Stage 1 Archaeological Assessment Extension of Intermodal Drive to Gorewood Drive (Lots 1-2, Concession 8 Northern Division, Geographical Toronto Gore Township, County of Peel) City of Brampton, Regional Municipality of Peel

Original Report

Prepared for:

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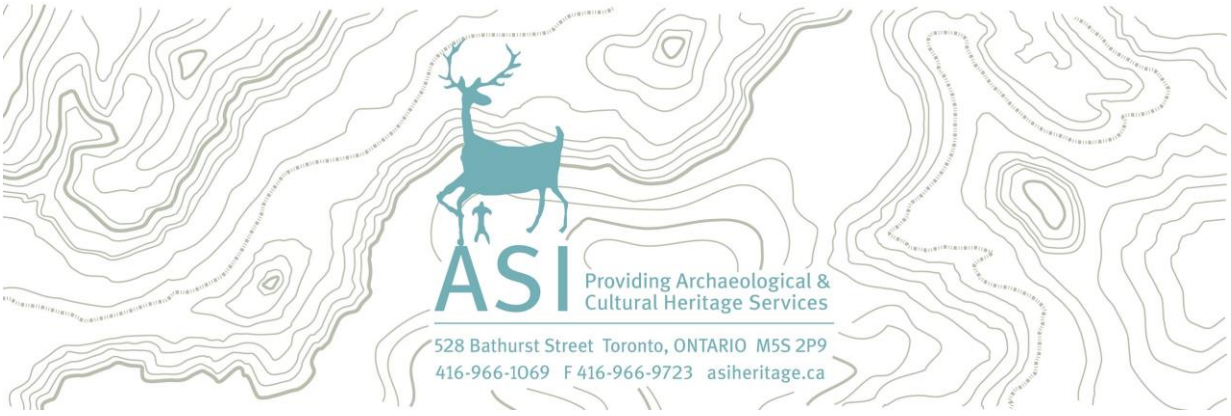

Executive Summary

Archaeological Services Inc. (ASI) was contracted by Arcadis Canada Inc. to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Extension of Intermodal Drive to Gorewood Drive Municipal Class Environmental Assessment. This project involves extending Intermodal Drive to Gorewood Drive to provide an alternate, shorter route for traffic to access Steeles Avenue from the east end of the employment area.

The Stage 1 Project Area consists of five proposed alternatives between Intermodal Drive to the west and Gorewood Drive to the east:

- Alternative 4A.
- Alternative 4B.
- Alternative 4D.
- Alternative 4F.
- Alternative 4G.

The Stage 1 background study determined 75 previously registered archaeological sites are located within one kilometre of the Project Area, none of which are located within 50 metres of the Project Area. The property inspection determined that parts of Alternative 4A, Alternative 4B, Alternative 4D, Alternative 4F, and Alternative 4G exhibit archaeological potential and require Stage 2 archaeological assessment by test pit survey at five metre intervals, prior to any proposed construction activities on these lands. The remainder of the Project Area does not retain archaeological potential on account of deep and extensive land disturbance. These lands do not require further archaeological assessment.

Project Personnel

- **Principal**: Lisa Merritt, MSc. (P094) Partner, Director, Environmental Assessment Division
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1.0 Project Context

Archaeological Services Inc. (ASI) was contracted by Arcadis Canada Inc. to conduct a Stage 1 Archaeological Assessment (Background Research and Property Inspection) as part of the Extension of Intermodal Drive to Gorewood Drive Municipal Class Environmental Assessment. This project involves extending Intermodal Drive to Gorewood Drive to provide an alternate, shorter route for traffic to access Steeles Avenue from the east end of the employment area.

The Stage 1 Project Area consists of five proposed alternatives between Intermodal Drive to the west and Gorewood Drive to the east:

- Alternative 4A (Figure 1: dotted outline in red).
- Alternative 4B (Figure 1: outlined in green).
- Alternative 4D (Figure 1: outlined in blue).
- Alternative 4F (Figure 1: outlined in yellow).
- Alternative 4G (Figure 1: dotted outline in teal).

All activities carried out during this assessment were completed in accordance with the *Ontario Heritage Act* (1990, as amended in 2023) and the 2011 *Standards and Guidelines for Consultant Archaeologists* (S & G), administered by the Ministry of Citizenship and Multiculturalism (MCM 2011).

1.1 Development Context

All work has been undertaken as required by the *Environmental Assessment Act, RSO* (Environmental Assessment Act, R.S.O. c. E.18, 1990 as amended 2022) and regulations made under the Act, and are therefore subject to all associated legislation. This project is being conducted in accordance with the *Municipal Class Environmental Assessment* process (Municipal Engineers Association, 2023).

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment and property inspection was granted by Arcadis Canada Inc. on January 25, 2024.

1.1.1 Treaties

The Project Area is within Treaty 13a and is within the Huron Wendat Nation's Area of interest for archaeology.

Treaty 13a was signed on August 2, 1805 between the Mississaugas and the British Crown in Port Credit at the Government Inn. A provisional agreement was reached in which the Mississaugas ceded 70,784 acres of land bounded by the Toronto Purchase of 1787 in the east, the Brant Tract in the west, and a northern boundary that ran six miles back from the shoreline of Lake Ontario. The Mississaugas also reserved the sole right of fishing at the Credit River and were to retain a one-mile strip of land on each of its banks, which became the Credit Indian Reserve.

On September 5, 1806, the signing of Treaty 14 confirmed the Head of the Lake Purchase between the Mississaugas of the Credit and the Crown for lands along the north shore of Lake Ontario southwest of the Toronto Purchase to what is now Oakville (Mississauga of the New Credit First Nation, 2001; Mississaugas of the Credit First Nation, 2017).

1.2 Historical Context

1.2.1 Indigenous Land Use and Settlement

Current archaeological evidence indicates humans were present in southern Ontario 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 archaeological evidence for cemeteries dates to approximately 4,500-3,000 B.P. and is interpreted by archaeologists to be indicative of increased social organization and the investment of labour into social infrastructure (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.), larger settlement sites focused on horticulture begin to dominate the archaeological record. Seasonal dispersal 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., archaeological research focusing on these horticultural societies note that this episodic community dispersal was no longer practised and these populations now 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 the process of coalescence, the socio-political organization of these First Nations, as described historically by the French and English explorers who first visited southern Ontario, was developed. Other First Nation communities continued to practice residential mobility and to harvest available resources across landscapes they returned to seasonally/annually.

By 1600 C.E., the Confederation of Nations were encountered by the first European explorers and missionaries in Simcoe County. By the 1640s, devastating epidemics and the traditional enmity between the Haudenosaunee and the Attawandaron and the Huron-Wendat (and their Algonquian allies such as the Nippissing and Odawa) led to their dispersal from southern Ontario. Shortly afterwards, the Haudenosaunee established a series of settlements at strategic locations along the trade routes inland from the north shore of Lake Ontario. Peace was achieved between the Haudenosaunee and the Anishinaabe Nations in August of 1701 when representatives of more than twenty Anishinaabe Nations assembled in Montreal to participate in peace negotiations. Peace was confirmed again at council held at Lake Superior when the Haudenosaunee delivered a wampum belt to the Anishinaabe Nations. This agreement between the Haudenosaunee and Anishinaabe nations is referred to as the Dish with One Spoon.

In 1763, following the fall of Quebec, New France was transferred to British control with the Treaty of Paris. The British government began to pursue major land purchases to the north of Lake Ontario in the early nineteenth century. The Crown acknowledged the Mississaugas of the Credit as the owners of the lands between Georgian Bay and Lake Simcoe and entered into negotiations for additional tracts of land as the need arose to facilitate European settlement.

1.2.2 Post-Contact Settlement

Historically, the Project Area is located in the Geographical Toronto Gore Township, County of Peel in Lots 1-2 & Concession 8 Northern Division.

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). 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.

Alexander Henry, a Northwest Company fur trader and merchant, for example, visited with the Michi Saagiig in 1764 and in his published account describes villages along the Humber River (Henry & Gough, 1992). Throughout the period of initial European settlement, Indigenous groups continued to inhabit southern Ontario, and continued to fish, gather, and hunt within their traditional and

treaty territories, albeit often with legal and informal restrictions imposed by colonial authorities and settlers. In many cases, Indigenous peoples acted as guides and teachers, passing on their traditional knowledge to Euro-Canadian settlers, allowing them to sustain themselves in their new homes. Indigenous peoples entered into economic arrangements and partnerships, and often inter-married with settlers. However, pervasive and systemic oppression and marginalization of Indigenous peoples also characterized Euro-Canadian colonization, with thousands being displaced from their lands, denied access to traditional and treaty hunting, fishing, and collecting grounds, and forced to assimilate with Euro-Canadian culture through mandatory attendance at Day and Residential Schools (Ray, 2005; Rogers & Smith, 1994).

1.2.2.1. Toronto Gore Township

The Township of Toronto Gore was established in 1831, and its name is derived from its particular boundary shape, as it resembles a wedge introduced between the adjacent townships of Chinguacousy, Toronto, Vaughan, and Etobicoke. The area that would eventually comprise the Township of Toronto Gore was formally surveyed in 1818, and the first "legal" settlers took up their lands later in that same year. The first landowners in the township were composed of settlers from New Brunswick, the United States, and also some United Empire Loyalists and their children. The Township of Toronto Gore remained a part of the County of Peel until 1973, and in 1974, the Township became a part of the City of Brampton (Armstrong, 1985; Mika & Mika, 1977).

1.2.3 Map Review

The 1859 *Tremaine's Historical County Map of Peel County* (Tremaine, 1859), 1877 *Illustrated Historical Atlas of the County of Peel* (Pope, 1877), and the 1915 Topographic Map Brampton Sheet (Department of Militia and Defence, 1915) were examined to determine the presence of historic features within the Project Area during the nineteenth and twentieth centuries (Figures 2-4).

It should be noted that not all features of interest were mapped systematically in the Ontario series of historical atlases. For instance, they were often financed by subscription limiting the level of detail provided on the maps. Moreover, not

every feature of interest would have been within the scope of the atlases. The use of historical map sources to reconstruct or predict the location of former features within the modern landscape generally begins by using common reference points between the various sources. The historical maps are geo-referenced to provide the most accurate determination of the location of any property on a modern map. The results of this exercise can often be imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including differences of scale and resolution, and distortions introduced by reproduction of the sources.

The 1859 map (Figure 2) and 1877 map (Figure 3) indicate Gorewood Drive to be a historically surveyed road. No structures are illustrated within 100 metres of the Project Area. The 1915 map (Figure 4) shows the West Humber River within 300 metres northeast of the Project Area. No features other than Gorewood Drive are shown within 100 metres of the Project Area on the 1859, 1877, and 1915 maps.

1.2.4 Aerial and Orthoimagery Review

Historical aerial imagery from 1954 (Hunting Survey Corporation Limited, 1954) shows the western portions of Alternative 4A, Alternative 4B, Alternative 4D, Alternative 4F, and Alternative 4G in a rural agricultural context, with the southeastern portions consisting of recently constructed residential houses fronting Gorewood Drive (Figure 5). Imagery from 1961 (Figure 6) and 1989 (Figure 7) show a clearer image of ground conditions within the Alternatives, which remain in a similar context to the 1954 aerial (City of Toronto Archives, 1961). Intermodal Drive had not yet been constructed. Imagery from 2004 shows construction of Intermodal Drive, within the western portion of all five Alternatives, and an unnamed private access road connecting Gorewood Drive and Intermodal Drive (Figure 8).

A review of available Google satellite imagery between 2003 and 2022 shows earth moving activities related to use as trucking yards in 2019, 2021, and 2022 (Image 10 to Image 12).

1.3 Archaeological Context

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Project 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 MCM through "Ontario's Past Portal"; published and unpublished documentary sources; and the files of ASI.

1.3.1 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 Project 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 B.P. (Karrow & Warner, 1990, fig. 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 Project Area is located within the bevelled till plains of the Peel Plain physiographic region of southern Ontario (Chapman & Putnam, 1984).

The Peel Plain is a level-to-undulating area of clay soil which covers an area of approximately 77,700 hectares across the central portions of the Regional Municipalities of York, Peel, and Halton. The Peel Plain has a general elevation of between 500 and 750 feet above sea level with a gradual uniform slope towards Lake Ontario. The Peel Plain is sectioned by the Credit, Humber, Don, and Rouge Rivers with deep valleys as well as a number of other streams such as the Bronte, Oakville, and Etobicoke Creeks. These valleys are in places bordered by trains of sandy alluvium. The region is devoid of large, undrained depressions, swamps, and bogs though nevertheless the dominant soil possesses imperfect drainage.

The Peel Plain overlies shale and limestone till which in many places is veneered by occasionally varved clay. This clay is heavy in texture and more calcareous than the underlying till and was presumably deposited by meltwater from limestone regions and deposited in a temporary lake impounded by higher ground and the ice lobe of the Lake Ontario basin. The Peel Plain straddles across the contact of the grey and red shales of the Georgian Bay and Queenston Formations, respectively, which consequently gives the clay southwest of the Credit River a more reddish hue and lower lime content than the clay in the eastern part of the plain. Additionally, the region exhibits exceptional isolated tracts of sandy soil specifically in Trafalgar Township, near Unionville, and north of Brampton where in the latter location there is a partly

buried esker. The region does not possess any good aquifers and the high level of evaporation from the clay's now deforested surface is a disabling factor in ground-water recharge. Further, deep groundwater accessed by boring is often found to be saline (Chapman & Putnam, 1984, pp. 174–175).

Figure 9 shows the surficial geology within the Project Area consists of fine textured glaciolacustrine deposits of silt and clay, minor sand and gravel, interbedded silt and clay and gritty, pebbly flow till and rainout deposits (Ontario Geological Survey, 2007).

Soils within the Project Area consist of Peel Clay, a grey-brown podzolic with imperfect drainage, and Malton Clay with poor drainage (Figure 10).

The West Humber River is approximately 280 metres northeast of the Project Area. The West Humber River originates in the Town of Caledon. The Humber River Watershed drains an area of approximately 911 square kilometers from its headwaters on the Niagara Escarpment and the Oak Ridges Moraine, flowing down to the Humber River and then into Lake Ontario. It encompasses 1,800 kilometres of waterway and 600 different bodies of water. Land use in the watershed consists of 54 percent rural, 33 percent urban, and 13 percent urbanizing (TRCA 2019). Euro-Canadian clearcutting for agricultural purposes likely had a major impact on the Humber and its tributaries in terms of ecology, water flow, and erosion from deforestation (ASI 2016). Archaeological research reveals a long history of human settlement along the back of the river. Within the watershed there is a system of trails known as the Carrying Place Trail, a route running from Lake Ontario up the Humber to Lake Simcoe. This route was a busy and important trade route used by Indigenous peoples and Euro-Canadian settlers as it provided easy access inland (ASI 2016; Finkelstein, 2006). The Humber River was designated a Canadian Heritage River on account of its historical significance (TRCA 2019).

1.3.2 Previously Registered Archaeological Sites

In Ontario, information concerning archaeological sites is stored in the Ontario Archaeological Sites Database maintained by the MCM. 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 Project Area under review is located in Borden block *AkGv*.

According to the Ontario Archaeological Sites Database, 75 previously registered archaeological sites are located within one kilometre of the Project Area, none of which are within 50 metres (MCM 2024). A summary of the sites is provided in Appendix A.

1.3.3 Previous Archaeological Assessments

Background research determined there are no previous archaeological assessments that detail fieldwork within 50 metres of the Project Area.

2.0 Property Inspection

2.1 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 Catherine Kitchen (R1364) on February 29, 2024, in order to gain first-hand knowledge of the geography, topography, and current conditions and to evaluate and map archaeological potential of the Project Area. It was a systematic visual inspection from publicly accessible lands/public rights-of-way 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 and three degrees Celsius), per S & G Section 1.2., Standard 2. Field photography is presented in Section 7.1 (Image 1 to Image 9), and field observations are overlaid onto the existing conditions of the Project Area in Section 8.0 (Figure 11).

2.2 Current Land Use and Field Conditions

Alternative 4A, Alternative 4B, Alternative 4D, Alternative 4F, and Alternative 4G are located between Intermodal Drive and Gorewood Drive. The Alternatives consist of parts of the existing Intermodal Drive and Gorewood Drive rights-of-way. Between these roads the Alternatives pass through a residential and commercial/industrial area. The residential area includes properties with single detached dwellings which are zoned to allow non-residential use. Non-residential use includes use as trucking yards and freight storage southwest of the houses.

Intermodal Drive is currently a two-way road with two lanes per direction. It is surrounded by industrial buildings and shipping storage areas. Part of Alternative 4F contains an unnamed two-lane private access road that allows access to Intermodal Drive from Gorewood Drive, located between 8124 Gorewood Drive and 8140 Gorewood Drive. Gorewood Drive is a two-lane road in a northwest-southeast alignment. The Alternatives are northwest of Highway 407.

Bell, gas, sanitary sewer, storm sewer, and water are present along Intermodal Drive. A gas line also follows the northeast side of Gorewood Drive which services the residential houses southwest of the road.

3.0 Analysis of Archaeological Potential

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

- Previously identified archaeological sites within one kilometre (See Table 1).
- Water sources within 300 metres: primary, secondary, or past water source (West Humber River); and
- Early historic transportation routes within 100 metres (Gorewood Drive)

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 no property within the Project Area is Listed or Designated under the *Ontario Heritage Act*.

The property inspection determined that parts of Alternative 4A, Alternative 4B, Alternative 4D, Alternative 4F, and Alternative 4G exhibit archaeological potential. These areas will require Stage 2 archaeological assessment prior to any construction activities or other proposed impacts. 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 (Image 3 to Image 8; Figure 11: areas highlighted in green). The background research and property inspection determined lands within parts of Alternative 4A, Alternative 4B, Alternative 4D, Alternative 4F, and Alternative 4G have been graded and used heavily used for a few years as trucking yards (Image 3, Image 5 to Image 6). According to the S & G Section 2.1.8, Standard 2, test pit survey may be conducted throughout a disturbed area to confirm the areas have been completely disturbed.

The remainder of Alternative 4A, Alternative 4B, Alternative 4D, Alternative 4F, and Alternative 4G have been subjected to deep soil disturbance events due to the construction of Intermodal Drive and Gorewood Drive, construction of the Highway 407 road bridge involving grading and ditching along Gorewood Drive, construction of houses, and installation of utilities (Bell, gas, sanitary sewer, storm sewer, and water). According to the S & G Section 1.3.2 these areas do not retain archaeological potential (Image 1 to Image 2, Image 5 to Image 9; Figure 11: areas highlighted in yellow) and do not require further survey.

3.1 Conclusions

The Stage 1 background study determined 75 previously registered archaeological sites are located within one kilometre of the Project Area, none of which are within 50 metres of the Project Area. The property inspection determined that parts of the Project Area exhibit archaeological potential and will require archaeological assessment (Figure 11: areas highlighted in green).

4.0 Recommendations

The following recommendations are made:

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

2) The remainder of the Project 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 Project 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 Archaeology Programs Unit of the MCM should be immediately notified.

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

5.0 Advice on Compliance with Legislation

ASI advises compliance with the following legislation:

- This report is submitted to the MCM 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 S & G 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 MCM a letter will be issued by the MCM 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.

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7.0 Images

7.1 Field Photography

Image 1: Intermodal Drive is disturbed, no potential.

Image 2: Intermodal Drive is disturbed, no potential.

Image 3: Trucking yards require Stage 2 test pit survey to confirm extent of disturbance.

Image 4: Gorewood Drive right-of-way is disturbed, no potential.

Image 5: Yards beyond disturbed building footprints and buried utilities require Stage 2 test pit survey to confirm disturbance.

Image 6: Lands behind disturbed building footprints require Stage 2 test pit survey to confirm disturbance.

Image 7: Yards beyond disturbed building footprints require test pit survey.

Image 8: Yards beyond disturbed right-of-way require test pit survey.

Image 9: Gorewood Drive right-of-way is disturbed, no potential.

7.2 Historical Imagery

Image 10: Earth moving activities in 2019 (Google Earth Pro, 2024).

Image 11: Earth moving activities in 2021 (Google Earth Pro, 2024).

Image 12: Earth moving activities in 2022 (Google Earth Pro, 2024).

8.0 Maps

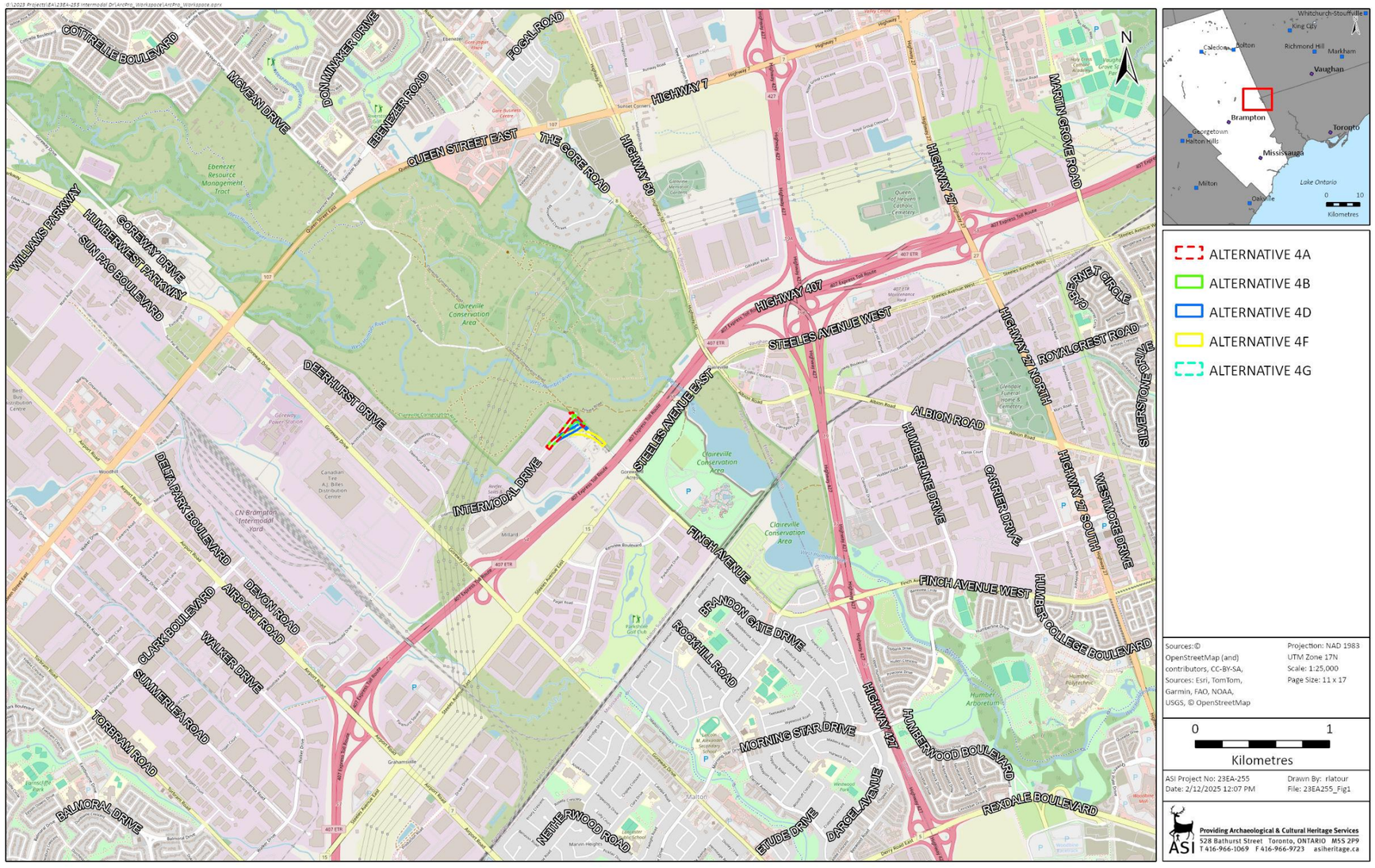

Figure 1: Extension of Intermodal Drive to Gorewood Drive Project Area.

Figure 2: Project Area (Approximate Location) Overlaid on the 1859 Tremaine's Map of the County of Peel.

Figure 3: Project Area (Approximate Location) Overlaid on the 1877 Illustrated Historical Atlas of the County of Peel.

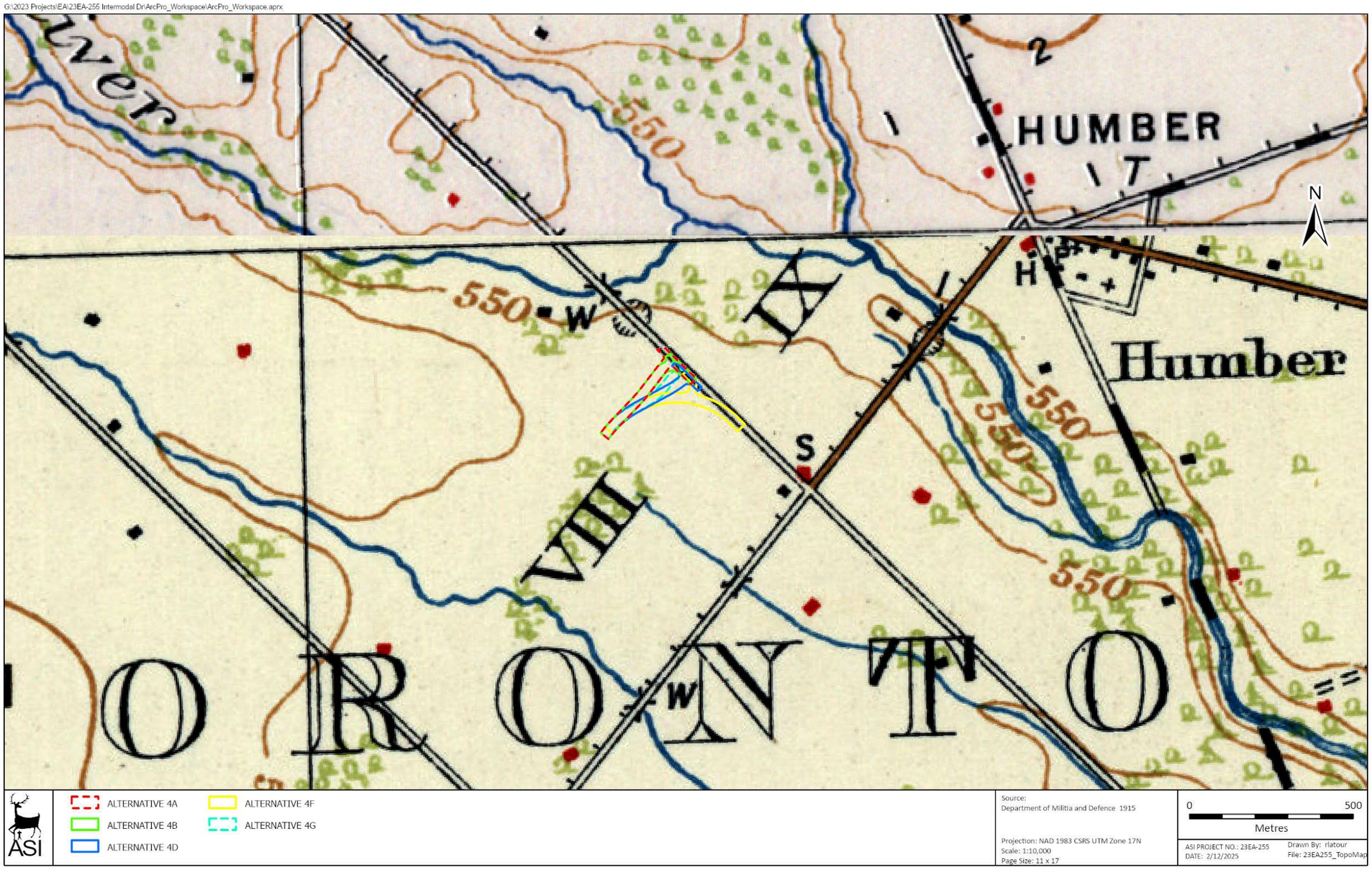

Figure 4: Project Area (Approximate Location) Overlaid on the 1915 Topographic Map Brampton Sheet.

Figure 5: Project Area (Approximate Location) Overlaid on the 1954 Aerial Photography.

Figure 6: Project Area (Approximate Location) Overlaid on the 1961 Aerial Photography.

Figure 7: Project Area (Approximate Location) Overlaid on the 1989 Aerial Photography.

Figure 8: Project Area (Approximate Location) Overlaid on the 2004 Aerial Photography.

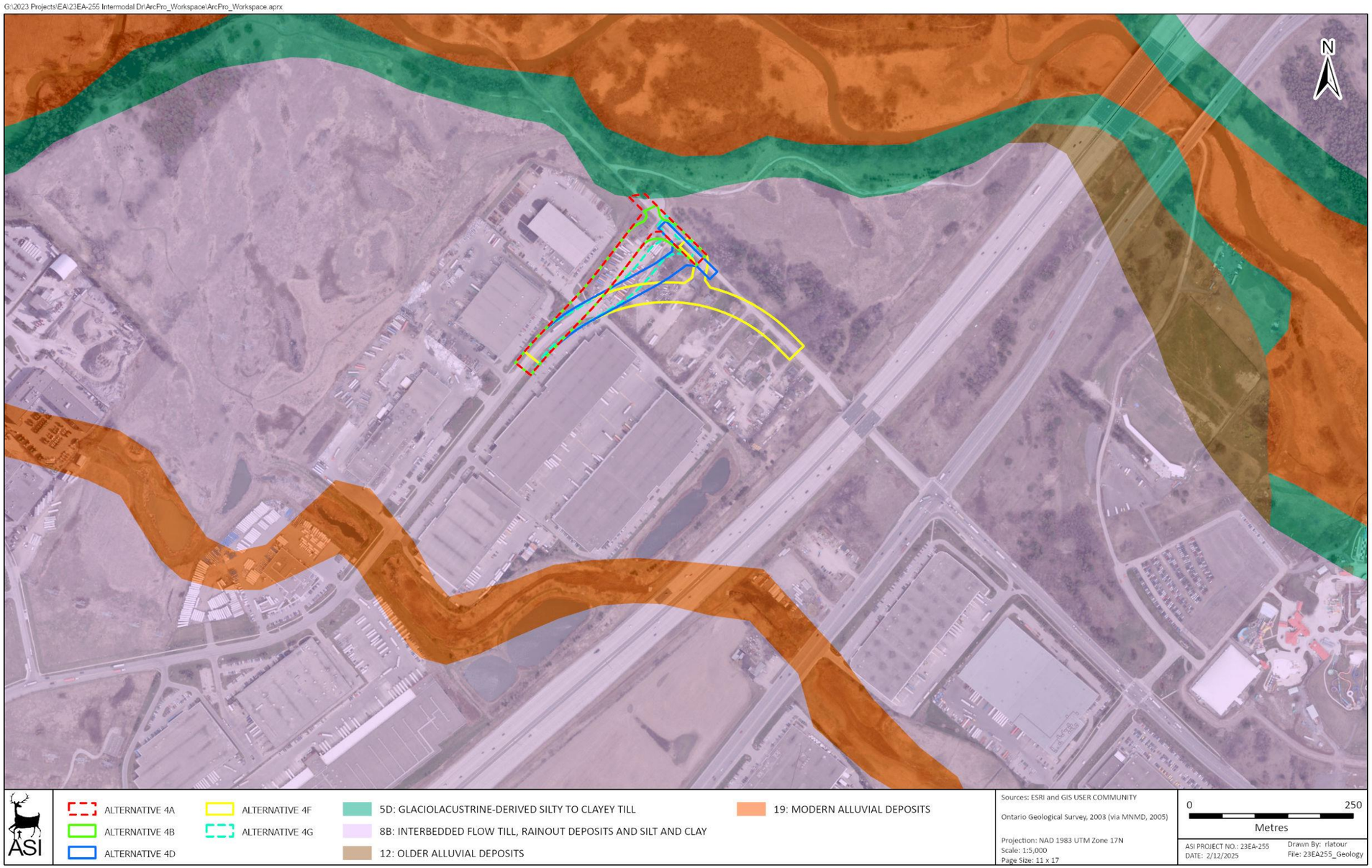

Figure 9: Project Area – Surficial Geology.

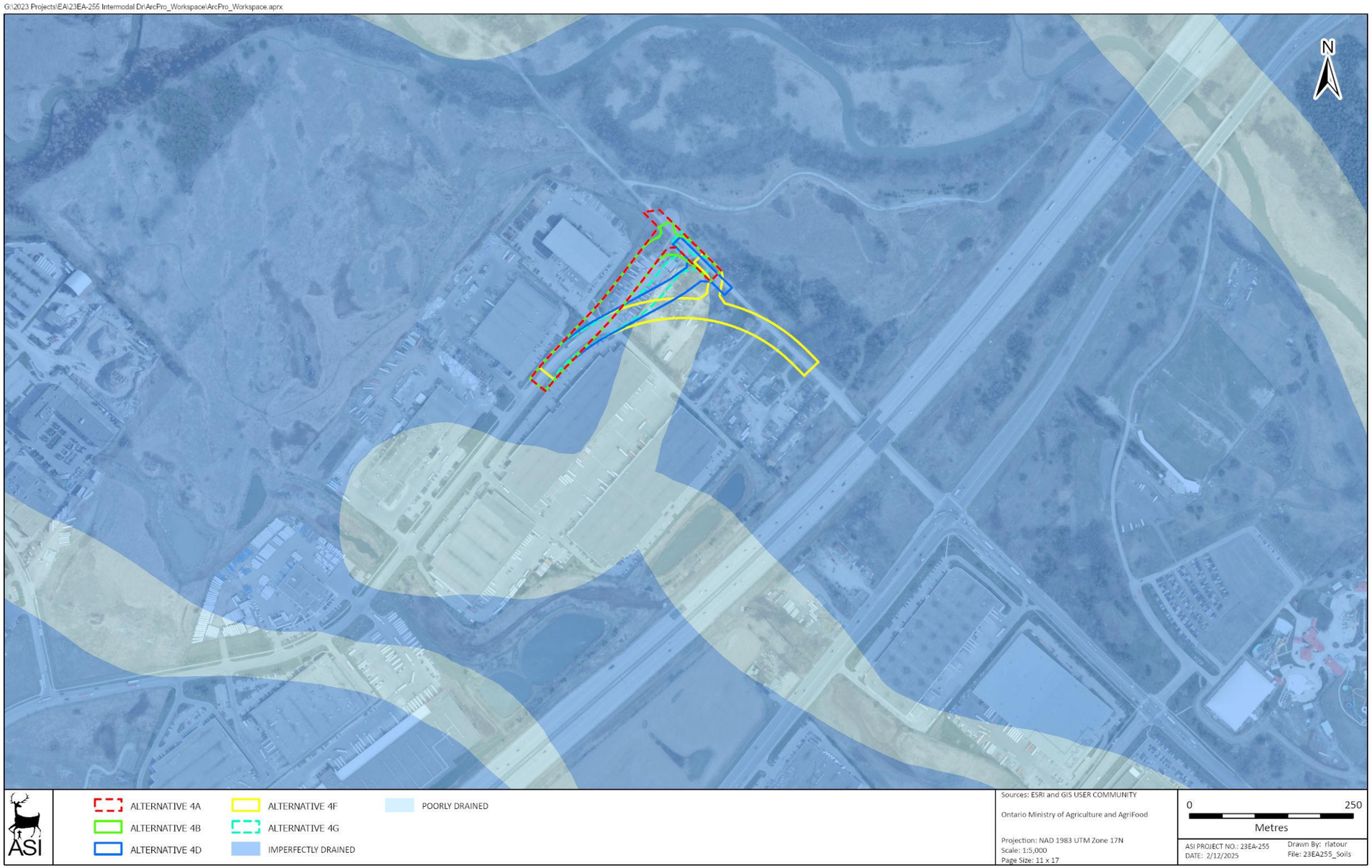

Figure 10: Project Area – Soil Drainage.

Figure 11: Extension of Intermodal Drive to Gorewood Drive – Results of Stage 1.

Appendix A: Table of Previously Registered Archaeological Sites

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

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-75	Familiaris	Paleo, Late	Campsite	TRCA 1988
AkGv-76	Inner	Pre-contact Indigenous	Unknown	TRCA 1988
AkGv-77	Syvil	Woodland	Campsite	TRCA 1988
AkGv-78	Vulpes	Pre-contact Indigenous	Unknown	TRCA 1988
AkGv-79	Sunshine	Paleo	Campsite	TRCA 1988
AkGv-118	Tegis	Archaic	Campsite	Royal Ontario Museum 1991
AkGv-119	Flood	Post-contact Indigenous	Scatter	TRCA 1991
AkGv-121	ROW	Archaic	Unknown	TRCA 1991
AkGv-123	Legu	Paleo	Campsite	TRCA 1991

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-174	CCA-20-1	Euro-Canadian	Scatter	TRCA 2000
AkGv-196		Post-contact	Unknown	TRCA 2004
AkGv-197		Post-contact	Unknown	TRCA 2004
AkGv-198		Post-contact	Unknown	TRCA 2004
AkGv-204		Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-205	Claireville 2	Archaic, Middle	Campsite	TRCA 2004
AkGv-206	Claireville 44	Pre-contact Indigenous	Campsite	TRCA 2004
AkGv-207	Claireville 4	Post-contact	Unknown	TRCA 2004
AkGv-208	Claireville 1	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-209	Claireville 3	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-210	Claireville 5	Post-contact	Unknown	TRCA 2004

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-211	Claireville 6	Post-contact	Unknown	TRCA 2004
AkGv-212	Claireville 7	Post-contact	Unknown	TRCA 2004
AkGv-213	Claireville 8	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-214	Claireville 9	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-215	Claireville 10	Post-contact	Unknown	TRCA 2004
AkGv-216	Claireville 11	Post-contact	Unknown	TRCA 2004
AkGv-217	Claireville 12	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-219	Claireville 14	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-220	Claireville 15	Post-contact	Unknown	TRCA 2004
AkGv-221	Claireville 16	Pre-contact Indigenous	Unknown	TRCA 2004

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-222	Claireville 17	Post-contact	Unknown	TRCA 2004
AkGv-223	Claireville 18	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-224	Claireville 19	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-225	Claireville 20	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-226	Claireville 21	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-227	Claireville 22	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-228	Claireville 23	Archaic, Early	Unknown	TRCA 2004
AkGv-229	Claireville 24	Paleo	Unknown	TRCA 2004
AkGv-230	Claireville 25	Post-contact	Unknown	TRCA 2004

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-231	Claireville 26	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-232	Claireville 31	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-233	Claireville 28	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-234	Claireville 29	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-235	Claireville 30	Post-contact	Unknown	TRCA 2004
AkGv-236	Claireville 31	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-237	Claireville 32	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-238	Claireville 34	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-240	Claireville 57	Pre-contact Indigenous	Unknown	TRCA 2004

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-241	Claireville 37	Woodland, Early	Unknown	TRCA 2004
AkGv-242	Claireville 38	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-243	Claireville 39	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-244	Claireville 40	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-245	Claireville 41	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-246	Claireville 42	Post-contact	Unknown	TRCA 2004
AkGv-247	Claireville 43	Woodland, Middle	Campsite	TRCA 2004
AkGv-248	Claireville 45	Pre-contact Indigenous	Campsite	TRCA 2004
AkGv-250	Claireville 47	Woodland	Campsite	TRCA 2004

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-251	Claireville 48	Post-contact	Unknown	TRCA 2004
AkGv-252	Claireville 49	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-253	Claireville 50	Post-contact	Unknown	TRCA 2004
AkGv-254	Claireville 51	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-255	Claireville 52	Post-contact	Unknown	TRCA 2004
AkGv-256	Claireville 53	Post-contact	Unknown	TRCA 2004
AkGv-257	Claireville 54	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-258	Claireville 55	Pre-contact Indigenous	Unknown	TRCA 2004
AkGv-259	Claireville 56	Pre-contact Indigenous	Unknown	TRCA 2004

Borden number	Site Name	Temporal/ Cultural Affiliation	Site type	Researcher
AkGv-280	Claireville 58	Pre-contact Indigenous	Campsite	TRCA 2007
AkGv-281	Claireville 59	Pre-contact Indigenous	Findspot	TRCA 2007
AkGv-328		Pre-contact Indigenous	Scatter	TRCA 2014
AkGv-329		Pre-contact Indigenous	Unknown	TRCA 2014