative photographs of the exterior and interior of a building or structure, and character-defining architectural details;
- A cultural heritage evaluation guided by the *Ontario Heritage Act* criteria;



- A summary of heritage attributes;
- Historical mapping, photographs; and
- A location plan.

Using background information and data collected during the site visits, the property is evaluated using criteria contained within Ontario Regulation 9/06. The criteria requires a full understanding, given the resources available, of the history, design and associations of all cultural heritage resources of the property. The criteria contained within Ontario Regulation 9/06 requires a consideration of the community context.





Figure 1: Location of the subject property at 35 Grant Avenue. Source: (c) Open Street Map contributors, Creative Commons n.d.

2.0 Community Engagement

The following section outlines the community consultation that was undertaken to gather and review information about the subject property.

2.1 Relevant Agencies/Stakeholders Engaged and/or Consulted

The following stakeholders were contacted with inquiries regarding the heritage status and for information concerning the subject property and any additional adjacent built heritage resources or cultural heritage landscapes:

- Chris Collyer, Manager/Chief Operator, Environmental Services, Municipality of Meaford (email communication 22 and 30 August 2022). Email correspondence confirmed that neither the subject property nor any adjacent properties were listed by the municipality or designated Part IV or V of the *Ontario Heritage Act*.
- The Ministry of Citizenship and Multiculturalism (email communication 13 and 16 September 2022). Email correspondence confirmed that there are no properties designated under the *Ontario Heritage Act* and no Provincial Heritage Properties within or adjacent to the study area.
- The Ontario Heritage Trust (email communication 13 and 15 September 2022). A response indicated that there are no conservation easements or Trust-owned properties within or adjacent to the subject property.



2.2 Agency Review

The draft report will be submitted to planning staff at the Municipality of Meaford and the Ministry of Citizenship and Multiculturalism (M.C.M.) for review and comment. Any feedback received will be considered and incorporated into this report as appropriate. The final cultural heritage evaluation report (C.H.E.R.) will be submitted to M.T.C.S. and the Municipality of Meaford for their information.

2.3 Indigenous Nations Engagement

Indigenous Nation Engagement for this project is being completed by Ainley Group to Indigenous Nations that have an interest in the study area, in particular, the Saugeen Ojibway Nation. At the time of report preparation, Indigenous Nation Engagement had been undertaken but no feedback had been received. Any feedback received from this engagement will be considered and incorporated into the final report as appropriate.

3.0 Description of the Property

The following section provides a description of the subject property.

3.1 Existing Conditions

The existing Waste Water Treatment Plant (W.W.T.P.) is located at 35 Grant Avenue, on the south side of Grant Avenue, at Aiken Street. It currently consists of the W.W.T.P. in the northeast, an off-leash dog park in the northwest and green space in the southern half. Georgian Bay is approximately 120 metres north of the subject property.

The W.W.T.P. was constructed in 1969 and started service in 1970 (Ainley Group, 2015). The site features a variety of structures and infrastructure related to municipal waste water treatment, as depicted in Figure 2. Infrastructure in the northeast portion of the study area in the footprint of the W.W.T.P. site includes biosolids storage and treatment, digesters, clarifiers, disinfection channels, and various pumps and blowers and associated piping.





Figure 2: Aerial image of the subject property at 35 Grant Avenue (Google Maps)

3.2 Heritage Recognitions

The subject property is not recognized as a known/potential heritage property by the municipality, province, or federal government.

3.3 Adjacent Lands

There are no known/potential heritage properties adjacent to the subject property.

4.0 Research

This section provides: the results of primary and secondary research; a discussion of historical or associative value; a discussion of physical and design value; a discussion of contextual value; and results of comparative analysis.

4.1 List of Key Sources and Site Visit Information

The following section describes the sources consulted and research activities undertaken for this report.

4.1.1 Key Sources

Background historical research, which includes consulting primary and secondary source documents, photos, and historic mapping, was undertaken to identify early settlement patterns and broad agents or themes of change on the subject property. In addition, online historical research was undertaken through the websites of the following libraries and archives to build upon information gleaned from other primary and secondary materials:

- Library and Archives Canada (Library and Archives Canada, n.d.).
- Municipality of Meaford Public Library
(<https://www.meaford.ca/en/explore-play/library.aspx>);
- Heritage Meaford / Architectural Conservancy of Ontario Meaford Chapter
(<https://www.heritagemeaford.com/resources.php>); and



- Meaford Museum (<https://www.meaford.ca/en/explore-play/meaford-museum.aspx>).

Available federal, provincial, and municipal heritage inventories¹ and databases were also consulted to obtain information about the properties. These included:

- The *Ontario Heritage Act Register* (Ontario Heritage Trust, n.d.b);
- The *Places of Worship Inventory* (Ontario Heritage Trust, n.d.c);
- The inventory of Ontario Heritage Trust easements (Ontario Heritage Trust, n.d.a);
- The Ontario Heritage Trust's *Ontario Heritage Plaque Guide*: an online, searchable database of Ontario Heritage Plaques (Ontario Heritage Trust, n.d.d);
- Parks Canada's *Directory of Federal Heritage Designations*, an on-line database that identifies National Historic Sites, National Historic Events, National Historic People, Heritage Railway Stations, Federal Heritage Buildings, and Heritage Lighthouses (Parks Canada, n.d.b); and
- Parks Canada's *Historic Places* website, an on-line register that provides information on historic places recognized for their heritage value at all government levels (Parks Canada, n.d.a).

Previous consultant reports associated with known and potential built heritage resources, cultural heritage landscapes and archaeological resources within and/or adjacent and/or in the vicinity of the subject property in the Municipality of Meaford, Ontario included the following:

¹ No municipal heritage register for the Municipality of Meaford was available online, however consultation with planning staff at the municipality confirmed that there are no known built heritage resources or cultural heritage landscapes within or adjacent to the study area (see Section 2.1).



- Stage 1 Archaeological Assessment, Meaford Waste Water Treatment Plant Expansion (Lot 14, Concession 4, Former St. Vincent Township, Grey County) (Archaeological Services Inc., 2022)

A full list of references consulted can be found in Section 7.0 of this document.

4.1.2 Site Visit

A site visit to the subject property was conducted on 8 September 2022 by John Sleath of Archaeological Services Incorporated (A.S.I.) The site visit included photographic documentation of the exterior of all structures on the subject property and representative elements of the interior of select structures on the subject property. Permission to Enter (P.T.E.) was granted by the Municipality of Meaford to allow A.S.I. to access the property.

4.2 Discussion of Historical or Associative Value

Historically, the subject property is located in the former St. Vincent Township, Grey County on Lot 14, Concession 4. It is now located at 35 Grant Avenue in the Municipality of Meaford, Grey County.

4.2.1 Summary of Early Indigenous History in Southern Ontario

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years before present (B.P.) (Ferris, 2013). Populations at this time would have been highly mobile, inhabiting a boreal-parkland similar to the modern sub-arctic. By approximately 10,000 B.P., the environment had progressively warmed (Edwards & Fritz, 1988) and populations now occupied less extensive territories (Ellis & Deller, 1990).

Between approximately 10,000-5,500 B.P., the Great Lakes basins experienced low-water levels, and many sites which would have been located on those former shorelines are now submerged. This period produces the earliest evidence of heavy wood working tools, an indication of greater investment of labour in felling



trees for fuel, to build shelter, and watercraft production. These activities suggest prolonged seasonal residency at occupation sites. Polished stone and native copper implements were being produced by approximately 8,000 B.P.; the latter was acquired from the north shore of Lake Superior, evidence of extensive exchange networks throughout the Great Lakes region. The earliest evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Brown, 1995, p. 13; Ellis et al., 1990, 2009).

Between 3,000-2,500 B.P., populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 B.P. and exchange and interaction networks broaden at this time (Spence et al., 1990, pp. 136, 138) and by approximately 2,000 B.P., evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al., 1990, pp. 155, 164). By 1,500 B.P. there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolithic evidence for maize in central New York State by 2,300 B.P. - it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch & Williamson, 2013, pp. 13–15). As is evident in detailed Anishinaabek ethnographies, winter was a period during which some families would depart from the larger group as it was easier to sustain smaller populations (Rogers, 1962). It is generally understood that these populations were Algonquian-speakers during these millennia of settlement and land use.

From the beginning of the Late Woodland period at approximately 1,000 B.P., lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (C.E.), the communal site is replaced by the village focused on horticulture. Seasonal disintegration of the community for the exploitation of a wider territory and more varied resource base was still practised (Williamson, 1990, p. 317). By 1300-1450 C.E., this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al., 1990, p. 343). By the



mid-sixteenth century these small villages had coalesced into larger communities (Birch et al., 2021). Through this process, the socio-political organization of the First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed.

By 1600 C.E., the communities within Simcoe County had formed the Confederation of Nations encountered by the first European explorers and missionaries. In the 1640s, the traditional enmity between the Haudenosaunee and the Huron-Wendat (and their Algonquian allies such as the Nipissing and Odawa) led to the dispersal of the Huron-Wendat. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. By the 1690s however, the Anishinaabeg were the only communities with a permanent presence in southern Ontario. From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there was no interruption to Anishinaabeg control and use of southern Ontario.

In Bruce and Grey Counties, archaeological evidence is indicative of some residential stability related to the practice of agriculture (Rankin, 2000). The archaeological evidence of Huron-Wendat/ Tionontaté material culture on Odawa sites, the proximity of contemporary Huron-Wendat and Tionontaté and Odawa sites to each other, and the historically documented alliance between the Odawa and the Neutral Nations are all indicative of cooperation between Algonquian and Iroquoian populations in Bruce and Grey Counties (Fox, 1990).

The Odawa are first described in 1615 when Samuel de Champlain encountered a group of Odawas at the mouth of the French River (Biggar, 1922). The Odawa were an Algonquian Nation who occupied Bruce County, Grey County and Manitoulin Island. The Odawa subsisted primarily from fishing but also practiced horticulture and were extensively involved in trade. They were known to co-reside with Iroquoian populations (Thwaites, 1896). The oral tradition from Nawash and Saugeen suggests that the ancestors of the Saugeen Ojibway Nation occupied the area as early as 7,500 years ago.



The Tionontaté were closely related to the Huron-Wendat and lived in the area west of Huronia within the current Town of The Blue Mountains, Grey County, Ontario. The seventeenth-century French explorers who encountered these peoples dubbed them the Petun, or “tobacco people,” due to their reputation of growing large amounts of tobacco. They lived in large, palisaded villages (averaging 1.7 ha), temporary hunting and fishing camps, cabin sites, and small hamlets with a material culture characterized by globular-shaped ceramic vessels, ceramic pipes, bone/antler awls and beads, ground and chipped stone tools, and copper objects. The population peaked at approximately 30,000 people during the late 15th century, however by the early sixteenth century Tionontaté territory contracted and the north shore of Lake Ontario was almost abandoned. (Garrad, 2014; Ramsden, 1990, pp. 363–378; Warrick, 2000, pp. 446–454, 2008).

The region of Bruce and Grey Counties is not specifically addressed in the contemporary documentary sources; however, the later dispersal of the Haudenosaunee from the region in the late seventeenth century is confirmed by Ojibway oral tradition (Copway, 1850).

The arrival of European trade goods in the sixteenth century, Europeans themselves in the seventeenth century, and increasing settlement efforts in the eighteenth century all significantly impacted traditional ways of life in Southern Ontario. Over time, war and disease contributed to death, dispersion, and displacement of many Indigenous peoples across the region. The Euro-Canadian population grew in both numbers and power through the eighteenth and nineteenth centuries and treaties between colonial administrators and First Nations representatives began to be negotiated.

The subject property is within the Nottawasaga Purchase (Treaty 18), a provisional agreement sometimes called the Lake Simcoe-Nottawasaga Treaty, signed on October 17, 1818, by representatives of the Government of Upper Canada and the Anishinaabe (Ministry of Indigenous Affairs, 2020; Williams Treaties First Nations, 2021). Treaty 18 encompassed 1,592,000 acres of land between the District of London in the west, Lake Huron in the north, the west limit of the Penetanguishene Purchase (1815) in the east, and the west shore of



Lake Simcoe, Cook's Bay, and the Holland River in the southeast. In exchange for the land, the Crown agreed to pay an annual sum of £1200 in goods at the "Montreal price" (Crown-Indigenous Relations and Northern Affairs, 2016; Ministry of Indigenous Affairs, 2020). The Nottawasaga Purchase territory includes the present-day communities of Wasaga, Bradford, Shelburne, New Tecumseth, and Collingwood.

4.2.2 Municipality of Meaford

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed existing transit routes established by Indigenous peoples and set up trading posts at strategic locations along the well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (ASI 2006). Early European settlements occupied similar locations as Indigenous settlements as they were generally accessible by trail or water routes, and would have been in locations with good soil and suitable topography to ensure adequate drainage.

Historically, the subject property is located in the Former St. Vincent Township, Grey County in Lot 14, Concession 4.

Meaford

The Township of St. Vincent, in which Meaford is situated, was formally surveyed in 1835 by Charles Rankin. The first Euro-Canadian settlement in what would become the Municipality of Meaford occurred in 1838. Meaford was originally named Peggy's Landing for Peggy Miller, wife of the first settler David Miller. The Millers' pioneer cabin served as a stopping place for early travellers. A village was laid out in 1845 and was named for Meaford Hall, the English estate of Admiral Sir John Jervis, Earl of St. Vincent. The township of St. Vincent also commemorates the Earl's name. Early industry in Meaford relied heavily on lumbering, fisheries, and agriculture, facilitated by the ease of transportation afforded by the creation



of the Northern Railway in 1855. Meaford was incorporated into a town in 1874 nearing a population of 1,000 (Mika & Mika, 1983).

Meaford established itself as an important fishing port on Georgian Bay and the fish, as well as the agricultural and industrial produce of the region, drew many commercial vessels to Meaford's docks in the late nineteenth century. The establishment of fruit orchards in the area after the turn of the century proved to be another draw to the area as ships made stops to pick up fruits for transport throughout the Great Lakes region (White, 2022).

Three noteworthy historical figures once called the municipality home. Canadian artist and friend of the Group of Seven, Tom Thomson, spent his childhood growing up in the village of Leith. Tom is buried at the Leith Church, near his boyhood home (South Georgian Bay Tourism, 2022). Author Margaret Marshall Saunders visited Meaford in 1892 and wrote a novel based on a true story about a local dog who had been rescued from a cruel owner by a local miller. *Beautiful Joe* has since sold over 7 million copies and the famous dog is buried in Beautiful Joe Park (Beautiful Joe Heritage Society, 2021a; Dougherty & Binstead, 2015). In 1934, Saunders was granted Canada's highest civilian award at the time, Commander of the Most Excellent Order of the British Empire (Beautiful Joe Heritage Society, 2022). American naturalist and author John Muir moved to Meaford during the American Civil War (1861-1865). When he returned to the United States he helped form the Sierra Club and is credited as the father of the United States National Park system (South Georgian Bay Tourism, 2022).

Meaford was incorporated as a municipality in 2001, when it amalgamated with St. Vincent and Sydenham townships, with a population of 11,100.



4.2.3 Historical Chronology and Setting of the Subject Property

The following provides a brief overview of the historical chronology of the subject property. It includes a history of the people who lived on or owned the property, as provided in available sources, as well as a mapping review. It is based on a variety of primary and secondary source materials, including maps, census data, abstract indexes, archival images, and historic photographs. Historically, the subject property is located in the Former St. Vincent Township, Grey County on Lot 14, Concession 4.

The Crown Patent for all 200 acres of Lot 14, Concession 4 was granted to Henry Simmons in November 1835 (AO, n.d.c). In the subsequent decade, the 200 acre property was bought and sold multiple times for 200 pounds until it was subdivided and a portion of the property was sold for 49 pounds in 1850. Due to poor resolution and image quality in the abstract index, the portion of the lot that was subdivided is not legible.

The 1855 Rankin Map of the Counties of Grey and Bruce (Rankin, 1855) and the *1880 Illustrated Historical Atlas of Grey County* (H. Belden & Co., 1880) were reviewed to determine the historical setting of the subject property in the nineteenth century (Figure 3 and Figure 4). It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases, given that they were financed by subscription, and subscribers were given preference with regard to the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases.

Nineteenth-century mapping shows the early core of Meaford as located to the northwest of the subject property (Figure 3 and Figure 4). The subject property was located in a rural agricultural context and is shown as being located very close to the shoreline of Georgian Bay.



In addition to nineteenth-century mapping, historical topographic mapping and aerial photographs from the twentieth century were examined. This report presents maps and aerial photographs from 1945, 1954, 1979, and 1999 (Figure 5 to Figure 8). These do not represent the full range of maps consulted for the purpose of this study but were judged to cover the full range of land uses that occurred in the area during this period. Generally, these maps demonstrate that the study area retained a rural agricultural context throughout the late nineteenth century and into the late twentieth century.

The subject property exchanged hands many times in the nineteenth and early twentieth century, until a portion of the lot was acquired by the Corporation of the Town of Meaford in 1953 (AO, n.d.b). The 1945 topographical map (Figure 5) and the 1954 aerial photograph (Figure 6) depict the subject property in a relatively undeveloped context. The subject property is undeveloped at this time, with trees illustrated surrounding the area. Development had expanded towards the subject property from the previously shown historical core of Meaford. Aiken Street is pictured though it does not yet reach the subject property and terminates to the west of the northwest corner of the subject property at this time. Historical aerial imagery from 1954 (Hunting Survey Corporation Limited, 1954) indicates that the subject property was agricultural land prior to the construction of the W.W.T.P. in 1969.

The Corporation of the Town of Meaford enacted By-law No. 306 A.D. 1966 on the subject property, and other by-laws including No. 421 A.D. 1969 as a subdivision control in an effort to re-zone the property in 1966 and 1969 respectively (AO, n.d.b). Ownership of the subject property was deeded to the Ontario Water Resources Commission in January 1969 (AO, n.d.a), at which time the extant W.W.T.P. was constructed (Ainley Group, 2015). The 1979 topographical map (Figure 7) depicts two structures labelled as 'Sewage' on the subject property. Aiken Street is shown to follow its present day alignment across the north boundary of the subject property before turning north towards the shoreline. Aiken Street serves as the boundary for the increased development that had taken place in Meaford since the 1940s. Houses line the waterfront to the northeast of the subject property. The W.W.T.P. had expanded by the end of



the twentieth century to six structures within the subject property, which is labelled as 'Water Treatment Plant' in the 1999 National Topographical System map (Figure 8). Ownership of the subject property was transferred from the Ontario Clean Water Agency to the Town of Meaford in January 2000 (AO, n.d.b). The Town of Meaford retains ownership at the time of report preparation (September 2022).

A review of available Google satellite imagery since 2005 (not included in this report) show the installation of fencing around the grassed area in the northwest corner of the subject property to create the off-leash dog park in 2013.



Figure 3: The location of the subject property overlaid on 1855 *Rankin Map of the Counties of Grey and Bruce*. Source: (Rankin, 1855)

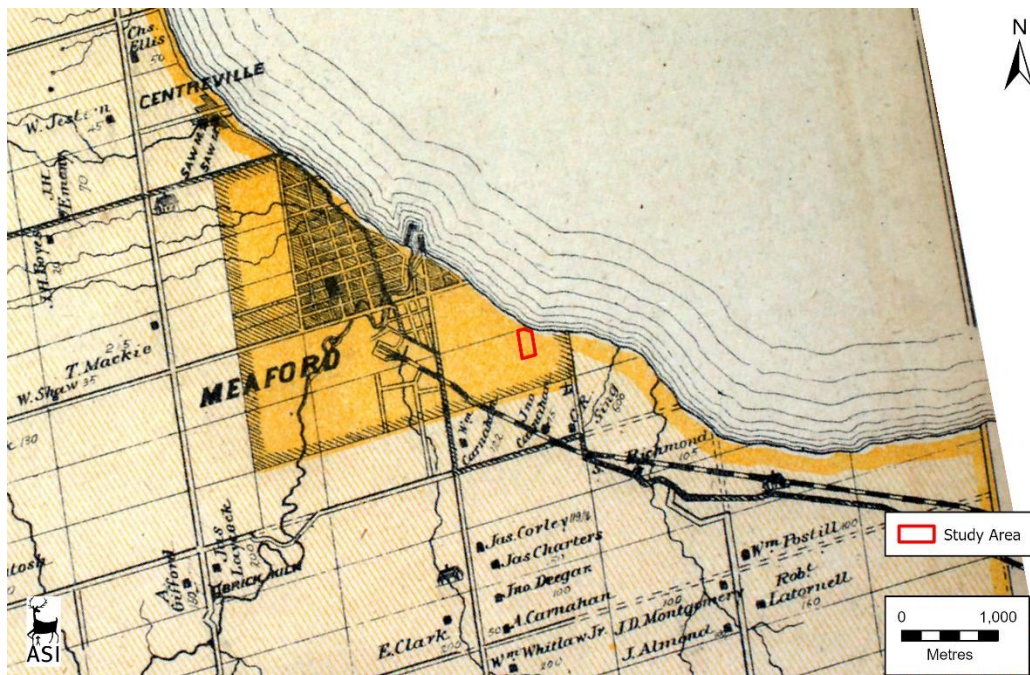


Figure 4: The location of the subject property overlaid on the 1880 *Illustrated Historical Atlas of Grey County*. Source: (H. Belden & Co., 1880)

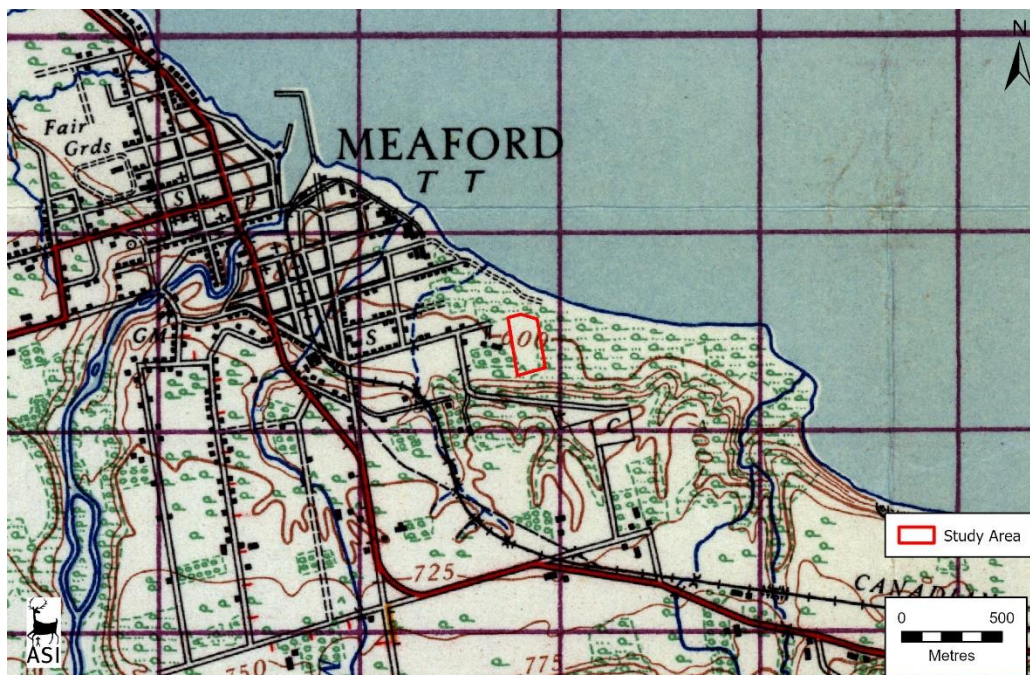


Figure 5: The location of the subject property overlaid on the 1945 Topographic Mapping. Source: (Department of National Defence, 1945)



Figure 6: The location of the subject property overlaid on the 1954 aerial photograph. Source: (Hunting Survey Corporation Limited, 1954)

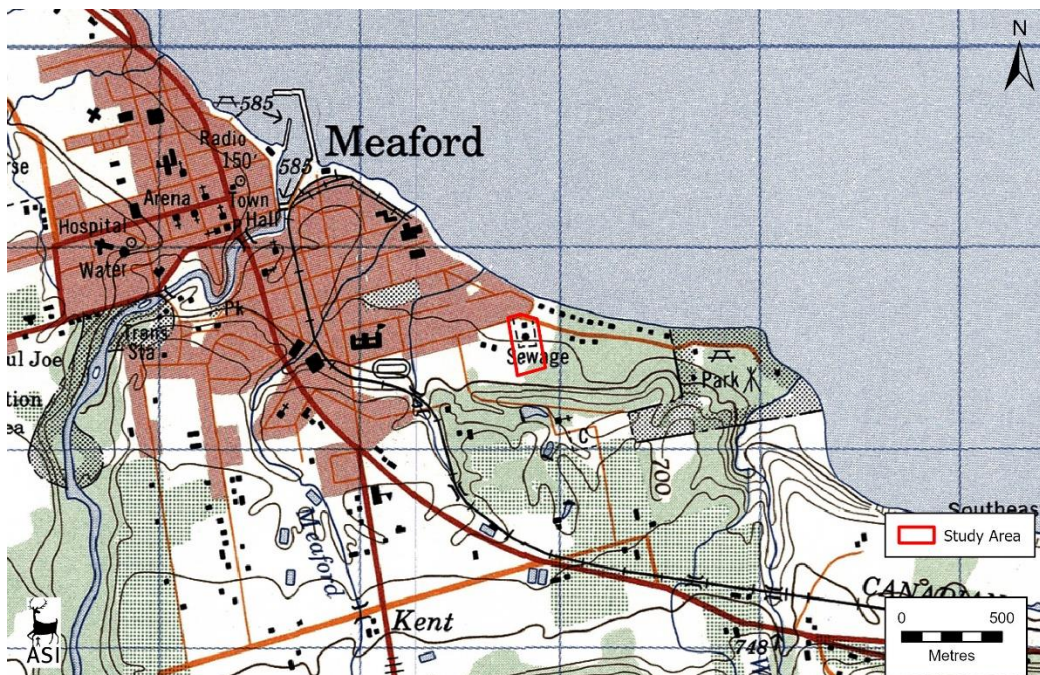


Figure 7: The location of the subject property overlaid on the 1979 Topographic Map. Source: (Department of Energy, Mines and Resources, 1979)

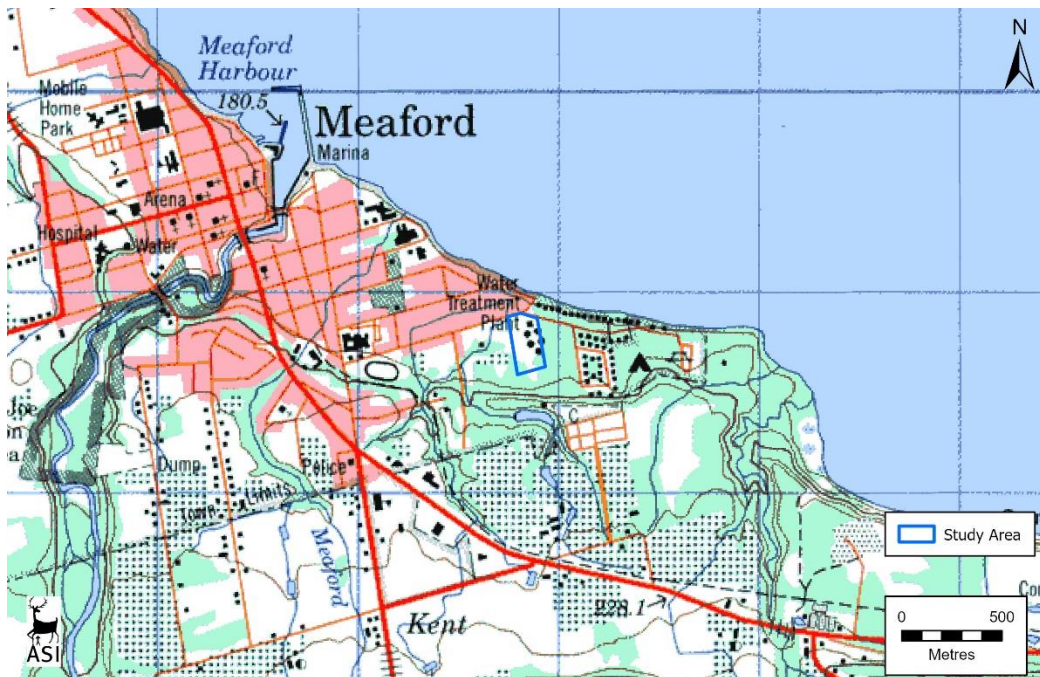


Figure 8: The location of the subject property overlaid on the 1999 Topographic Map. Source: (Natural Resources Canada, 1999)

4.3 Discussion of Physical and Design Value

The following discusses the physical and design value of the subject property.

4.3.1 Physical Characteristics

The subject property (W.W.T.P.) is located at 35 Grant Avenue, on the south side of Grant Avenue, at Aiken Street. It currently consists of the Waste Water Treatment Plant (W.W.T.P.) on the northeast, an off-leash dog park in the northwest, and green space in the southern half of the property. Georgian Bay is approximately 120 metres north of the subject property. Photographs of the subject property are provided in Figure 9 to Figure 22.

The W.W.T.P. was constructed in 1969 and started service in 1970 (Ainley Group, 2015). The site features a variety of structures and infrastructure related to municipal waste water treatment, as depicted in Figure 2 and Figure 23. Infrastructure in the northeast portion of the study area in the footprint of the W.W.T.P. site includes:

- Biosolid treatment and storage pools
- Solids digester
- Clarifiers
- Aeration tanks
- Blowers and pumps
- Administration office
- Septage building
- Ultraviolet disinfection channel
- Parking and circulation routes to access site

Most of the waste water treatment infrastructure is constructed of cast-in-place concrete, and also features stainless steel mechanical components and various electrical equipment. A network of underground pipes direct the untreated sewage into the plant where pumps move the sewage to the various stages of treatment, including biosolid separation and digestion, clarifying, and ultraviolet (U.V.) disinfection before the treated water is discharged into Georgian Bay.

The personnel office is a single-storey concrete block structure that features offices, storage areas, and a laboratory to test waste water samples. The on site raw sewage pump station near Grant Avenue is constructed of concrete blocks and features subterranean pumps beneath the structure and electrical and mechanical controls within the structure.

The plant is accessed off Grant Avenue by a paved driveway leading to paved circulation routes providing access to the facilities. The plant is largely at-grade, however an artificial berm is constructed adjacent to the biosolids treatment and storage pools in the southwest corner of the site. The facility is bound by a chain link fence around the perimeter.

The northwest portion of the study area is currently an off-leash dog park, called Beautiful Joe's Leash-Free Dog Park. The park opened in 2013 (Beautiful Joe Heritage Society, 2021b) and consists of a gravel parking lot and two fenced in areas which contain planted trees. No structures or infrastructure related to the W.W.T.P. is located in this area.



The south half of the property is partly forested and partly grassed. This naturalized area does not contain any buildings or infrastructure related to the W.W.T.P.

4.3.2 Building Evolution and Alterations

According to the *Water and Wastewater Servicing Master Plan* (Ainley Group, 2015), the W.W.T.P. has undergone a number of upgrades and modifications since 1969 including:

- New Aerobic Digester and Storage tanks (1996)
- Mechanical Aerators replaced with a fine bubble Aeration System (2005)
- Chlorination replaced with U.V. Disinfection (2005)
- Fine Screen with an auger and bagging systems at the Inlet Works (2005)
- Septage Receiving station added (2005)

In addition to these documented modifications, one large biosolids clarifier was being decommissioned at the time of field review (September 2022).

4.3.3 Building Style

The structures on the subject property are generally constructed of concrete blocks and are designed to be utilitarian structures without decoration. Waste water treatment structures are generally constructed of cast-in-place concrete with stainless steel components and various electrical and mechanical elements. The built structures associated with the W.W.T.P. are utilitarian and lack any embellishment or decoration, and are generally painted white. The subject property is representative of a late twentieth-century waste water treatment facility based on the comparative analysis provided in Section 4.5 below.



4.3.4 Existing Conditions Photographs



Figure 9: Entrance drive to the subject property, looking south (A.S.I. 2022)



Figure 10: Sewage pumping station, looking west (A.S.I. 2022)



Figure 11: Electrical controls in the pumping station
(A.S.I. 2022)



Figure 12: North and west elevations of the
administration building, looking southeast (A.S.I.
2022)



Figure 13: Laboratory in the administration building
(A.S.I. 2022)



Figure 14: West elevation of aeration tank with inlet
pipe at right (A.S.I. 2022)



Figure 15: Secondary clarifier (A.S.I. 2022)



Figure 16: Secondary clarifier, looking east (A.S.I. 2022)



Figure 17: Digester, not in service (A.S.I. 2022)



Figure 18: North elevation of the biosolids storage and treatment facility (A.S.I. 2022)



Figure 19: Representative waste water pumps (A.S.I. 2022)



Figure 20: Ultraviolet disinfection channel (A.S.I. 2022)



Figure 21: Blower building (A.S.I. 2022)



Figure 22: Fenced in dog runs at Beautiful Joe Dog Park, looking east to the W.W.T.P. (A.S.I. 2022)

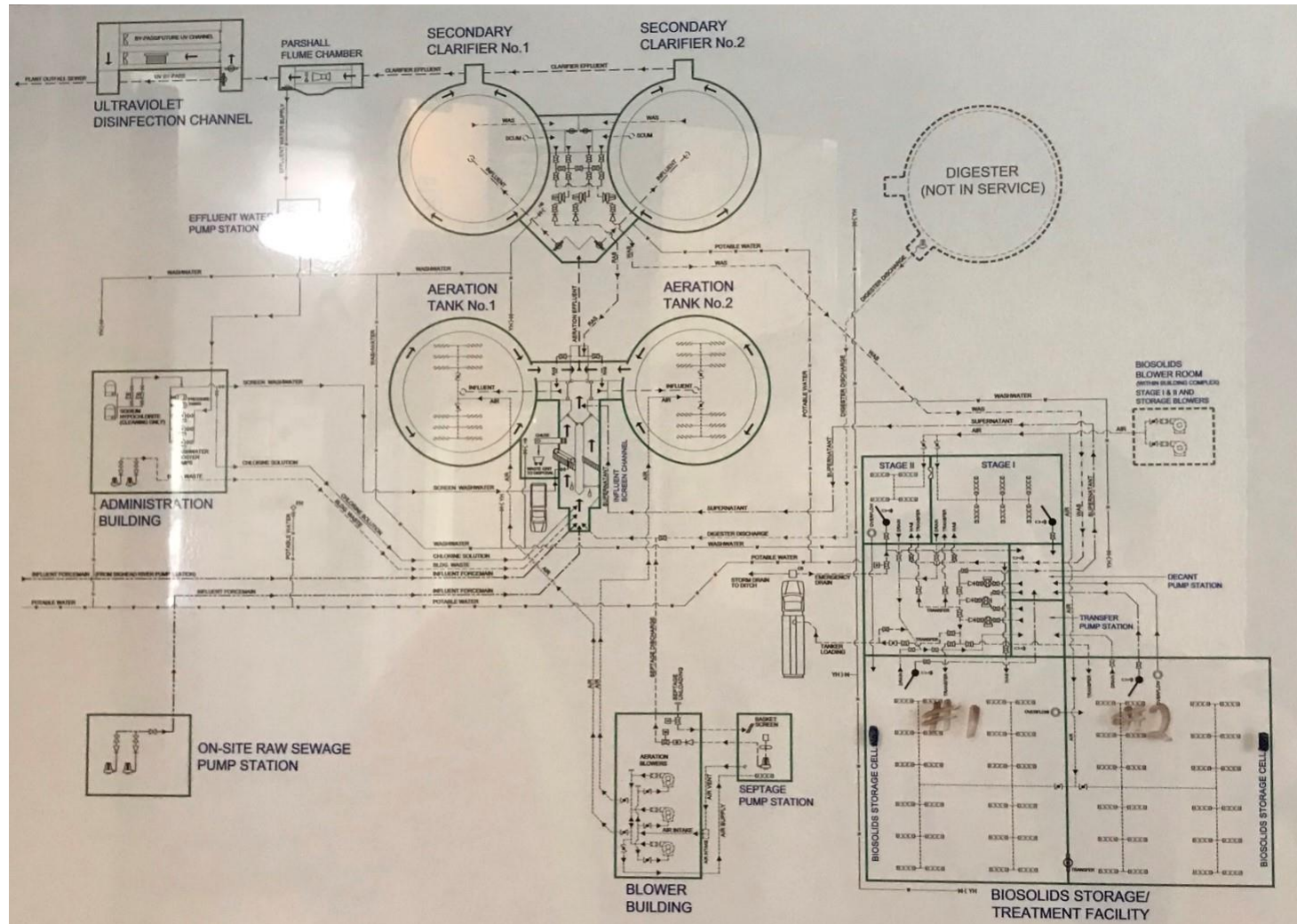


Figure 23: Excerpt of the W.W.T.P. site plan, showing the location of various structures and infrastructure on site (prepared by Ainley Group in 2005).

4.4 Discussion of Contextual Value

The following section discusses the contextual value of the subject property.

4.4.1 Setting and Character of the Property and Surroundings

The subject property at 35 Grant Avenue is in a residential area in the southeast portion of the urban area of the Municipality of Meaford, and bound by residences fronting on Grant Avenue to the northeast, Aiken Street to the northwest, and Pollard Drive to the east. Residences in this area are typically single-storey detached structures constructed in the mid to late twentieth century based on observations made during field review and in the historical map review (Section 4.2.3). The west and the south of the subject property is bound by wooded areas. Recreational cottages on the shoreline of Georgian Bay are approximately 100 metres north of the subject property on Aiken Street. As the subject property is intended to treat waste water from local residences and businesses in the urban core of Meaford, it is required to be in proximity to the more densely populated areas; however, it has no direct connection to the character of these residences besides this functional requirement. Further, the subject property does not have any significant connection to the character of nearby Georgian Bay, and is located in proximity only to facilitate the discharge of clean water. Photographs of setting and character of the surrounding area are provided in Figure 24 to Figure 27.

4.4.2 Community Landmark

The subject property at 35 Grant Avenue is not considered to be a landmark within the local context. The W.W.T.P. is a utilitarian site that lacks decoration and embellishment, and serves the practical function of waste water management. Many structures on site are set back from the roadway to reduce visibility and odours to local residents and motorists on Grant Avenue and Aiken Street. Neither of these roadways are major thoroughfares, and Grant Avenue terminates approximately 400 metres east at a public beach and campground. As such, the subject property is not considered to be a well-known feature in the Municipality of Meaford and is not considered to be a landmark.





Figure 24: Looking south on Grant Avenue to the subject property (A.S.I. 2022)



Figure 25: Looking southeast from the intersection of Grant Avenue and Aiken Street towards the subject property. Note the parking lot for Beautiful Joe Dog Park at right. (A.S.I. 2022)



Figure 26: Representative residence on Aiken Street northwest of the subject property (A.S.I. 2022)



Figure 27: Lakeside Avenue 100 metres north of the subject property, with cottages at left and Georgian Bay at right, looking west (A.S.I. 2022)

4.5 Comparative Analysis

The subject property is the only W.W.T.P. in the Municipality of Meaford as it has sufficient capacity to treat all the waste water created in the only urban area of the municipality. As such, there are no other comparative properties within the Municipality and this comparative analysis discusses W.W.T.P.s from other municipalities.

4.5.1 Owen Sound Waste Water Treatment Plant

The Owen Sound Waste Water Treatment Plant on Third Avenue in Owen Sound was constructed in 1962 and treats waste water from the urban area of Owen Sound and discharges into Georgian Bay (Figure 28). The facility features solids removal, clarifiers, digesters and other pump and pipe infrastructure (City of Owen Sound, 2019).



Figure 28: Satellite imagery of the Owen Sound Waste Water Treatment Plant (Google Maps)

4.5.2 Paris Water Pollution Control Plant

The Paris Water Pollution Control Plant, at 120 Race Street in Brant County, features similar water treatment infrastructure as the subject property, including control buildings, clarifiers, aerators, digesters, and related pump and piping infrastructure (A.S.I., 2022). The facility was constructed in the late twentieth century and treats waste water from the settlement of Paris before discharging it into the Grand River (Figure 29).



Figure 29: Infrastructure in the Paris Water Pollution Control Plant (A.S.I., 2022).

4.5.3 Wasaga Beach Water Pollution Control Plant

The Wasaga Beach Water Pollution Control Plant, at 10 Woodland Drive in the Town of Wasaga Beach features similar water treatment infrastructure as the subject property, including control buildings, clarifiers, aerators, digesters, and related pump and piping infrastructure based on a review of Google Earth imagery. The facility was constructed at an unknown date and treats waste water from Wasaga Beach before discharging it into the Nottawasaga River (Figure 30).



Figure 30: Satellite imagery of the Wasaga Beach Water Pollution Control Plant (Google Maps)

4.5.4 Summary

The three comparative W.W.T.P.s included in this comparative analysis are constructed in a similar layout with a similar arrangement and function of structures. Comparative sites, like the subject property, are utilitarian, lack embellishment, and most buildings and infrastructure are constructed with cast-in-place concrete and stainless steel. By virtue of their function and associated odours, W.W.T.P.s are generally set back from residential and public settings and lack visibility in the overall landscape.

5.0 Heritage Evaluation

The evaluation of the subject property at 35 Grant Avenue using the criteria set out in Ontario Regulation 9/06 is presented in the following section. The following evaluation has been prepared in consideration of data regarding the design, historical/associative, and contextual values in the Municipality of Meaford.

5.1 Ontario Regulation 9/06

The following section provides the evaluation of the subject property at 35 Grant Avenue using Ontario Regulation 9/06 of the *Ontario Heritage Act*.

1. The property has design value or physical value because it:

- i. is a rare, unique, representative or early example of a style, type, expression, material or construction method:
 - The subject property was constructed in 1969 using common materials and with a common arrangement of structures and processes to treat municipal waste water prior to discharge. The property is considered to be a common example of a later twentieth-century municipal waste water facility, and does not feature any exemplary or unique features, materials, or structures.
 - The subject property does not meet this criterion.
- ii. displays a high degree of craftsmanship or artistic merit:
 - The subject property is a utilitarian municipal waste water facility that lacks decorative features or embellishments and there is no evidence of exemplary craftsmanship or artistic merit.
 - The subject property does not meet this criterion.
- iii. demonstrates a high degree of technical or scientific achievement:
 - The subject property is a utilitarian municipal waste water facility that features cast-in-place concrete structures with stainless steel elements and various mechanical and electrical components. While designed with an emphasis on technical process to ensure suitable waste water treatment safety guidelines are met, the subject property does not demonstrate a greater than industry standard in terms of technical or mechanical achievement in construction or processes.
 - The subject property does not meet this criterion.

2. The property has historical value or associative value because it:



- i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community:
 - The subject property was constructed in 1969 and does not have any direct associations that are significant to the community.
 - The subject property does not meet this criterion.
 - ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture:
 - The subject property does not have the potential to yield information that would significantly contribute to an understanding of the Municipality of Meaford as it is a typical example of a utilitarian waste water facility.
 - The subject property does not meet this criterion.
 - iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community:
 - The structures and infrastructure on the subject property were originally constructed in 1969 based on the designs of an unknown engineer, and rehabilitated extensively in 2005 by the Ainley Group. None of these engineers or designers are known to have any significant connection to the Municipality of Meaford.
 - The subject property does not meet this criterion.
3. The property has contextual value because it:
- i. is important in defining, maintaining or supporting the character of an area:
 - The subject property has limited visibility from Grant Avenue and Aiken Street due to its large set back, and is located in an otherwise residential context near the shores of Georgian Bay. The subject waste water facility does not define, maintain, or support this character.
 - The subject property does not meet this criterion.
 - ii. is physically, functionally, visually or historically linked to its surroundings:



- The subject property is functionally and physically linked to the urban centre of the Municipality of Meaford through piping and other waste water infrastructure. However, this is a practical reality of the requirements for waste water treatment and is not considered to be a significant link to the surroundings from a cultural heritage perspective. The late twentieth century facility features a large setback from the adjacent roadways, and as such, has no significant visual links to the surroundings.
 - The subject property does not meet this criterion.
- iii. is a landmark:
- The subject property at 35 Grant Avenue is not considered to be a landmark within the local context as it has reduced visibility due to its setback from the roadway, is utilitarian in appearance and lacks decoration and embellishment, and serves the practical function of waste water management. As such, the subject property is not considered to be a well-known feature in the Municipality of Meaford and is not considered to be a landmark.
 - The subject property does not meet this criterion.

Based on available information, it has been determined that the property at 35 Grant Avenue does not meet the criteria contained in Ontario Regulation 9/06.



6.0 Conclusions and Next Steps

This evaluation was prepared in consideration of data regarding the design, historical/associative, and contextual values within the Municipality of Meaford. This evaluation determined that the property at 35 Grant Avenue does not meet the criteria outlined in Ontario Regulation 9/06 and therefore does not have cultural heritage value or interest.

The following recommendations are proposed:

1. The proponent should submit this report for review and comment to planning staff at the Municipality of Meaford, the Ministry of Citizenship and Multiculturalism, and to any other relevant stakeholder that has an interest in the heritage of the subject property. Any feedback will be incorporated into this report prior to finalization. The final report should be submitted to the Municipality of Meaford Public Library for archival purposes.



7.0 List of Resources Consulted

Ainley Group. (2015). *Water and Wastewater Servicing Master Plan*.
<https://www.meaford.ca/en/our-government/resources/Documents/OP2015-06-Water-and-Wastewater-Servicing-Master-Plan.pdf>

AO, (Archives of Ontario). (n.d.a). *Grey County Land Registry Office (LRO 16) Records, Abstract/ Parcel Register Books, Owen Sound Book 292*.

AO, (Archives of Ontario). (n.d.b). *Grey County Land Registry Office (LRO 16) Records, Abstract/Parcel Register Books, Meaford Book 326*.

AO, (Archives of Ontario). (n.d.c). *Grey County Land Registry Office (LRO 16) Records, Abstract/Parcel Register Books, St. Vincent Book 234*.

Archaeological Services Inc. (2006). *Historical Overview and Assessment of Archaeological Potential Don River Watershed, City of Toronto*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

Archaeological Services Inc. (2022). *Stage 1 Archaeological Assessment Meaford Wastewater Treatment Plant Expansion (Lot 14, Concession 4, Former St. Vincent Township, Grey County) Municipality of Meaford, Grey County (P383-0299-2021)*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries.

A.S.I. (Archaeological Services Inc.). (2022). *Cultural Heritage Report: Paris Water Pollution Control Plant Upgrades and Expansion Municipal Class Environmental Assessment, County of Brant, Ontario* (CH Report No. 21CH-096).

Beautiful Joe Heritage Society. (2021a). *Beautiful Joe*. <https://beautifuljoe.org/>

Beautiful Joe Heritage Society. (2021b). *Leash Free Dog Park*.
<https://beautifuljoe.org/leash-free-dog-park/>

Beautiful Joe Heritage Society. (2022). *About the Author*.
<https://beautifuljoe.org/the-author/>



Biggar, H. P. (1922). *The Works of Samuel De Champlain* (Vol. 6). The Champlain Society.

Birch, J., Manning, S. W., Sanft, S., & Conger, M. A. (2021). Refined Radiocarbon Chronologies for Northern Iroquoian Site Sequences: Implications for Coalescence, Conflict, and the Reception of European Goods. *American Antiquity*, 86(1), 61–89.

Birch, J., & Williamson, R. F. (2013). *The Mantle Site: An Archaeological History of an Ancestral Wendat Community*. Rowman & Littlefield Publishers, Inc.

Brown, J. (1995). On Mortuary Analysis – with Special Reference to the Saxe-Binford Research Program. In L. A. Beck (Ed.), *Regional Approaches to Mortuary Analysis* (pp. 3–23). Plenum Press.

City of Owen Sound. (2019). *Owen Sound Wastewater Treatment Process and Information*. <https://www.owensound.ca/en/resources/documents/Waste-Water-Treatment-brochure.pdf>

Copway, G. (1850). *The Traditional History and Characteristic Sketches of the Ojibway Nation*. Charles Gilpin.

Crown-Indigenous Relations and Northern Affairs. (2016). *Lake Simcoe-Nottawasaga Treaty No. 18*. Treaty Texts – Upper Canada Land Surrenders. <https://www.rcaanc-cirnac.gc.ca/eng/1370372152585/1370372222012#ucls17>

Department of Energy, Mines and Resources. (1979). *Owen Sound Sheet 41A/10* [Map].

Department of National Defence. (1945). *Owen Sound Sheet, 41A10* [Topographic].

Dodd, C. F., Poulton, D. R., Lennox, P. A., Smith, D. G., & Warrick, G. A. (1990). The Middle Ontario Iroquoian Stage. In C. J. Ellis & N. Ferris (Eds.), *The*



Archaeology of Southern Ontario to A.D. 1650 (pp. 321–360). Ontario Archaeological Society Inc.

Dougherty, F., & Binstead, D. (2015). *Meaford*.
<https://www.thecanadianencyclopedia.ca/en/article/meaford>

Edwards, T. W. D., & Fritz, P. (1988). Stable-Isotope Palaeoclimate Records from Southern Ontario, Canada: Comparison of Results from Marl and Wood. *Canadian Journal of Earth Sciences*, 25, 1397–1406.

Ellis, C. J., & Deller, D. B. (1990). Paleo-Indians. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 37–64). Ontario Archaeological Society Inc.

Ellis, C. J., Kenyon, I. T., & Spence, M. W. (1990). The Archaic. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 65–124). Ontario Archaeological Society Inc.

Ellis, C. J., Timmins, P. A., & Martelle, H. (2009). At the Crossroads and Periphery: The Archaic Archaeological Record of Southern Ontario. In T. D. Emerson, D. L. McElrath, & A. C. Fortier (Eds.), *Archaic Societies: Diversity and Complexity across the Midcontinent*. (pp. 787–837). State University of New York Press.

Ferris, N. (2013). Place, Space, and Dwelling in the Late Woodland. In M. K. Munson & S. M. Jamieson (Eds.), *Before Ontario: The Archaeology of a Province* (pp. 99–111). McGill-Queen's University Press.
<http://www.jstor.org/stable/j.ctt32b7n5.15>

Fox, W. (1990). The Odawa. In *The Archaeology of Southern Ontario to A.D. 1650* (Vol. 5, pp. 457–473). Ontario Archaeological Society.

Garrad, C. (2014). *Petun to Wyandot: The Ontario Petun from the Sixteenth Century* (J. Pilon & W. Fox, Eds.). Canadian Museum of History and University of Ottawa Press.



H. Belden & Co. (1880). Grey County (Ontario Map Ref#17). In *Illustrated Atlas of the Dominion of Canada*.

Hunting Survey Corporation Limited. (1954). *Digital Aerial Photographs* [Map]. <https://mdl.library.utoronto.ca/collections/air-photos/1954-air-photos-southern-ontario/index>

Library and Archives Canada. (n.d.). *Collection Search*. Libraries and Archives Canada. <https://www.bac-lac.gc.ca/eng/collectionsearch/Pages/collectionsearch.aspx>

Mika, N., & Mika, H. (1983). *Places In Ontario: Their Name Origins and History, Part III, N-Z*. Mika Publishing Company.

Ontario Heritage Act, R.S.O. c. O.18, 1990 [as amended in 2021], (1990).

Ministry of Indigenous Affairs. (2020). *Map of Ontario Treaties and Reserves*. Government of Ontario. <https://www.ontario.ca/page/map-ontario-treaties-and-reserves#t16>

Ministry of Municipal Affairs and Housing. (2020). *Provincial Policy Statement, 2020, Under the Planning Act*. Queen's Printer for Ontario.

Environmental Assessment Act, R.S.O., (1990).

Ministry of Tourism, Culture and Sport. (2016). *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes, A Checklist for the Non-Specialist*. <http://www.mtc.gov.on.ca/en/heritage/tools.shtml>

Ministry of Transportation. (2007). *Environmental Guide for Built Heritage and Cultural Heritage Landscapes*. <http://www.raqsmb.mto.gov.on.ca/techpubs/eps.nsf/0/0c286507a82cde53852572d70059fdf>

9/\$FILE/FINAL_MTO%20Env%20Guide%20BHCHL%20Final%202007%20ACC.pdf



M.T.C.S., M. of T., Culture and Sport. (2006). *Ontario Heritage Tool Kit*.
http://www.mtc.gov.on.ca/en/heritage/heritage_toolkit.shtml

Natural Resources Canada. (1999). *Owen Sound Sheet 41A/10* [Map].

Ontario Heritage Trust. (n.d.a). *Easement Properties*. Ontario Heritage Trust.
<https://www.heritagetrust.on.ca/en/property-types/easement-properties>

Ontario Heritage Trust. (n.d.b). *Ontario Heritage Act Register*.
<https://www.heritagetrust.on.ca/en/pages/tools/ontario-heritage-act-register>

Ontario Heritage Trust. (n.d.c). *Places of Worship Inventory*. Ontario Heritage Trust.
<https://www.heritagetrust.on.ca/en/places-of-worship/places-of-worship-database>

Ontario Heritage Trust. (n.d.d). *Provincial Plaque Program*. Ontario Heritage Trust.
<https://www.heritagetrust.on.ca/en/pages/programs/provincial-plaque-program>

Parks Canada. (n.d.a). *Canadian Register of Historic Places*.
<https://www.historicplaces.ca/en/home-accueil.aspx>

Parks Canada. (n.d.b). *Directory of Federal Heritage Designations*.
https://www.pc.gc.ca/apps/dfhd/search-recherche_eng.aspx

Ramsden, P. G. (1990). The Hurons: Archaeology and Culture History. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 361–384).

Rankin. (1855). *Map of the Counties of Grey and Bruce* [Map].

Rankin, L. (2000). *Interpreting Long-term Trends in the Transition to Farming: Reconsidering the Nodwell Site, Ontario, Canada*. British Archaeological Reports.

Rogers, E. S. (1962). *The Round Lake Ojibwa* (Occasional Paper 5). Royal Ontario Museum.



South Georgian Bay Tourism. (2022). *Municipality of Meaford*.
<https://southgeorgianbay.ca/meaford/>

Spence, M. W., Pihl, R. H., & Murphy, C. (1990). Cultural Complexes of the Early and Middle Woodland Periods. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650*. Ontario Archaeological Society Inc.

Thwaites, R. G. (1896). *The Jesuit Relations and Allied Documents: Travel and Explorations of the Jesuit Missionaries in New France, 1610-1791; the Original French, Latin, and Italian Texts, with English Translations and Notes* (Vol. 1–73). Burrows Brothers.

Warrick, G. (2000). The Precontact Iroquoian Occupation of Southern Ontario. *Journal of World Prehistory*, 14(4), 415–466.

Warrick, G. (2008). *A Population History of the Huron-Petun, A.D. 500–1650*. Cambridge University Press.

White, P. (2022). *Meaford Ontario: The Early Years*. History-Articles.Com.
<https://www.history-articles.com/meaford-ontario.html>

Williams Treaties First Nations. (2021). *Pre-Confederation Treaties* [Chippewas and Mississaugas Williams Treaties First Nations].
<https://williamstreatiesfirstnations.ca/pre-confederation-treaties/>

Williamson, R. F. (1990). The Early Iroquoian Period of Southern Ontario. In C. J. Ellis & N. Ferris (Eds.), *The Archaeology of Southern Ontario to A.D. 1650* (pp. 291–320). Ontario Archaeological Society Inc.



Appendix A: Qualified Persons Involved in the Project

Lindsay Graves, M.A., C.A.H.P.

Senior Cultural Heritage Specialist, Assistant Manager - Cultural Heritage Division

The Senior Project Manager for this Cultural Heritage Evaluation Report is **Lindsay Graves** (M.A., Heritage Conservation), Senior Cultural Heritage Specialist and the Environmental Assessment Coordinator for the Cultural Heritage Division. She was responsible for: overall project scoping and approach; development and confirmation of technical findings and study recommendations; application of relevant standards, guidelines and regulations; and implementation of quality control procedures. Lindsay is academically trained in the fields of heritage conservation, cultural anthropology, archaeology, and collections management and has over 15 years of experience in the field of cultural heritage resource management. This work has focused on the assessment, evaluation, and protection of above ground cultural heritage resources. Lindsay has extensive experience undertaking archival research, heritage survey work, heritage evaluation and heritage impact assessment. She has also contributed to cultural heritage landscape studies and heritage conservation plans, led heritage commemoration and interpretive programs, and worked collaboratively with multidisciplinary teams to sensitively plan interventions at historic sites/places. In addition, she is a leader in the completion of heritage studies required to fulfill Class Environmental Assessment processes and has served as Project Manager for over 100 heritage assessments during her time at A.S.I. Lindsay is a member of the Canadian Association of Heritage Professionals.

John Sleath, M.A.

Cultural Heritage Specialist, Project Manager - Cultural Heritage Division

The Project Manager for this Cultural Heritage Evaluation Report is **John Sleath** (M.A.), who is a Cultural Heritage Specialist and Project Manager within the



Cultural Heritage Division with A.S.I. He was responsible for the day-to-day management activities, including scoping of research activities and site surveys and drafting of study findings and recommendations. John has worked in a variety of contexts within the field of cultural heritage resource management for the past 14 years, as an archaeologist and as a cultural heritage professional. An exposure to both land-based and underwater archaeology and above ground cultural heritage assessments has provided John with a holistic understanding of heritage in a variety of contexts. In 2015 John began working in the Cultural Heritage Division researching and preparing a multitude of cultural heritage assessment reports and for which he was responsible for a variety of tasks including: completing archival research, investigating built heritage and cultural heritage landscapes, report preparation, historical map regression, and municipal consultation. Since 2018 John has been a project manager responsible for a variety of tasks required for successful project completion. This work has allowed John to engage with stakeholders from the public and private sector, as well as representatives from local municipal planning departments, government agencies, and museums. John has conducted hundreds of cultural heritage assessments across Ontario, with a focus on transit and rail corridor infrastructure including bridges and culverts.

