

# Appendix P – Stage 2 Archaeology Report



**407 TRANSITWAY – WEST OF BRANT STREET TO WEST OF HURONTARIO STREET**  
**MINISTRY OF TRANSPORTATION - CENTRAL REGION**

**STAGE 2 ARCHAEOLOGICAL ASSESSMENT  
407 TRANSITWAY FROM WEST OF HURONTARIO STREET TO WEST OF BRANT STREET  
G.W.P. 16-20003  
(FORMER TOWNSHIP OF TORONTO, COUNTY OF PEEL  
AND FORMER TOWNSHIPS OF TRAFALGAR, AND NELSON, COUNTY OF HALTON)  
CITY OF BRAMPTON AND CITY OF MISSISSAUGA, PEEL REGION;  
TOWN OF HALTON HILLS, TOWN OF MILTON, TOWN OF OAKVILLE,  
AND CITY OF BURLINGTON; HALTON REGION, ONTARIO**

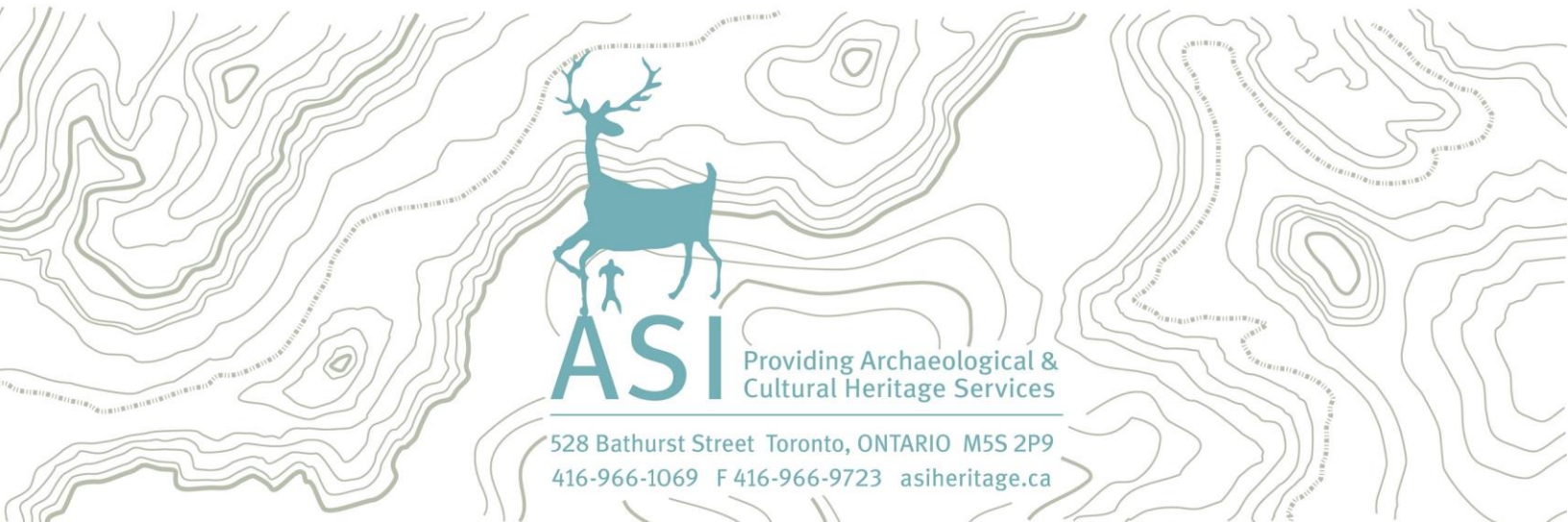
**ORIGINAL REPORT**

Prepared for:

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8 July, 2020



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**TOWN OF HALTON HILLS, TOWN OF MILTON, TOWN OF OAKVILLE,**  
**AND CITY OF BURLINGTON; HALTON REGION, ONTARIO**

**EXECUTIVE SUMMARY**

ASI was contracted by LGL on behalf of the MTO to conduct a Stage 2 archaeological assessment for the 407 Transitway from west of Brant Street to west of Hurontario Street. The Study Area consists of the approximately 43-kilometre-long Preferred Design from west of Hurontario Street to west of Brant Street and seven preferred stations, whose locations will be determined as part of the overall study. Due to alignment changes to the 407 Transitway Project Limits, the area surveyed as part of this assessment is larger than the final alignment and the additional assessed areas are not part of the preferred preliminary design alternative of the transitway. The additional assessed areas were initially assessed during the preliminary design but they were later redefined and/or eliminated.

The Stage 2 archaeological assessment for the 407 Transitway Project from Hurontario Street to Brant Street, was conducted intermittently between November 6, 2019 and May 22, 2020 for the property parcels where PTE had been acquired. The total survey area comprises 215 ha of both open and closed lands that encompasses approximately 167 ha of the preferred preliminary design alternative. During the course of the Stage 2 property survey, one historical Euro-Canadian site (H1), six pre-contact findspots (P4, P5, P6, P7, P8 and P9) and four pre-contact sites (P1, P2, P3 and the River site) were identified.

Due to their non-diagnostic nature and overall paucity of artifacts, findspots P4, P5, P6, P7, P8, and P9 do not have continued CHVI as per S & G Section 2.2, Standard 1ai, and therefore do not meet the requirements for Stage 3 assessment.

Site P1 (AjGw-632) is a non-diagnostic precontact Indigenous site measuring 5 m in diameter and consists of two flake fragments, two secondary retouch flakes, and one secondary knapping flake, all manufactured from Onondaga chert. A single Lockport chert secondary retouch flake was also recovered. Site P1 meets the requirements for Stage 3 assessment as per S & G Section 2.2, Standard 1.a.ii, and therefore requires further work.

Site P2 (AjGw-637) is a non-diagnostic precontact Indigenous site measuring 5 m in diameter and consists of two secondary retouch flakes and one flake fragment, manufactured from Onondaga and Lockport cherts. Site P2 does not meet the requirements for Stage 3 assessment as per S & G Section 2.2, Standard 1.a.ii, and therefore does not require further work.



Site P3 (AjGw-481) is a non-diagnostic precontact Indigenous site measuring 5 m in diameter and consists of two flake fragments and one secondary retouch flake, all manufactured from Onondaga chert. Two flake fragments and one secondary knapping flake manufactured from Bois Blanc chert were also recovered. Site P3 meets the requirements for Stage 3 assessment as per S & G Section 2.2, Standard 1.a.ii, and therefore requires further work.

At AjGw-631, H1, a total of 553 artifacts was recovered from the test pit survey and test unit excavations. The scatter, measuring approximately 35 m x 25 m was located south of Highway 407 ETR and east of Trafalgar Road within a residential lot. The analysis of the artifacts recovered from Site H1 indicates that it likely represents a Euro-Canadian occupation dating from the early nineteenth century to the late nineteenth or early twentieth century. This conclusion is supported by land use history research, ceramic assemblage, as well as the presence of hand wrought and machine cut nails. According to S & G: Section 2.2, Standard 1 (c), archaeological sites with more than 20 artifacts that pre-date 1900 are culturally significant and as such must be subject to a Stage 3 Site-Specific assessment.

The previously registered River Site (AjGw-68) was first encountered by MPP in 1985 and 1986 during an archaeological assessment for the proposed NPS 36 Parkway Belt West Pipeline project. The site is located south of the current Highway 407 and is not within the Preferred Preliminary Design for the 407 Transitway. The site is a multi-component site including a Late Woodland village ca. 1400-1450 CE; a Middle Woodland camp consisting of six vessels and a projectile point, suggested to be affiliated with the Point Peninsula Complex ca. 300 B.C. to 500 CE; and a Broad Point Archaic component ca. 1800-1400 CE. The River Site should be subject to a Stage 3 Site-specific assessment following S & G Section 3.2 prior to any construction or soil disturbing activities.

The Stage 1 background research identified five previously registered archaeological sites are located within the current preferred preliminary design alternative, but not within the current study area, and retain further CHVI: Bob Alton site (AiGw-97), 403-36 site (AiGw-165), 81-403-49 (AjGw-32), and 81-403-51 site (AjGw-33). The sites are recommended for Stage 2 survey to relocate them, due to the passage of time and paucity of mapping from when they were first identified. Site AjGw-43 was reinvestigated as part of the current project and due to its non-diagnostic nature and overall paucity of artifacts, does not have continued CHVI as per S & G Section 2.2, Standard 1ai, and therefore does not meet the requirements for Stage 3 assessment.



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### **REPORT DISCLAIMER**

NOTWITHSTANDING the results and recommendations presented in this study, Archaeological Services Inc. 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 Ministry of Heritage, Sport, Tourism and Culture Industries should be immediately notified.



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## 1.0 PROJECT CONTEXT

Archaeological Services Inc. (ASI) was contracted by LGL Limited (LGL) on behalf of the Ministry of Transportation (MTO) to conduct a Stage 2 archaeological assessment (Background Research and Property Inspection) for the 407 Transitway from west of Brant Street to west of Hurontario Street G.W.P. 16-20003. The Study Area consists of the approximately 43-kilometre-long Preferred Design from west of Hurontario Street to west of Brant Street and seven preferred stations, whose locations will be determined as part of the overall study (Figure 1: areas outlined in red). Additional assessed areas are not part of the preferred preliminary design alternative of the transitway. The additional assessed areas were initially assessed but during the preliminary design they were redefined (runningway) /eliminated (Stations) (Figure 1: areas outlined in yellow).

This is a total project management (TPM) assignment, where the consultant delivers all aspects of the study on behalf of MTO. The TPM prime consultant is Parsons, who has assembled a team of engineering and environmental specialists to provide the services required for this study. LGL is providing environmental design and planning services on behalf of Parsons.

MTO is undertaking the Planning Phase, the Environmental Assessment (EA), and the Preliminary Design for the 407 Transitway from west of Brant Street to west of Hurontario Street G.W.P. 16-20003 study will follow the Transit Project Assessment Process (TPAP) prescribed in *Ontario Regulation 231/08, Transit Projects and Metrolinx Undertakings* under the *Environmental Assessment Act*. The 407 Transitway will be a two-lane, fully grade separated transit facility on an exclusive right-of-way, running along the Highway 407 Corridor. This section of the transitway facility will consist of approximately 43 km of Runningway and a number of stations whose locations will be determined as part of this study. The station layouts will include vehicular and pedestrian access(es), park and ride and pick-up/drop off (PPUDO) facilities, bus lay bay facilities, on street integration with local transit, shelters, buildings and other amenities. The transitway and the stations will initially be designed to support a two-lane busway service with provisions for future conversion to a two-track light-rail transit technology.

This 43 km segment forms part of the 150 km long high-speed interregional facility planned to be ultimately constructed on a separate right-of-way that parallels Highway 407 from Burlington to Highway 35/115, with stations, parking and access connections. This transitway is a component within the official plans of the stakeholder municipalities and of the Province's commitment to support transit initiatives in the Greater Golden Horseshoe through the Metrolinx Regional Transportation Plan.

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.

The study will follow the Transit Project Assessment Process (TPAP) prescribed in *Ontario Regulation 231/08, Transit Projects and Metrolinx Undertakings* under the *Environmental Assessment Act*.



The *Archaeological Master Plan for the Regional Municipality of Halton* (ASI 1998; ASI 2008) was consulted. The Master Plan provides further refinement with regards to potential buffers surrounding any noted features or characteristics which affect archaeological potential.

Authorization to carry out the activities necessary for the completion of the Stage 1 archaeological assessment was granted by LGL on September 5, 2017.

ASI previously completed a Stage 1 Archaeological Assessment for the 407 Transitway under MHSTCI PIF P380-0055-2019. Background information pertinent to the current Stage 2 assessment has been excerpted and/or summarized from the Stage 1 report.

## **1.2 Historical Context**

A comprehensive review of the pre-contact Indigenous and Euro-Canadian occupations of the Halton and Peel Regions are presented in the Stage 1 report (ASI 2020a). To summarize, background research indicates that the general vicinity of the Study Area has been attractive to human settlement for thousands of years, primarily by Indigenous people and more recently by Euro-Canadian settlers. Historically, the Study Area is located within the Township of Toronto in the County of Peel, and the Townships of Trafalgar and Nelson in the County of Halton.

## **1.3 Archaeological Context**

This section provides background research pertaining to previous archaeological fieldwork conducted within and in the vicinity of the Study Area, its environmental characteristics (including drainage, soils or surficial geology and topography, etc.), and current land use and field conditions. Three sources of information were consulted to provide information about previous archaeological research: the site record forms for registered sites available online from the MHSTCI through “Ontario’s Past Portal”; published and unpublished documentary sources; and the files of ASI.

### **1.3.1 Current Land Use and Field Conditions**

The Study Area is a 43 km segment of a long high-speed interregional facility planned to be ultimately constructed on a separate right-of-way that parallels Highway 407. This section of the transitway facility will consist of the approximately 43 km long Preferred Design from west of Hurontario Street to west of Brant Street and six preferred station locations.

A review of available Google satellite imagery shows that lands within the Final Preferred Design have remained relatively unchanged since 2004 within rural agricultural fields, hydro corridor, and undeveloped lands within the Regions of Peel and Halton.

The Stage 2 property inspection was conducted intermittently between November 6, 2019 and May 22, 2020, under the field direction of Alanna Martini (R1088), Emily Meikle (R1191), Andrew Sparling (R1200), and Wes Oldham (R292).



### **1.3.2 Physiography**

The study area crosses the the Peel Plain, South Slope, Niagara Escarpment, and Iroquois Plain physiographic regions of southern Ontario (Chapman and 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 and Putnam 1984:174–175).

The South Slope physiographic region (Chapman and Putnam 1984: 172-174) is the southern slope of the Oak Ridges Moraine. The South Slope meets the Moraine at heights of approximately 300 metres above sea level, and descends southward toward Lake Ontario, ending, in some areas, at elevations below 150 metres above sea level. Numerous streams descend the South Slope, having cut deep valleys in the till. In the vicinity of the Study Area, the South Slope is ground moraine of limited relief.

The Niagara Escarpment, one of the most prominent features in southern Ontario, extends from the Niagara River to the northern tip of the Bruce Peninsula, continuing through the Manitoulin Islands (Chapman and Putman 1984:114-122). Vertical cliffs along the brow mostly outline the edge of the dolostone of the Lockport and Amabel Formations, which the slopes below are carved in red shale. Flanked by landscapes of glacial origin, the rock-hewn topography stands in striking contrast, and its steep-sided valleys are strongly suggestive of non-glacial regions. From Queenston, on the Niagara River, westward to Ancaster, the escarpment is a simple topographic break separating the two levels of the Niagara Peninsula. The Niagara Escarpment is a designated UNESCO World Biosphere Reserve.

The Iroquois Plain physiographic region of southern Ontario is a lowland region bordering Lake Ontario. This region is characteristically flat and formed by lacustrine deposits laid down by the inundation of Lake Iroquois, a body of water that existed during the late Pleistocene. This region extends from the Trent River, around the western part of Lake Ontario, to the Niagara River, spanning a distance of 300 km (Chapman and Putnam 1984:190). The old shorelines of Lake Iroquois include cliffs, bars, beaches and boulder pavements. The old sandbars in this region are good aquifers that supply water to farms and villages. The gravel bars are quarried for road and building material, while the clays of the old lakebed have been used for the manufacture of bricks (Chapman and Putnam 1984:196).



The Study Area is within the watersheds of the Credit River, Sixteen Mile Creek, Fourteen Mile Creek, Bronte Creek, and the Urban Creeks.

The Credit River Watershed drains an area of approximately 860 square kilometres from its headwaters in Orangeville, Erin, and Mono, passing through part of the Niagara Escarpment and the Oak Ridges Moraine, and draining into Lake Ontario at the town of Port Credit (Credit Valley Conservation 2009). The river was named “Mis.sin.ni.he” or “Mazinigae-zeebi” by the Mississaugas, and surveyor Augustus Jones believed this signified “the trusting creek”, or could also be translated as “to write or give and make credit”, while the French name used when the river was first mapped in 1757 was “Riviere au Credit”. These names refer to the fur trading period, when the French, British, and Indigenous traders would meet along this river (Jameson 1838:73–74; Smith 1987:255–257; Rayburn 1997:84; Scott 1997:182; Gibson 2002:177; Robb et al. 2003:6). The Credit River was historically considered to be one of the best potential power sources for milling in all of southern Ontario, which led to the development of early of saw and grist mill industries, and later textile mills, distilleries, bottling plants, and hydro-electric plants spawned communities throughout the river valley, typically close to the Niagara Escarpment (Town of Caledon 2009:7.1).

The Sixteen Mile Creek watershed is a 357 square kilometre subwatershed composed of a west, middle and eastern branch, which converge below the Niagara Escarpment and flow south through the deeply incised creek valley into Lake Ontario at Oakville. The steep banks and stepped terraces of the Valley were created by glacial meltwater, and erosion of the till and shale deposits left behind by retreating glaciers and is protected as an environmentally sensitive area, as it provides habitat for rare species, has relatively undisturbed blocks of woodland, and significant geological features. The creek was known as Nanzuhzaugewazog or 'having two outlets' by the Mississauga, because it was very shallow and had a gravel bar dividing the mouth at Lake Ontario. European settlers named it Sixteen Mile Creek based on its distance from Burlington Bay (Campbell et al. 2017; Conservation Halton 2017; Town of Oakville 2017).

Fourteen Mile Creek is mainly an urban and suburban creek with it's headwaters north of Old Base Line Road and flows southeast into Lake Ontario through the City of Oakville. The watershed north of the Queen Elizabeth Way is recognized as an Environmentally Sensitive Area (Oakvillegreen Conservation Association 2017; The Friends of the Greenbelt Foundation 2019).

The Bronte Creek watershed is the second largest watershed within the Conservation Halton jurisdiction, draining over 300 square kilometers through the City of Hamilton, City of Burlington, Town of Milton, Town of Oakville, and Puslinch Township into Lake Ontario (Conservation Halton 2009). The main branch of Bronte Creek is approximately 48 kilometres long with 12 tributaries (Conservation Halton 2017). The watershed encompasses a variety of significant natural areas including large provincially significant wetlands, the Niagara Escarpment, headwater wetlands and forests, significant valley systems and coldwater fish habitat.

The Urban Creek watersheds consist of 18 small watersheds located along the north shore of Lake Ontario primarily within the City of Burlington and the Town of Oakville, with small portions located within the City of Hamilton and the City of Mississauga (Conservation Halton 2017). All the creeks originate at or below the Niagara Escarpment, flowing into Lake Ontario, and despite heavy development, contains some interesting natural features such as the Niagara Escarpment, Carolinian forest, old-growth forest, and remnants of both prairie and oak savannah (Conservation Halton 2008; Conservation Halton 2017).



### 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 blocks *AiGw*, *AiGx*, and *AjGw*.

According to the OASD, 300 previously registered archaeological sites are located within one kilometre of the Study Area, 43 of which are within 50 m of the Final Preferred Design and 25 which are within the Final Preferred Design (MHSTCI 2019). A summary of all 300 sites is provided the Stage 1 report (ASI 2020). Table 2 below only lists sites within 50 m of the Study Area and whether they are considered to retain further Cultural Heritage Value or Interest (CHVI).

**Table 1: List of previously registered sites within 50 m of the Study Area**

<b>Borden #</b>	<b>Site Name</b>	<b>Cultural Affiliation</b>	<b>Site Type</b>	<b>CHVI (y/n)</b>
<b>AiGw-97</b>	<b>Bob Alton</b>	<b>Archaic, Late</b>	<b>Unknown</b>	<b>Y</b>
AiGw-129	80-403-8	Pre-Contact Indigenous	Camp	N
<b>AiGw-132</b>	<b>80-403-12</b>	<b>Archaic, Early</b>	<b>Camp</b>	<b>N</b>
AiGw-138	81-403-10	Pre-Contact Indigenous	Findspot	N
AiGw-139	81-403-11	Pre-Contact Indigenous	Findspot	N
AiGw-140	81-403-12	Pre-Contact Indigenous	Findspot	N
AiGw-161	81-403-33	Pre-Contact Indigenous	Unknown	N
AiGw-163	81-403-34	Pre-Contact Indigenous	Findspot	N
AiGw-164	81-403-35	Pre-Contact Indigenous	Findspot	N
<b>AiGw-165</b>	<b>81-403-36</b>	<b>Archaic, Early</b>	<b>Findspot</b>	<b>Y</b>
AiGw-166	81-403-38	Pre-Contact Indigenous	Findspot	N
<b>AiGw-167</b>	<b>81-403-167</b>	<b>Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>N</b>
AiGw-168	81-403-40	Pre-Contact Indigenous	Findspot	N
AiGw-171	81-403-43	Pre-Contact Indigenous	Findspot	N
AiGw-174	81-403-53	Pre-Contact Indigenous	Findspot	Y
AiGw-301	Bucolic	Middle Archaic	Camp	N
AiGw-302	Downstairs	Early-Late Archaic, Early Woodland	Camp	N
<b>AiGw-303</b>	<b>Upstairs</b>	<b>Early Archaic</b>	<b>Camp</b>	<b>N</b>
<b>AiGw-305</b>	<b>Doug</b>	<b>Archaic, Early; Archaic, Middle</b>	<b>Unknown</b>	<b>N</b>
<b>AiGw-315</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>N</b>
AiGw-316	n/a	Pre-Contact Indigenous	Findspot	N
<b>AiGw-317</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Scatter</b>	<b>N</b>
<b>AiGw-318</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Scatter</b>	<b>N</b>
AiGw-319	n/a	Pre-Contact Indigenous	Scatter	N
<b>AiGw-323</b>	<b>n/a</b>	<b>Late Archaic</b>	<b>Findspot</b>	<b>N</b>
<b>AiGw-324</b>	<b>n/a</b>	<b>Late Woodland</b>	<b>Findspot</b>	<b>N</b>



<b>Borden #</b>	<b>Site Name</b>	<b>Cultural Affiliation</b>	<b>Site Type</b>	<b>CHVI (y/n)</b>
AiGw-327	Attic	Woodland, Middle	Scatter	N
AiGw-328	n/a	Pre-Contact Indigenous	Findspot	N
AiGw-340	n/a	Pre-Contact Indigenous	Findspot	N
<b>AiGw-341</b>	<b>n/a</b>	<b>Early Archaic</b>	<b>Unknown</b>	<b>N</b>
AiGw-342	Pendant	Pre-Contact Indigenous	Scatter	N
AiGw-386	Tremaine	Late Archaic	Findspot	N
<b>AiGw-455</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>N</b>
AiGw-511	n/a	Pre-Contact Indigenous	Camp; Scatter	N
<b>AiGw-512</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Camp; Scatter</b>	<b>N</b>
AiGw-513	n/a	Pre-Contact Indigenous	Findspot	N
AiGw-514	n/a	Late Archaic; Pre-Contact Indigenous	Scatter	N
<b>AiGw-515</b>	<b>n/a</b>	<b>Late Archaic; Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>N</b>
<b>AiGw-516</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>N</b>
<b>AiGw-518</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>N</b>
AiGx-39	Ireland	Late Paleo; Late Woodland	Camp	N
AiGx-40	N. of Skeet Club	Late Archaic; Early Woodland	Unknown	Y
<b>AiGx-63</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Camp</b>	<b>N</b>
AiGx-74	Ganong	<b>Euro-Canadian</b>	<b>Midden</b>	N
<b>AiGx-75</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>N</b>
AjGw-2	n/a	Pre-Contact Indigenous	Camp	N
AjGw-3	C. Stewart	Archaic	Camp	Y
AjGw-27	80-403-13	Early Woodland	Camp	N
AjGw-28	80-403-14	Pre-Contact Indigenous	Findspot	N
AjGw-29	80-403-15	Pre-Contact Indigenous	Findspot	N
<b>AjGw-32</b>	<b>81-403-49</b>	<b>Pre-Contact Indigenous</b>	<b>Findspot</b>	<b>Y</b>
<b>AjGw-33</b>	<b>81-403-51</b>	<b>Euro-Canadian</b>	<b>Midden</b>	<b>Y</b>
<b>AjGw-34</b>	<b>81-403-53</b>	Pre-Contact Indigenous	Findspot	N
AjGw-43	n/a	Pre-Contact Indigenous	Findspot	Y
AjGw-63	Junction	Pre-Contact Indigenous	Findspot	N
AjGw-66	Pengilly	Ancestral Huron-Wendat; Euro-Canadian	Village, burial; homestead	Y
<b>AjGw-68</b>	<b>River</b>	<b>Late Woodland; Middle Woodland; Late Archaic</b>	<b>Village; Camp; Camp</b>	<b>Y</b>
AjGw-226	Meadowvale TS	Pre-Contact Indigenous	Findspot	N
AjGw-248	Mullet Creek	Pre-Contact Indigenous	Camp	Y
AjGw-250	Tilt	Euro-Canadian	Homestead	N
AjGw-254	Laneway	Euro-Canadian	Midden	N
AjGw-280	River Knoll	Archaic, Late Euro-Canadian	Camp Cabin	N Y
AjGw-464	n/a	Pre-Contact Indigenous	Unknown	N
<b>AjGw-465</b>	<b>n/a</b>	<b>Pre-Contact Indigenous</b>	<b>Scatter</b>	<b>N</b>
AjGw-467	n/a	Early Woodland	Findspot	N
AjGw-480	Credit Flats I	Pre-Contact Indigenous	Camp	N
<b>AjGw-481</b>	<b>Credit Flats II</b>	<b>Pre-Contact Indigenous</b>	<b>Camp</b>	<b>N</b>





<b>Borden #</b>	<b>Site Name</b>	<b>Cultural Affiliation</b>	<b>Site Type</b>	<b>CHVI (y/n)</b>
AjGw-482	Credit Flats III	Pre-Contact Indigenous	Camp	N

**Sites in bold are within the Final Preferred Design**

According to the background research, ASI was able to identify 100 previous archaeological assessments to date that detail fieldwork within 50 m of the Study Area (see ASI 2020: Appendix B for details of these reports). Selected reports which inform the present archaeological assessment are summarised below. Previously assessed areas within the Study Area are illustrated on Figures 3-15.

Previous assessments associated with the construction of Highway 407 overlap with the current Study Area. Two early reports on archaeological assessments within the Study Area were for Phases 1 and 2 of MTO's Preliminary Design Report of the Highway 403 Freeman Interchange to Highway 403/Oakville Link completed by Rob Pihl for the Museum of Indian Archaeology (now the London Museum of Archaeology) in 1980-1981 (Pihl 1982). The Phase 1 and 2 surveys identified seven sites and 56 findspots. More intensive archaeological survey of the corridor was conducted by Mary Ambrose in 1983 (Ambrose 1984). This work involved the testing of ten sites identified by Pihl. Subsequent to this testing, six sites were recommended for further work: AiGx-76, AiGw-124, AiGw-39, AiGw-132, AiGw-100 and AiGw-74. Ambrose additionally tested two historic sites, the Rasputine site (AjGw-34) and the Ganong site (AiGx-74). While the Ganong site was recommended for further work and consequently salvage excavated in 1984 (1993), the Rasputine site was cleared of further archaeological concern.

In 1993, Material Culture Management undertook testing and salvage excavation of five sites, including AiGw-129 within 50 m of the current Study Area (MHCI 1994). In 1994, the White Beard site (AiGw-132) was salvage excavated by the MTO (Murphy 1995).

AMAA (1998) carried out Stage 1, 2 and 3 archaeological assessments of the Highway 407 corridor between Sixth Line Dundas Street West, east of Guelph Line in 1995, 1996 and 1998. The systematic survey consisted of test pit and pedestrian survey at five metre intervals where possible within the current 407 right-of-way (ROW) property lines, at minimum 90 metres in width, as well as additional survey units that extended into adjacent properties, for a total of 81 acres (approximately 33 ha). Eight sites were recommended for further Stage 4 mitigation (AiGw-301, -302, -303, -304, -305, -306, -307, and -327). The remainder of the 407 ROW was considered clear of further archaeological concern.

Some survey units between Regional Road 25/Bronte Road and Dundas Street which could not be assessed by AMAA, due to lack of permission to enter the properties, were later assessed by ASI in 1998 (ASI 1999). The areas assessed by ASI were considered clear of further archaeological concern and any sites identified were fully mitigated by Stage 3 assessment (including AiGw-327 within 50 m of the current Study Area).

AAL (2008) conducted a Stage 1-2 archaeological assessment of a property at Highway 407 and Credit River, consisting of approximately 21 acres of valley lands. The Stage 2 survey in 2007 consisted of test pitting at five metre intervals, which identified the River Knoll site (AjGw-280), and the Credit Flats I, II and III sites (AjGw-480, -481, -482). All four sites were recommended for Stage 3 archaeological assessment. Credit Flats II is located along the north limit of the Final Preferred Design.

Fisher Archaeological Consulting (2008) conducted a Stage 3 assessment of the four sites previously identified by AAL at the Credit River and Highway 407. The River Knoll site (AjGw-280) is situated on



top a terrace on the east bank of the Credit River and consists of both Late Archaic and mid-to-late nineteenth century components. The Credit Flats I, II and III sites (AjGw-480, -481, -482) are all situated on the west side of the Credit River on a slight rise in a meadow. The three Credit Flats sites represent indeterminate pre-contact camp sites. Based on the Stage 3 findings, the Credit Flats I, II and III sites (AjGw-480, -481, -482) are not considered archaeological significant and are clear of further archaeological concern. The pre-contact component of the River Knoll site (AjGw-280) is also not considered to be archaeological significant and is clear of further archaeological concern. However, the Euro-Canadian component of the River Knoll site (AjGw-280) was recommended for further Stage 4 mitigation. The Final Preferred Design was realigned to avoid the River Knoll Site (AjGw-280) and there will be no anticipated impacts associated with this project.

The Pengilley Site (AjGw-66) was first identified in 1985 and 1986 (Mayer, Pihl, Poulton and Associates Inc. 1985a; 1985b; 1986; Mayer, Poulton and Associates Inc. 1991). Dillon Consulting Limited also conducted Stage 2 and 3 archaeological assessment for the Pengilley Site in 1994 and 1995, as part of the Highway 407 project, which encountered a Euro-Canadian component of the Pengilley Site in addition to late Woodland Huron-Wendat village (Dillon Consulting Ltd. 1994). Dillon completed Stage 3 and Stage 4 mitigative excavations for parts of the Pengilley Site (Dillon Consulting Ltd. 1997a; Dillon Consulting Ltd. 1997b).

In 2013 and 2014 DRPA (D.R. Poulton & Associates Inc. 2014) conducted Stage 2 for the Enbridge GTA project which determined that the Pengilley Site (AjGw-66) would require Stage 3 archaeological assessment to inform future Stage 4 mitigative excavation for the portion within the project area. Stage 3 and Stage 4 archaeological assessments for the portion of the Pengilley Site (AjGw-66) occurred in 2014 by DRPA (2015; 2016). The Stage 4 salvage excavation encountered a multiple secondary human burial in 2014. A site disposition agreement between Infrastructure Ontario and the Huron-Wendat First Nation was signed in the spring of 2016, following a declaration by the Registrar and the Huron-Wendat of Wendake held a final ceremony for the burial in mid June of 2016. Avoidance and protective measures are recommended for the reburial. Stantec (2016) was retained by Enbridge Gas Distribution Inc. to conduct the Stage 4 archaeological monitoring of the Pengilley Site (AjGw-66) and burial located outside of the mitigated Enbridge GTA Project Segment A lands. Protective fencing remained intact at all times, and the protected site and secondary burial remained unaffected by construction activities. As no additional archaeological resources or impacts to the protected portions of the archaeological site occurred, Stantec had no new recommendations. The site and burial will not be impacted by the Final Preferred Design.

The River Site (AjGw-68) is a multi-component site including a Late Woodland village ca. 1400-1450 CE; a Middle Woodland camp consisting of six vessels and a projectile point, suggested to be affiliated with the Point Peninsula Complex ca. 300 B.C. to 500 CE; and a Broad Point Archaic component ca. 1800-1400 CE. The site was originally affiliated with a Euro-Canadian component in the north end of the site, which has since been designated as The River Knoll site (AjGw-280).

The River site was first identified in 1985 and 1986 (Mayer, Pihl, Poulton and Associates Inc. 1985a; 1985b; 1986; Mayer, Poulton and Associates Inc. 1991). In 1986 MPP conducted salvage excavations of the River Site including block excavation for the proposed NPS 36 Parkway Belt West Pipeline project, south of the Final Preferred Design of the current Study Area.

Further excavations of the River site were conducted in advance of the proposed construction of Highway 407 by Dillon Consulting Limited in 1994 and 1995 (Dillon Consulting Ltd. 1997a; Dillon Consulting Ltd. 1997b; Dillon Consulting Ltd. 1997c). The 1994 work focussed on the meadow area that defined the



northern portion of the site, while work in 1995 included test pits throughout the entire site at 2.5 metre intervals and block excavations of artifact rich units south of the southern limit of the Highway 407 corridor (shown in Figure 4 of the Dillon 1997c report). Following the establishment of the proposed centreline, the salvage excavations of the Highway 407 corridor through the River site were confined to a corridor that extended 50 metres either side of the centre line of the highway. The 1995 salvage excavations encompassed a total surface area of 4,190 square metres. The excavations covered an irregularly shaped area that straddled the proposed centre line. They revealed the presence of four parallel closely grouped longhouses within the proposed Highway 407 alignment. Relatively few features or post moulds were present inside the longhouses, no palisade was located, and nine discrete middens were located in Dillon's project area. Three separate human bone specimens were recovered from a localized area at the east end of House 3, none of which were within a specific feature. Feature depths reached a maximum of approximately 100-110 centimetres below surface level. Dillon (1997c) noted that a village such as this located adjacent to a major river and without palisades was an anomaly. The report also noted that although the ceramics were representative of ancestral Huron-Wendat style, a high percentage of lithics resemble Neutral manufacture. Dillon's final report recommended that the portion of the site within the Highway 407 ROW was fully excavated, and that up to 50 metres from the ROW centreline was clear of further concern.

In 2013 and 2014 DRPA (D.R. Poulton & Associates Inc. 2014) conducted Stage 2 for the Enbridge GTA project, south of the Highway 407 ROW, which determined the River Site (AjGw-68) remained undisturbed however the site could be avoided by project designs, and would not require further assessment at that time. DRPA suggested that roughly half the River Site remains both intact and well-preserved south of the Highway 407 ROW.

The Final Preferred Design for the 407 Transitway lies just north of Dillon's clearance zone. Part of the River Site as mapped by DRPA (D.R. Poulton & Associates Inc. 2015) overlaps with the Final Preferred Design (see *Supplementary Documentation*) and will require additional assessment in accordance with the S & Gs.

ASI is currently undertaking Stage 2 survey of six properties which overlap with the Final Preferred Design, in advance of their redevelopment by Mattamy Homes, along the west side of Ninth Line between the Union Gas property south of Derry Road and Eglinton Avenue. At the time of writing, Stage 2 was completed (ASI 2019; ASI 2020b; ASI 2020b; ASI 2020c) at four parcels for which reports have been submitted to MHSTCI (PIF P449-0382-2019, P449-0355-2019, P449-0386-2019, P449-0354-2019). Two properties have ongoing Stage 2 which will be completed in 2020 (PIFs P449-0385-2019 P449-0317-2019).

## 2.0 FIELD METHODS

The Stage 2 archaeological assessment for the 407 Transitway from west of Brant Street to west of Hurontario Street, was conducted intermittently between November 6, 2019 and May 22, 2020, under the field direction of Alanna Martini (R1088), Emily Meikle (R1191), Andrew Sparling (R1200), and Wes Oldham (R292). The Stage 2 property assessment was conducted in accordance with the *Ontario Heritage Act* and the S & G, Section 2.1. Weather and lighting conditions as well as surface visibility conditions were suitable on all dates for Stage 2 property survey.

This Stage 2 archaeological assessment is being completed as part of Planning Phase, the EA and the Preliminary Design for the 407 Transitway and includes Stage 2 survey for lands where permission to



enter (PTE) was secured. Lands without PTE were not assessed as part of this Stage 2 assessment and have been recommended for Stage 2 survey during Detail Design (Figures 3-15).

The current Stage 2 Project Limits comprise 39.14 ha of open and closed lands and is composed of agricultural and fallow fields, woodlots, hydro corridors, existing municipal and Highway 407 ETR ROWs, wetlands, and rail corridors, in addition to privately, municipally, provincially, and federally owned industrial, commercial, and vacant lands (Figures 3-15; Plates 1-35). Due to alignment changes to the 407 Transitway Project Limits during the TPAP, the 129.87 hectares surveyed as part of this assessment is larger than the final preferred alignment. The below discussion summarizes the results of all fieldwork completed and separates the work completed within the preferred preliminary design alternative from the additional assessed areas.

Actively or recently cultivated agricultural lands were subjected to pedestrian survey in accordance with the S & G, Section 2.1.1, Standards 1-6. Lands were recently ploughed in advance of the survey and allowed to weather by one heavy rainfall or several light rainfalls to improve visibility of archaeological resources. Lands were ploughed deep enough to provide total topsoil exposure but not deeper than previous ploughing. The ground surface visibility was 80% of greater. If archaeological resources were recovered, survey transects were decreased to 1 m intervals over a minimum of 20 m radius around the find, working outward at this interval until the full extent of the surface scatter was defined. Artifacts were collected per Section 2.1.1, Standards 7-9.

As per Section 2.1 of the S & G, all lands within areas where ploughing was not possible or viable were subject to test pit survey at 5 m intervals. According to Section 2.1.2(2) of the S & G, any undisturbed areas requiring test pit survey within 300 m of any feature of archaeological potential must be subject to systematic assessment at 5 m intervals. Test pits were placed at 5 m intervals until disturbance was encountered, and then increased to 10 m intervals to confirm previous disturbance as per S & G Section 2.1.8b. All test pits in this survey were excavated following the S & G Section 2.1.2 Standards 2-9. All test pits were excavated by hand to a minimum of 30 cm in diameter. All test pits were excavated into the first 5 cm of subsoil and examined for stratigraphy, cultural features, and evidence of fill. Test pit fill was screened through 6 mm mesh to facilitate artifact recovery. Afterwards, all test pits were backfilled and their locations were recorded on field maps. If archaeological resources were uncovered, test pit intervals were intensified to a maximum of 2.5 m around the positive test pits to define site boundaries. Any factors that precluded the excavation of test pits (e.g. excessive slope, drainage, exposed bedrock, previous disturbance) were noted, and the areas were mapped and photographed.

## 2.1 Preferred Preliminary Design Alternative

The previous Stage 1 archaeological assessment determined that 145.98 ha (46%) of the preferred preliminary design alternative had been subject to previous archaeological assessments, exhibited deep and pervasive disturbance or were found to have no archaeological potential due to low and wet conditions or excessive slope. No further archaeological assessment was recommended for these areas.

Within the preferred preliminary design alternative approximately 7.72 ha (2.5%) of the study area was subject to test-pit survey at 5 m intervals following the above standards, and approximately 5.92 ha (2%) were subject to judgemental test pit survey at 10 m intervals to confirm previous disturbance. Pedestrian survey was conducted on approximately 0.55 ha (<1%) of the study area.



Approximately 3.07 ha (1%) were found to have no potential due to deep and pervasive disturbance (S & G Section 2.1, Standard 2b) resulting from past construction activities associated with Highway 407, and commercial and industrial development.

Approximately 3.72 ha (1%) were found to have no archaeological potential due to low and wet conditions excessive slope. The remaining 148 ha (47%) require further Stage 2 archaeological assessment prior to any ground disturbing activities.

## 2.2 Additional Assessed Areas

Due to alignment changes to the 407 Transitway Project limits during the TPAP, areas outside the final preferred alignment were also subject to an archaeological assessment. In total 31.92 ha had been subject to previous archaeological assessments, exhibited deep and pervasive disturbance or were found to have no archaeological potential due to low and wet conditions.

An additional 0.64 ha were subject to test-pit survey at 5 m intervals following the above standards, and approximately 2.63 ha were subject to judgemental test pit survey at 10 m intervals to confirm previous disturbance. Pedestrian survey was conducted on approximately 12.28 ha.

## 2.3 Fieldwork Summary

Results of the assessment and the location and direction of each photo are presented in Figure 3 through Figure 15, and Plate 1 through Plate 29. A summary as it pertains to each property identification number (PIN) is presented in Table 2.

In general, typical undisturbed test pits displayed soil profiles of dark brown sandy loam A-horizon over yellowish brown sandy B-Horizon or dark brown clay-loam A-horizon over lighter brown clay B-Horizon, between 25-45 cm deep (Plates 6 and 32).



**Table 2: 407 Transitway Stage 2 Property Survey Results by PIN**

PIN	Location	Survey Method	Date of Survey	Field Director	Results	Figure	Plate
140845472	City of Mississauga	Visual Inspection & Test Pit Survey	25-Nov-19, 29-Nov-19	AM/AS	Partially disturbed (ASI 2019a); test pit at 5m and 10m intervals	3	1
140844328	City of Mississauga	Visual Inspection & Test Pit Survey	12-Dec-19	AM	Test Pit at 5m and 10m intervals; disturbed by previous construction	3, 4	2
140842014	City of Mississauga	Visual Inspection & Test Pit Survey	12-Dec-19	AM	Test Pit at 5m and 10m intervals, disturbed by previous construction	3	3
140850146	City of Mississauga	Visual Inspection	17-Apr-20	AM	Disturbed, low and wet, slope	3, 4	4
140850146	City of Mississauga	Visual Inspection & Test Pit Survey	04-Dec-19	AM	Additional assessed: Test Pit survey at 10 m; low and wet	--	--
140854990	City of Mississauga	Visual Inspection & Test Pit Survey	16-17- Apr-20	AM	Partially disturbed (ASI 2019a); Test Pit between 2.5m and 10m intervals; test unit excavation; low and wet; disturbed	4	5-7
140854990	City of Mississauga	Visual Inspection & Test Pit Survey	04-Dec-19	AM	Additional assessed: Test Pit at 5m and 10 m intervals; low and wet		--
140890494	City of Mississauga	Partially Assessed	15-Apr-20	AS	Partially disturbed (ASI 2019a); low and wet; further work (pedestrian survey) required	4	8
250260120	City of Mississauga	Not Assessed	n/a	--	Further work (pedestrian survey) required	--	--
249390131	City of Mississauga	Visual Inspection	15-Apr-20	AS	Low and wet; disturbed	6	9
249380091	City of Mississauga	Visual Inspection & Test Pit Survey	15-Apr-20	AS	Test pit at 10 m intervals, low and wet	6	10-12
249380092	City of Mississauga	Test Pit Survey	15-Apr-20	AS	Test pit at 10 m intervals	6	13
249380025	City of Mississauga	Visual Inspection	15-Apr-20	AS	Disturbed - area heavily modified by adjacent industrial operation	7	14
249310073	City of Mississauga	Test Pit Survey	6- Nov-19, 7-Nov-19	AS AS	Judgmental Test pit at 10 m intervals to confirm disturbance	7	15-16
249310107	City of Mississauga	Visual Inspection & Test Pit Survey	6-Nov-19	AS	Test Pit at 5m and 10m intervals; partially disturbed – built up berm	8	17-19
249310109	City of Mississauga	Not Assessed	n/a	--	To be assessed by ASI in summer 2020 under separate contract	--	--
249300099	City of Mississauga	Visual Inspection & Test Pit Survey	16-Apr-20	AS	Test pit at 5m and 10 m intervals; Disturbed – areas previously graded during Highway 407 construction	8	20-21



PIN	Location	Survey Method	Date of Survey	Field Director	Results	Figure	Plate
249300097	City of Mississauga	Visual Inspection & Test Pit Survey	16-Apr-20	AS	Partially disturbed (ASI 2019a); Test pit at 5m and 10 m intervals; Low and wet; Disturbed – areas previously graded during Highway 407 construction	8	22-23
--	Town of Oakville	Visual Inspection & Test Pit Survey	05-Dec-19, 27-Apr-20	AM	Test pit survey at 5m and 10 m intervals; low and wet	9	24
249300653	Town of Oakville	Visual Inspection & Test Pit Survey	05-Dec-19, 24 & 27-Apr-20	AS/AM	Test pit survey at 2.5 - 5 m intervals; test unit excavation; low and wet	9	25-27
249300653	Town of Oakville	Pedestrian Survey	21-22-May-20	WO	Ped survey at 1 – 5 m intervals	9	28-29
249290024	Town of Oakville	Test Pit	12-Dec-19	AS	Test pit survey at 5 m and 10m intervals	10	30
249280183	Town of Oakville	Test Pit & Visual Inspection	7-Nov-19	AS	Test pit survey at 5 m and 10 m intervals; low and wet pocket in woodlot	10, 11	31-32
249280183	Town of Oakville	Pedestrian Survey	22-May-20	WO	Ped survey at 1 – 5 m intervals	11	33
249270109	Town of Oakville	Not Assessed	n/a	--	Further work (pedestrian survey) required	--	--
72010019	City of Burlington	Not Assessed	n/a	--	Further work (test pit survey) required	--	--
72010010	City of Burlington	Not Assessed	n/a	--	Further work (pedestrian survey) required	--	--
72020024	City of Burlington	Partially Assessed	15-Apr-20	AM	Low and wet; Further work (pedestrian survey) required	13	34
72023693	City of Burlington	Not Assessed	n/a	--	Further work (pedestrian survey) required	--	--
71950037	City of Burlington	Partially Assessed	15-Apr-20	AM	Low and wet; Test pit at 5 m; AMAA 1998; Further work (pedestrian survey) required	14	35



### 3.0 RECORD OF FINDS

During the course of the Stage 2 property survey, one historical Euro-Canadian site, three pre-contact sites and seven pre-contact findspots were identified within the preferred preliminary design alternative. One pre-contact site was also identified within the additional assessed areas. Detailed location information including GPS coordinates and detailed mapping for all sites and findspots can be found in a separate *Supplementary Documentation* [SD] report.

#### 3.1 Site AjGw-632 (P1)

**General Site location:** The site is located north of Highway 407 ETR and east of Creditview Road within valleylands west of the Credit River within PIN 140854990 (SD Table 2; SD Figures 1-2).

**Topography:** Site located within flat valleylands within the Peel Plain physiographic region.

**Soil Type:** Sandy-loam topsoil, sandy subsoil.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-68, AjGw-480, AjGw-481, AjGw-482), Primary water source east of the site (i.e. Credit River).

**Site Type:** Pre-contact scatter of unknown cultural association.

**Field Conditions:** Herbaceous plant covered valleylands. Site visit on April 21 and 29, 2020.

**Site Size (approximate):** 5 m diameter

**Assessment Method:** Test pit survey at 5 m intervals; Test pits were excavated at 2.5 m intensive intervals surrounding the initial positive test pit, and three one-metre square test units were excavated.

**Density & Distribution:** One lithic artifact was recovered during the initial test pit survey at 5 m intervals. No additional artifacts were recovered during the intensified test pit survey at 2.5 m intervals. However, five additional lithics were collected during the test unit excavation (see SD Figure 2).

**Content Summary:** Six lithic artifacts.

**Sample Collected:** The comprehensive collection of all six identified lithics were collected.

**General Collection Description:** The lithic artifacts comprise five Onondaga and one Lockport chert artifacts. The Onondaga pieces include two flake fragments, two secondary retouch flakes, and one secondary knapping flake. A single Lockport chert secondary retouch flake was also recovered (Plate 36). The collected assemblage is detailed in the Site P1 artifact catalogue below.

P1 Artifact Catalogue

Cat#	Context	Qty	Category	Type	Material
L1	Test Pit #1	1	Lithic	FF - Flake Fragment	Onondaga Chert
L2	Test Unit #1	1	Lithic	FF - Flake Fragment	Onondaga Chert
L3	Test Unit #1	2	Lithic	SR - Secondary Retouch Flake	Onondaga Chert
L4	Test Unit #2	1	Lithic	SK - Secondary Knapping Flake	Onondaga Chert





Cat#	Context	Qty	Category	Type	Material
L5	Test Unit #2	1	Lithic	SR - Secondary Retouch Flake	Lockport Chert

**Site Interpretation:** A total of six chipped stone artifacts were recovered by ASI during the test pit survey of PIN 140854990 or during the test unit excavation. The site probably represents a small, short-term activity area.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** No

**Recommendations:** This site has further cultural heritage value and interest and requires further assessment.

**Justification:** Meets the requirements of Section 2.2, Standard 1.a.ii of the S & G.

### 3.2 Site AjGw-637 (P2)

**General Site location:** The site is located north of Highway 407 ETR and east of Creditview Road within valleylands west of the Credit River within PIN 140854990 (SD Table 2; SD Figures 1-2).

**Topography:** Site located within flat valleylands within the Peel Plain physiographic region.

**Soil Type:** Sandy-loam topsoil, sandy subsoil.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-68, AjGw-480, AjGw-481, AjGw-482), Primary water source east of the site (i.e. Credit River).

**Site Type:** Pre-contact site of unknown cultural association.

**Field Conditions:** Herbaceous plant covered valleylands. Site visit on April 21 and 29, 2020.

**Site Size (approximate):** 5 m diameter

**Assessment Method:** Test pit survey at 5 m intervals; Test pits were excavated at 2.5 m intensive intervals surrounding the initial positive test pit, and three one-metre square test units were excavated.

**Density & Distribution:** One lithic artifact was recovered during the initial test pit survey at 5 m intervals. No additional artifacts were recovered during the intensified test pit survey at 2.5 m intervals. However, two additional lithics were collected during the test unit excavation (see SD Figure 2).

**Content Summary:** Three lithic artifacts.

**Sample Collected:** The comprehensive collection of all three identified lithics were collected.

**General Collection Description:** The lithic artifacts comprise two Onondaga and one Bois Blanc chert artifacts. The Onondaga pieces include one flake fragment and one secondary retouch flake (Plate 37). A single Bois Blanc flake fragment was also recovered. The collected assemblage is detailed in the P2 artifact catalogue below.



**P2 Artifact Catalogue**

<b>Cat#</b>	<b>Context</b>	<b>Qty</b>	<b>Category</b>	<b>Type</b>	<b>Material</b>
L1	Test Pit #1	1	Lithic	FF - Flake Fragment	Onondaga Chert
L2	Test Unit #1	1	Lithic	SR - Secondary Retouch Flake	Onondaga Chert
L3	Test Unit #2	1	Lithic	SR - Secondary Retouch Flake	Lockport Chert

**Site Interpretation:** A total of 3 chipped stone artifacts were recovered by ASI during the test pit survey of PIN 249390271 or during the test unit excavation. The presence of non-diagnostic flakes likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for Site P2.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1.a.ii of the S & G.

### **3.3 Site AjGw-481 (P3)**

**General Site location:** The site is located north of Highway 407 ETR and east of Creditview Road within valleylands west of the Credit River within PIN 140854990 (SD Table 2; SD Figures 1 and 3).

**Topography:** Site located within flat valleylands within the Peel Plain physiographic region.

**Soil Type:** Sandy-loam topsoil, sandy subsoil.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-68, AjGw-480, AjGw-482), Primary water source east of the site (i.e. Credit River).

**Site Type:** Pre-contact scatter of unknown cultural association.

**Field Conditions:** Herbaceous plant covered valleylands. Site visit on April 22-23, 2020.

**Site Size (approximate):** 15 m E-W by 10 m N-S

**Assessment Method:** Test pit survey at 5 m intervals; test pits were excavated at 2.5 m intensive intervals surrounding the initial positive test pit. When enough artifacts were recovered to make a recommendation for Stage 3 assessment, test pit intensification was halted, and test units were not excavated.

**Density & Distribution:** Two lithic artifacts were recovered during the initial test pit survey at 5 m intervals. Four additional lithic artifacts were recovered during the intensified test pit survey at 2.5 m intervals (see SD Figure 3).

**Content Summary:** Six lithic artifacts.

**Sample Collected:** The comprehensive collection of all six identified lithics were collected.



**General Collection Description:** The lithic artifacts comprise three Onondaga and three Bois Blanc chert artifacts. The Onondaga pieces include two flake fragments and one secondary retouch flake. The Bois Blanc pieces include two flake fragments and one secondary knapping flake (Plate 38). The collected assemblage is detailed in the AjGw-481 artifact catalogue below.

**AjGw-481 (P3) Artifact Catalogue**

Cat#	Context	Qty	Category	Type	Material
L1	Test Pit #1	1	Lithic	FF - Flake Fragment	Bois Blanc Chert
L2	Test Pit #2	1	Lithic	FF - Flake Fragment	Onondaga Chert
L3	Test Pit #3	1	Lithic	SR - Secondary Retouch Flake	Onondaga Chert
L4	Test Pit #4	1	Lithic	SR - Secondary Retouch Flake	Onondaga Chert
L5	Test Pit #5	1	Lithic	SR - Secondary Knapping Flake	Bois Blanc Chert
L6	Test Pit #6	1	Lithic	FF - Flake Fragment	Bois Blanc Chert

**Site Interpretation:** A total of six chipped stone artifacts were recovered by ASI during the test pit survey of PIN 140854990. The site probably represents a small, short-term activity area and is likely an extension of the site previously identified by Archaeological Assessments Ltd and further investigated by Fisher Archaeological Consulting in 2008 (Archaeological Assessments Ltd. 2008; Fisher Archaeological Consulting 2008).

**Has the CHVI been sufficiently assessed and documented in Stage 2:** No

**Recommendations:** This site has further cultural heritage value and interest and requires further assessment.

**Justification:** Meets the requirements of Section 2.2, Standard 1.a.ii of the S & G.

### 3.4 River Site (AjGw-68)

**General Site location:** The site is located south of Highway 407 ETR and west of the rail corridor within valleylands east of the Credit River within PIN 140854990 (SD Table 2; SD Figures 1 and 4). The River site is within an additional assessed area and is not within the preferred preliminary design alternative of the transitway. No evidence of the River site was identified during the test pit survey within the limits of the preferred preliminary design alternative.

**Topography:** Site located within flat valleylands within the Peel Plain physiographic region.

**Soil Type:** Sandy-loam topsoil, sandy subsoil.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-481, AjGw-480, AjGw-482), Primary water source west of the site (i.e. Credit River).

**Site Type:** Multi-component site including a Late Woodland village ca. 1400-1450 CE; a Middle Woodland camp consisting of six vessels and a projectile point, suggested to be affiliated with the Point Peninsula Complex ca. 300 B.C. to 500 CE; and a Broad Point Archaic component ca. 1800-1400 CE.

**Field Conditions:** Herbaceous plant covered valleylands. Site visit on December 4, 2019.



**Site Size (approximate):** 7 m E-W by 45 m N-S

**Assessment Method:** Test pit survey at 5 m intervals.

**Density & Distribution:** A total of 33 pre-contact artifacts were recovered during the test pit survey at 5 m intervals (see SD Figure 4).

**Content Summary:** Thirty pre-contact ceramic artifacts, two lithics and a single faunal fragment

**Sample Collected:** The comprehensive collection of all 33 identified artifacts were collected.

**General Collection Description:** The lithic assemblage includes one flake fragment and one secondary retouch flake, both manufactured from Onondaga chert. The ceramic vessel assemblage consists of one identified vessel, including one unanalyzable rim fragments and six body fragments (Plates 39-40). Ceramic fragments that were smaller than 23 mm or displayed excessive exterior exfoliation were classified as unanalyzable and account for 22 fragments, or 73.33% of the total ceramic assemblage. A single piece of faunal material was also recovered. The full catalogue for the River Site (AjGw-68) is presented in Appendix A

**Site Interpretation:** A total of 33 pre-contact artifacts were recovered by ASI during the test pit survey of PIN 140854990. All positive test pits were identified in the area of the previously identified River Site (AjGw-68). The presence of plain body fragments and an opposed neck decoration on the rim fragment would suggest that the River Site has a Late Iroquoian occupation and probably dates to post 1400 (Wright 1966). This interpretation is consistent with the previous interpretations of the site (c.f. Mayer, Pihl, Poulton and Associates Inc. 1985a; Dillon Consulting Ltd. 1997c; D.R. Poulton & Associates Inc. 2014).

**Has the CHVI been sufficiently assessed and documented in Stage 2:** No

**Recommendations:** This site has further cultural heritage value and interest and requires further assessment.

**Justification:** Meets the requirements of Section 2.2, Standard 1.a.ii of the S & G.

### 3.5 Site AjGw-631 (H1)

**General Site location:** The site is located south of Highway 407 ETR and east of Trafalgar Road within a residential lot, north of Oakville within PIN 249300653 (SD Table 3; SD Figures 5-6).

**Topography:** The site is located within a gently undulating residential lot within the Peel Plain physiographic region.

**Soil Type:** Clay-loam topsoil, clay subsoil.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-33, etc.), Secondary water source west of the site (i.e. tributary of Joshua Creek); gently undulating topography, Euro-Canadian settlement features (i.e. structure and orchard on 1877 atlas), early transportation routes (i.e. Trafalgar Road).



**Site Type:** Historical Euro-Canadian domestic occupation

**Euro-Canadian Land Use History:**

The Crown Patent for Lot 12 was granted to Joseph Osyer in 1809. The patent was for the entire 200 acres. Osyer sold the lot to Jabez Ellison the next day. Ellison then sold it to Levi Lewis in 1810, who in turn sold it to David Kenney in 1812. Kenney partitioned Lot 12 into two farms and sold the south 100 acres to Peter Kenney in 1812. The rear 100 acres were sold also to Peter Kenney in 1823. Peter Kenney sold 50 acres in the northwest quarter to his son William Kenney in 1842, and later sold him the south half of the north half in 1845 [onland.ca, Halton County LRO, Abstract Index to Deed Titles, Trafalgar Township, Book 35]. The archaeological site is located in the north quarter of the south half.

The personal portion of the 1851 census listed Peter Kenney as a 62-year-old farmer who lived with his 60-year-old wife Rebecca in a one and a half storey frame dwelling. Both had been born in the United States, while their three daughters, Mary aged 22, Rebecca aged 20, and Louisa aged 17, had been born in Canada. The family were adherents of the Congregational Church. Their eldest son William had established his own household. William Kenney was listed as a 36-year-old farmer born in Canada who lived with his wife Jane aged 30, and their two children, Mary aged 7 and Samuel aged 5, in a one storey frame house. A 13-year-old Scottish boy Duncan MaCallum also lived with the family and probably helped with farm chores [LAC, 1851 Census of Canada, Trafalgar Township].

Two farms were enumerated for Lot 12 in the agricultural returns for the 1861 census, including that of Peter Kenney who owned the south half of Lot 12. The farm totalled 150 acres in Lots 11 and 12, of which 111 were devoted to crops, four to pasture, ten to gardens and 25 left wild. The crops included wheat, barley, peas, oats, buckwheat, Indian corn, potatoes, and turnips, while the livestock consisted of cows, horses, and pigs. The personal portion of the census indicated that William and Rebecca's youngest child, Louisa still lived at home in 1861 [LAC, 1861 Census of Canada, Trafalgar Township].

In 1865, Peter Kenney sold the south 50 acres of Lot 12 to his stepson George Marlatt Jr. The north 50 acres of the south half, which would have contained the family's homelot, were inherited by William Kenney [onland.ca, Halton County LRO, Abstract Index to Deed Titles, Trafalgar Township, Book 35] after Peter Kenney died on January 2, 1871. Rebecca Kenney had predeceased her husband on April 20, 1869 (Nickerson 2012:94). William Kenney in turn sold the 50-acre parcel to his son Samuel Marlatt Kenney in 1872. Samuel Marlatt Kenney did not retain the property for very long and sold this part to William Trimble in 1875. Also in 1875, William Kenney sold the north half (100 acres) of Lot 12 to William Trimble [onland.ca, Halton County LRO, Abstract Index to Deed Titles, Trafalgar Township, Book 35].

Two farms were enumerated for Lot 12 in the 1871 census, neither of which were operated by a member of the Kenney family. It would appear that William Kenney's 150-acre farm was occupied by the Hartnet family: 60-year-old widow Bridget Hartnet, 30-year-old tenant labourer Patrick Hartnet, 25-year-old Ann Hartnet, and 15-year-old John Hartnet. Bridget and the older children had been born in Ireland but John had been born in Ontario. No acreage or dwelling house were listed but the family grew barley, oats, turnips, and apples, and they owned cows [LAC, 1871 Census of Canada, Trafalgar Township].

In 1882 William Trimble granted 150 acres to Thomas Dunn. This grant included the north half of the south half of Lot 12 (50 acres) along with other lands. The administrator of the estate of Thomas Edward Dunn granted the north half of the south half to William Francis Dunn in 1924. William Francis Dunn in turn granted the property to Rolf Proudfoot in 1951 [onland.ca, Halton County LRO, Abstract Index to Deed Titles, Trafalgar Township, Book 35].



Three families were enumerated for Lot 12 North of Dundas Street in the 1901 census, including that of Thomas Dunn. Dunn was listed as a 49-year-old English-born Methodist farmer who lived with his wife Sarah Jane aged 44 and their sons John aged 23 and William aged 20. The family owned 100 acres and resided in a nine-room house [LAC, 1901 Census of Canada, Trafalgar Township].

**Field Conditions:** Lawn area around residential property.

**Site Size (approximate):** 25 m E-W x 35 m N-S

**Assessment Method:** Test pit survey at 5 m intervals, and three one-metre square test units were excavated.

**Density & Distribution:** 553 artifacts found in an area of approximately 875 m<sup>2</sup>; 79 artifacts recovered from the initial test pit survey, and an additional 474 artifacts from three test units (see SD Figure 6).

**Content Summary:** A total of 553 historical Euro-Canadian artifacts was encountered, all of which were collected (Plates 42-43). An analysis of these artifacts is presented in Appendix A.

**General Collection Description:** The historical artifacts include 205 ceramic kitchen-related items, three glass kitchen-food items, 104 architectural items, six personal class items, 12 tools/equipment class items, and 15 indeterminate items. An additional 208 faunal remains were also collected. The ceramics include: pearlware [hand painted early palette (16), hand painted monochrome blue (2), blue transfer print (30), olde blue transfer print (3), and undecorated (6)]; refined white earthenware (RWE) [straight and moulded edgeware (2), factory slip banded (2), hand painted late palette (2), spongeware (1), Chinese motif transfer print (3), blue, brown and black transfer print (14) and undecorated (11)], ironstone [moulded (1), ribbed or panelled moulded (2), wheatware (13), blue transfer print (1) and undecorated (39)], coarse red earthenware (29), porcelain English bone china (5), banded factory slip and lustre on refined red earthenware (4), and decalcomania on semi-porcelain (1), and 18 unidentifiable sherds. Together, the ceramic assemblage is suggestive of a long occupation starting in the early nineteenth century extending to the late nineteenth or early twentieth century. This date is supported by the strong representation of early ceramics, such as pearlware, which were popular during the turn of the nineteenth century and continued, in Ontario, until the mid-1830s (Kenyon 1995). RWE quickly became the most popular ceramic of the mid-nineteenth century (Majewski and O'Brien 1987), while ironstone is found in very high frequencies in late nineteenth century sites, with a concurrent decline in the frequency of RWE (Kenyon 1995).

The remaining artifacts in the collection include both hand-wrought (36) and machine cut (32) nails and window glass (23). Additional architectural items include one brick fragment, one sewer pipe fragment, seven indeterminate nails, one roof nail and one wire nail. Hand-wrought nails were used during the early nineteenth century and were replaced with machine cut nails in the mid-nineteenth century (Wells 1998). Personal class artifacts include one shell button, one Treble Gilt brass button, one smoking pipe stem with yellow glaze, two grommets, and one piece of aqua container glass, likely from a small medicine bottle. Tools and equipment include fence staples (2), horseshoe nails (5), a shell casing, a spike, a split pin, and two pieces of strapping.

The faunal remains recovered include 203 mammal bone fragments and five avian bone fragments.



Indeterminate artifacts include artifacts that could not be confidently placed in any of the other classes. Fifteen artifacts were assigned to this class and include unidentifiable container glass and one piece of wire.

**Site Interpretation:** The artifacts recovered from the Stage 2 test pit survey are indicative of a Euro-Canadian occupation between ca. 1820 and 1890. This conclusion is most strongly supported by the ceramic assemblage, as well as the presence of both hand-wrought and machine cut nails. The land use history research indicates that Rebecca and Peter Kenney, who raised a family of 11 children on Lot 12, occupied PIN 249300653 during the first half of the nineteenth century. By 1851, the homelot included a one and a half storey frame house. It was inherited by eldest son William Kenney in 1871. He chose not to remain on the farm and Irish widow Bridget Hartnet and her children were listed as tenants in the 1871 census. William Trimble acquired the lot before selling it to Thomas Dunn in 1882. The Dunn family continued to occupy the lot at the time of the 1901 census.

Based on the nineteenth-century mapping review in this study, while no historical structures are visible on the 1859 map (ASI 2019a; Figure 3), the location of Site H1 may correspond to the William Trimble house depicted on the 1877 *Historical Atlas* (ASI 2019a; Figure 6).

**Has the CHVI been sufficiently assessed and documented in Stage 2:** No.

**Recommendations:** This site has further cultural heritage value and interest and requires further assessment.

**Justification:** Meets the requirements of Section 2.2, Standard 1 (c) of the S & G.

### 3.6 Findspot P4

**General Site location:** The site is located southeast of Highway 407 ETR and east of Trafalgar Road within an agricultural within PIN 249300653 (SD Table 1; SD Figures 5 and 7).

**Topography:** Site located within gently undulating agricultural field within the South Slope physiographic region.

**Soil Type:** Sandy-loam ploughzone soils.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-28, AjGw-32, AjGw-43, etc.), secondary water source east of the findspot (i.e. tributary of Joshua Creek).

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** The site area is within a ploughed field. Site visit on May 21-22, 2020.

**Site Size (approximate):** Isolated find.

**Assessment Method:** Pedestrian survey was conducted at 5 m intervals with intensive 1 m survey used within 20 m of the find. Ground surface visibility was better than 80% and weathering was adequate.

**Density & Distribution:** One isolated artifact was recovered (see SD Figure 7).



**Content Summary:** One lithic artifact.

**Sample Collected:** The collection comprises a single artifact.

**General Collection Description:** A single primary thinning flake of thermally altered Onondaga chert was recovered. The alternate margins exhibit steep dorsal and ventral edge retouch. The collected assemblage is detailed in the Site P4 artifact catalogue below.

**P4 Artifact Catalogue**

Cat#	Context	Qty	Category	Type	Material
L1	Surface	1	Lithic	PT – Primary Thinning Flake	Onondaga Chert

**Site Interpretation:** A single chipped stone artifact was recovered by ASI during the pedestrian survey of PIN 249300653. The presence of one non-diagnostic flake likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for the P4 Site.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

### 3.7 Findspot P5

**General Site location:** The site is located southeast of Highway 407 ETR and east of Trafalgar Road within an agricultural within PIN 249300653 (SD Table 1; SD Figures 5 and 7).

**Topography:** Site located within gently undulating agricultural field within the South Slope physiographic region.

**Soil Type:** Sandy-loam ploughzone soils.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-28, AjGw-32, AjGw-43, etc.), secondary water source east of the findspot (i.e. tributary of Joshua Creek).

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** The site area is within a ploughed field. Site visit on May 21-22, 2020.

**Site Size (approximate):** Isolated find.

**Assessment Method:** Pedestrian survey was conducted at 5 m intervals with intensive 1 m survey used within 20 m of the find. Ground surface visibility was better than 80% and weathering was adequate.

**Density & Distribution:** One isolated artifact was recovered (see SD Figure 7).

**Content Summary:** One lithic artifact.





**Sample Collected:** The collection comprises a single artifact.

**General Collection Description:** A single flake fragment of Onondaga chert was recovered. The collected assemblage is detailed in the Site P5 artifact catalogue below.

**P5 Artifact Catalogue**

Cat#	Context	Qty	Category	Type	Material
L1	Surface	1	Lithic	FF – Flake Fragment	Onondaga Chert

**Site Interpretation:** A single chipped stone artifact was recovered by ASI during the pedestrian survey of PIN 249300653. The presence of one non-diagnostic flake likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area..

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for the P5 Site.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

### 3.8 Site AjGw-43

**General Site location:** The site is located southeast of Highway 407 ETR and east of Trafalgar Road within an agricultural within PIN 249300653 (SD Table 2; SD Figures 5 and 7).

**Topography:** Site located within gently undulating agricultural field within the South Slope physiographic region.

**Soil Type:** Sandy-loam ploughzone soils.

**Features of Archaeological Potential:** Previously identified archaeological sites (AjGw-28, AjGw-32, etc.), secondary water source east of the findspot (i.e. tributary of Joshua Creek).

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** The site area is within a ploughed field. ASI site visit on May 21-22, 2020.

**Site Size (approximate):** Isolated find.

**Assessment Method:** In 1984 the Museum of Indian Archaeology (MIA), now the Museum of Ontario Archaeology, completed a pedestrian survey at 5 m intervals. In 2020, ASI completed a pedestrian survey at 5 m intervals with intensive 1 m survey used in the vicinity of the original find. Ground surface visibility was better than 80% and weathering was adequate.

**Density & Distribution:** One isolated artifact was recovered by MIA in 1984 (see SD Figure 7).

**Content Summary:** Pedestrian survey around the initial find failed to locate any further artifacts.

**Sample Collected:** No additional artifacts were recovered.



**General Collection Description:** A single flake fragment of Onondaga chert with evidence of utilization was recovered by MIA in 1984. No additional artifacts were recovered by ASI during the 2020 site visit.

**Site Interpretation:** A single chipped stone artifact was recovered by MIA during the pedestrian survey of PIN 249300653. The presence of one non-diagnostic flake likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for AjGw-43.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

### 3.9 Findspot P6

**General Site location:** The site is located southeast of Highway 407 ETR and west of Fourth Road within an agricultural within PIN 249280183 (SD Table 1; SD Figure 8).

**Topography:** Site located within level agricultural field within the South Slope physiographic region.

**Soil Type:** Sandy-loam ploughzone soils.

**Features of Archaeological Potential:** Previously identified archaeological sites (AiGw-161, AiGw-163 AiGw-164, AiGw-323, etc.), primary water source west of the findspot (i.e. Bronte Creek).

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** The site area is within a ploughed field. Site visit on May 22, 2020.

**Site Size (approximate):** Isolated find

**Assessment Method:** Pedestrian survey was conducted at 5 m intervals with intensive 1 m survey used within 20 m of the find. Ground surface visibility was better than 80% and weathering was adequate.

**Density & Distribution:** Two isolated artifacts were recovered 7 m apart (see SD Figure 8).

**Content Summary:** Two lithic artifacts.

**Sample Collected:** All observed artifacts were collected.

**General Collection Description:** One biface fragment of Bois Blanc chert and one flake fragment of Onondaga chert were recovered. The refined biface fragment measures 23 mm in length, 19 mm in width and 4 mm in thickness (Plate 41). The collected assemblage is detailed in the Site P6 artifact catalogue below.



**P6 Artifact Catalogue**

Cat#	Context	Qty	Category	Type	Material
L1	Surface	1	Lithic	BI – Biface	Bois Blanc chert
L2	Surface	1	Lithic	FF – Flake Fragment	Onondaga chert

**Site Interpretation:** Two chipped stone artifacts were recovered by ASI during the pedestrian survey of PIN 249280183. The presence of non-diagnostic flakes likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for the P6 Site.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

**3.10 Findspot P7**

**General Site location:** The site is located southeast of Highway 407 ETR and west of Fourth Road within an agricultural within PIN 249280183 (SD Table 1; SD Figure 8).

**Topography:** Site located within level agricultural field within the South Slope physiographic region.

**Soil Type:** Sandy-loam ploughzone soils.

**Features of Archaeological Potential:** Previously identified archaeological sites (AiGw-161, AiGw-163 AiGw-164, AiGw-323, etc.), primary water source west of the findspot (i.e. Bronte Creek).

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** The site area is within a ploughed field. Site visit on May 22, 2020.

**Site Size (approximate):** Isolated find.

**Assessment Method:** Pedestrian survey was conducted at 5 m intervals with intensive 1 m survey used within 20 m of the find. Ground surface visibility was better than 80% and weathering was adequate.

**Density & Distribution:** One isolated artifact was recovered (see SD Figure 8).

**Sample Collected:** The collection comprises a single artifact.

**General Collection Description:** One flake fragment of Onondaga chert was recovered. The collected assemblage is detailed in the Site P7 artifact catalogue below.

**P7 Artifact Catalogue**

Cat#	Context	Qty	Category	Type	Material
L1	Surface	1	Lithic	FF – Flake Fragment	Onondaga chert



**Site Interpretation:** One chipped stone artifact was recovered by ASI during the pedestrian survey of PIN 249280183. The presence of one non-diagnostic flake likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for the P7 Site.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

### 3.11 Findspot P8

**General Site location:** The site is located southeast of Highway 407 ETR and west of Fourth Road within an agricultural within PIN 249280183 (SD Table 1; SD Figure 8).

**Topography:** Site located within level agricultural field within the South Slope physiographic region.

**Soil Type:** Sandy-loam ploughzone soils.

**Features of Archaeological Potential:** Previously identified archaeological sites (AiGw-161, AiGw-163 AiGw-164, AiGw-323, etc.), primary water source west of the findspot (i.e. Bronte Creek).

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** The site area is within a ploughed field. Site visit on May 22, 2020.

**Site Size (approximate):** 5 m E-W x 2 m N-S

**Assessment Method:** Pedestrian survey was conducted at 5 m intervals with intensive 1 m survey used within 20 m of the find. Ground surface visibility was better than 80% and weathering was adequate.

**Density & Distribution:** Two isolated artifacts were recovered 7 m apart (see SD Figure 8).

**Content Summary:** Two lithic artifacts.

**Sample Collected:** All observed artifacts were collected.

**General Collection Description:** Two flake fragments, one of Onondaga chert and one of Bois Blanc chert were recovered. The collected assemblage is detailed in the Site P8 artifact catalogue below.

**P8 Artifact Catalogue**

Cat#	Context	Qty	Category	Type	Material
L1	Surface	1	Lithic	FF – Flake Fragment	Onondaga chert
L2	Surface	1	Lithic	FF – Flake Fragment	Bois Blanc chert

**Site Interpretation:** Two chipped stone artifacts were recovered by ASI during the pedestrian survey of PIN 249280183. The presence of non-diagnostic flakes likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area.



**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for the P8 Site.

**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

### 3.12 Findspot P9

**General Site location:** The site is located southeast of Highway 407 ETR and west of Fourth Road within an agricultural within PIN 249280183 (SD Table 1; SD Figure 8).

**Topography:** Site located within level agricultural field within the South Slope physiographic region.

**Soil Type:** Sandy-loam ploughzone soils.

**Features of Archaeological Potential:** Previously identified archaeological sites (AiGw-161, AiGw-163 AiGw-164, AiGw-323, etc.), primary water source west of the findspot (i.e. Bronte Creek).

**Site Type:** Pre-contact findspot of unknown cultural association.

**Field Conditions:** The site area is within a ploughed field. Site visit on May 22, 2020.

**Site Size (approximate):** Isolated find.

**Assessment Method:** Pedestrian survey was conducted at 5 m intervals with intensive 1 m survey used within 20 m of the find. Ground surface visibility was better than 80% and weathering was adequate.

**Density & Distribution:** One isolated artifact was recovered (see SD Figure 8).

**Content Summary:** One lithic artifact.

**Sample Collected:** The collection comprises a single artifact.

**General Collection Description:** One flake fragment of Onondaga chert was recovered. The collected assemblage is detailed in the Site P9 artifact catalogue below.

**P9 Artifact Catalogue**

Cat#	Context	Qty	Category	Type	Material
L1	Surface	1	Lithic	FF – Flake Fragment	Onondaga chert

**Site Interpretation:** One chipped stone artifact was recovered by ASI during the pedestrian survey of PIN 249280183. The presence of one non-diagnostic flake likely represents a single event such as the by-product of expedient tool repair by an individual passing through the site area.

**Has the CHVI been sufficiently assessed and documented in Stage 2:** Yes.

**Recommendations:** Stage 3 Assessment is not required for the P9 Site.



**Justification:** Does not meet the requirements of Section 2.2, Standard 1 (a) of the S & G.

### 3.13 Documentary and Material Record

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

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

**Table 3: Inventory of Documentary and Material Record**

Document/Material	Location	Comments
Written Field Notes, Annotated Field Maps, GPS Logs, etc.	Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9	Field notes hard copy, GPS data (digital) [33 files]
Field Photography (Digital)	Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9	Stored on ASI network servers [315 files]
Research/Analysis/Reporting Materials (Various Formats)	Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9	Hard copy and/or digital files stored on ASI network servers [14 files]
Artifacts	Archaeological Services Inc., 528 Bathurst Street, Toronto, ON M5S 2P9	All sealed in plastic bags measuring 13 cm x 21 cm and stored in a bankers' box

## 4.0 ANALYSIS AND CONCLUSIONS

ASI was contracted by LGL on behalf of the MTO to conduct a Stage 2 archaeological assessment for the 407 Transitway from west of Brant Street to west of Hurontario Street. The Study Area consists of the approximately 43-kilometre-long Preferred Design from west of Hurontario Street to west of Brant Street and seven preferred stations, whose locations will be determined as part of the overall study. Due to alignment changes to the 407 Transitway Project Limits, the area surveyed as part of this assessment is larger than the final alignment and the additional assessed areas are not part of the preferred preliminary design alternative of the transitway. The additional assessed areas were initially assessed but during the preliminary design they were redefined and/or eliminated.

The Stage 2 archaeological assessment for the 407 Transitway Project from Hurontario Street to Brant Street, was conducted intermittently between November 6, 2019 and May 22, 2020 for the property parcels where PTE had been acquired. The total survey area comprises 215 ha of both open and closed lands that encompasses approximately 167 ha of the preferred preliminary design alternative. During the course of the Stage 2 property survey, one historical Euro-Canadian site (H1), six pre-contact findspots (P4, P5, P6, P7, P8 and P9) and four pre-contact sites (P1, P2, P3 and River site) were identified (SD Figures 1 to 10).



Due to their non-diagnostic nature and overall paucity of artifacts, findspots P4, P5, P6, P7, P8, and P9 do not have continued CHVI as per S & G Section 2.2, Standard 1ai, and therefore do not meet the requirements for Stage 3 assessment.

Site P1 (AjGw-632) is a non-diagnostic precontact Indigenous site measuring 5 m in diameter and consists of include two flake fragments, two secondary retouch flakes, and one secondary knapping flake, all manufactured from Onondaga chert (SD Figure 2). A single Lockport secondary retouch flake was also recovered. Site P1 meets the requirements for Stage 3 assessment as per S & G Section 2.2, Standard 1.a.ii, and therefore requires further work.

Site P2 (AjGw-637) is a non-diagnostic precontact Indigenous site measuring 5 m in diameter and consists of one secondary retouch flake and one flake fragment manufactured from Onondaga chert, and one secondary retouch flake manufactured from Lockport chert. Site P2 does not meet the requirements for Stage 3 assessment as per S & G Section 2.2, Standard 1.a.ii, and therefore does not require further work.

Site P3 (AjGw-481) is a non-diagnostic precontact Indigenous site measuring 5 m in diameter and consists of two flake fragments and one secondary retouch flake, all manufactured from Onondaga chert (SD Figure 3). Two flake fragments and one secondary knapping flake manufactured from Bois Blanc chert were also recovered. Site P3 meets the requirements for Stage 3 assessment as per S & G Section 2.2, Standard 1.a.ii, and therefore requires further work.

At AjGw-631, H1, a total of 553 artifacts was recovered from the test pit survey and test unit excavations. The scatter, measuring approximately 35 m x 25 m was located south of Highway 407 ETR and east of Trafalgar Road within a residential lot (SD Figure 6). The analysis of the artifacts recovered from Site H1 indicates that it likely represents a Euro-Canadian occupation dating from the early nineteenth century to the late nineteenth or early twentieth century. This conclusion is supported by land use history research, ceramic assemblage, as well as the presence of hand-wrought and machine cut nails. According to S & G: Section 2.2, Standard 1 (c), archaeological sites with more than 20 artifacts that pre-date 1900 are culturally significant and as such must be subject to a Stage 3 Site-Specific assessment.

The previously registered River Site (AjGw-68) was first encountered by MPP in 1985 and 1986 during an archaeological assessment for the proposed NPS 36 Parkway Belt West Pipeline project. The site is located south of the current Highway 407 and is not within the Preferred Preliminary Design for the 407 Transitway (SD Figure 4). The site is a multi-component site including a Late Woodland village ca. 1400-1450 CE; a Middle Woodland camp consisting of six vessels and a projectile point, suggested to be affiliated with the Point Peninsula Complex ca. 300 B.C. to 500 CE; and a Broad Point Archaic component ca. 1800-1400 CE. The River Site should be subject to a Stage 3 Site-specific assessment following S & G Section 3.2 prior to any construction or soil disturbing activities.

The Stage 1 background research identified five previously registered archaeological sites are located within the current preferred preliminary design alternative, but are not within the current study area, and retain further CHVI: Bob Alton site (AiGw-97), 403-36 site (AiGw-165), 81-403-49 (AjGw-32), and 81-403-51 site (AjGw-33) (SD Figures 5, 9-10). The sites are recommended for Stage 2 survey to relocate them, due to the passage of time and paucity of mapping from when they were first identified. Site AjGw-43 was reinvestigated as part of the current project and due to its non-diagnostic nature and overall paucity of artifacts, does not have continued CHVI as per S & G Section 2.2, Standard 1ai, and therefore does not meet the requirements for Stage 3 assessment.



## 5.0 RECOMMENDATIONS

In light of the above results, ASI makes the following recommendations:

1. The following PINs in the 407 Transitway Project study area have been fully documented within the limits of the project. No further archaeological assessment is required on these lands;

• 140845472	• 249380091	• 249300097
• 140844328	• 249380025	• 249290024
• 140842014	• 249310073	• 249280183
• 140850146	• 249310107	
• 249390131	• 249300099	
2. Pre-contact Indigenous findspots P4, P5, P6, P7, P8, P9 and site AjGw-43 are isolated and non-diagnostic in nature. They do not have sufficient CHVI for Stage 3 Site-specific assessment as per S & G Section 2.2, Standard 1ai, therefore no further archaeological assessment is required;
3. Precontact Indigenous site P2 (AjGw-637) is diffuse and non-diagnostic in nature. Site P2 does not have sufficient CHVI for Stage 3 Site-specific assessment as per S&G Section 2.2, Standard 1aii, and further archaeological assessment is not required;
4. Registered pre-contact Indigenous Sites P1 (AjGw-632) and P3 (AjGw-481), identified within PIN 140854990, exhibits CHVI as per S & G Section 2.2, Standard 1.a.ii, and therefore meets the requirements for Stage 3 Site-specific Assessment. Stage 3 assessment is recommended prior to any construction or soil disturbing activities to clarify the nature and extent of the cultural deposit, and to aid in the determination of a Stage 4 mitigation strategy, if one is required.
  - a. Following S & G Table 3.1 for small precontact sites with undetermined cultural heritage value, the Stage 3 archaeological assessments should commence with the creation of a recording grid on a fixed datum, the position of which has been recorded using a GPS.
  - b. Each site will be excavated by hand, placing one metre square units in an established five metre grid across each site with additional units amounting to 20% of the site grid total. These will be placed strategically in areas of interest around units of high artifact counts or other significant areas of the site. The test units should be excavated five cm into the sterile subsoil and soil fills screened through six mm wire mesh to facilitate artifact recovery. The sterile subsoil should be trowelled and all soil profiles examined for undisturbed cultural deposits.
5. Historical Euro-Canadian Site H1 (AjGw-631), identified within PIN 249300653, has further cultural heritage value or interest and Stage 3 Archaeological Assessment is recommended in accordance with the S & G in order to clarify the nature and extent of the cultural deposits, and to aid in the determination of a Stage 4 mitigation strategy, if one is required. Given that it is not yet evident if this site possessed sufficient CHVI to require Stage 4 mitigation of impacts, the following strategy is recommended following S & G Table 3.1:
  - The Stage 3 archaeological assessment should commence with the creation of a recording grid on a fixed datum, the position of which has been recorded using a GPS.



- The site must then be excavated by hand, placing 1 m square units in a 5 m grid across the site with additional units amounting to 20% of the grid total. These will be placed in areas of interest around units of high artifact counts or other significant areas of the site. The test units should be excavated five cm into the sterile subsoil and soil fills screening through 6 mm wire mesh to facilitate artifact recovery. The sterile subsoil should be troweled and all soil profiles examined for undisturbed cultural deposits.
6. The River Site (AjGw-68) is a highly significant multi-component indigenous site. It has previously been documented by MPP in 1985-86 and subsequently by Dillon in 1994-95 and DRPA in 2014, has been determined to possess further CHVI and is in PIN 140854990. A portion of Site AjGw-68 falls within the preferred preliminary design alternative and will require a Stage 3 Site-specific Assessment. Stage 3 assessment is recommended as per recommendations made in DRPA 2014 prior to any construction or soil disturbing activities to clarify the nature and extent of the cultural deposit, and to aid in the determination of a Stage 4 mitigation strategy, if required. Within the preferred design alternative:
- Following S & G Table 3.1, the Stage 3 archaeological assessment should commence with the creation of a recording grid on a fixed datum, the position of which has been recorded using a GPS.
  - A series of one-metre by one-metre units should then be excavated across the entire site area at five-metre intervals within an established grid in order to determine the nature and extent of the cultural deposits.
  - Following the test unit excavation, as per S & G Standard 3.3.2 mechanical removal of the topsoil may be required to establish site limits, followed by the shovel shining of the exposed surfaces and subsequent inspection for subsurface cultural features or settlement patterns.

If portions of the River site outside the preferred design alternative are to be impacted, Stage 3 assessment following S & G Section 3.2 will be required as per recommendations made in DRPA 2014.

7. AiGw-97, AiGw-165, AjGw-32, and AjGw-33 are within the Study Area and is considered to retain further CHVI. The sites are recommended for Stage 2 survey to relocate them, due to the passage of time and paucity of mapping from when they were first identified;
8. Lands within the final alignment of the 407 Transitway Project Limits that have been documented as having archaeological potential require Stage 2 assessment prior to any construction or soil disturbing activities;
9. Should the proposed work extend beyond the current Project Limits, then further archaeological assessment must be conducted to determine the archaeological potential of the surrounding lands.



## 6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

ASI also advises compliance with the following legislation:

- This report is submitted to the Minister 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 *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 Government and Consumer Services.
- Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, nor may artifacts be removed from them, except by a person holding an archaeological license.

## 7.0 REFERENCES CITED

### A. M. Archaeological Associates

1998 *The Archaeological Assessment of Highway 407 West (Stages 1-3)*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

### Ambrose, M.T.

1984 *An Archaeological Assessment of Highway 403*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

### Archaeological Assessments Limited

2008 *The Stage 1-2 Archaeological Assessment of the Huronia Regional Centre Property, Part of Lots 10 and 11, Concession 2 and Part of Lots 10, 11, 12, 13 AND 14, Concession 3, South Orillia Geographic Township, City of Orillia, County of Simcoe, Ontario Realty Corporation Project No. D00430*. Toronto.

### Archaeological Assessments Ltd.

2008 *The Stage 1-2 Archaeological Assessment of the Ontario Realty Corporation Highway 407 and Credit River Property, City of Brampton, Regional Municipality of Peel Project No.D64021*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

### ASI, (Archaeological Services Inc.)

1998 *Archaeological Master Plan for the Regional Municipality of Halton*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

1999 *An Archaeological Assessment of the Highway 407 ETR - West Extension*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

2008 *Master Plan of Archaeological Resources of the Regional Municipality of Halton 2008 Update*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

2019 *Stage 2 Archaeological Assessment of 6314 and 6302 Ninth Line, Part of Lot 7, Concession 9 New Survey, Geographic Township of Trafalgar, Halton County, City of Mississauga, Regional Municipality of Peel, Ontario [P449-0355-2019]*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

2020a *Stage 1 Archaeological Assessment 407 Transitway from West of Hurontario Street to West of Brant Street G.W.P. 16-20003 (Former Township of Toronto, County of Peel and Former Townships of Trafalgar, and Nelson, County of Halton) City of Brampton and City of Mississauga, Peel Region; Town of Halton Hills, Town of Milton, Town of Oakville, and City of Burlington; Halton Region, Ontario [P380-0055-2019]*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

2020b *Stage 2 Archaeological Assessment of 6252 Ninth Line, Part of Lot 7, Concession 9 New Survey, Geographic Township of Trafalgar, Halton County, City of Mississauga, Regional Municipality of Peel, Ontario [P449-0354-2019]*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.



2020c *Stage 2 Archaeological Assessment of Part of Lot 7, Concession 9 New Survey, Geographic Township of Trafalgar, Halton County, City of Mississauga, Regional Municipality of Peel, Ontario [P449-0386-2019]*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

Campbell, S., B.J. Lawrence, and A. Von Gernet  
2017 *The Town of Oakville: The Mississauga People (1701-1800)*.  
<http://www.oakville.ca/culturerec/firstnations-essay5.html>.

Chapman, L.J., and F. Putnam  
1984 *The Physiography of Southern Ontario*. Vol. 2. Ontario Geologic Survey, Special Volume. Ontario Ministry of Natural Resources, Toronto.

#### Conservation Halton

2008 *Urban Creeks and Supplemental Monitoring. Long Term Environmental Monitoring Program*.

2009 *Bronte Creek and Supplemental Monitoring. Long Term Environmental Monitoring Program*.

2017 *Conservation Halton Watersheds*. <http://www.conservationhalton.ca/conservation-halton-watersheds>.

#### Credit Valley Conservation

2009 *Rising to the Challenge: A Handbook for Understanding and Protecting the Credit River Watershed*.

#### Dillon Consulting Ltd.

1994 *Canadian Highways International Constructors - Archaeological Assessment of Highway 407 ROW – Stage 2 Assessment & Stage 3 Testing - 1994 Field Season*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

1997a *Canadian Highways International Constructors, Archaeological Assessment of Highway 407 ROW - Final Report: Stage 3 Testing and Stage 4 Mitigation – Pengilley Site (AjGw-66) Prehistoric Component*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

1997b *Canadian Highways International Constructors, Archaeological Assessment of Highway 407 ROW - Final Report: Stage 3 Testing and Stage 4 Mitigation – Pengilley Site (AjGw-66) James Burns Historic Component*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

1997c *Canadian Highways International Constructors Archaeological Assessment of Highway 407 ROW River Site (AjGw-68) Stage 3: Testing & Stage 4: Mitigation Final Report*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

#### D.R. Poulton & Associates Inc.

2014 *The 2013-2014 Stage 2 Archaeological Assessment of Segment A of the Proposed*



*Enbridge Gas Distribution GTA Project, Regional Municipalities of Halton, Peel & York, Ontario.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

2015 *The 2014 Stage 3 Archaeological Assessment of the Pengilley Site (AjGw-66), Segment A of the Proposed Enbridge Gas Distribution Inc. GTA Project, City of Brampton, Regional Municipality of Peel, Ontario.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

2016 *The 2014 Stage 4 Archaeological Assessment of the Pengilley Site (AjGw-66), Segment A of the Proposed Enbridge Gas Distribution Inc. GTA Project, City of Brampton, Regional Municipality of Peel, Ontario.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

Fisher Archaeological Consulting

2008 *Archaeological Stage 3: Testing of Four Sites AjGw-280, -480, -481 & -482. Credit River & Highway 407, City of Brampton.* Final Report. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

Gibson, M.M.

2002 *Changes at the River's Mouth: The Port Credit Community.* In *Mississauga: The First Ten Thousand Years.* F.A. Dieterman. Eastend Books, Toronto.

Jameson

1838 *Winter Studies and Summer Rambles in Canada.* London.

Kenyon, I.

1995 *A History of Ceramic Tableware in Ontario: 1780-1910. Paper Presented at Table Talks Lecture Series, Montgomery's Inn.* Toronto.

Majewski, T., and M.J. O'Brien

1987 *The Use and Misuse of Nineteenth-Century English and American Ceramics.* In *Archaeological Analysis. Advances in Archaeological Method and Theory*, M.B. Schiffer, ed, Volume II:pp. 97–209. Academic Press, New York.

Mayer, Pihl, Poulton and Associates Inc.

1985a *An Archaeological Resource Assessment of the Proposed Parkway Belt West Pipeline in Halton, Peel and York Regional Municipalities, Ontario.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

1985b *Mitigative Investigations at Three Archaeological Sites on the Proposed Parkway Belt West Pipeline.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

1986 *An Interim Report on the 1986 Mitigative Excavations at the Pengilley and River Sites.* Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.



Mayer, Poulton and Associates Inc.

1991 *Report on the 1985-1986 Mitigative Excavations of the River and Pengilley Sites*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

MHCI, (Mayer Heritage Consultants Inc.)

1994 *Archaeological Testing and Salvage of Four Sites on Highway 403. Phase I Report for Site AiGw-129*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

MHSTCI, (Ministry of Heritage, Sport, Tourism and Culture Industries)

1990 *Ontario Heritage Act, R.S.O. 1990, c. O.18 [as Amended in 2019]*.

Ministry of Heritage, Sport, Tourism and Culture Industries

2019 Ontario's Past Portal. *PastPortal*. <https://www.pastport.mtc.gov.on.ca>.

Ministry of the Environment

1990 Environmental Assessment Act, R.S.O. Province of Ontario.

Ministry of Tourism and Culture

2011 *Standards and Guidelines for Consultant Archaeologists*. Cultural Programs Branch, Ontario Ministry of Tourism and Culture, Toronto.

Murphy, C.

1995 *Archaeological Test Excavation of the White Beard Site (AiGw-132). Highway 407W, Town of Oakville*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

Oakvillegreen Conservation Association

2017 Fourteen Mile Creek: Small Creek Big Heart. <http://oakvillegreen.org/discover-your-creek/fourteen-mile-creek-small-creek-big-heart/>.

Pihl, R.H.

1982 *Final Report on the Phase I and II Archaeological Assessment of the Highway 403 Project from Highway 5 to Oakville Link*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

Rayburn, A.

1997 *Place Names of Ontario*. University of Toronto Press, Toronto.

Robb, G., P. Dilse, H. Henderson, B. Hermsen, W. Shearer, and P. Stewart

2003 *Heritage Conservation Feasibility Study of Old Port Credit Village, Stage 1 Report. Prepared for the City of Mississauga*. November 28.

Scott, W.B.

1997 *Ontario Place Names: The Historical, Offbeat or Humorous Origins of More Than 1,000 Communities*. Lone Pine Publishing, Edmonton.

Smith, D.B.

1987 *Sacred Feathers: The Reverend Peter Jones (Kahkewaquonaby) & the Mississauga*



*Indians*. University of Toronto Press, Toronto.

Stantec Consulting Ltd.

2016 *Stage 4 Avoidance and Protection: Pengilley Site (AjGw-66), Enbridge Gas Distribution Inc., GTA Project Part of Lot 13, Concession 3, Geographic Township of Toronto, Former Peel County, Now City of Brampton, Regional Municipality of Peel, Ontario*. Report on file with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, Toronto.

The Friends of the Greenbelt Foundation

2019 Fourteen Mile Creek. *Green Belt*. [https://www.greenbelt.ca/fourteen\\_mile\\_creek](https://www.greenbelt.ca/fourteen_mile_creek).

Town of Caledon

2009 *Cultural Heritage Landscape Inventory Report*.

Town of Oakville

2017 Sixteen Mile Creek Information Station. <http://www.oakville.ca/culturerec/is-sixteen.html>.

Wells, T.

1998 Nail Chronology: The Use of Technologically Derived Features. *Historical Archaeology* 32(2):79–99.

Wright, J.V.

1966 *The Ontario Iroquois Tradition*. *National Museum of Canada Bulletin 210*. National Museum of Canada, Ottawa.



## 8.0 MAPS





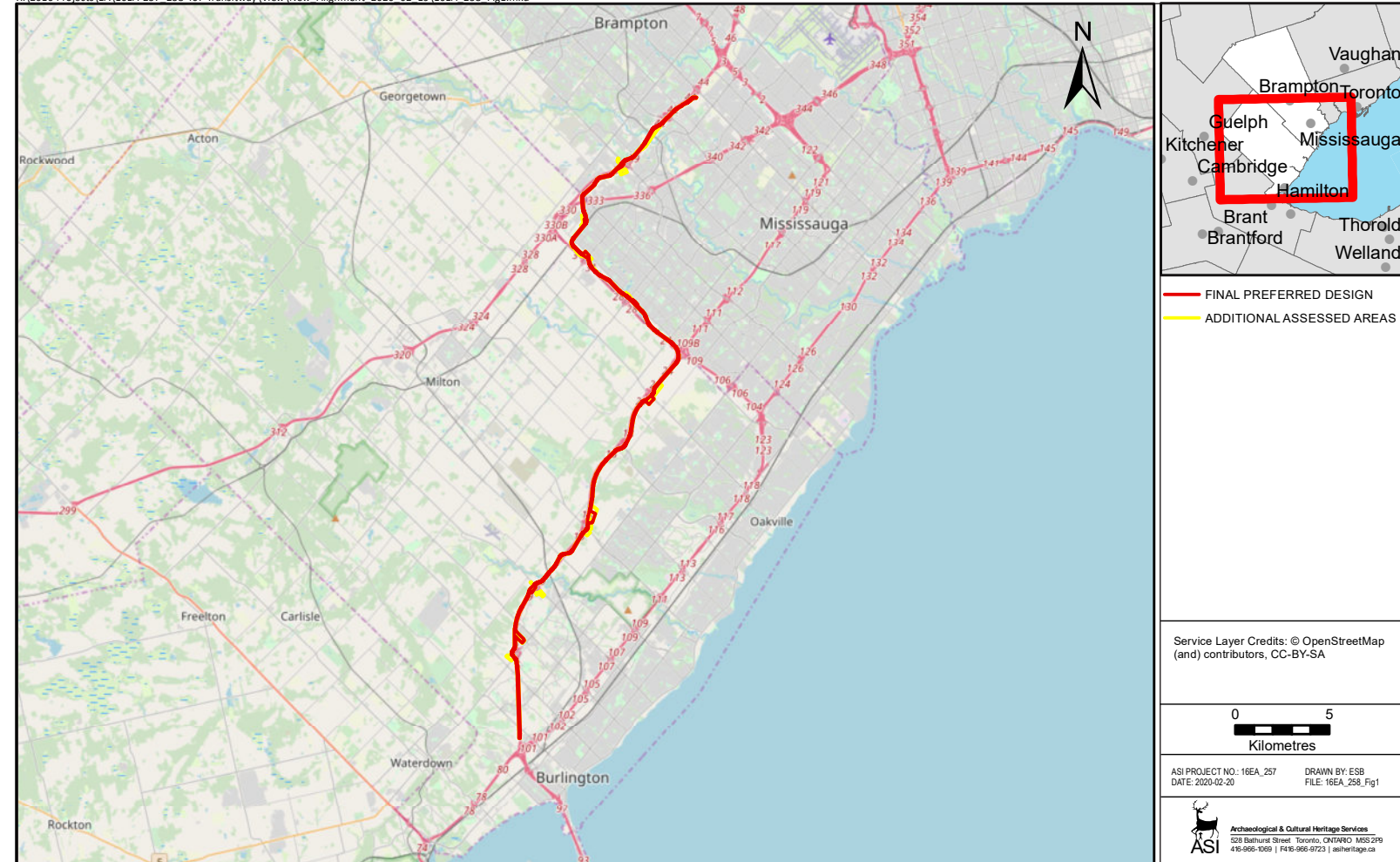
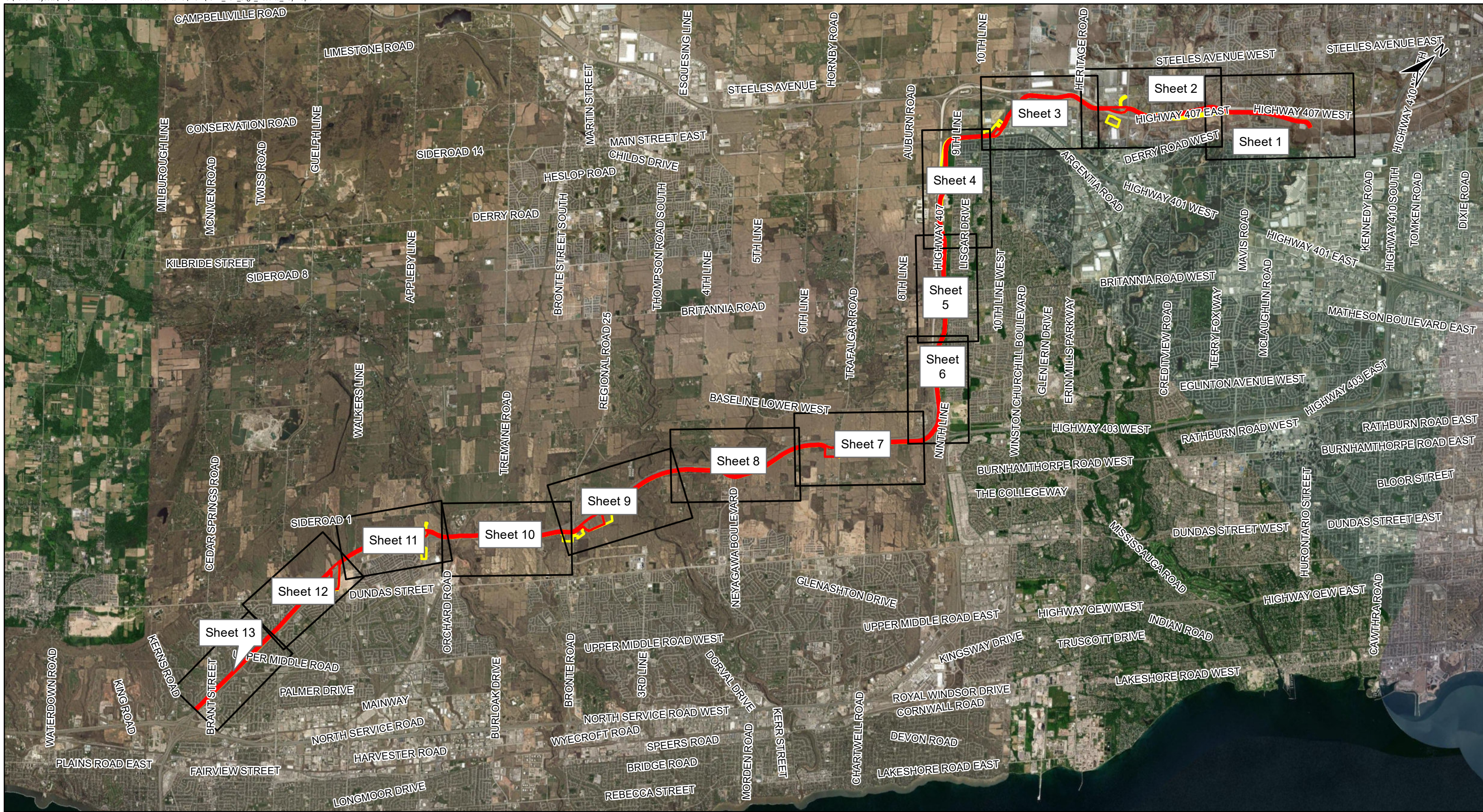


Figure 1: Location of the Study Area.



	PREFERRED DESIGN	Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  Projection: NAD 1983 UTM Zone 17N Scale: 1:100,000 Page Size: 11 x 17	0  5 Kilometers
	ADDITIONAL ASSESSED AREAS		
MAP KEY	ASI PROJECT NO.: 19EA_234 DATE: 2020-06-26	DRAWN BY: ESB FILE: 19EA_234_Results_KeyMap	

Figure 2: Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Key Map)



	PREFERRED DESIGN	DISTURBED - NO POTENTIAL	TEST PIT (5M)
	PTE PARCEL	LOW AND WET - NO POTENTIAL	STAGE 2 REQUIRED
	ADDITIONAL ASSESSED AREAS	SLOPE - NO POTENTIAL	PHOTO LOCATION AND DIRECTION
	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	JUDGEMENTAL TEST PITS (10M)	TEST PIT PROFILE

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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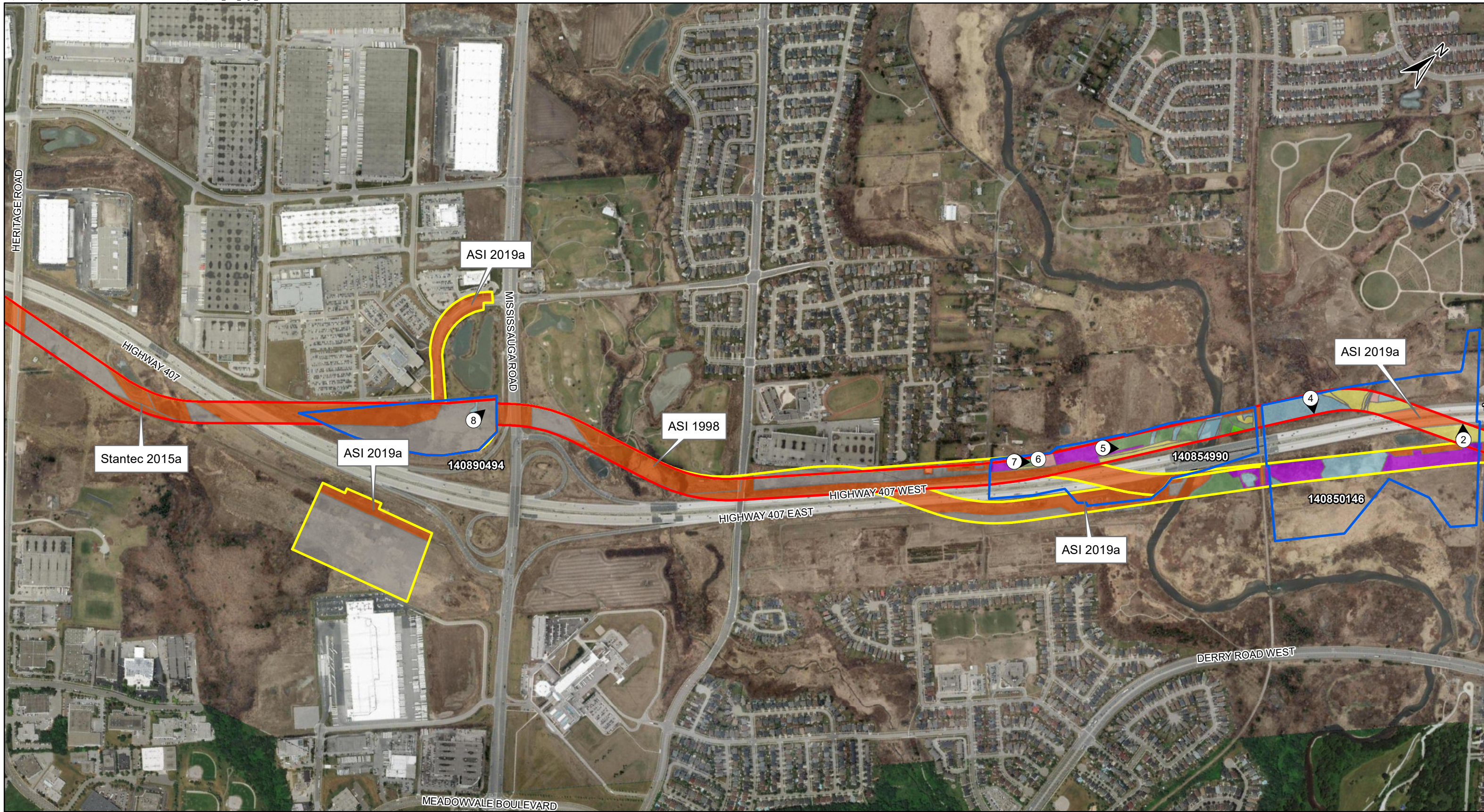
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Metres

ASI PROJECT NO.: 19EA\_234  
DATE: 2020-06-29

DRAWN BY: ESB  
FILE: 19EA\_234\_Stg2\_Results

Figure:3 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 1)



	PREFERRED DESIGN	DISTURBED - NO POTENTIAL	TEST PIT (5M)	TEST PIT PROFILE
	PTE PARCEL	LOW AND WET - NO POTENTIAL	STAGE 2 REQUIRED	
	ADDITIONAL ASSESSED AREAS	SLOPE - NO POTENTIAL	STAGE 3 REQUIRED	
	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	JUDGEMENTAL TEST PITS (10M)	PHOTO LOCATION AND DIRECTION	

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 17N  
Scale: 1:10,000  
Page Size: 11 x 17

0 500  
Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-07-07    FILE: 19EA\_234\_Stg2\_Results

Figure:4 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 2)



	PTE PARCEL	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED
	PREFERRED DESIGN	STAGE 2 REQUIRED
	ADDITIONAL ASSESSED AREAS	

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

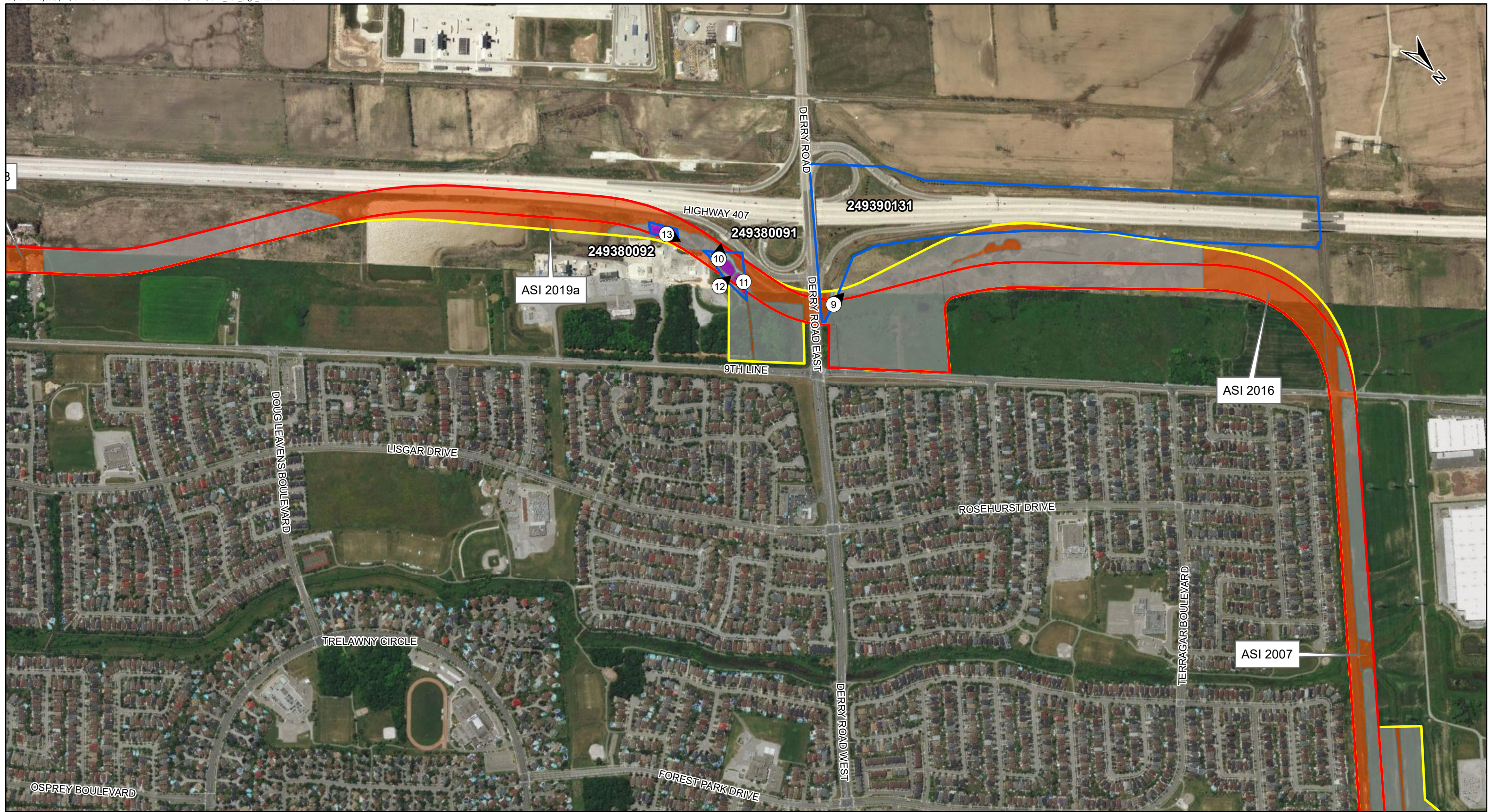
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0 400

Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
 DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:5 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 3)



	PTE PARCEL	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	JUDGEMENTAL TEST PITS (10M)	TEST PIT PROFILE
	PREFERRED DESIGN	DISTURBED - NO POTENTIAL	STAGE 2 REQUIRED	PHOTO LOCATION AND DIRECTION
	ADDITIONAL ASSESSED AREAS	LOW AND WET - NO POTENTIAL		

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 17N  
Scale: 1:8,500  
Page Size: 11 x 17

0 400  
Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:6 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 4)



	PTE PARCEL	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	STAGE 2 REQUIRED
	PREFERRED DESIGN	DISTURBED - NO POTENTIAL	PHOTO LOCATION AND DIRECTION
	ADDITIONAL ASSESSED AREAS	JUDGEMENTAL TEST PITS (10M)	TEST PIT PROFILE

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 17N  
Scale: 1:7,500  
Page Size: 11 x 17

0 375

Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:7 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 5)



	PTE PARCEL	DISTURBED - NO POTENTIAL	STAGE 2 REQUIRED
	PREFERRED DESIGN	LOW AND WET - NO POTENTIAL	PHOTO LOCATION AND DIRECTION
	ADDITIONAL ASSESSED AREAS	JUDGEMENTAL TEST PITS (10M)	TEST PIT PROFILE
	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	TEST PIT (5M)	

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 17N  
Scale: 1:7,500  
Page Size: 11 x 17

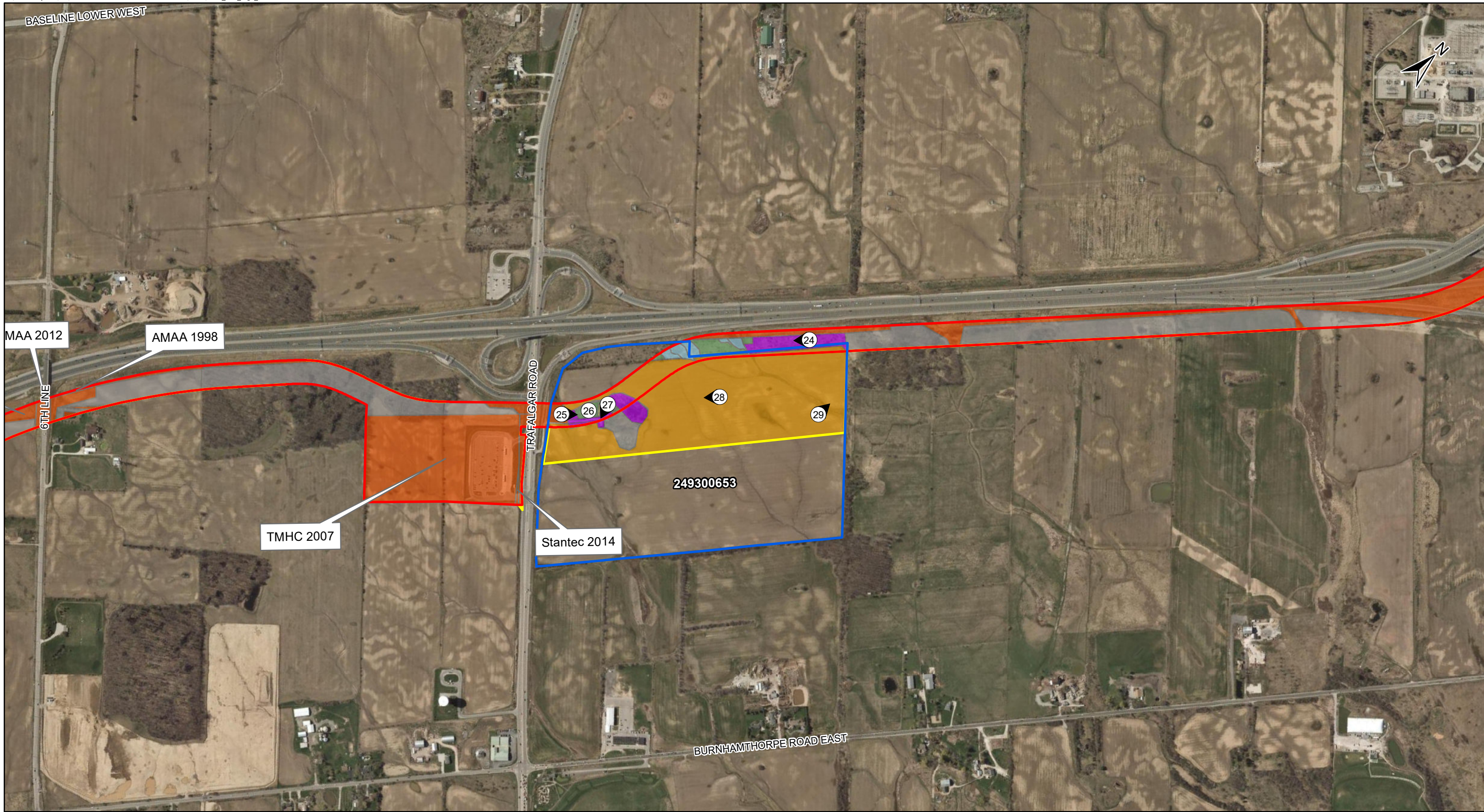
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Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:8 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 6)





	PTE PARCEL	DISTURBED - NO POTENTIAL	TEST PIT (5M)
	PREFERRED DESIGN	LOW AND WET - NO POTENTIAL	STAGE 2 REQUIRED
	ADDITIONAL ASSESSED AREAS	PEDESTRIAN SURVEY	PHOTO LOCATION AND DIRECTION
	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	JUDGEMENTAL TEST PITS (10M)	TEST PIT PROFILE

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

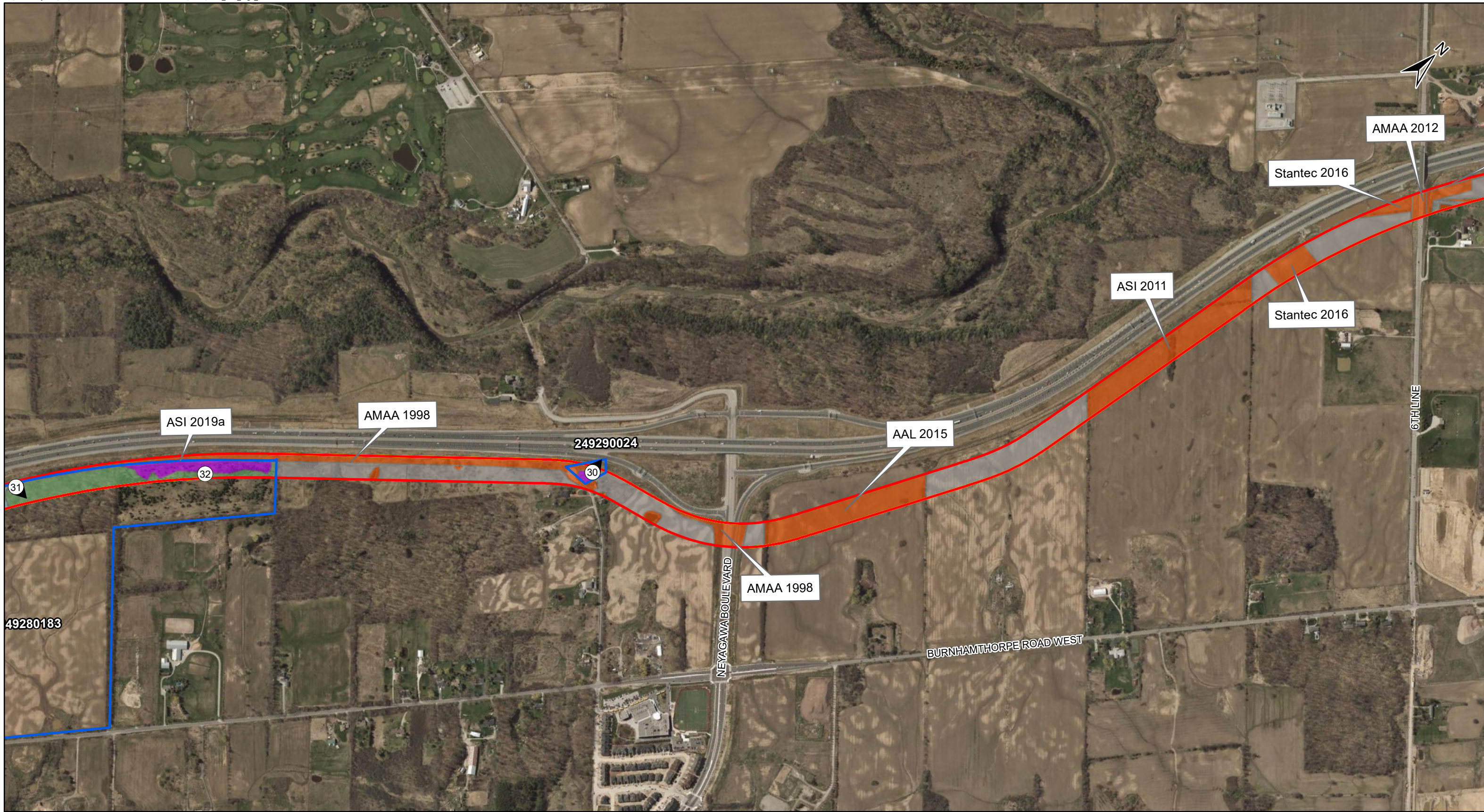
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Scale: 1:9,000  
Page Size: 11 x 17

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Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:9 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 7)



	PTE PARCEL	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	TEST PIT (5M)	TEST PIT PROFILE
	PREFERRED DESIGN	LOW AND WET - NO POTENTIAL	STAGE 2 REQUIRED	PHOTO LOCATION AND DIRECTION
	ADDITIONAL ASSESSED AREAS	JUDGEMENTAL TEST PITS (10M)		

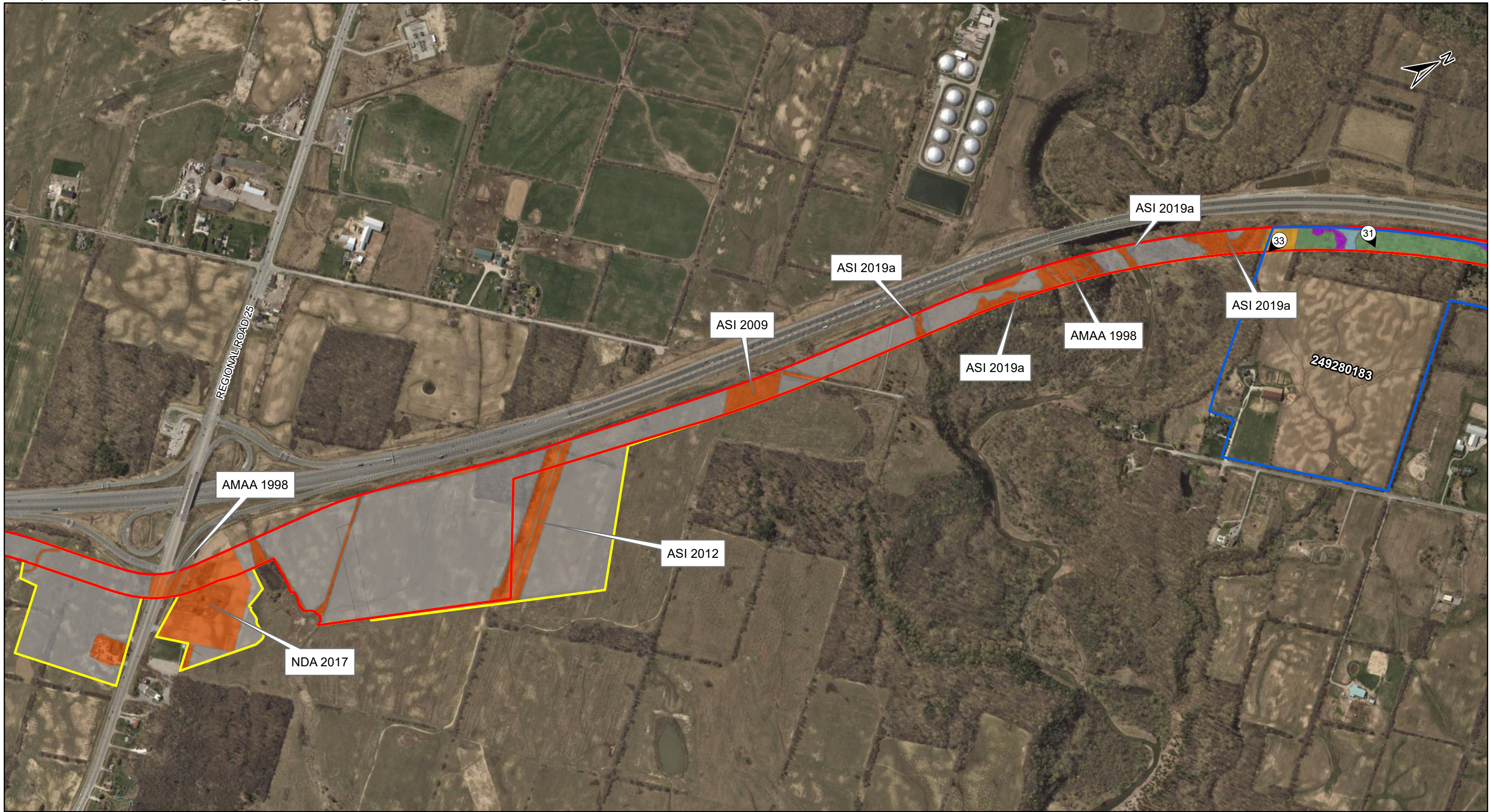
Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 17N  
Scale: 1:9,000  
Page Size: 11 x 17

0 450  
Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:10 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 8)



	PTE PARCEL	LOW AND WET - NO POTENTIAL	STAGE 2 REQUIRED
	PREFERRED DESIGN	PEDESTRIAN SURVEY	PHOTO LOCATION AND DIRECTION
	ADDITIONAL ASSESSED AREAS	JUDGEMENTAL TEST PITS (10M)	
	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	TEST PIT (5M)	

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

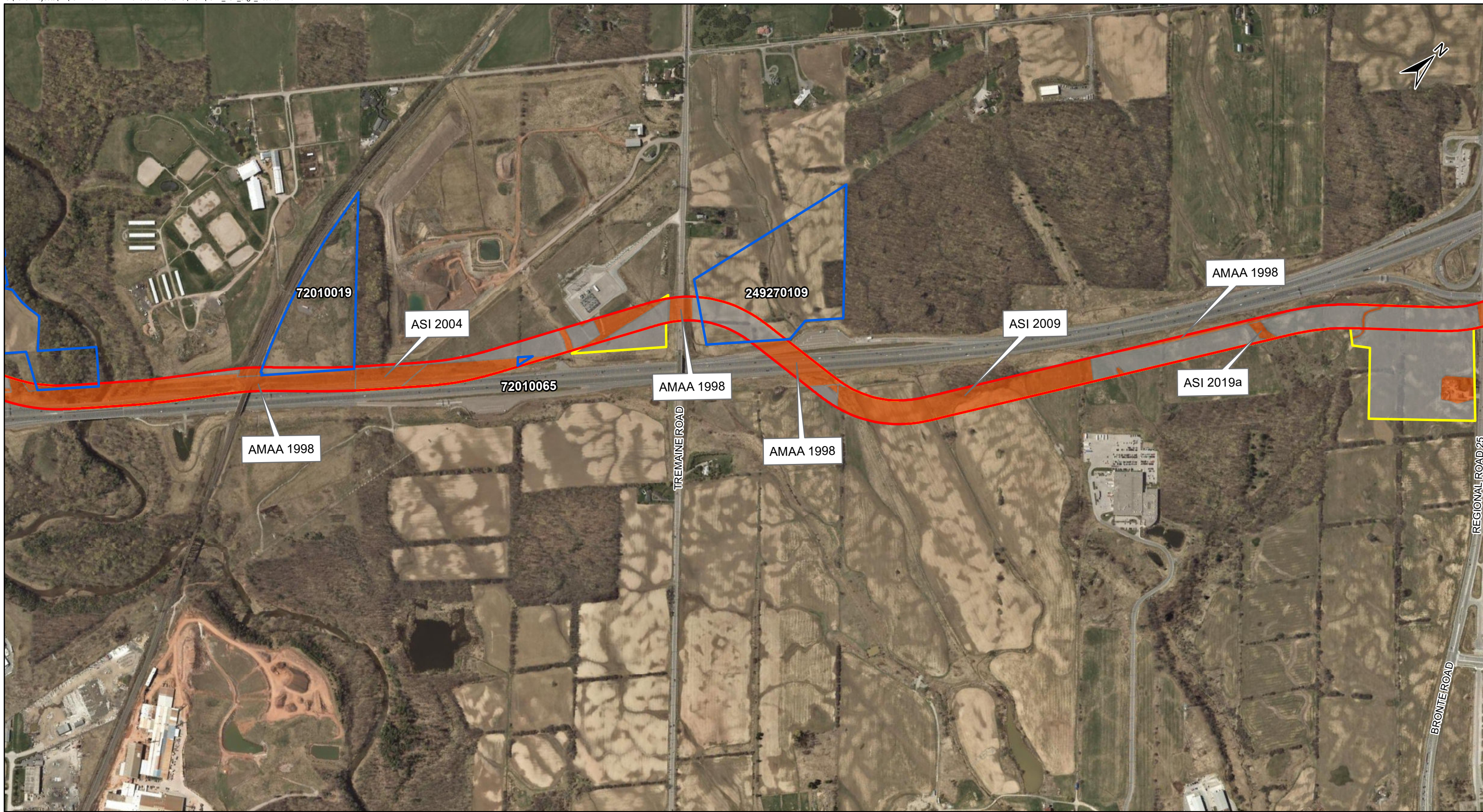
Projection: NAD 1983 UTM Zone 17N  
Scale: 1:9,000  
Page Size: 11 x 17

0 450

**Metres**

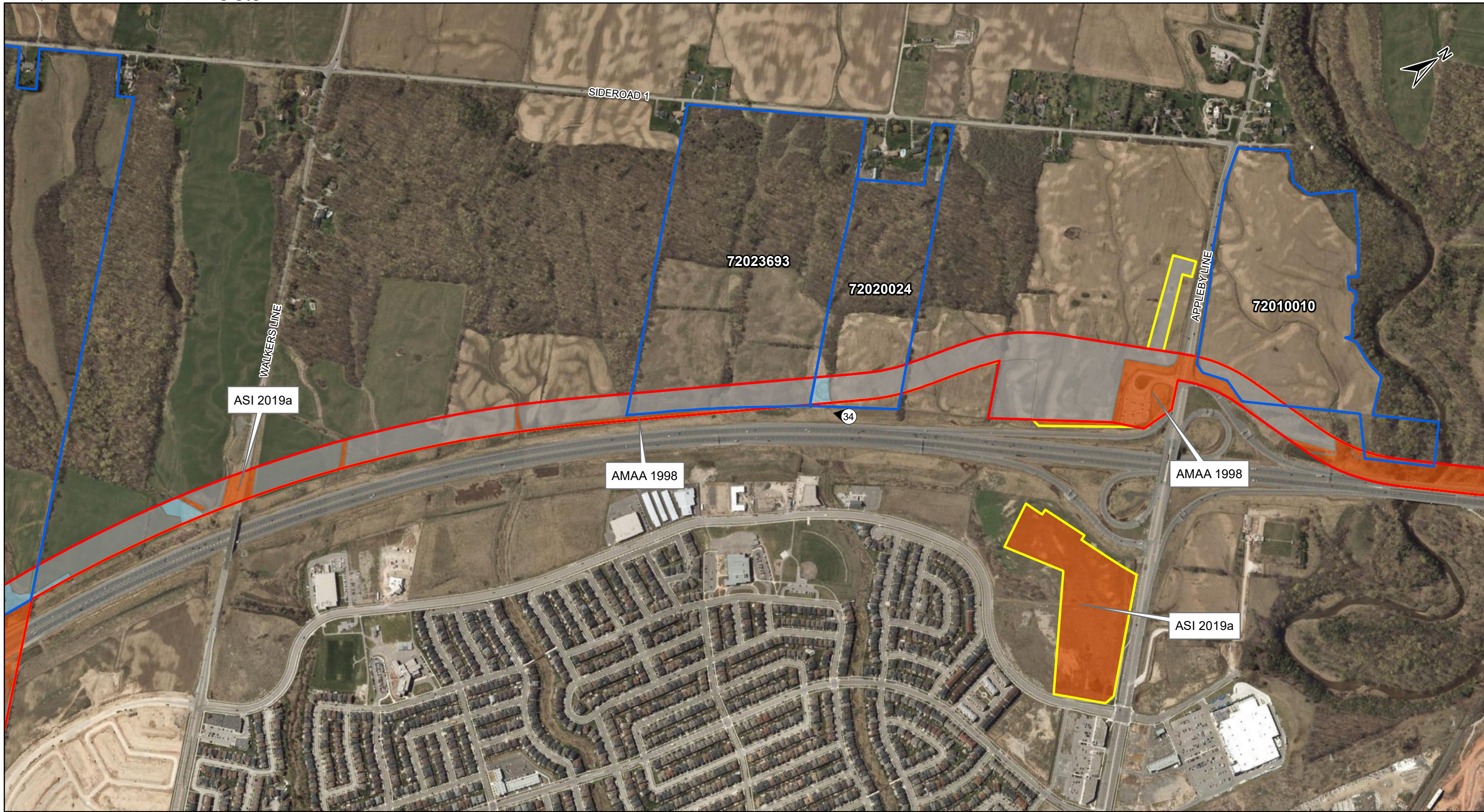
ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:11 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 9)



	PTE PARCEL	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community  Projection: NAD 1983 UTM Zone 17N Scale: 1:9,000 Page Size: 11 x 17	
	PREFERRED DESIGN	STAGE 2 REQUIRED		
	ADDITIONAL ASSESSED AREAS			
ASI PROJECT NO.: 19EA_234      DRAWN BY: ESB DATE: 2020-06-26      FILE: 19EA_234_Stg2_Results				

Figure:12 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 10)



	PTE PARCEL	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	STAGE 2 REQUIRED
	PREFERRED DESIGN	LOW AND WET - NO POTENTIAL	PHOTO LOCATION AND DIRECTION
	ADDITIONAL ASSESSED AREAS	TEST PIT (5M)	

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Projection: NAD 1983 UTM Zone 17N  
Scale: 1:8,000  
Page Size: 11 x 17

0 400  
Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:13 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 11)



	PTE PARCEL	PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED	STAGE 2 REQUIRED
	PREFERRED DESIGN	LOW AND WET - NO POTENTIAL	PHOTO LOCATION AND DIRECTION
	ADDITIONAL ASSESSED AREAS	TEST PIT (5M)	

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

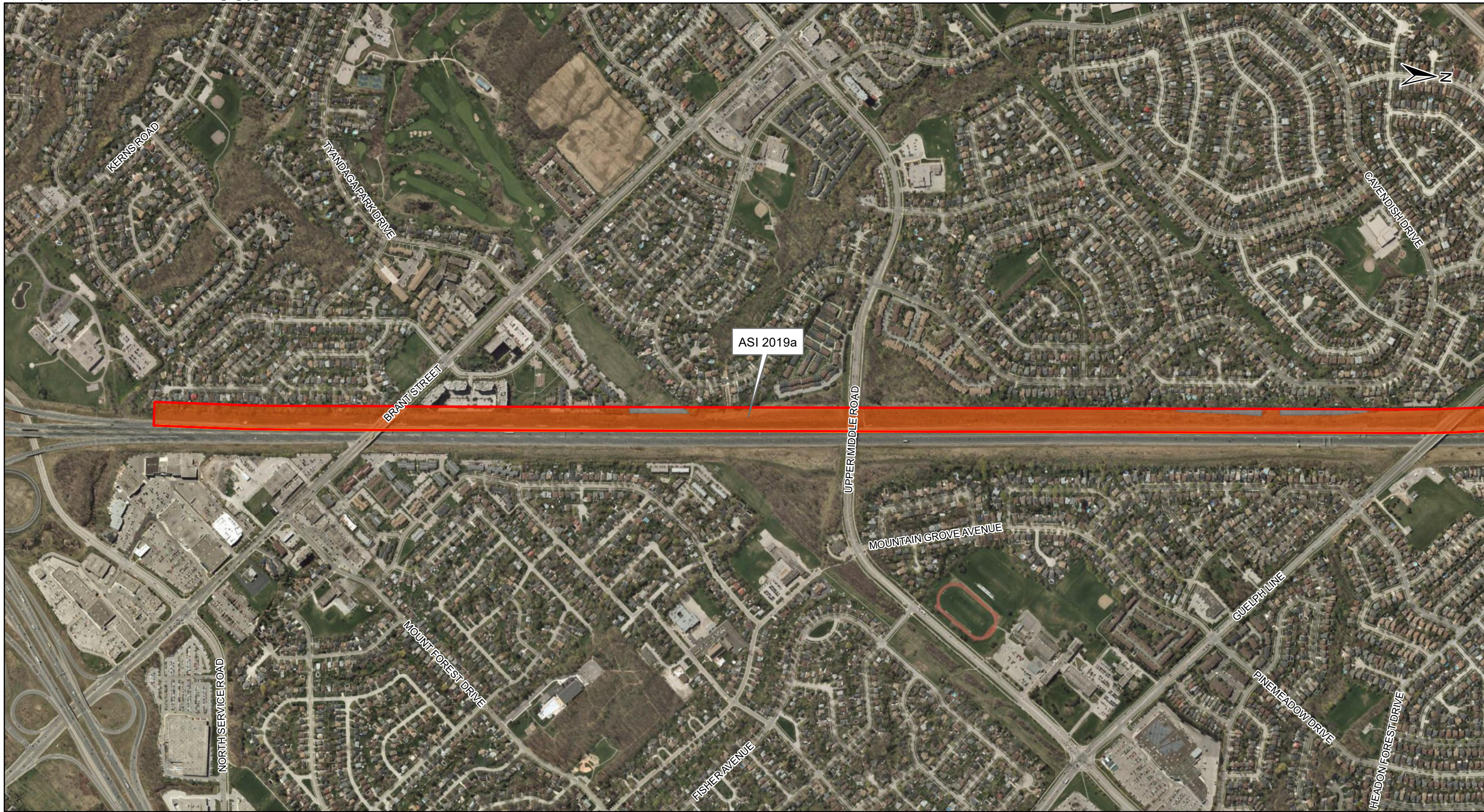
Projection: NAD 1983 UTM Zone 17N  
Scale: 1:8,000  
Page Size: 11 x 17

0 400

Metres

ASI PROJECT NO.: 19EA\_234    DRAWN BY: ESB  
DATE: 2020-06-26    FILE: 19EA\_234\_Stg2\_Results

Figure:14 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 12)








		PREFERRED DESIGN		STAGE 2 REQUIRED	<p>Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community</p> <p>Projection: NAD 1983 UTM Zone 17N Scale: 1:9,000 Page Size: 11 x 17</p>	<p>0 450</p> <p>Metres</p>
		ADDITIONAL ASSESSED AREAS				
		PREVIOUSLY ASSESSED - NO FURTHER WORK REQUIRED				
<p>ASI PROJECT NO.: 19EA_234 DRAWN BY: ESB DATE: 2020-06-26 FILE: 19EA_234_Stg2_Results</p>						

Figure:15 Results of the Stage 2 Archaeological Assessment for the 407 Transitway Project (Sheet 13)

## 9.0 IMAGES

Locations of all photos presented within this report are indicated by the numbered plate location markers on Figures 3-15.

### Fieldwork Photos



Plate 1: View of test pit survey at 5 m intervals



Plate 2: View of disturbed area adjacent to Highway 407.



Plate 3: Example of test pit with disturbed soil profile



Plate 4: View of wetland area.





Plate 5: View of test pit survey at 5 m intervals



Plate 6: View of test pit with intact soil profile.



Plate 7: View of Test Unit from site AjGw-632; dark brown sandy loam topsoil over yellowish brown subsoil



Plate 8: View across wetland area within field area.



Plate 9: View across low and wet area with disturbed built up roadbed in distance.



Plate 10: View of judgmental test pit survey at 10 m intervals



Plate 11: Disturbed soil profile with multiple layers of fill over low and wet area. No natural soils observed.



Plate 12: View across wetland area adjacent to Highway 407.



Plate 13: View of judgmental test pit survey at 10 m intervals



Plate 14: View of disturbed area: graded surface and large stockpile of soil.



Plate 15: View of judgmental test pit survey at 10 m intervals across lawn area.



Plate 16: Example of disturbed soil profile: brown clay fill over orangish subsoil.



Plate 17: Test pit survey at 5 m intervals in progress



Plate 18: Example of disturbed soil profile: dark brown clay fill soil over yellowish brown clay subsoil



Plate 19: Built-up berm adjacent to Highway 407, no potential.



Plate 20: Graded and disturbed area; no potential.



Plate 21: View of area subject to judgmental test pit survey.



Plate 22: View of test pit survey adjacent to Highway 407.



Plate 23: Example of disturbed soil profile; clay fill with gravel and concrete over subsoil.



Plate 24: Test pitting adjacent to Highway 407



Plate 25: View at creek and adjacent bank sloping down to creek



Plate 26: Example of natural soil profile: dark brown topsoil over yellowish brown subsoil.



Plate 27: Example of test unit profile at Site AjGw-631.



Plate 28: Pedestrian survey at 5 m intervals in progress.



Plate 29: Pedestrian survey at 1m interval in progress



Plate 30: Test pit survey in progress adjacent to Highway 407



Plate 31: View of test pit survey in progress in woodlot.



Plate 32: Example of natural test pit soil profile.



Plate 33: Pedestrian survey at 1m interval in progress.



Plate 34: View toward marsh area.



Plate 35: View of test pit survey in progress

**Artifact Photos:**



Plate 36: Selected lithic artifacts from Site P1 (Cat. L1 on left, Cat. L4 on right)



Plate 37: Selected lithic artifacts from Site P2 (from left to right: Cat. L1, Cat. L2, and Cat. L3)



Plate 38: Selected lithic artifacts from Site P3 (Cat. L4 on left, Cat. L6 on right)



Plate 39: River Site (AjGw-68) Identified Vessel (Cat. C7)



Plate 40: River Site (AjGw-68) Unanalyzable Rim Fragments (Cat. C1)



Plate 41: Refined biface fragment manufactured from Bois Blanc chert from Findspot P6 (Cat. L1)

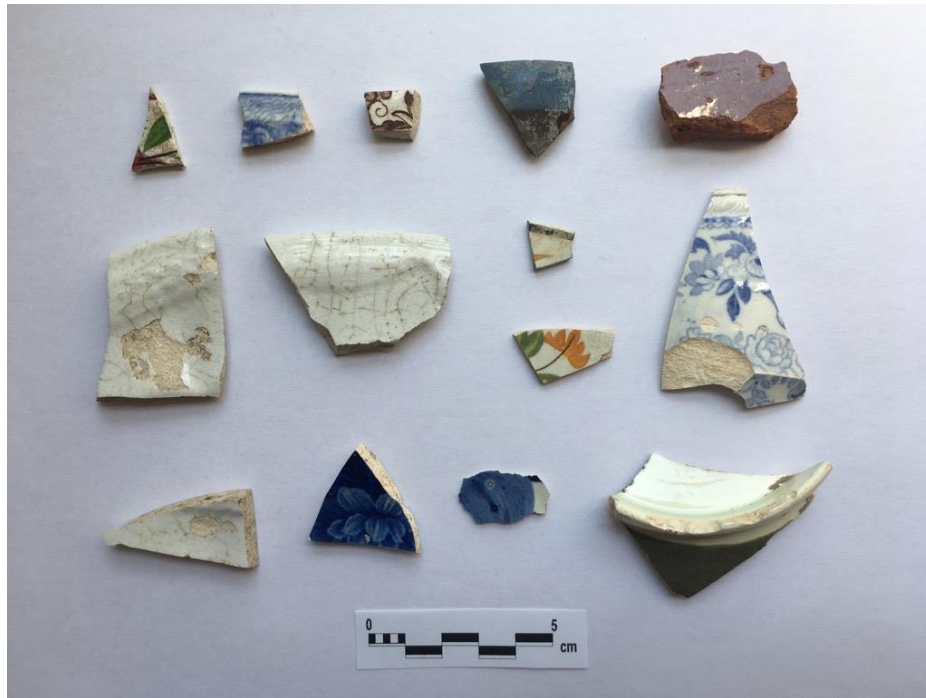


Plate 42: Select ceramic artifacts from H1, from L to R (top): RWE Hand-painted - Late Palette (Cat.157), RWE transfer print blue (Cat.231), RWE transfer print brown (163), Refined red earthenware (Cat.45), Red earthenware (Cat.133). From L to R (middle): Ironstone, wheatware (Cat.142) and (Cat.22), Pearlware Hand-painted – Early Palette (Cat.154) and (Cat.226), Pearlware – Factory Slip (Cat.4). From L to R (bottom): Ironstone, wheatware (Cat.143), Pearlware Transfer Print – Olde Blue (Cat.81), Pearlware Hand-painted-Monochrome Blue (Cat.2), Pearlware Transfer Print (cat.220)



Plate 43: Select non-ceramic artifacts, from L to R (top): machine cut nail (Cat.192), hand-wrought nail (Cat.190), unidentified glass container (Cat.96), medicine bottle finish (Cat.261), and body fragment (Cat.172), pipe stem fragment (Cat.180), brass button (Cat.330), shell button (Cat.181)



**APPENDIX A**  
Artifact Catalogues



**Artifact Catalogue for River Site (AjGw-68)**

<b>Cat #</b>	<b>Context</b>	<b>Stratum</b>	<b>Quantity</b>	<b>Type</b>	<b>Material</b>	<b>Comments</b>
<b><i>Lithics</i></b>						
L1	Test Pit 2	Topsoil	1	Flake Fragment	Onondaga	retouch/utilization along one edge; thermally altered
L2	Test Pit 3	Topsoil	1	Secondary Retouch Flake	Onondaga	
<b><i>Ceramics</i></b>						
C1	Test Pit 1	Topsoil	1	Unanalyzable Rim Fragments		DECORATION: [Rim Fragment]
C2	Test Pit 1	Topsoil	7	Unanalyzable Fragments		
C3	Test Pit 3	Topsoil	6	Unanalyzable Fragments		
C4	Test Pit 3	Topsoil	2	Body Fragments		DECORATION: Plain [Body]
C5	Test Pit 4	Topsoil	6	Unanalyzable Fragments		
C6	Test Pit 4	Topsoil	2	Body Fragments		DECORATION: Plain [Body]
C7	Test Pit 4	Topsoil	1	Identified Vessels		TYPE: Indeterminate; MORPHOLOGY: Rim - Outflaring and Collarless (Expanded); Lip - Flat; Lip Thickness: 6.63 mm; DECORATION: Plain [Lip] over Plain [Upper Rim] Incised Oblique (Open) [Neck]; Interior - Plain [Rim]
C8	Test Pit 5	Topsoil	2	Body Fragments		DECORATION: Plain [Body]
C9	Test Pit 6	Topsoil	1	Unanalyzable Fragments		
C10	Test Pit 7	Topsoil	2	Unanalyzable Fragments		
<b><i>Faunal</i></b>						
<b>Cat #</b>	<b>Context</b>	<b>Stratum</b>	<b>Quantity</b>	<b>Class</b>	<b>Taxon</b>	<b>Comments</b>
F1	Test Pit 1	Topsoil	1	Actinopterygii	Salmonidae	Vertebrae fragment

**Artifact Catalogue for Site AjGw-631 (H1)**

## Stage 2 Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
1	1	Test Pit Test Pit 1	Layer 1	Unidentifiable	Hand-painted - General	Flatware	Portion: Body; Colour: Blue; A very small, thin, burnt sherd with a hint of blue decoration. The underside is fully exfoliated.
2	1	Test Pit Test Pit 1	Layer 1	Pearlware	Hand Painted - Monochrome Blue	Saucer	Portion: Body; Colour: Blue; Only a very small portion of this sherd is unpainted. A large blue leaf dominates the surface. No other colours are present on the sherd. The underside is fully exfoliated.
3	1	Test Pit Test Pit 1	Layer 1	Pearlware	Hand Painted - Monochrome Blue	Saucer	Portion: Body; Colour: Blue; Decoration is a blue floral motif. On this small sherd blue stems and the beginnings of blue leaves are visible. The underside is exfoliated.
4	1	Test Pit Test Pit 1	Layer 1	RWE	Factory Slip - Banded	Hollowware	Portion: Body; Colour: Green; This hollowware vessel has a raised footring. The exterior near the base is decorated with a grayish-green band. The interior appears undecorated.
5	1	Test Pit Test Pit 1	Layer 1	RWE	Factory Slip - Banded	Hollowware	Portion: Body; Colour: Black, Yellow
15	1	Test Pit Test Pit 2	Layer 1	RWE	Transfer Print - General	Unidentifiable	Portion: Body; Colour: Black; This small sherd is decorated with a pattern of robust black dots circled by delicate black dots.
20	2	Test Pit Test Pit 3	Layer 1	Pearlware	Hand Painted - Early Palette	Hollowware	Portion: Body; Colour: Brown, Green, Blue; The exterior has a floral motif. The stem is brown, the leaves are green, petals blue with a mustard yellow centre. The sherds mend together.
21	1	Test Pit Test Pit 3	Layer 1	RWE	Transfer Print - General	Flatware	Portion: Brim; Colour: Brown; The brim is decorated with a geometric zig-zag band. Lower on the brim part of a larger, unknown pattern is visible.
22	2	Test Pit Test Pit 3	Layer 1	Ironstone	Moulded - Wheatware	Flatware	Portion: Brim; The two sherds mend together.
23	14	Test Pit Test Pit 3	Layer 1	Ironstone	Undecorated	Flatware	Portion: Body; The sherds may all belong to the same vessel as well as to the sherds catalogued as Cat #22.
35	1	Test Pit Test Pit 5	Layer 1	RWE	Undecorated	Unidentifiable	Portion: Body
36	1	Test Pit Test Pit 5	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Black; Small, largely exfoliated sherd.
40	1	Test Pit Test Pit 6	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Red; Largely exfoliated.

## Stage 2 Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
45	1	Test Pit Test Pit 7	Layer 1	Unidentifiable	Unidentified	Hollowware	Portion: Body; Colour: Blue; The interior is fully exfoliated. The exterior is fully blue in colour making the decorative style difficult to confirm.
50	1	Test Pit Test Pit 8	Layer 1	Semi-porcelain	Decalcomania	Hollowware	Portion: Body; Colour: Unidentified; The decals have flaked off and left a little residue on the exterior surface.
55	1	Test Pit Test Pit 9	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Brown; The interior of this small sherd is glazed while the exterior has been exfoliated.
60	1	Test Pit Test Pit 10	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Brown; This small sherd is glazed on the exterior and exfoliated on the interior.
61	1	Test Pit Test Pit 10	Layer 1	Unidentifiable	Undecorated	Flatware	Portion: Brink; The surface and fabric has been burnt to a grey colour.
65	3	Test Pit Test Pit 11	Layer 1	RWE	Undecorated	Unidentifiable	Portion: Body
70	1	Test Pit Test Pit 12	Layer 1	RWE	Undecorated	Flatware	Portion: Brink
71	1	Test Pit Test Pit 12	Layer 1	Red Earthenware - Refined	Lustre	Hollowware	Portion: Body; Colour: Blue, White, Grey; This small fragment features a portion of the body with the tail of a handle. The exterior body has the hint of a blue banded motif over grey. The interior is white. The vessel is likely a jug or pitcher.
80	1	Test Pit Test Pit 14	Layer 1	Pearlware	Transfer Print - Olde Blue	Flatware	Portion: Brim; Colour: Blue; The fragments are decorated with a floral pattern on the brim and likely all belong to the same vessel. A small undecorated sherd belongs to the exterior of one of the decorated sherds.
81	1	Test Pit Test Pit 14	Layer 1	Pearlware	Transfer Print - Olde Blue	Flatware	Portion: Body; Colour: Blue; The pattern matches that of Cat #80.
82	1	Test Pit Test Pit 14	Layer 1	Pearlware	Transfer Print - General	Flatware	Portion: Footring; Colour: Blue; Unlike Cat #80-81 this print may have been made on a white background but with the sherd being small this is difficult to confirm.
83	1	Test Pit Test Pit 14	Layer 1	RWE	Transfer Print - General	Flatware	Portion: Footring; Colour: Blue; The interior is decorated in light blue with a delicate geometric pattern. Hexagons with chevrons and stippling have been printed and a seam where the patterns do not line up is visible.

## Stage 2 Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
100	1	Test Pit Test Pit 16	Layer 1	RWE	Undecorated	Flatware	Portion: Body
101	3	Test Pit Test Pit 16	Layer 1	Unidentifiable	Edgeware - Evenly Scalloped	Flatware	Portion: Rim; Colour: Blue; The three sherds mend together. The ware may be pearlware but it is difficult to determine as the sherds are burnt. The edge is decorated with an impressed motif.
110	4	Test Unit Test Unit 1	Layer 1	RWE	Undecorated	Teacup	Portion: Footring
111	1	Test Unit Test Unit 1	Layer 1	RWE	Undecorated	Flatware	Portion: Body; Light thermal alteration.
112	2	Test Unit Test Unit 1	Layer 1	RWE	Transfer Print - General	Hollowware	Portion: Body; Colour: Blue; A floral pattern decorates the interior and exterior of one of the small sherds. The patterns are the same and likely the sherds belong to the same vessel.
113	1	Test Unit Test Unit 1	Layer 1	Ironstone	Transfer Print - General	Unidentifiable	Portion: Body; Colour: Blue; A portion of a geometric pattern is visible on the interior surface of this sherd. The exterior appears undecorated.
114	1	Test Unit Test Unit 1	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Brown; The interior is glazed and the exterior is exfoliated.
115	1	Test Unit Test Unit 1	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Light Brown; The interior is glazed while the exterior has been exfoliated.
130	2	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Unidentified	Hollowware	Portion: Body; The sherds are exfoliated.
131	5	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Red; The sherds are small and exfoliated on one side.
132	1	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Red; The sherd is almost fully exfoliated but likely belongs to the portion of the vessel where the body meets the base.
133	1	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Red; This robust sherd is glazed on the interior and exterior.
134	1	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Red; The interior is glazed while the exterior is not.
135	2	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Rim; Colour: Beige; These two sherds feature a glazed interior rim while the exterior is exfoliated so the true form of the rim has not been identified.
136	1	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Rim; Colour: Beige; This small sherd may belong to the glazed exterior rim of a vessel.

## Stage 2 Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
137	1	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Rim; Colour: Brown; The exterior is partially glazed while the interior of the sherd is exfoliated.
138	2	Test Unit Test Unit 2	Layer 1	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Black; The interiors of the sherds are glazed while the exteriors are exfoliated.
139	1	Test Unit Test Unit 2	Layer 1	Ironstone	Undecorated	Flatware	Portion: Base; The footring is very shallow. The maker's mark is only partially present. A hint of the Royal Coat of Arms is visible and the lettering reads "_MPERIAL//_STONE/CHINA".
140	5	Test Unit Test Unit 2	Layer 1	Ironstone	Undecorated	Flatware	Portion: Brink; These sherds all appear to belong to the brink of a flatware vessel. The thickness of the sherds suggests that they may belong to the same vessel; possibly the same as Cat #139.
141	17	Test Unit Test Unit 2	Layer 1	Ironstone	Undecorated	Flatware	Portion: Body; Based on the thickness, colouring and distress I would suggest that these sherds belong to the same vessel as Cat # 140 and 141.
142	4	Test Unit Test Unit 2	Layer 1	Ironstone	Moulded - Wheatware	Flatware	Portion: Rim; The sherds do not mend together though they may belong to the same vessel.
143	1	Test Unit Test Unit 2	Layer 1	Ironstone	Moulded - Wheatware	Flatware	Portion: Brim; A small portion of a wheatsheaf is visible.
144	2	Test Unit Test Unit 2	Layer 1	Ironstone	Moulded - Ribbed or Panelled	Hollowware	Portion: Lid; The sherds belong to the lid of a hollowware vessel; possibly a teapot.
145	2	Test Unit Test Unit 2	Layer 1	Porcelain - English Bone China	Undecorated	Saucer	Portion: Footring; The two sherds mend together. There is a triple footring.
146	1	Test Unit Test Unit 2	Layer 1	Porcelain - English Bone China	Undecorated	Flatware	Portion: Base; This sherd likely belongs to the same vessel as Cat #145.
147	1	Test Unit Test Unit 2	Layer 1	Porcelain - English Bone China	Undecorated	Flatware	Portion: Body
148	1	Test Unit Test Unit 2	Layer 1	Pearlware	Undecorated	Flatware	Portion: Footrim; The interior has been fully exfoliated.
149	1	Test Unit Test Unit 2	Layer 1	Pearlware	Undecorated	Flatware	Portion: Brink
150	1	Test Unit Test Unit 2	Layer 1	Unidentifiable	Undecorated	Unidentifiable	Portion: Body; The sherd is too small and burnt to confirm ware and form.
151	1	Test Unit Test Unit 2	Layer 1	Unidentifiable	Unidentified	Hollowware	Portion: Body; The sherd is robust and severely thermally altered. There may be blue decoration on the interior surface.

**Stage 2 Ceramic Catalogue**  
H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
152	1	Test Unit Test Unit 2	Layer 1	Pearlware	Hand Painted - Early Palette	Teacup	Portion: Rim; Colour: Brown, Green; Motif is floral with a narrow brown band just below rim.
153	3	Test Unit Test Unit 2	Layer 1	Pearlware	Hand Painted - Early Palette	Teacup	Portion: Body; Colour: Brown, Blue, Green; Motif is floral.
154	1	Test Unit Test Unit 2	Layer 1	Pearlware	Hand Painted - Early Palette	Saucer	Portion: Rim; Colour: Brown, Mustard; Motif is floral with a narrow brown band just below rim.
155	2	Test Unit Test Unit 2	Layer 1	Pearlware	Hand Painted - Early Palette	Teas	Portion: Body; Colour: Green; Motif is floral. Fragments are too small to determine form.
156	1	Test Unit Test Unit 2	Layer 1	RWE	Hand Painted - Late Palette	Teacup	Portion: Rim; Colour: Red, Black, Blue; Motif is floral in black, blue and green. There is also a narrow red band just below the rim on both sides of the cup.
157	1	Test Unit Test Unit 2	Layer 1	RWE	Hand Painted - Late Palette	Teacup	Portion: Rim; Colour: Red, Black, Green; Motif is floral in red, black and green. There is also a narrow red band just below the rim on both sides of the cup. The very top of the rim is exfoliated off.
158	1	Test Unit Test Unit 2	Layer 1	RWE	Spongeware	Saucer	Portion: Body; Colour: Blue
159	1	Test Unit Test Unit 2	Layer 1	Pearlware	Transfer Print - Olde Blue	Plate - Twiffler	Portion: Rim; Colour: Blue; The rim and brim are present. The edge is scalloped. The pattern might be a continuation of a main scene. What appears to be a tree is visible on the brim.
160	1	Test Unit Test Unit 2	Layer 1	Pearlware	Hand Painted - Early Palette	Teapot	Portion: Spout; Colour: Green; The fragment is small with a portion of the spout lip present. The lip has a narrow band hand-painted a dark green.
161	3	Test Unit Test Unit 2	Layer 1	Unidentifiable	Transfer Print - General	Teacup	Portion: Rim; Colour: Grey; The fragments are mendable. Transfer is a continuous repeating design that incorporates geometric and botanical motifs. Both sides are decorated.
162	3	Test Unit Test Unit 2	Layer 1	Unidentifiable	Transfer Print - General	Teacup	Portion: Body; Colour: Red; Fragments are small. Visible pattern is botanical. Both sides are decorated. One fragment has a carinated body. Ware might be ironstone.
163	1	Test Unit Test Unit 2	Layer 1	RWE	Transfer Print - General	Flatware	Portion: Brink; Colour: Brown; Fragment is small. Visible pattern is botanical.
164	1	Test Unit Test Unit 2	Layer 1	RWE	Transfer Print - General	Flatware	Portion: Body; Colour: Brown; Fragment is small. Visible pattern is botanical. Might be part of Cat.163.
165	1	Test Unit Test Unit 2	Layer 1	Unidentifiable	Transfer Print - General	Flatware	Portion: Body; Colour: Brown; Fragment is small. Visible pattern is likely a central narrative scene.



## Stage 2 Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
220	8	Test Unit Test Unit 3	Layer 2	Pearlware	Transfer Print - General	Teacup	Portion: Rim; Colour: Blue; Fragments are part of the same cup and six of these are mendable. The exterior has a moulded ribbon like band at the rim. Below this is a transfer print with a continuous floral pattern. The interior has the same pattern but is a wide border at the rim. The cup has a carinated body. See Cat.221-24.
221	5	Test Unit Test Unit 3	Layer 2	Pearlware	Transfer Print - General	Teacup	Portion: Body; Colour: Blue; Pattern is botanical. Both sides are decorated. Body is carinated. Fragments are part of Cat.220.
222	8	Test Unit Test Unit 3	Layer 2	Pearlware	Transfer Print - General	Teacup	Portion: Body; Colour: Blue; Pattern is botanical. Six fragments have decoration on both sides. Two fragments have completely exfoliated interior. Part of Cat.220-1.
223	2	Test Unit Test Unit 3	Layer 2	Pearlware	Transfer Print - General	Teacup	Portion: Body; Colour: Blue; Pattern is botanical. One fragment has decoration on both sides and one has a completely exfoliated interior. Part of Cat.220-2.
224	1	Test Unit Test Unit 3	Layer 2	Pearlware	Transfer Print - General	Teacup	Portion: Footrim; Colour: Blue; Entire footrim and small portion of body present. The exterior body has a botanical pattern. Interior centre has a narrative scene that incorporates a pavilion, trees and two figures. Part of Cat.220-3.
225	2	Test Unit Test Unit 3	Layer 2	Pearlware	Hand Painted - Early Palette	Teacup	Portion: Rim; Colour: Brown, Green; Mendable. Both sides have a narrow brown band just below rim. The body exterior also has a floral motif.
226	1	Test Unit Test Unit 3	Layer 2	Pearlware	Hand Painted - Early Palette	Saucer	Portion: Body; Colour: Mustard, Brown, Green; Motif is botanical. On the base there is an impressed maker's mark. Mark incorporates an anchor and above this indeterminate text.
227	2	Test Unit Test Unit 3	Layer 2	Pearlware	Hand Painted - Early Palette	Saucer	Portion: Body; Colour: Blue, Green; Motif is floral. One fragment is thermally altered.
228	2	Test Unit Test Unit 3	Layer 2	Pearlware	Undecorated	Flatware	Portion: Footring; Small exfoliated fragments. Footring is narrow.
229	2	Test Unit Test Unit 3	Layer 2	Pearlware	Undecorated	Flatware	Portion: Body; Small fragments.
230	2	Test Unit Test Unit 3	Layer 2	RWE	Edgeware - Straight and Moulded	Plate - Table	Portion: Rim; Colour: Blue; Mendable. Rim and brink present.
231	1	Test Unit Test Unit 3	Layer 2	RWE	Transfer Print - General	Flatware	Portion: Rim; Colour: Blue; Small fragment.

## Stage 2 Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
232	3	Test Unit Test Unit 3	Layer 2	RWE	Transfer Print - General	Flatware	Portion: Body; Colour: Blue; Pattern is botanical.
233	1	Test Unit Test Unit 3	Layer 2	RWE	Transfer Print - General	Unidentifiable	Portion: Rim; Colour: Blue; Small fragment.
234	3	Test Unit Test Unit 3	Layer 2	RWE	Transfer Print - Chinese Motif	Plate - Muffin	Portion: Rim; Colour: Blue; Mendable. Rim and brink present. Pattern is a characteristic Chinese Motif including a band of fishroe at rim and on the brim a network, Joo-l, ring and key pattern.
235	2	Test Unit Test Unit 3	Layer 2	RWE	Transfer Print - General	Flatware	Portion: Body; Colour: Brown; Small fragments.
236	1	Test Unit Test Unit 3	Layer 2	Unidentifiable	Undecorated	Unidentifiable	Portion: Body; Small exfoliated fragment.
237	2	Test Unit Test Unit 3	Layer 2	Ironstone	Moulded - Wheatware	Teacup	Portion: Rim; Mendable.
238	1	Test Unit Test Unit 3	Layer 2	Ironstone	Moulded - Wheatware	Teacup	Portion: Rim
239	2	Test Unit Test Unit 3	Layer 2	Ironstone	Moulded - Wheatware	Teacup	Portion: Body
240	1	Test Unit Test Unit 3	Layer 2	Ironstone	Moulded - General	Hollowware	Portion: Rim; Small fragment.
241	1	Test Unit Test Unit 3	Layer 2	Ironstone	Undecorated	Hollowware	Portion: Body; Exterior is completely exfoliated.
242	1	Test Unit Test Unit 3	Layer 2	Ironstone	Undecorated	Unidentifiable	Portion: Body; Small exfoliated fragment.
243	1	Test Unit Test Unit 3	Layer 2	Porcelain - English Bone China	Undecorated	Flatware	Portion: Footring
244	1	Test Unit Test Unit 3	Layer 2	Unidentifiable	Factory Slip - Other	Hollowware	Portion: Rim; Colour: Brown, Black; Small thermally altered fragment. Motif is encrustation.
245	3	Test Unit Test Unit 3	Layer 2	Red Earthenware - Refined	Factory Slip - Banded	Hollowware	Portion: Body; Colour: Blue, Unidentified; Thermally altered. Motif on exterior is a wide blue band and a band of indeterminate colour. Interior is slip glazed white.
246	2	Test Unit Test Unit 3	Layer 2	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Rim; Colour: Light Brown; Small rim fragment. Both sides are clear glazed.
247	1	Test Unit Test Unit 3	Layer 2	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Rim; Colour: Light Brown; Small fragment. Exterior is partially clear glazed and interior is exfoliated. Fragment might be a string rim.

## Stage 2 Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Ware	Motif	Form	Comments
248	3	Test Unit Test Unit 3	Layer 2	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Light Brown; One side glazed and other completely exfoliated.
249	1	Test Unit Test Unit 3	Layer 2	Red Earthenware - Coarse	Glazed	Hollowware	Portion: Body; Colour: Brown; One side glazed and other completely exfoliated.
310	2	Test Unit Test Unit 3	Layer 3	Pearlware	Transfer Print - General	Teacup	Portion: Rim; Colour: Blue; Small fragments. Part of the same cup. The exterior has a moulded ribbon like band at the rim. Below this is a transfer print with a floral pattern. The interior has the same pattern. Mendable to Cat.220.
311	3	Test Unit Test Unit 3	Layer 3	Pearlware	Transfer Print - General	Teacup	Portion: Body; Colour: Blue; Small fragments. Pattern is botanical. One fragment is carinated and has a completely exfoliated interior. One fragment is decorated on both sides. Part of Cat.310.
312	1	Test Unit Test Unit 3	Layer 3	Pearlware	Hand Painted - Early Palette	Saucer	Portion: Rim; Colour: Brown, Blue, Green; Motif is floral.
313	1	Test Unit Test Unit 3	Layer 3	Unidentifiable	Hand Painted - General	Saucer	Portion: Rim; Colour: Blue, Unidentified; Thermally altered. The motif is floral with a narrow band just below the rim. The band is likely brown and the ware is likely pearlware with a Hand Painted - Early Palette motif.
314	1	Test Unit Test Unit 3	Layer 3	Ironstone	Moulded - Wheatware	Hollowware	Portion: Body; Small fragment. Likely a teacup.

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**Grand Total : 205 artifacts**

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## Stage 2 Non-Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Type	Material	Comments
6	3	Test Pit Test Pit 1	Layer 1	Window Glass	Glass	Patina on surface.; Manufacture: Unknown
7	1	Test Pit Test Pit 1	Layer 1	Window Glass	Glass	A small, slightly curved shard of thin glass with patina.; Manufacture: Unknown
8	1	Test Pit Test Pit 1	Layer 1	Nail - Hand-Wrought	Metal - Ferrous	
9	1	Test Pit Test Pit 1	Layer 1	Nail - Hand-Wrought	Metal - Ferrous	
10	1	Test Pit Test Pit 1	Layer 1	Faunal - Mammal	Bone	
11	2	Test Pit Test Pit 1	Layer 1	Faunal - Avian	Bone	
12	1	Test Pit Test Pit 1	Layer 1	Faunal - Mammal	Bone	
24	1	Test Pit Test Pit 3	Layer 1	Nail - Machine Cut	Metal - Ferrous	
25	1	Test Pit Test Pit 3	Layer 1	Faunal - Mammal	Bone	
26	2	Test Pit Test Pit 3	Layer 1	Faunal - Mammal	Bone	
30	2	Test Pit Test Pit 4	Layer 1	Grommet	Metal - Cuprous	
41	1	Test Pit Test Pit 6	Layer 1	Container - Unidentifiable	Glass	A small shard with heavy patina.; Colour: Aqua; Manufacture: Unknown
46	1	Test Pit Test Pit 7	Layer 1	Container - Unidentifiable	Glass	Colour: Colourless; Manufacture: Unknown
66	1	Test Pit Test Pit 11	Layer 1	Unidentified	Metal - Ferrous	Thin, flat fragment of metal.
67	1	Test Pit Test Pit 11	Layer 1	Faunal - Mammal	Bone	
75	2	Test Pit Test Pit 13	Layer 1	Container - Modern Beer Bottle	Glass	Modern beer bottle finish.; Colour: Colourless; Manufacture: Unknown
89	1	Test Pit Test Pit 14	Layer 1	Nail - Hand-Wrought	Metal - Ferrous	The tip has broken off the shaft. Though highly corroded a rose-head is identifiable.
90	2	Test Pit Test Pit 14	Layer 1	Faunal - Mammal	Bone	
95	1	Test Pit Test Pit 15	Layer 1	Container - Unidentifiable	Glass	This shard of glass belongs to a robust rounded vessel.; Colour: Colourless; Manufacture: Unknown
96	1	Test Pit Test Pit 15	Layer 1	Container - Unidentifiable	Glass	This small shard belongs to the neck of a container to hold liquid. The beginning of a finish is visible; likely a two-part or three-part finish, possibly rounded.; Colour: Colourless; Manufacture: Unknown
97	1	Test Pit Test Pit 15	Layer 1	Faunal - Mammal	Bone	
102	1	Test Pit Test Pit 16	Layer 1	Window Glass	Glass	Manufacture: Unknown
103	2	Test Pit Test Pit 16	Layer 1	Nail - Hand-Wrought	Metal - Ferrous	
104	1	Test Pit Test Pit 16	Layer 1	Nail - Machine Cut	Metal - Ferrous	
105	1	Test Pit Test Pit 16	Layer 1	Faunal - Mammal	Bone	
120	1	Test Unit Test Unit 1	Layer 1	Nail - Hand-Wrought	Metal - Ferrous	
121	4	Test Unit Test Unit 1	Layer 1	Nail - Machine Cut	Metal - Ferrous	
122	1	Test Unit Test Unit 1	Layer 1	Nail - Wire	Metal - Ferrous	Roofing nail.
125	1	Test Unit Test Unit 1	Layer 1	Faunal - Mammal	Bone	
126	6	Test Unit Test Unit 1	Layer 1	Faunal - Mammal	Bone	

## Stage 2 Non-Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Type	Material	Comments
170	13	Test Unit Test Unit 2	Layer 1	Window Glass	Glass	Manufacture: Unknown
171	1	Test Unit Test Unit 2	Layer 1	Container - Unidentifiable	Glass	Fragment is part of a straight-sided panel. Thin bodied. Might be a medicine bottle.; Colour: Aqua; Manufacture: Unknown
172	6	Test Unit Test Unit 2	Layer 1	Container - Unidentifiable	Glass	Small fragments. Thin bodied. Likely a small bottle.; Colour: Aqua; Manufacture: Unknown
180	1	Test Unit Test Unit 2	Layer 1	Smoking Pipe	White Ball Clay	Part of a pipe stem with yellow glaze.
181	1	Test Unit Test Unit 2	Layer 1	Button	Shell	Button is thin. Button holes are in centre but they are not equidistant.; One Piece; Shell; Diameter: 9.3mm
190	18	Test Unit Test Unit 2	Layer 1	Nail - Hand-Wrought	Metal - Ferrous	
191	5	Test Unit Test Unit 2	Layer 1	Nail - Hand-Wrought	Metal - Ferrous	
192	5	Test Unit Test Unit 2	Layer 1	Nail - Machine Cut	Metal - Ferrous	
193	7	Test Unit Test Unit 2	Layer 1	Nail - Machine Cut	Metal - Ferrous	
194	7	Test Unit Test Unit 2	Layer 1	Nail - Indeterminate	Metal - Ferrous	Straight-sided shaft.
195	3	Test Unit Test Unit 2	Layer 1	Horse Shoe Nail	Metal - Ferrous	
196	1	Test Unit Test Unit 2	Layer 1	Horse Shoe Nail	Metal - Ferrous	
197	1	Test Unit Test Unit 2	Layer 1	Nail - Roof	Metal - Ferrous	
198	1	Test Unit Test Unit 2	Layer 1	Spike	Metal - Ferrous	
199	1	Test Unit Test Unit 2	Layer 1	Container - Food	Metal - Ferrous	Part of a 'tin can' rim.
210	90	Test Unit Test Unit 2	Layer 1	Faunal - Mammal	Bone	Seventeen of these bone fragments are calcified.
211	22	Test Unit Test Unit 2	Layer 1	Faunal - Mammal	Bone	
212	8	Test Unit Test Unit 2	Layer 1	Faunal - Mammal	Bone	
213	3	Test Unit Test Unit 2	Layer 1	Faunal - Avian	Bone	
260	3	Test Unit Test Unit 3	Layer 2	Window Glass	Glass	Manufacture: Unknown
261	1	Test Unit Test Unit 3	Layer 2	Container - Medicine	Glass	The finish has a thin wide flare. Mouth opening is of small diameter. Likely a small medicine bottle.; Colour: Aqua; Finish: One Part; Lip: Wide Prescription; Manufacture: Unknown
262	2	Test Unit Test Unit 3	Layer 2	Container - Unidentifiable	Glass	Small cylindrical fragments. Thin bodied. Might be part of Cat.261 - ie. medicine bottle.; Colour: Aqua; Manufacture: Unknown
270	2	Test Unit Test Unit 3	Layer 2	Nail - Hand-Wrought	Metal - Ferrous	
271	5	Test Unit Test Unit 3	Layer 2	Nail - Hand-Wrought	Metal - Ferrous	
272	9	Test Unit Test Unit 3	Layer 2	Nail - Machine Cut	Metal - Ferrous	
273	2	Test Unit Test Unit 3	Layer 2	Nail - Machine Cut	Metal - Ferrous	
274	3	Test Unit Test Unit 3	Layer 2	Nail - Machine Cut	Metal - Ferrous	
275	2	Test Unit Test Unit 3	Layer 2	Nail - Wire	Metal - Ferrous	
276	1	Test Unit Test Unit 3	Layer 2	Horse Shoe Nail	Metal - Ferrous	
277	2	Test Unit Test Unit 3	Layer 2	Fencing Staple	Metal - Ferrous	

## Stage 2 Non-Ceramic Catalogue

H1 (AjGw-631)

Cat#	Qty	Context	Stratum	Type	Material	Comments
278	1	Test Unit Test Unit 3	Layer 2	Split Pin	Metal - Ferrous	A split pin. Shaft is split and head is shaped like a flat donut with small hole in centre.
279	1	Test Unit Test Unit 3	Layer 2	Wire	Metal - Ferrous	Wire bent into a small triangular shape. End points slightly overlap and do not appear to be soldered.
280	2	Test Unit Test Unit 3	Layer 2	Strapping	Metal - Ferrous	Small fragments. Flat bands.
281	1	Test Unit Test Unit 3	Layer 2	Sewer Pipe	Metal - Ferrous	Part of a cast iron pipe.
290	50	Test Unit Test Unit 3	Layer 2	Faunal - Mammal	Bone	
291	5	Test Unit Test Unit 3	Layer 2	Faunal - Mammal	Bone	
292	2	Test Unit Test Unit 3	Layer 2	Faunal - Mammal	Bone	
300	1	Test Unit Test Unit 3	Layer 2	Brick	Clay	Part of a red brick. Width is 6cm, length and depth not known. Machine Made. Smooth dense brick. Top has an indentation that extends to the edge. Brick is stamped with _AUA BRICK and a line under this mark. Appears to have some mortar attached.
301	1	Test Unit Test Unit 3	Layer 2	Shell Casing	Metal - Cuprous	
320	2	Test Unit Test Unit 3	Layer 3	Window Glass	Glass	Manufacture: Unknown
330	1	Test Unit Test Unit 3	Layer 3	Button	Metal - Cuprous	Cast brass flat disc button with a soldered Alpha shank. The face is undecorated. The back is stamped with "TREBLE" in ornamental letters and between first and last letter there is a rosette. i.e. a 'Treble Gilt' Brass button.; Flat Disks; Metal - Cuprous; Diameter: 14.7mm
340	9	Test Unit Test Unit 3	Layer 3	Faunal - Mammal	Bone	

**Grand Total : 348 artifacts**