

**STAGE 1 ARCHAEOLOGICAL ASSESSMENT
MONTROSE ROAD AND LYONS CREEK ROAD/BIGGAR ROAD
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT
PART OF LOTS 170, 178, 179, 186, 198, 209, 210, 211;
LOTS 1 & 2 BROKEN FRONT; LOT 10 BROKEN FRONT OF CHIPPEWA CREEK;
LOTS 1& 2 CON 1; LOT 15, CON 6; LOT 15, CON 7;
LOT 16, CON 6; AND LOT 16, CON 7,
(FORMER TOWNSHIPS OF STAMFORD, CROWLAND AND WILLOUGHBY)
CITY OF NIAGARA FALLS AND REGION OF NIAGARA, ONTARIO**

REVISED REPORT

Prepared for:

Parsons
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Archaeological Licence #P1066 (Lytle)
Ministry of Heritage, Sport, Tourism and Culture Industries PIF# P1066-0151-2020
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**Stage 1 Archaeological Assessment
Montrose Road and Lyons Creek Road/Biggar Road
Municipal Class Environmental Assessment
Part of Lots 170, 178, 179, 186, 198, 209, 210, 211;
Lots 1 & 2 Broken Front; Lot 10 Broken Front of Chippewa Creek;
Lots 1& 2 Con 1; Lot 15, Con 6; Lot 15, Con 7;
Lot 16, Con 6; and Lot 16, Con 7,
(Former Townships of Stamford, Crowland and Willoughby)
City of Niagara Falls and Region of Niagara, Ontario**

EXECUTIVE SUMMARY

ASI was contracted by Parsons to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Montrose Road and Lyons Creek Road/Biggar Road Municipal Class Environmental Assessment in the City of Niagara Falls. This project involves road improvements along Montrose Road between McLeod Road in the north and south of Lyons Creek Road/Biggar Road in the south, and along Lyons Creek Road/Biggar Road between the Queen Elizabeth Way (QEW) interchange in the east and approximately one kilometre west of Montrose Road in the west.

The Stage 1 background study determined that 65 previously registered archaeological sites are located within one kilometre of the Study Area. The property inspection determined that parts of the Study Area exhibit archaeological potential and will require Stage 2 assessment.

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

1. The Study Area exhibits archaeological potential. These lands require Stage 2 archaeological assessment by test pit/pedestrian survey at five metre intervals, where appropriate (Figures 9-12), prior to any proposed impacts to the property;
2. The Study Area includes the Welland River. If the riverbed is going to be impacted by construction then a marine archaeological assessment should be undertaken;
3. The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance or having been previously assessed (Figures 9-12). These lands do not require further archaeological assessment; and,
4. Should the proposed work extend beyond the current Study Area, further Stage 1 archaeological assessment should be conducted to determine the archaeological potential of the surrounding lands.



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1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by Parsons to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Montrose Road and Lyons Creek Road/Biggar Road Municipal Class Environmental Assessment in the Niagara Falls (Figure 1). This project involves road improvements along Montrose Road between McLeod Road in the north and south of Lyons Creek Road/Biggar Road in the south, and along Lyons Creek Road/Biggar Road between the Queen Elizabeth Way (QEW) interchange in the east and approximately one kilometre west of Montrose Road in the west.

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (1990, as amended in 2018) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI 2011), formerly the Ministry of Tourism, Culture and Sport.

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act*, RSO (Ministry of the Environment 1990 as amended 2010) 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* (2000 as amended in 2007, 2011 and 2015).

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted by Parson on June 10, 2020.

1.2 Historical Context

The purpose of this section, according to the S & G, Section 7.5.7, Standard 1, is to describe the past and present land use and the settlement history and any other relevant historical information pertaining to the Study Area. A summary is first presented of the current understanding of the Indigenous land use of the Study Area. This is then followed by a review of the historical Euro-Canadian settlement history.

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 (BP) (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 BP, the environment had progressively warmed (Edwards and Fritz 1988) and populations now occupied less extensive territories (Ellis and Deller 1990).

Between approximately 10,000-5,500 BP, 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 BP; 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 BP and is indicative of increased social organization, investment of labour into social infrastructure, and the establishment of socially prescribed territories (Ellis et al. 1990; Ellis et al. 2009; Brown 1995:13).

Between 3,000-2,500 BP, populations continued to practice residential mobility and to harvest seasonally available resources, including spawning fish. The Woodland period begins around 2,500 BP and exchange and interaction networks broaden at this time (Spence et al. 1990:136, 138) and by approximately 2,000 BP, evidence exists for small community camps, focusing on the seasonal harvesting of resources (Spence et al. 1990:155, 164). By 1,500 BP there is macro botanical evidence for maize in southern Ontario, and it is thought that maize only supplemented people's diet. There is earlier phytolith evidence for maize in central New York State by 2,300 BP - it is likely that once similar analyses are conducted on Ontario ceramic vessels of the same period, the same evidence will be found (Birch and Williamson 2013:13-15). As is clearly evident in the 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 BP, lifeways became more similar to that described in early historical documents. Between approximately 1000-1300 Common Era (CE), 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 1990:317). By 1300-1450 CE, this episodic community disintegration was no longer practised and populations now communally occupied sites throughout the year (Dodd et al. 1990:343). From 1450-1649 CE this process continued with the coalescence of these small villages into larger communities (Birch and Williamson 2013). 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 CE, 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 Haudenosaunee¹ and the Huron-Wendat (and their Algonquian allies such as the Nipissing and Odawa) led to the dispersal of the Huron-Wendat.

Samuel de Champlain in 1615 reported that a group of Iroquoian-speaking people situated between the Haudenosaunee and the Huron-Wendat were at peace and remained "la nation neutre". In subsequent years, the French visited and traded among the Neutral, but the first documented visit was not until 1626, when the Recollet missionary Joseph de la Roche Daillon recorded his visit to the villages of the Attiwandaron, whose name in the Huron-Wendat language meant "those who speak a slightly different tongue" (the Neutral apparently referred to the Huron-Wendat by the same term). Like the Huron-Wendat, Petun, and Haudenosaunee, the Neutral people were settled village agriculturalists. Several discrete settlement clusters have been identified in the lower Grand River, Fairchild-Big Creek, Upper Twenty Mile Creek, Spencer-Bronte Creek drainages, Milton, Grimsby, Eastern Niagara Escarpment and Onondaga Escarpment areas, which are attributed to Iroquoian populations. These settlement clusters are believed by some scholars to have been inhabited by populations of the Neutral Nation or pre- (or ancestral) Neutral Nation (Lennox and Fitzgerald 1990).

¹ The Haudenosaunee are also known as the New York Iroquois or Five Nations Iroquois and after 1722 Six Nations Iroquois. They were a confederation of five distinct but related Iroquoian-speaking groups – the Seneca, Onondaga, Cayuga, Oneida, and Mohawk. Each lived in individual territories in what is now known as the Finger Lakes district of Upper New York. In 1722 the Tuscarora joined the confederacy.



The Neutral village of Onyahrah (translated as neck or strip of land between two lakes) was located on both sides of the Niagara Falls, including present day Niagara-on-the-Lake, and another village was located near what is now St. David's along Four Mile Creek. It is believed that the Iroquoian word Onguiaahra (translated as 'the strait' or 'thundering waters') was anglicized by missionaries in the seventeenth century to Niagara (Walker 2018). Between 1647 and 1651, the Neutral were decimated by epidemics and ultimately dispersed by the Haudenosaunee, who subsequently settled along strategic trade routes on the north shore of Lake Ontario for a brief period during the mid-seventeenth century.

Shortly after dispersal, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. From east to west, these villages consisted of Ganneious, on Napanee Bay, an arm of the Bay of Quinte; Quinte, near the isthmus of the Quinte Peninsula; Ganaraske, at the mouth of the Ganaraska River; Quintio, at the mouth of the Trent River on the north shore of Rice Lake; Ganatsekwyagon (or Ganestiquiagon), near the mouth of the Rouge River; Teyaiagon, near the mouth of the Humber River; and Quinaouatoua, on the portage between the western end of Lake Ontario and the Grand River (Konrad 1981:135). Their locations near the mouths of the Humber and Rouge Rivers, two branches of the Toronto Carrying Place, strategically linked these settlements with the upper Great Lakes through Lake Simcoe. The inhabitants of these villages were agriculturalists, growing maize, pumpkins and squash, but their central roles were that of portage starting points and trading centres for Iroquois travel to the upper Great Lakes for the annual beaver hunt (Konrad 1974; Williamson et al. 2008:50–52). Ganatsekwyagon, Teyaiagon, and Quinaouatoua were primarily Seneca; Ganaraske, Quinte and Quintio were likely Cayuga, and Ganneious was Oneida, but judging from accounts of Teyaiagon, all of the villages might have contained peoples from a number of the Iroquois constituencies (ASI 2013).

E.S. Roger's chapter "Southeastern Ojibwa" in the *Smithsonian Handbook of Northamerican Indians, Northeast Volume* was constructed using both Anishinaabeg oral tradition and the European documentary record. The history of Anishinaabeg movement from along the north shore of Lake Huron and their military actions against the Haudenosaunee is based almost entirely on Anishinaabeg oral tradition provided by elders such as Kahgegahbowh (George Copway) and Robert Paudash.

Kahgegahbowh was born among the Mississauga in 1818 and followed a traditional lifestyle until his family converted to Christianity. He became a Methodist missionary in Canada and the US, including to the Saugeen Mission for a period, and later a popular author and lecturer (MacLeod 1992:197; Smith 2000). Rogers notes that this movement included those populations that were later known as the Chippewa, Ojibwa, Mississauga, and Saulteaux or "Southeastern Ojibwa" groups. He also noted linguistic differences between those groups split between Central Ojibwa-Odawa, spoken primarily by the Odawas of Manitoulin Island and Michigan and some Ojibwas (or Chippewas) of the Lower Peninsula of Michigan and that part of southwestern Ontario lying west of a north-south line drawn through the base of the Bruce peninsula east of which is spoken the second major dialect, spoken by Ojibwa (or Chippewa) and Mississauga. There is also sub-dialectical variation within each major dialect, and some groups and individuals whose speech is fundamentally of one type use forms characteristic of the other.

According to Kahgegahbowh, the objectives of campaigns against the Haudenosaunee were to create a safe trade route between the French and the Ojibway, to regain the land abandoned by the Huron-Wendat and "drive the Iroquois wholly from the peninsula." Kahgegahbowh describes more than 700 canoes meeting near Sault Ste Marie and splitting into three parties for a three-pronged attack via the Ottawa River, Lake Simcoe and along the Trent River, and the St. Clair River, and all of which had fierce engagements with the Haudenosaunee. While various editions of Kahgegahbowh's book have these battles occurring in the mid-seventeenth century, common to all is a statement that the battles occurred



around 40 years after the dispersal of the Huron-Wendat (Copway 1850:88; Copway 1851:91; Copway 1858:91). Various scholars agree with this timeline ranging from 1687, in conjunction with Denonville's attack on Seneca villages (Johnson 1986:48; Schmalz 1991:21–22) to around the mid- to late-1690s leading up to the Great Peace of 1701 (Schmalz 1977:7; Bowman 1975:20; Smith 1975:215; Tanner 1987:33; Von Gernet 2002:7–8).

Robert Paudash's 1904 account of Mississauga origins is like that of Kahgegagahbowh's and relies on oral history. It came from Paudash's father, who died at the age of 75 in 1893 and was the last hereditary chief of the Mississauga at Rice Lake. His account in turn came from his father Cheneebesh, who died in 1869 at the age of 104 and was the last sachem or Head Chief of all the Mississaugas. He also relates a story of origin on the north shore of Lake Huron near the river that gave them their name having been founded by a party of Shawnee (Paudash 1905:7–8) and later, after the dispersal of the Huron-Wendat, carrying out coordinated attacks against the Haudenosaunee. Francis Assikinack (1858:308–309) provides similar details on battles with the Haudenosaunee. Francis Assikinack (b. 1824) was an Ojibwa of Manitoulin Island. He enrolled at Upper Canada College when he was 16 and after graduation, worked for the Indian Department as an interpreter, clerk, and teacher.

During the 1690s, the Anishinaabeg replaced, it appears by force, the Haudenosaunee who had settled after 1650 along the north shores of Lake Ontario. By the first decade of the eighteenth century, the Michi Saagiig had settled at the mouth of the Humber, near Fort Frontenac at the east end of Lake Ontario and the Niagara region and within decades were well re-established in the region. In 1736, the French estimated there were 60 men at Lake Saint Clair and 150 among small settlements at Quinte, the head of Lake Ontario, the Humber River, and Matchedash (Rogers 1978:761).

Peace was achieved between the Haudenosaunee and the Anishinaabek Nations in August of 1701 when representatives of more than twenty Anishinaabek Nations assembled in Montreal to participate in peace negotiations (Johnston 2004:10). During these negotiations captives were exchanged and the Iroquois and Anishinaabek agreed to live together in peace. Peace between these nations was confirmed again at council held at Lake Superior when the Iroquois delivered a wampum belt to the Anishinaabek Nations.

In 1763, following the fall of Quebec, New France was transferred to British control at the Treaty of Paris. The British government began to pursue major land purchases throughout Ontario in the early nineteenth century and entered into negotiations with various Nations for additional tracts of land as the need arose to facilitate European settlement.

From the beginning of the eighteenth century to the assertion of British sovereignty in 1763, there is no interruption to Anishinaabeg control and use of southern Ontario. While hunting in the territory was shared, and subject to the permission of the various nations for access to their lands, its occupation was by Anishinaabeg until the assertion of British sovereignty, the British thereafter negotiating treaties with them. Eventually, with British sovereignty, tribal designations changed (Smith 1975:221–222; Surtees 1985:20–21). The word "Saulteux," for example, was gradually substituted by "Chippewa" while the north shore of Lake Ontario groups became known as "Mississauga," although some observers, like John Graves Simcoe, described them as a branch of the "Chippewa" and the two terms were often used as synonyms. The nineteenth-century Mississauga also called themselves "Ojibwa," especially when addressing an English-speaking audience (Jones 1861:31).

According to Rogers (1978), by the twentieth century, the Department of Indian Affairs had divided the "Anishinaabag" into three different tribes, despite the fact that by the early eighteenth century, this large Algonquian-speaking group, who shared the same cultural background, "stretched over a thousand miles



from the St. Lawrence River to the Lake of the Woods.” With British land purchases and treaties, the communities at Beausoleil Island, Cape Croker, Christian Island, Georgina and Snake Islands, Rama, Sarnia, Saugeen, the Thames, and Walpole, became known as “Chippewa” while the communities at Alderville, New Credit, Mud Lake, Rice Lake, and Scugog, became known as “Mississauga.” The northern groups on Lakes Huron and Superior, who signed the Robinson Treaty in 1850, appeared and remained as “Ojibbewas” in historical documents.

Following the 1764 Niagara Peace Treaty and the follow-up treaties with Pontiac, the English colonial government considered the Mississaugas to be their allies since they had accepted the Covenant Chain. The English administrators followed the terms of the Royal Proclamation and insured that no settlements were made in the hunting grounds that had been reserved for their use (Johnston 1964; Lytwyn 2005). In 1784, under the terms of the “Between the Lakes Purchase” signed by Sir Frederick Haldimand and the Mississaugas, the Crown acquired over one million acres of land in-part spanning westward from near modern day Niagara-on-the-Lake along the north shore of Lake Ontario to modern day Burlington (Aboriginal Affairs and Northern Development Canada 2016).

The eighteenth century saw the ethnogenesis in Ontario of the Métis, when Métis people began to identify as a separate group, rather than as extensions of their typically maternal First Nations and paternal European ancestry (Métis National Council n.d.). Métis populations were predominantly located north and west of Lake Superior, however, communities were located throughout Ontario (MNC n.d.; Stone and Chaput 1978:607,608). During the early nineteenth century, many Métis families moved towards locales around southern Lake Huron and Georgian Bay, including Kincardine, Owen Sound, Penetanguishene, and Parry Sound (MNC n.d.). Recent decisions by the Supreme Court of Canada (Supreme Court of Canada 2003; Supreme Court of Canada 2016) have reaffirmed that Métis people have full rights as one of the Indigenous people of Canada under subsection 91(24) of the Constitution Act, 1867.

The Study Area is within Treaty 381, the Niagara Purchase, signed in 1781 between the Crown and the Chippewa and Mississaugas for the tract of land which had not been agreed upon in the 1764 Niagara Peace Treaty on the west side of “the Straits” that lead from Lake Erie to Lake Ontario at Niagara Falls (Crown-Indigenous Relations and Northern Affairs 2016).

1.2.2 Euro-Canadian Land Use: Township Survey and Settlement

Historically, the Study Area is located in the Former Townships of Stamford, Crowland and Willoughby, Region of Niagara in Part of Lots 170, 178, 179, 186, 198, 209, 210, 211; Lots 1 & 2 Broken Front; Lot 10 Broken Front of Chippewa Creek; Lot 1, Con 1; Lots 1& 2 Con 2; Lot 15, Con 6; Lot 15, Con 7; Lot 16, Con 6; and Lot 16, Con 7,

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 m 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).

Stamford Township

The area long known as Stamford Township was, during the 1780s, initially referred to as “Township No. 2,” and also as the “Mountain Township.” In the late 1780s and early 1790s, it was also known as “Mount Dorchester.” The name “Stamford” officially came into common use after Simcoe renamed the townships in the Niagara Region in 1792. This name was selected in honour of a town by the same name located in Lincolnshire in England (Gardiner 1899:277).

Stamford comprised part of Lincoln County in the Home District from 1792 until 1800. At that time, the Home District (York) was separated and raised to independent status, and the remainder of the older administrative unit on the south side of Lake Ontario was renamed as the Niagara District. Following the abolition of the Districts in 1849, the Niagara District was succeeded for judicial purposes by the United Counties of Lincoln, Welland and Haldimand. Haldimand was separated from this union in 1850-1851, and the provisional County of Welland was fully separated from the union in 1856. Both Lincoln and Welland counties were abolished in 1969-1970, and replaced by the Regional Municipality of Niagara (Proclamation 24 July 1788; Proclamation 16 July 1792; 32 Geo. III c. 8; 38 Geo. III c. 5; 12 Vic. c. 78; Armstrong 1985:138-140, 147, 186).

The first township survey was undertaken shortly after the Treaty of 1784, and the first permanent settlers took up their land holdings around that same time (Armstrong 1985:147). Stamford was initially settled by disbanded soldiers, mainly Butler’s Rangers, following the end of the American Revolutionary War. Stamford was the location of the Battle of Lundy’s Lane in 1814. By 1846, the population stood at 2,636, which was a mixture of “Canadians, English, Irish, Scotch and Americans” (Smith 1846:176). During the late eighteenth and the nineteenth centuries a number of notable settlements were established within Stamford Township. Many of these, including Chippawa, which was first settled in the early 1790s and had a post office by 1801, still exist as communities or neighbourhoods within the City of Niagara Falls. Other early settlements in Stamford Townships include Clifton (1832), Elgin (1840s) and Drummondville (1831). Stamford Township was amalgamated into the Regional Municipality of Niagara in 1970 (Armstrong 1985:147; Boulton 1805:89; Crossby 1873:86; Mika and Mika 1983; Rayburn 1997:68, 328; Scott 1997:48-49; Smith 1975:176; Winearls 1991:640).

Crowland Township

Crowland Township was established in 1788, named after a town in Lincolnshire, England. The Welland River (also known as Chippawa Creek) divides the townships of Crowland, Thorold and Stamford (Page 1876).



The township was settled by United Empire Loyalists who arrived as early as the 1770's. Some of the early families included Buchner, Young, Misner, Cook, Yokam, Bender, Wilson, Brailey, Brookfield, Brown, Doan and Everingham (Mika and Mika 1977:504). In 1801, a road from Bertie Township through Crowland to the Welland River was surveyed by Charles Fell. In 1803, Crowland had its first town meeting and the population at this time was 120 males and 96 females. By 1817, the population was approximately 600 individuals (Page 1876). The first post office opened in 1841 at Cook's Mills, in the store of Luther Boardman. Mr. Boardman was also a hotelkeeper in Cook's Mills and credited for organizing the Crowland Agricultural Society in 1846. The Methodists were the first to build a church in the township, followed by the Presbyterians in 1850. The first school was built at Cook's Mills on land donated by Mr. Street in the mid-1800s (Mika and Mika 1977:505). The hamlet of Cook's Mills was located on Lots 11-13, Concessions 4 and 5; this hamlet later became known as Crowland.

In 1970, Crowland Township was dissolved, being incorporated into the Town of Thorold, City of Niagara Falls and City of Welland (Mika and Mika 1977:505).

Willoughby Township

Willoughby Township is bounded on the south by Bertie Township, on the north by Stamford Township, on the west by Crowland Township, and on the east by the Niagara (Page 1876:14). Willoughby Township was first settled in 1784, and was surveyed in 1787. Land could initially be purchased for one shilling per acre. By 1817, the township had 450 inhabitants and the value of the land had increased to 25 shillings per acre (Page 1876:14).

Around 1830, a number of German settlers arrived in the area. Many bought small pieces of land, usually no more than fifty acres. They paid for this land by chopping the wood into cordwood and taking it to the settlement centre of Chippewa (Page 1876:14). By 1850, there were 970 residents in the township. The township did not have as many improvements and impressive residences as some other townships due to the number of uprisings in the area over the years such as the War of 1812, the rebellion of 1837, and the 1867 Fenian raid (Page 1876:14).

1.2.3 Historical Map Review

The 1862 *Map of the Counties of Lincoln and Welland* and the 1881 (Tremaine and Tremaine 1862; Page 1876) were examined to determine the presence of historic features within the Study Area during the nineteenth century (Table 1; Figures 2-3).

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.

In addition, the use of historical map sources to reconstruct/predict the location of former features within the modern landscape generally proceeds by using common reference points between the various sources. These sources are then geo-referenced in order to provide the most accurate determination of the location of any property on historic mapping sources. The results of such exercises are often imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including the vagaries of map production (both past and present), the need to resolve differences of scale and resolution, and distortions introduced by reproduction of the sources. To a large degree, the significance



of such margins of error is dependent on the size of the feature one is attempting to plot, the constancy of reference points, the distances between them, and the consistency with which both they and the target feature are depicted on the period mapping.

Table 1: Nineteenth-century property owner(s) and historical features(s) within or adjacent to the Study Area

		<i>1862 Tremaine</i>		<i>1876</i>	
Con #	Lot #	Property Owner(s)	Historical Feature(s)	Property Owner(s)	Historical Feature(s)
	170	Hervey Edward	None	Peter Sutton	None
	178	Henry Spencer	None	J. Malone	None
	179	C. R. Henry Spencer	Spencer homestead	William Sutton William Lundy	Sutton homestead
	186	T. A. Henry Spencer A Skinner	None	John Howey	Howey farmstead
	198	Miller(?)	None	Lanty McGilly	None
	209	Archibald Thompson Archibald Grey	None	Archibald Thompson Mrs. Smith	None
	210	Archibald Thompson Archibald Grey	Thompson and Grey homesteads	Archibald Grey	Post Office, blacksmith
	211	Illegible Archibald Grey	Two buildings	Murray	None
Broken Front	1	Jonathan Ven (Sp?) W. T. Wilkins	Swing bridge	J.O. Dell Thomas Dell Harvey Burns T. Wilkins	Hotel, farmstead
Broken Front	2	Jonathan Ven (Sp?) William Binckley	None	Harvey Burns	None
B. Front Chippewa Creek	10	Estate of W. Miller	None	N/A	None
	1	Wells	None	Wells	None
	2	Wells	None	Harvey Burns	None
	6	E. Mc Credie	None	E. Mc Credie	None
	7	H. Dell (Estate of Barney Dell)	None	Jason Heimer	Heimer farmstead
	6	E. M. Mc Credie	None	E. Mc Credie	None
	7	N/A	None	Christopher Dell	None

According to the map, the Study Area covers numerous parcels some which are visible in both the 1862 and 1876 maps such as Grey, Wells and Mc Credie. A swing bridge and some standing buildings likely houses are visible on the 1862 maps however their land usage is vague. Many farmsteads are visible on the 1876 map as is a hotel, a post office and a blacksmith.



1.2.4 Twentieth-Century Mapping Review

The 1920 National Topographic System Niagara sheet was examined to determine the extent and nature of development and land uses within the Study Area (Figure 4) (Department of Militia and Defence 1920). The 1954 Hunting Survey Corp. aerial photographs were also examined (Figure 5) (Hunting Survey Corporation Limited 1954). The 1920 map shows the Central Railway, electric power lines along Montrose Road and emergence of the towns of Montrose and Fraser. The map indicates that the road alignment was modified in the north section of the Study Area. The 1954 aerial map appears to show the construction on the Queen Elizabeth Way (QEW) which may have resulted in the road realignment of Montrose Road.

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

A review of available Google satellite imagery since 2002 shows that the Study Area has been subject to commercial developments and the construction of a residential subdivision. Two complexes north of McLeod Road can be seen under construction in 2006, the western complex is a commercial complex with a Lowe’s and the eastern complex is a YMCA with a large stormwater pond. A residential subdivision north of Brown Road can be seen under construction starting in 2015. The commercial complex at Blackburn Parkway can be seen expanding with the construction of two large buildings in 2006 and 2015. Soil grading, likely in advance of construction, can also be noted at the south-east corner of Montrose Road and McLeod Road in late 2017.

A Stage 1 property inspection was conducted on August 26, 2020 that noted the Study Area is located in City of Niagara Falls. The south portion is primarily active agricultural fields and treed areas adjacent to the road right-of-ways (ROWs) with some large commercial buildings along the Study Area. To the east, along Oakwood Drive, an existing RV park known as Jellystone Camp Resort is within the Study Area as is part of the QEW Highway ROW. To the north a large mall known as Niagara Square and a hotel known as the Peninsula Inn are visible with large surrounding paved parking lots.

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 and Warner 1990: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 Study Area is located within Clay Plains of the Haldimand Clay Plain of southern Ontario (Chapman and Putnam 1984). The Haldimand Clay Plain physiographic region (Chapman and Putnam 1984:156-159) is among the largest of the 53 defined physiographic regions in southern Ontario, comprising approximately 3,500 square km (MacDonald 1980:3). Generally, this region is flat and poorly drained, although it includes several distinctive landforms including dunes, cobble, clay, and sand beaches, limestone pavements, and back-shore wetland basins. Within this part of the Niagara peninsula, a number of environmental sub-regions have been described, including the Niagara Slough Clay Plain, the Fort Erie Clay Plain, the Calcareous Rock Plain (Onondaga Escarpment), the Buried Moraines, the Lake Erie Coast, and the Niagara River Valley (MacDonald 1980). The distribution and nature of these sub-regions, and the specific environmental features they contain, have influenced land use in the region throughout history and pre-history.

Figure 6 depicts surficial geology for the Study Area. The surficial geology mapping demonstrates that the Study Area is underlain by massive-well laminated soil, alluvial deposits and man-made deposits (Ontario Geological Survey 2010). Soils in the Study Area consist of silt and clay, minor sand and gravel. The drainage includes poorly drained, imperfectly drained, “variable” and moderately well drained soils (Figure 7).

Chippawa Creek crosses the Study Area and the Creek eventually becomes the Welland River, part of the Welland River watershed. Historically these waterways have been heavily modified for canals to serve as transportation routes as well as hydroelectric power generation. The Study Area is adjacent to the Hydro Electric Power Canal (HEPC) which diverts water from the Welland River at Montrose to the Sir Adam Beck No. 2 Generating Station on the Niagara River near Queenston.

1.3.3 Previous Archaeological Research



In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database (OASD) 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 km east to west, and approximately 18.5 km 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 AgGs.

According to the OASD, 65 previously registered archaeological sites are located within one kilometre of the Study Area, none of which are within 50 metres (MHSTCI 2020). A summary of the sites is provided below.

Table 2: List of previously registered sites within one kilometre of the Study Area

Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AgGs-116	Garner Estates	Euro-Canadian	homestead	MH, 1998
AgGs-15	MIA 8469	Unknown	Unknown	MolA, 1984
AgGs-16	MIA 8470	Unknown	Unknown	MolA, 1984
AgGs-17	MIA 8471	Unknown	Unknown	MolA, 1984
AgGs-18	MIA 8472	Unknown	Unknown	MolA, 1984
AgGs-19	MIA 8473	Precontact Indigenous	Camp	MolA, 1984
AgGs-20	MIA 8474	Precontact Indigenous	Camp	MolA, 1984
AgGs-21	MIA 8475	Unknown	Unknown	MolA, 1984
AgGs-229	James Macklem	Precontact Indigenous, Euro-Canadian	homestead	AMICK, 2001
AgGs-23	MIA 8477	Unknown	Unknown	MolA, 1984
AgGs-230	Grassy Brook Camp II	Precontact Indigenous	Unknown	AMICK, 2001
AgGs-231	John Steinhoff	Precontact Indigenous, Euro-Canadian	homestead	AMICK, 2001
AgGs-232	Welland River Camp	Precontact Indigenous	Camp	AMICK, 2001
AgGs-233	Alexander Simpson	Precontact Indigenous, Euro-Canadian	homestead	AMICK, 2001
AgGs-234	N/A	Unknown	Unknown	Unknown
AgGs-235	Cabeiroi Camp I	Precontact Indigenous	Unknown	AMICK, 2001
AgGs-236	Cabeiroi Camp 2	Precontact Indigenous	Camp	AMICK, 2001
AgGs-237		Euro-Canadian	Unknown	AMICK, 2001
AgGs-238	Welland Drain	Precontact Indigenous	Camp	AMICK, 2001
AgGs-24	MIA 8478	Unknown	Unknown	MolA, 1984
AgGs-251		Precontact Indigenous	Unknown	AMICK, 2002
AgGs-252		Precontact Indigenous	Unknown	AMICK, 2002
AgGs-253		Precontact Indigenous	Unknown	AMICK, 2002
AgGs-27	MIA 8481	Precontact Indigenous	Camp	MolA, 1984



Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AgGS-277		Unknown	Findspot	S. Austin, 2006
AgGs-278		Unknown	Findspot	S. Austin, 2006
AgGs-279		Precontact Indigenous	Findspot	ASI, 2006
AgGs-28	MIA 8482	Unknown	Unknown	MolA, 1984
AgGs-292		Precontact Indigenous	Findspot	ASI, 2006
AgGs-293		Precontact Indigenous	Findspot	ASI, 2006
AgGs-294		Unknown	Unknown	ASI, 2006
AgGs-295		Precontact Indigenous	Findspot	ASI, 2006
AgGs-296		Precontact Indigenous	Camp	DC, 2016
AgGs-297		Precontact Indigenous	Findspot	ASI, 2007
AgGs-298		Unknown	Unknown	ASI, 2006
AgGs-299		Unknown	Unknown	DC, 2014
AgGs-300		Precontact Indigenous	Findspot	ASI, 2006
AgGs-301		Precontact Indigenous	Findspot	ASI, 2006
AgGs-302		Precontact Indigenous	Findspot	ASI, 2006
AgGs-303		Precontact Indigenous	Findspot	ASI, 2006
AgGs-33	MIA 8483	Euro-Canadian	house	MolA, 1984
AgGs-34	MIA 8484	Precontact Indigenous	Findspot	MolA, 1984
AgGs-35	MIA 8485	Unknown	Unknown	MolA, 1984
AgGs-375		Euro-Canadian	farmstead	DC, 2013
AgGs-379		Unknown	Unknown	MH, 2014
AgGs-380		Unknown	Unknown	MH, 2014
AgGs-381		Unknown	Unknown	MH, 2014
AgGs-399	Parkway Site	Unknown	Camp	AMICK, 2017
AgGs-4	Feren	Unknown	Unknown	Unknown
AgGs-410		Euro-Canadian	homestead	DC, 2019
AgGs-48	14-001:3	Unknown	Unknown	MH, 2014
AgGs-5	Walters	Unknown	Unknown	Unknown,
AgGs-50	Feren	Other	Unknown	MH, 2014
AgGs-51	Thompsons Creek	Precontact Indigenous	hunting	W. Parkins, 1973
AgGs-52		Unknown	Camp	MPPA, 1988
AgGs-53	Dell	Precontact Indigenous	Camp	MPPA, 1988
AgGs-54		Unknown	Camp	MPPA, 1988
AgGs-55		Unknown	Findspot	MPPA, 1988



Borden #	Site Name	Cultural Affiliation	Site Type	Researcher
AgGs-56		Unknown	Findspot	MPPA, 1988
AgGs-90	Walter	Precontact Indigenous	Camp	R. Pearce, 1990
AgGs-91	TCPL 90-11	Unknown	Findspot	R. Pearce, 1990
AgGs-92	TCPL 90-12	Unknown	Findspot	R. Pearce, 1990
AgGs-93	TCPL 90-13	Unknown	Findspot	R. Pearce, 1990
AgGs-94	TCPL 91-2	Unknown	Findspot	Unknown, 1991
AgGs-95	TCPL 91-3	Unknown	Findspot	Unknown, 1991

DC- Detritus Consulting
 MH- Mayer Heritage
 MoIA- Museum of Indian Archaeology
 MPPA- Mayer, Pihl, Poulton & Assoc. Inc.

According to the background research, 8 eight previous reports detail fieldwork within 50 m of the Study Area.

In 2007, ASI conducted a Stage 1-2 assessment in advance of the Warren Woods subdivision (P117-072, P141-021-2006 and P117-050). The Stage 2 portion resulted in the documentation of 23 precontact Indigenous findspots, 13 pre-contact indigenous sites and 1 Euro-Canadian sites. This project overlaps the current Study Area along Montrose Road north of Brown Road. All of the sites documented are further than 50 m away from the current Study Area (2007).

In 2009, ASI conducted a Stage 1 as part of the QEW “Part C Highway Assessment” from McLeod Road to Central Avenue. This assessment occurred to identify deficiencies and prove recommendations. The majority of the relevant study area was disturbed by road construction however some areas were noted as having archaeological and additional work was recommended (ASI 2009).

In 2010, ASI conducted a Stage 1 for McLeod Road/Marineland Parkway and Montrose Road (PIF:P057-625-2010). The Montrose Road section covers the northern section of the current Study Area along McLeod Road. The report determined that the Montrose Road right-of-way (ROW) section does not have archaeological potential and be considered free of archaeological concern however some areas of archaeological potential were noted beyond the road ROW (ASI 2010a:17).

In 2010, ASI conducted a Stage 1 assessment in advance of a proposed Lowe's commercial development, (P049-569-2010). This project overlaps the current Study Area on the north side of McLeod Road. The area was noted as having 6 meters of imported fill deposited on the site and significant grading activity occurred in 2002-2009, due to this significant soil disturbance this land was considered free of archaeological concern (ASI 2010b).

In 2016, Detritus Consulting Conducted a Stage 2-3 assessment in advance of a proposed Hospital development at the northwest of the intersection of Biggar Road and Montrose Road (PIF# P017-260-2012 and P017-270-2013). Seven findspots, two Precontact Indigenous and five Euro-Canadian sites were found. Only two sites were recommended for Stage 3 (Ags-375 and AgGs-376) and AgGs-375 was recommended for further work (Detritus Consulting 2016a). In 2016 a Stage 4 was conducted on AgGs-375 (P017-0478-2016) and the site can be considered free of further cultural heritage value or interest (Detritus Consulting 2016b).



In 2017, AS&G Archaeological Consulting conducted a Stage 1 -2 assessment for a site-specific rezoning approval (Plan 59R-13115) (PIFs: P388-0002-2017 and P388-0003-2017). The Stage 1 portion noted that there is archaeological potential on the site and during the Stage 2 portion no archaeological resources were found and the site can be considered free of archaeological concern (AS&G Archaeological Consulting 2017). This project is outside of the current Study Area but it is within 50 m.

In 2019, ASI conducted a Stage 1-2 assessment in advance of the replacement of MTO Bridges over the Welland River (PIF# P094-0315-2019). The Stage 1 portion found that there were areas of archaeological potential and they were test pitted during the Stage 2 portion. No archaeological resources were encountered and the area can be considered free of archaeological concern (ASI 2019). This project intersects the current Study Area at the Oakwood Drive/QEW underpass and following the railroad to the intersection of Montrose Road and Grassy Brook Road.

2.0 FIELD METHODS: PROPERTY INSPECTION

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 Andrew Clish (P046) of ASI, on August 26, 2020, 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 visual inspection only and did not include excavation or collection of archaeological resources. Fieldwork was only conducted when weather conditions were deemed suitable and seasonally appropriate, per S & G Section 1.2., Standard 2. Previously identified features of archaeological potential were examined; additional features of archaeological potential not visible on mapping were identified and documented as well as any features that will affect assessment strategies. Field observations are compiled onto the existing conditions of the Study Area in Section 7.0 (Figures 9-12) and associated photographic plates are presented in Section 8.0 (Plates 1-10).

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 background research and property inspection 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:

- Well drained soils (massive-well laminated soils)
- Previously identified archaeological sites (Table 1)
- Proximity to early settlements (Montrose, hotel, post office)
- Water sources: primary, secondary, or past water source (Chippawa Creek/Welland River); and
- Early historic transportation routes (Montrose Road, McLeod Road, Brown Road, Chippawa Creek Road, Grassy Brook Road, Reixinger Road, Biggar Road)

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. The Municipal Heritage Register was consulted and one property, the Twin Welland River Bridges was noted as a Heritage feature within the Study Area. This feature has been covered by previously archaeological assessment and can be considered free of archaeological concern.

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

3.2 Analysis of Property Inspection Results

The property inspection determined that the Study Area exhibits archaeological potential (Plates 1-4; Figures 9-11: areas highlighted in green). These areas will require Stage 2 archaeological assessment prior to any development. According the S & G Section 2.1.1, pedestrian survey is required in actively or recently cultivated fields (eg. Plate 3). 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 (eg. Plates 1-2 and 4).

The remainder of the Study Area has been subjected to deep soil disturbance events and according to the S & G Section 1.3.2 do not retain archaeological potential (Plates 1-10; Figures 9-12: areas highlighted in yellow); these areas do not require further survey. A part of the study area is located in a watercourse and if the development is going to impact the riverbed, a marine archaeological assessment should occur (Figure 10: area highlighted in blue).

3.3 Conclusions

The Stage 1 background study determined that 65 previously registered archaeological sites are located within one kilometre of the Study Area, none of which are within 50 metres. The property inspection determined that parts of the Study Area exhibit archaeological potential and will require Stage 2 assessment.



4.0 RECOMMENDATIONS

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

1. The Study Area exhibits archaeological potential. These lands require Stage 2 archaeological assessment by test pit/pedestrian survey at five metre intervals, where appropriate (Figures 9-12), prior to any proposed impacts to the property;
2. The Study Area includes the Welland River (Figure 10), if the riverbed is going to be impacted by construction then a marine archaeological assessment should be undertaken;
3. The remainder of the Study Area does not retain archaeological potential on account of deep and extensive land disturbance, low and wet conditions or having been previously assessed (Figures 9-12). These lands do not require further archaeological assessment; and,
4. Should the proposed work extend beyond the current Study Area, further Stage 1 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 MHSTCI should be immediately notified.



5.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI also 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 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological 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 regard to alterations to archaeological sites by the proposed development.
- It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological 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 *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.



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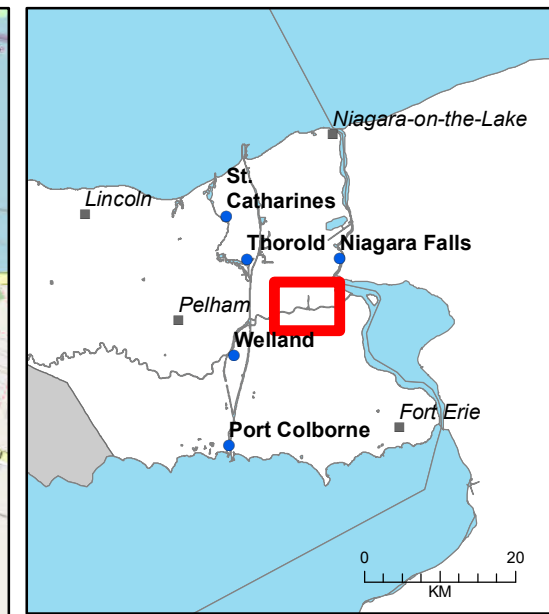
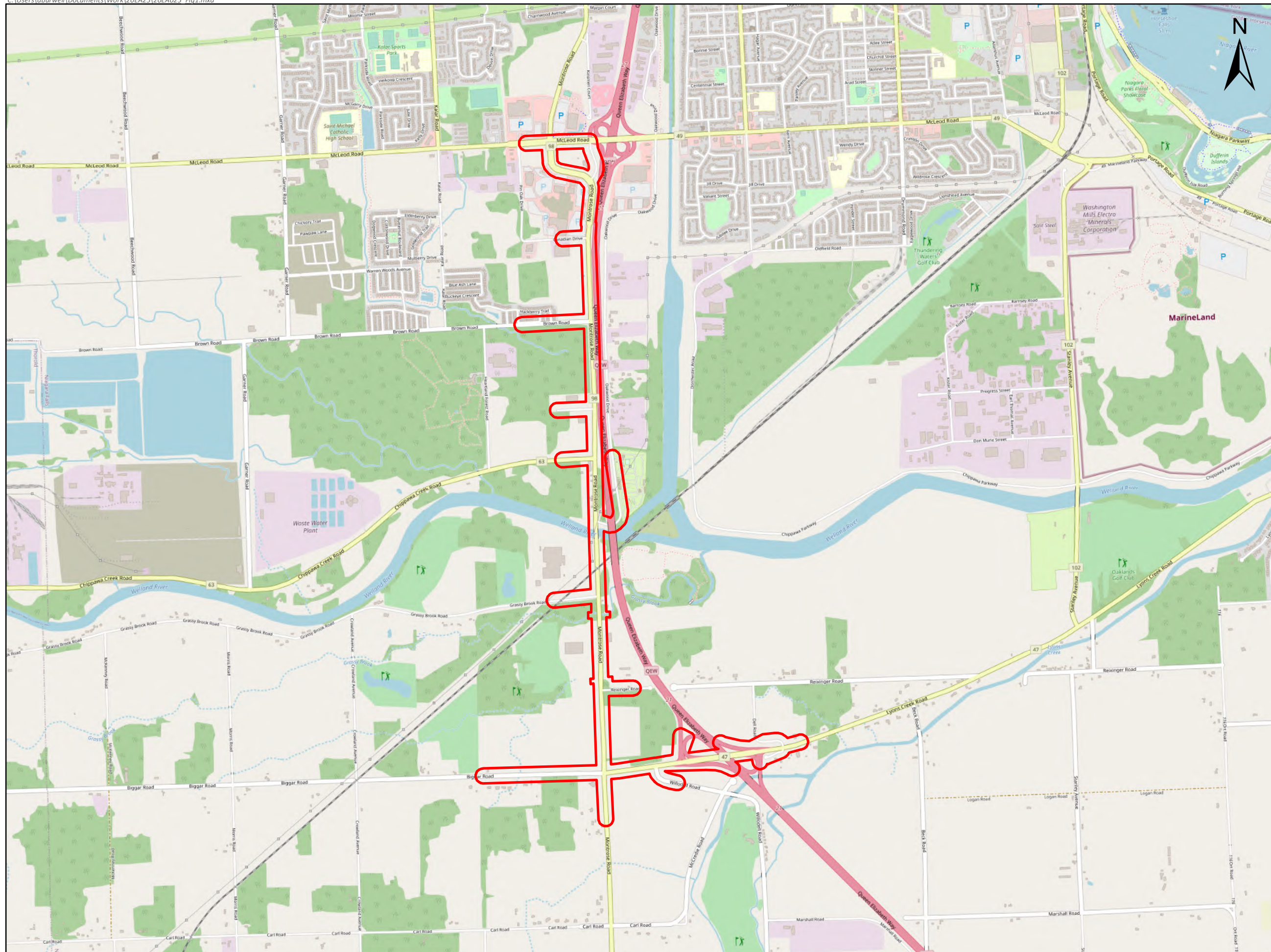
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7.0 MAPS





LEGEND

STUDY AREA

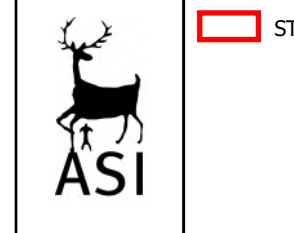
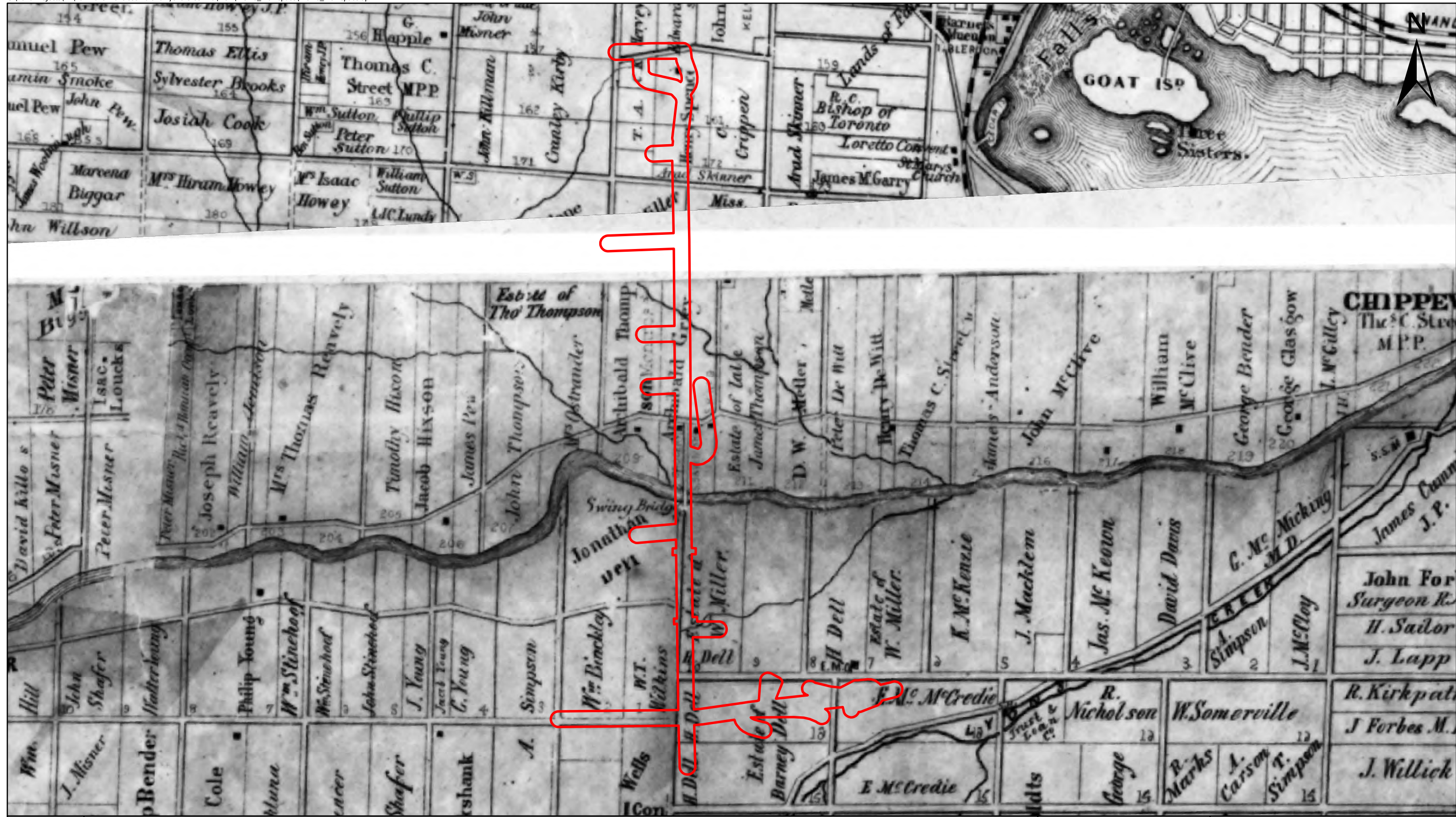
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ASI Providing Archaeological & Cultural Heritage Services
 528 Bathurst Street Toronto, ONTARIO M5S 2P9
 T 416-966-1069 F 416-966-9723 asiheritage.ca

Figure 1: Location of the Study Area



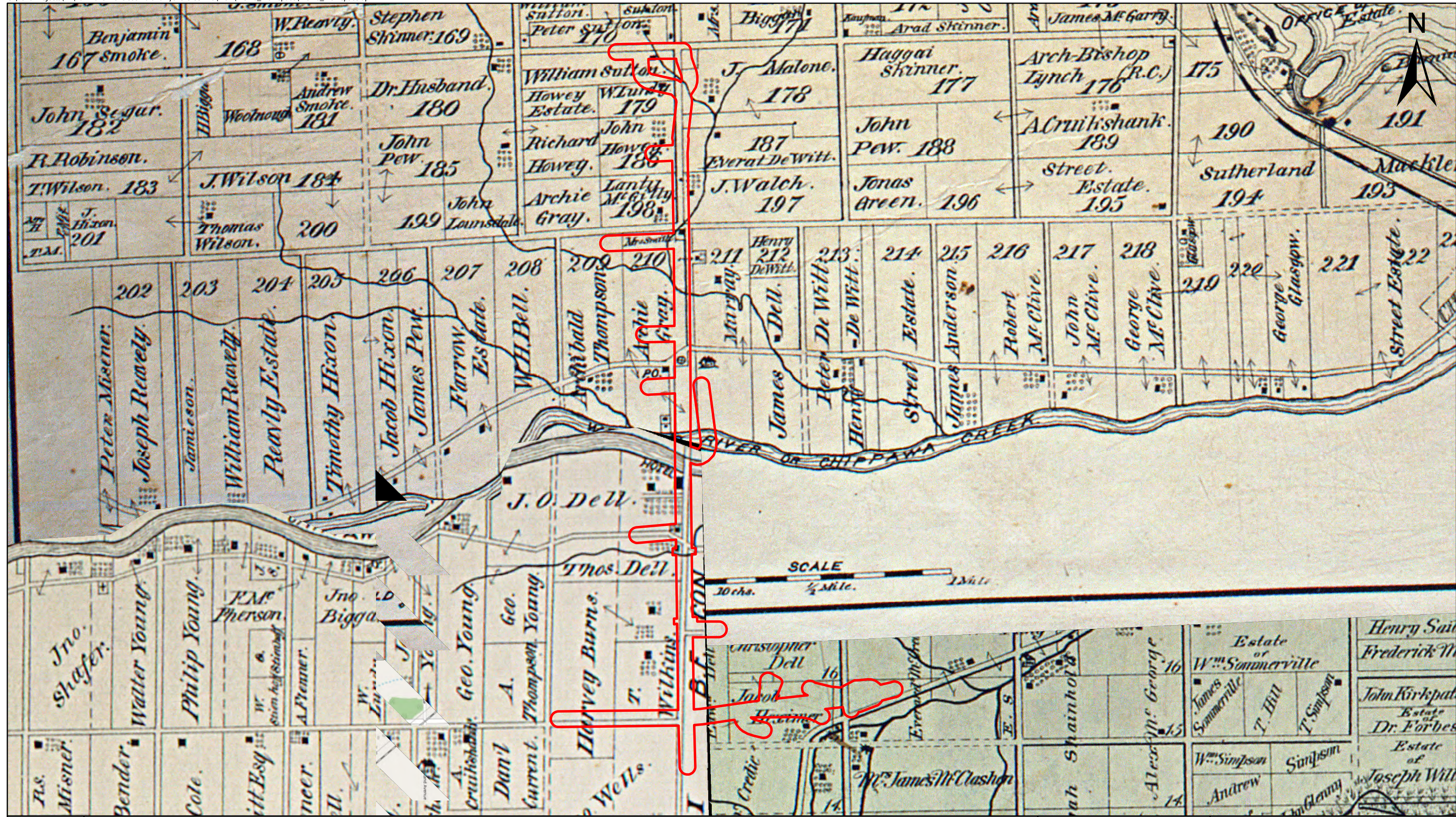
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 Kilometers

ASI Project No.: 20EA_025
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Figure 2: Montrose Road and Lyons Creek Study Area overlaid on the 1862 Tremaine Map of Lincoln and Welland




ASI

 STUDY AREA

Sources: Illustrated Historical Atlas, Stamford, Crowland and Willoughby.

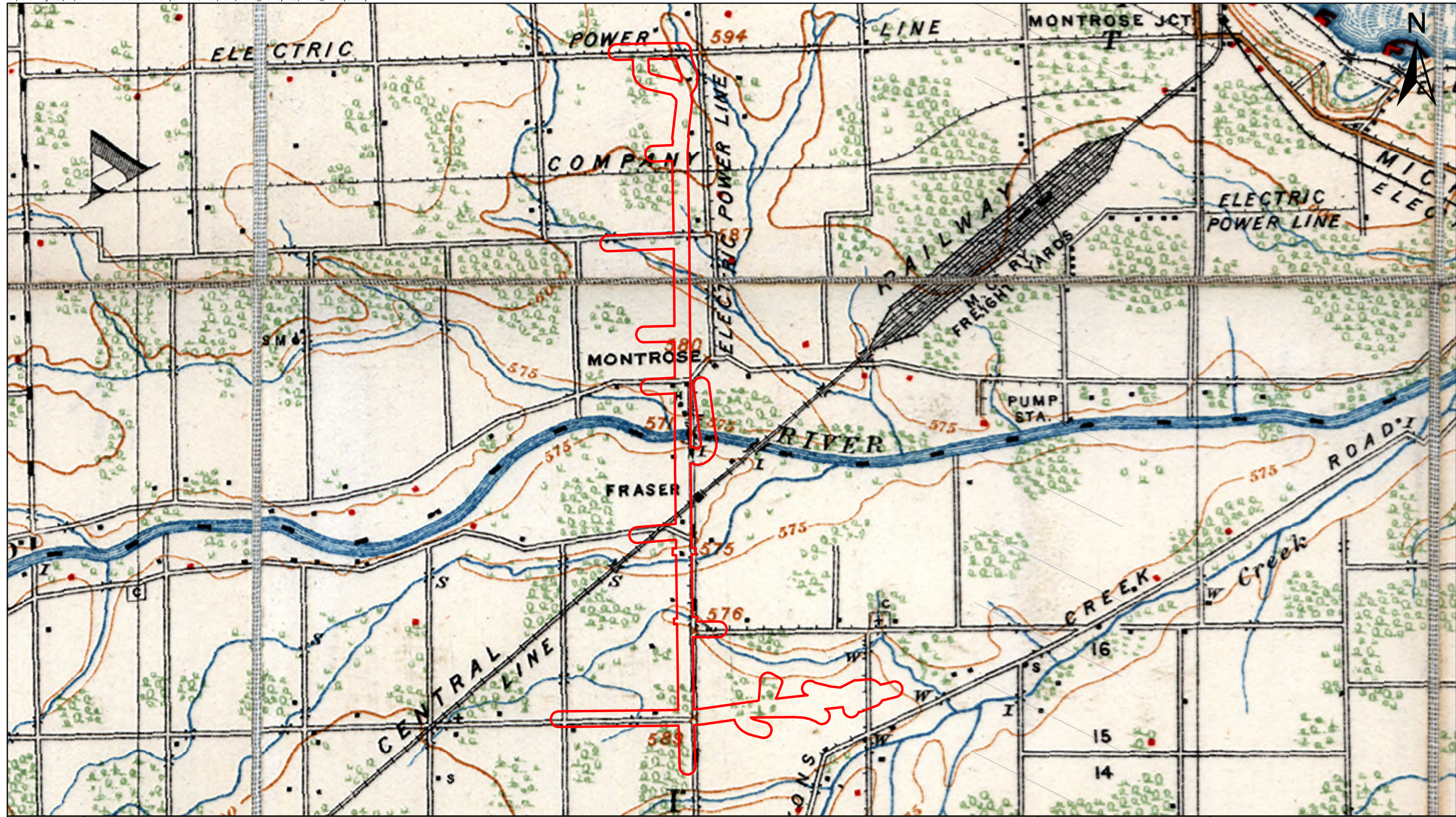
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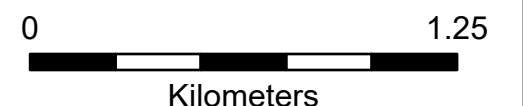
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Figure 3: Montrose Road and Lyons Creek Study Area overlaid on the 1876 map of Townships of Stamford, Crowland and Willoughby



 STUDY AREA

Sources: National Topographic System, Niagara Sheet. 1920

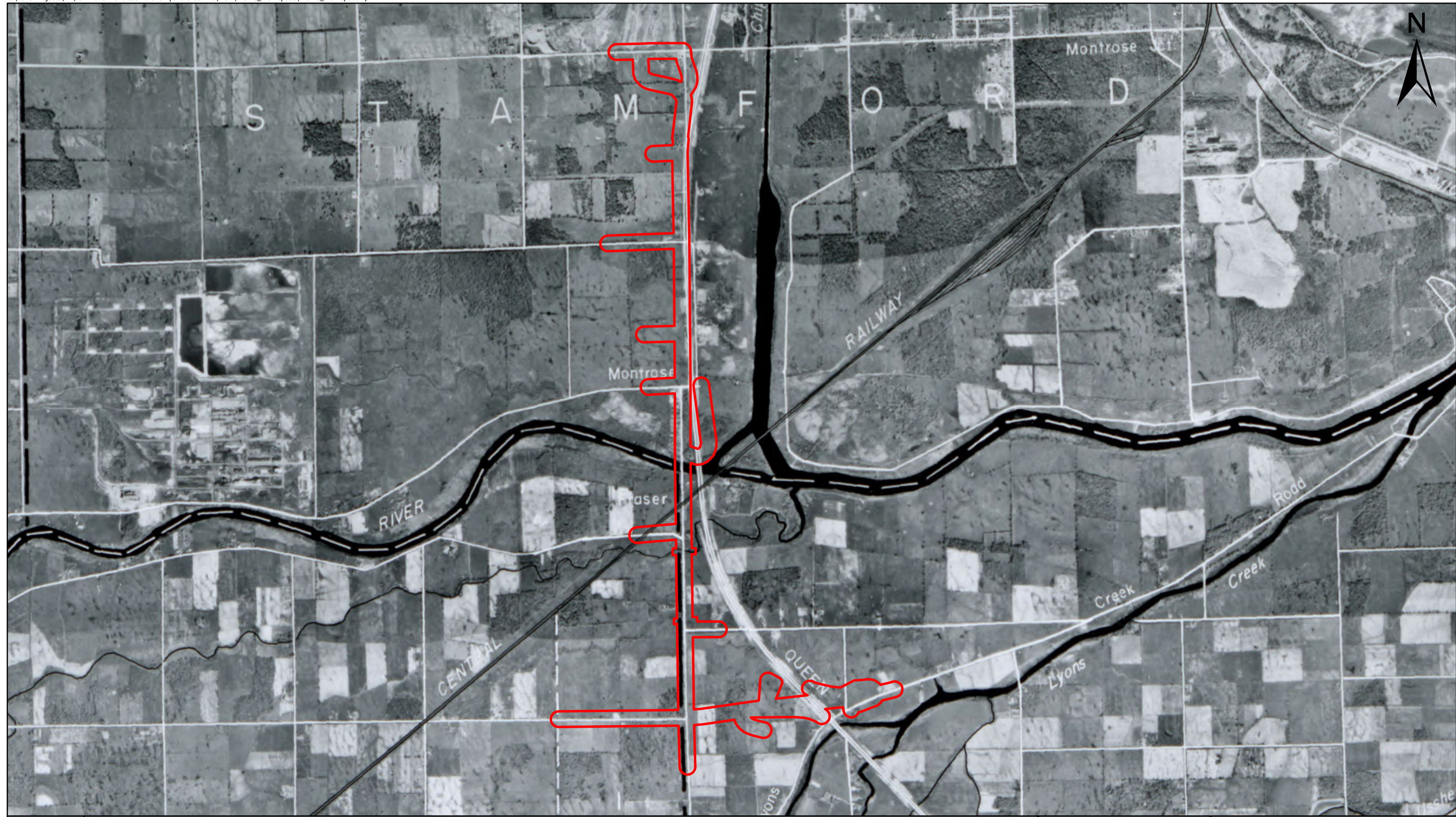


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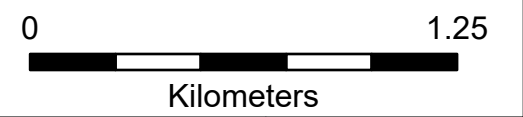
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Figure 4: Montrose Road and Lyons Creek Study Area overlaid on the 1920 Topographic Sheet for Niagara



STUDY AREA

Sources: University of Toronto, Map and Data Library

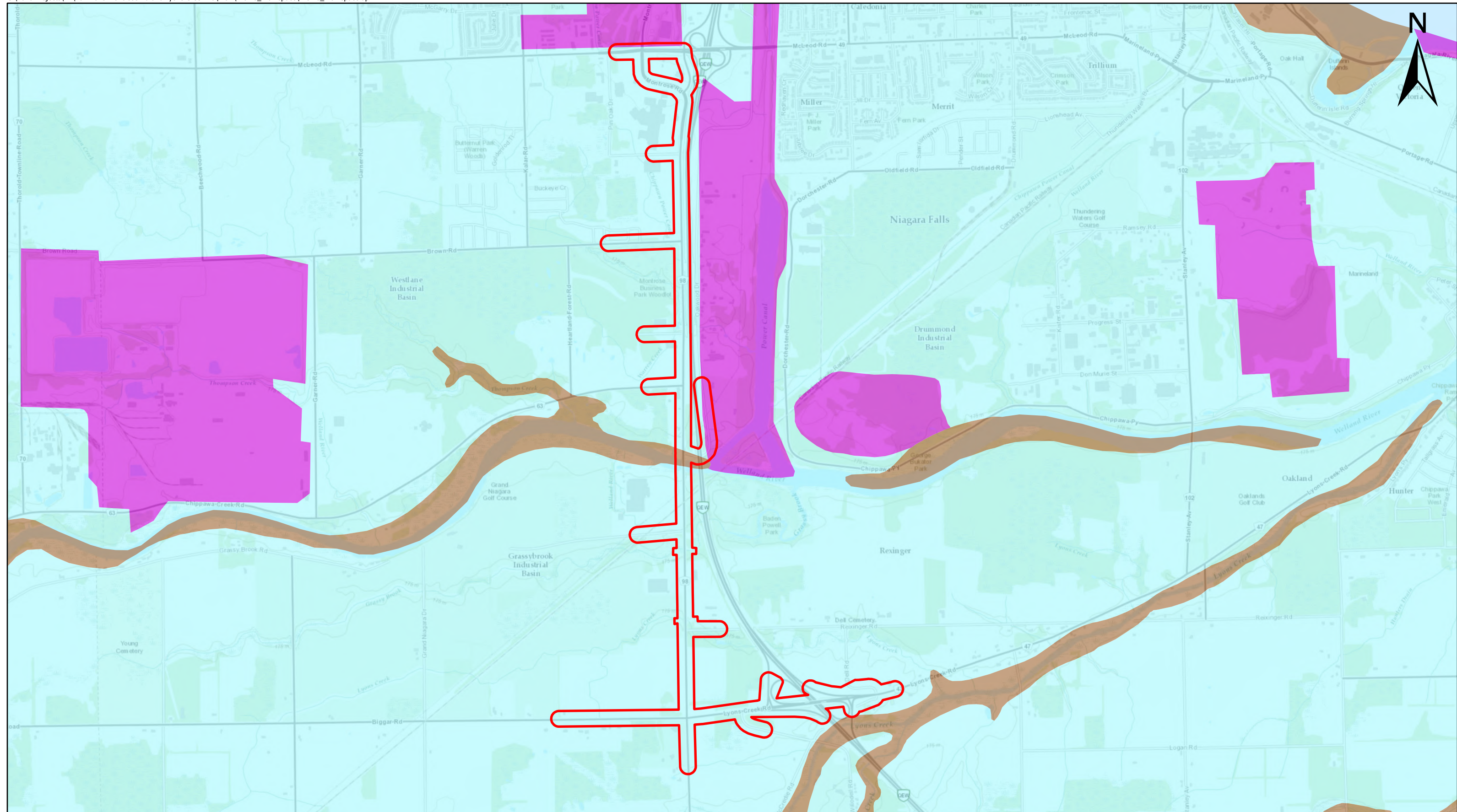








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Figure 5: Montrose Road and Lyons Creek Study Area overlaid on the 1954 Aerial Photograph



	 STUDY AREA	 12: OLDER ALLUVIAL DEPOSITS
	 8A: MASSIVE-WELL LAMINATED	 19: MODERN ALLUVIAL DEPOSITS
	 21: MAN-MADE DEPOSITS	

City of Niagara Falls, City of Welland, Niagara Region, Regional Municipality of Niagara, Province of Ontario, Ontario MNR, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, AAFC, NRCan

Projection: NAD 1983 MTM 10
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Page Size: 11 x 17

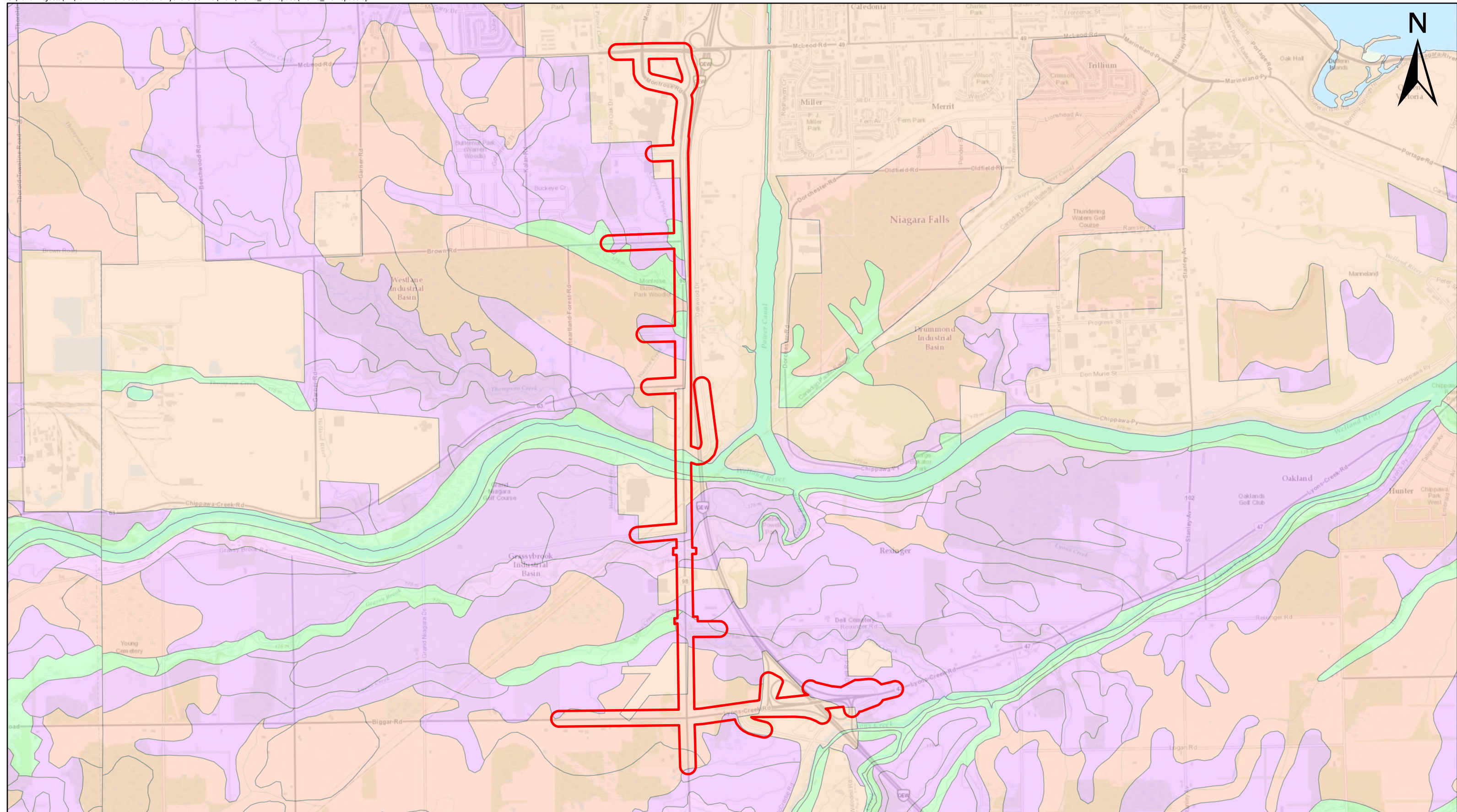
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Kilometers

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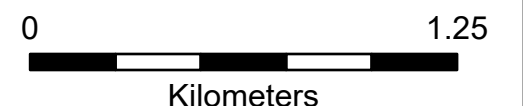
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File: 11x17_Landscape

Figure 6: Montrose Road and Lyons Creek Study Area - Surficial Geology



- STUDY AREA
- IMPERFECTLY
- MODERATELY WELL
- NOT APPLICABLE
- POORLY
- VARIABLE

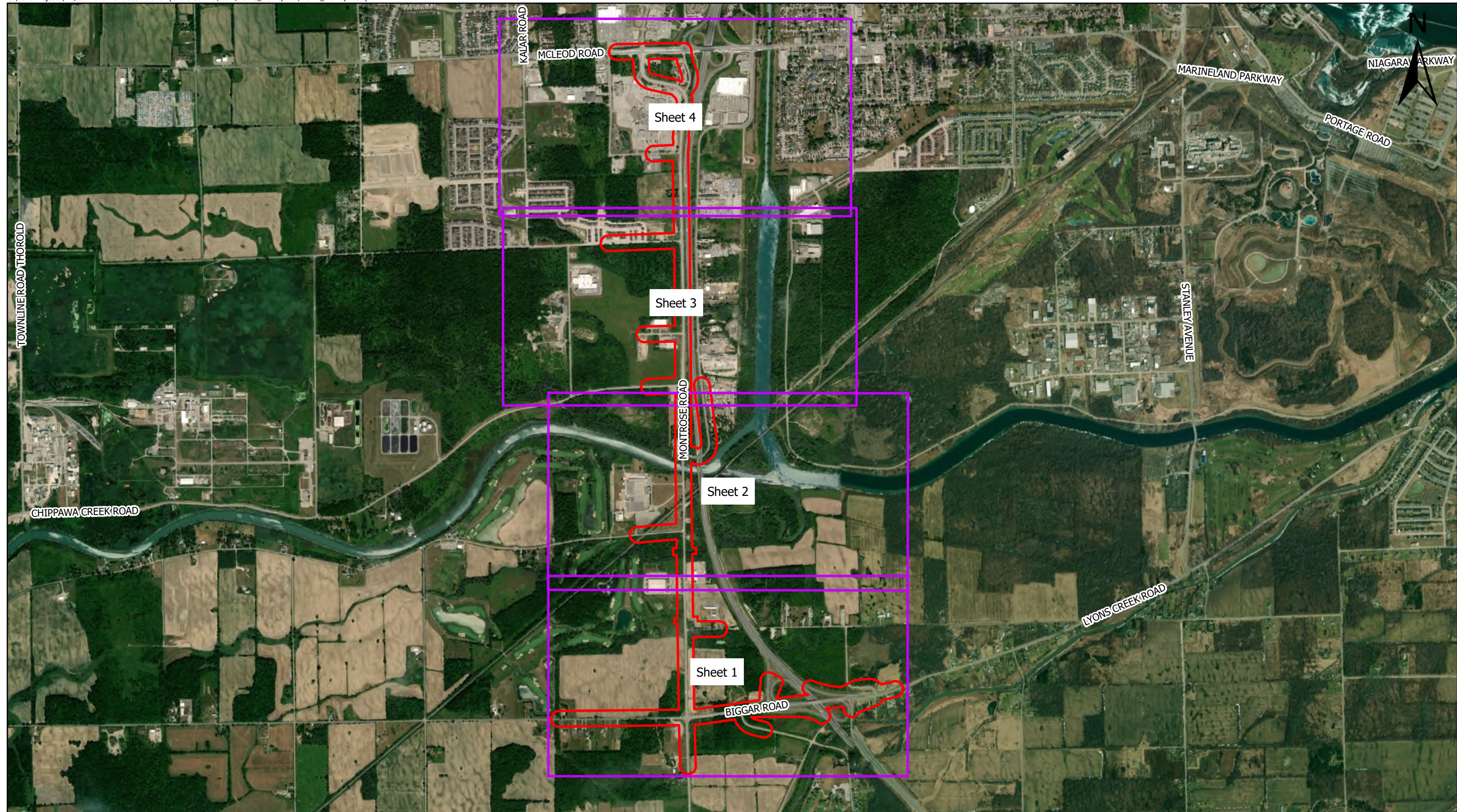
City of Niagara Falls, City of Welland, Niagara Region, Regional Municipality of Niagara, Province of Ontario, Ontario MNR, Esri Canada, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA, AAFC, NRCan



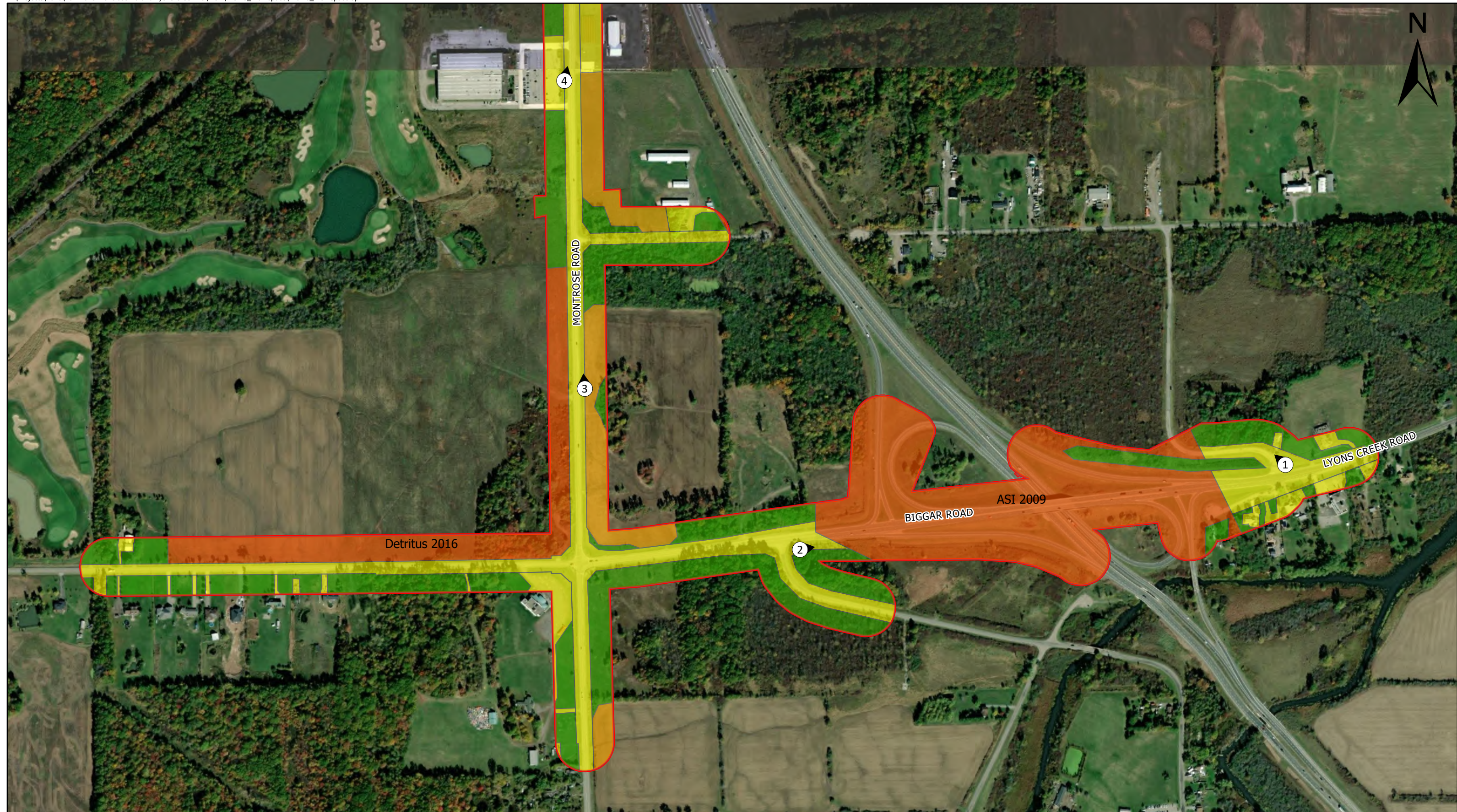
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Figure 7: Montrose Road and Lyons Creek Study Area – Soil Drainage




	STUDY AREA MAP KEY	Earthstar Geographics Projection: NAD 1983 MTM 10 Scale: 1:22,133 Page Size: 11 x 17	0 1.25 Kilometers ASI Project No.: 20EA_025 Date: 2020-09-09 9:22 AM Drawn By: ESB File: 11x17_Landscape
	Figure 8: Stage 1 Archaeological Assessment Results (Key Plan)		



	 STUDY AREA	 ARCHAEOLOGICAL POTENTIAL: REQUIRES PEDESTRIAN SURVEY
	 PREVIOUSLY ASSESSED: NO FURTHER WORK REQUIRED	 ARCHAEOLOGICAL POTENTIAL: REQUIRES TEST PIT SURVEY
	 DISTURBED: NO POTENTIAL	 PHOTO LOCATION AND DIRECTION

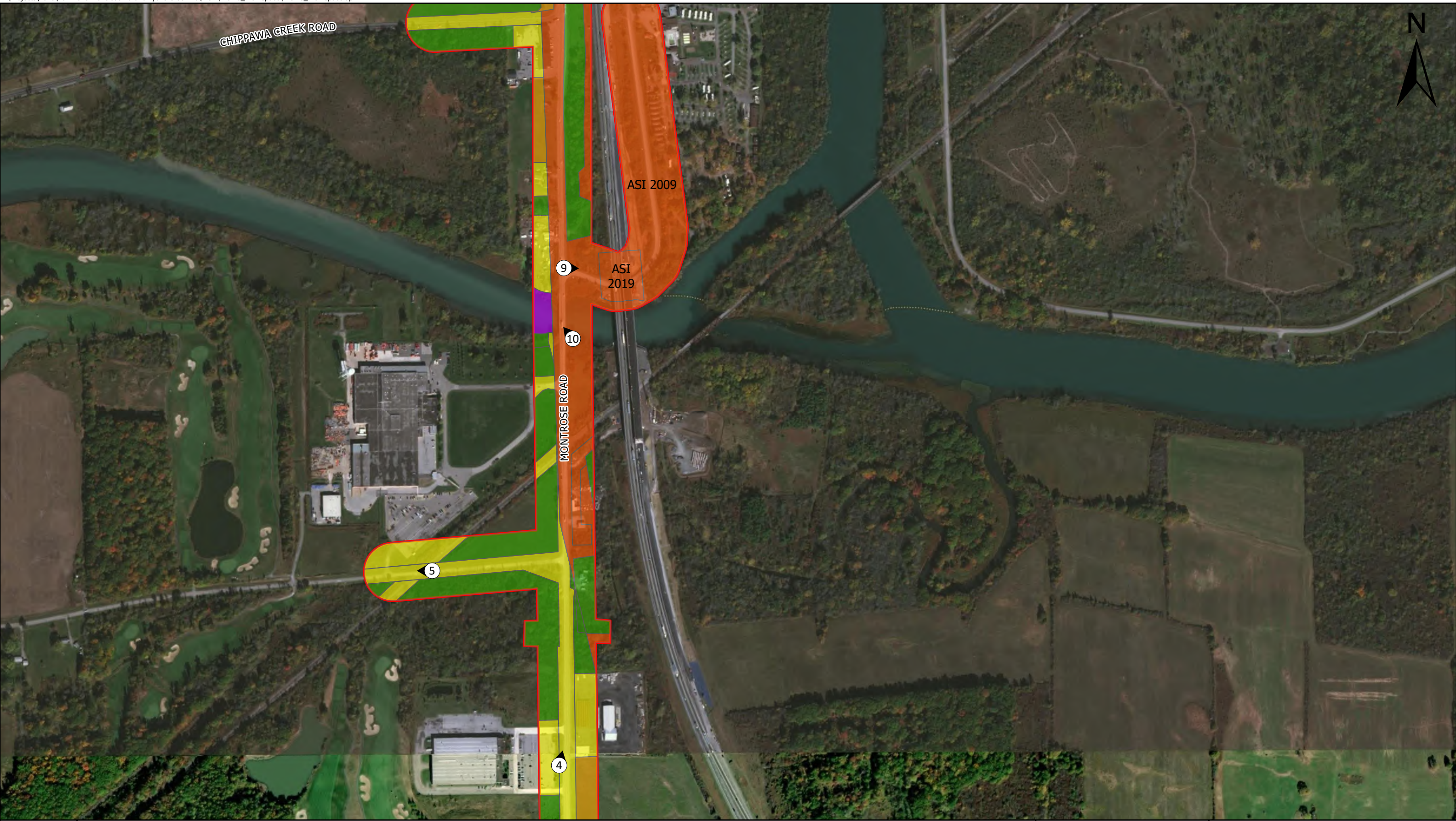
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Meters

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Figure 9: Stage 1 Archaeological Assessment Results (Sheet 1)












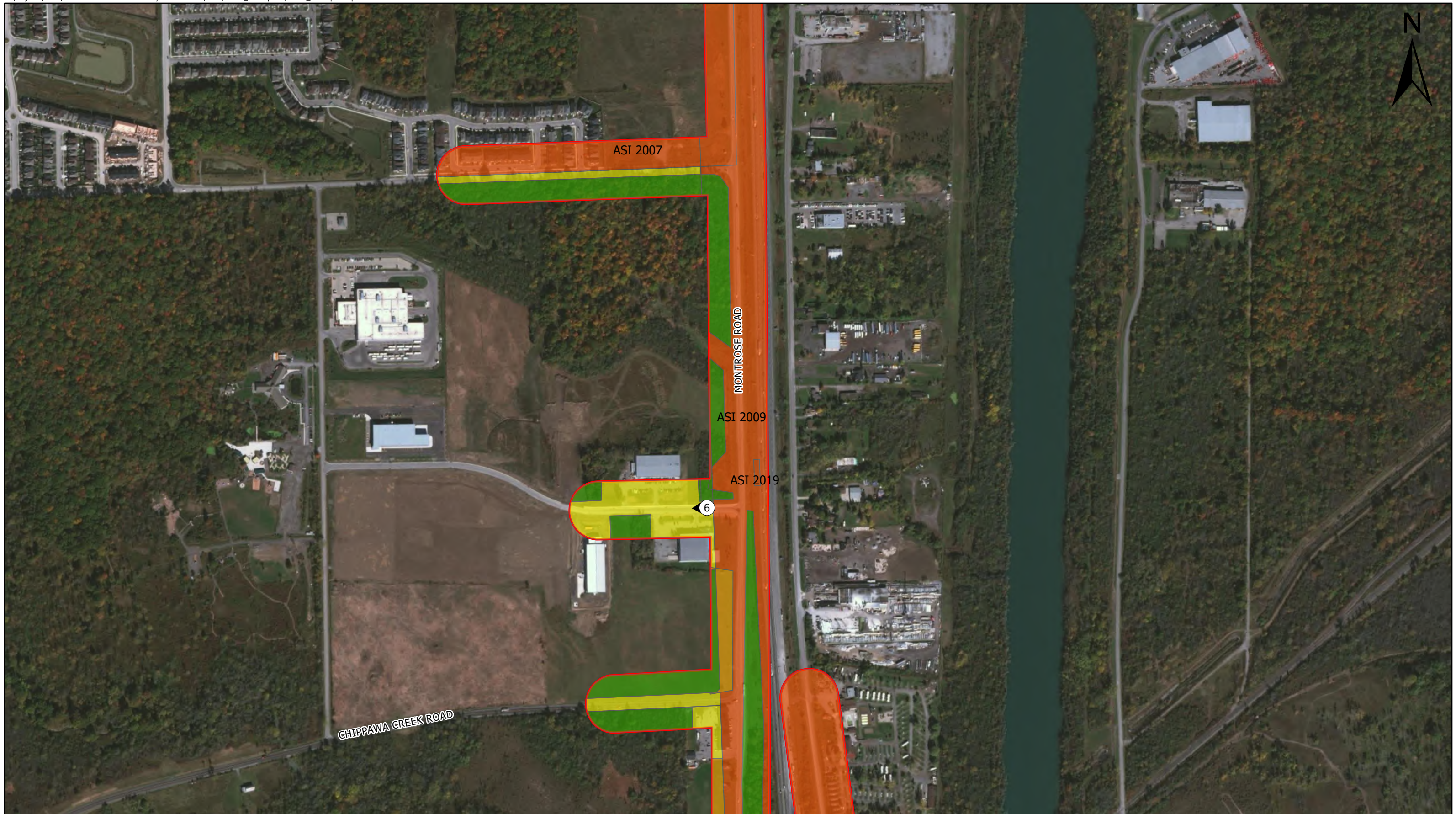






	 STUDY AREA	 ARCHAEOLOGICAL POTENTIAL: REQUIRES TEST PIT SURVEY	 PHOTO LOCATION AND DIRECTION	Maxar Projection: NAD 1983 MTM 10 Scale: 1:6,000 Page Size: 11 x 17
	 PREVIOUSLY ASSESSED: NO FURTHER WORK REQUIRED	 WATERCOURSE		
 DISTURBED: NO POTENTIAL	 ARCHAEOLOGICAL POTENTIAL: REQUIRES PEDESTRIAN SURVEY			0  375 Meters
		ASI Project No.: 20EA_025 Date: 2021-07-27 9:11 AM		Drawn By: JFernandez File: 11x17_Landscape


Figure 10: Stage 1 Archaeological Assessment Results (Sheet 2)



 STUDY AREA	 ARCHAEOLOGICAL POTENTIAL: REQUIRES PEDESTRIAN SURVEY
 PREVIOUSLY ASSESSED: NO FURTHER WORK REQUIRED	 ARCHAEOLOGICAL POTENTIAL: REQUIRES TEST PIT SURVEY
 DISTURBED: NO POTENTIAL	 PHOTO LOCATION AND DIRECTION

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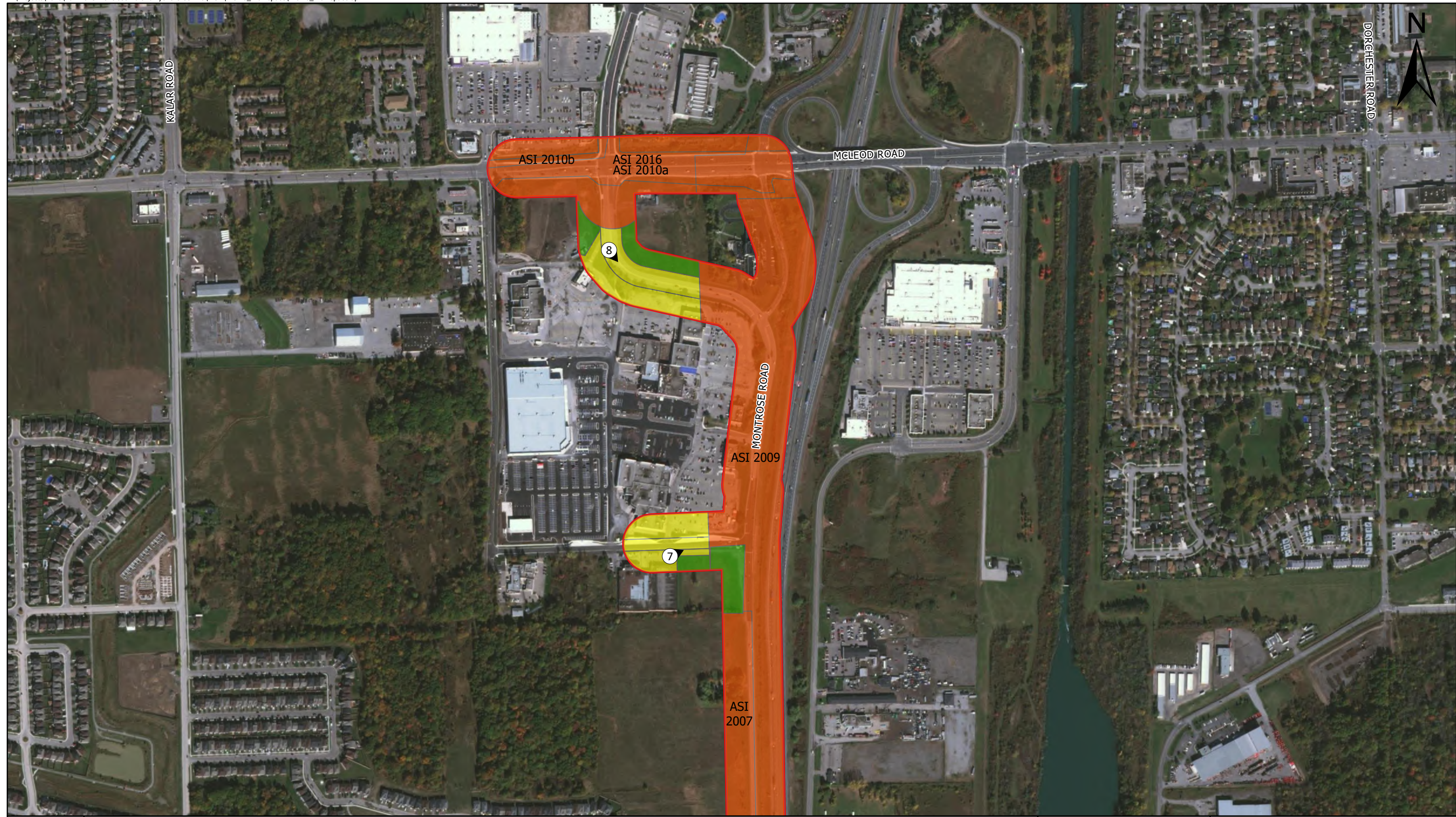
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Meters

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Figure 11: Stage 1 Archaeological Assessment Results (Sheet 3)



- STUDY AREA
- PREVIOUSLY ASSESSED: NO FURTHER WORK REQUIRED
- DISTURBED: NO POTENTIAL
- ARCHAEOLOGICAL POTENTIAL: REQUIRES TEST PIT SURVEY
- PHOTO LOCATION AND DIRECTION

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Meters	
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Figure 12: Stage 1 Archaeological Assessment Results (Sheet 4)

8.0 IMAGES



Plate 1: Lands beyond disturbed road ROW require Stage 2 survey



Plate 2: Lands beyond disturbed road ROW require Stage 2 survey



Plate 3: Lands beyond disturbed road ROW require Stage 2 survey



Plate 4: Disturbed road ROW and extensive landscaping and buried utilities



Plate 5: Disturbed road and rail ROW; no potential



Plate 6: Disturbed road ROW; no potential



Plate 7: Disturbed road ROW; no potential



Plate 8: Disturbed road ROW; no potential



Plate 9: Representative photo of area along Welland River, disturbed by road cuts and erosion control



Plate 10: Commercial complex along river, disturbed. Google Earth photo used to show area without tree cover (April 2021)