Appendix C

Stage 1 Archaeological Assessment Report

DILLON CONSULTING

FISHER ARCHAEOLOGICAL CONSULTING

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA

Part Lots 2-15, Concession 8, Geographic Barton Township, and Part Lots 5-14, Concession 1, Geographic Glanford Township, Historic Wentworth County, City of Hamilton, Ontario

FINAL REPORT
(Original)

P115-0066-2020
31 October 2021

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON, (PART LOTS 2-15, CONCESSION 8, BARTON TOWNSHIP, AND PART LOTS 5-14, CONCESSION ,1 GLANFORD TOWNSHIP, HISTORIC COUNTY OF WENTWORTH, ONTARIO, NOW THE CITY OF HAMILTON) PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA

ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY

FINAL REPORT
(Original)

Property Location:
Part Lots 2-15, Concession 8, Geographic Barton Township, and Part Lots 5-14, Concession 1, Geographic Glanford Township, Historic Wentworth County, City of Hamilton, Ontario

Submitted to:
Ontario Ministry of Heritage, Sport, Tourism and Culture Industries

&

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PIF No.: P115-0066-2020
(PIF is valid)

31 October 2021

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON, (PART LOTS 2-15, CONCESSION 8, BARTON TOWNSHIP, AND PART LOTS 5-14, CONCESSION 1, GLANFORD TOWNSHIP, HISTORIC COUNTY OF WENTWORTH, ONTARIO, NOW THE CITY OF HAMILTON) PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA

ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY

EXECUTIVE SUMMARY

Fisher Archaeological Consulting (FAC) was contracted by Maria King of Dillon Consulting Ltd to conduct the Archaeological Stage 1: Background Study for Phases 1 to 4 of the Schedule C Municipal Environmental Assessment (EA) for improvements to Rymal Road between Upper James Street and Dartnall Road in Hamilton (***Figures 1 & 2***). The Study Area is defined by the Right of Way (ROW) of Rymal Road, a corridor that varies between 30 m and 36 m wide along its length. Portions of the ROW of cross streets with signalized intersections are also included in the Study Area; these extend 50 m North and South of the centre line of Rymal Road. The Study Area crosses part Lots 2-15, Concession 8, Barton Township, and part Lots 5-14, Concession ,1 Glanford Township, historic County of Wentworth, Ontario, now the City of Hamilton. The Study Area is approximately 22.4 hectares in size. Since the archaeological work is being conduct early in the Environmental Assessment (EA) process, no development plan has been developed yet. ***Figures 2a-2e*** depict the Study Area shapefile that was provided by the proponent projected onto aerial images from 2015.

Rymal Road passes through the southern edge of the urban zone of the City of Hamilton. The sections of Rymal Road both East and West of the Study Area are now five lanes wide (two in each direction with one turning lane). The Study Area itself is primarily a three lane road with one travel lane in each direction and a centre turning lane. This improvement project will widen the road and improve the stormwater drainage within this corridor.

The Study Area is generally level, with some minor variations in surface topography where natural watercourses cross the ROW. Much of the Study Area is bordered by residential subdivisions, with commercial and light industrial developments. A very small portion of the properties that border the ROW are farm fields. Sidewalks line much of the corridor, although they are not continuous, nor uniform in their design. Drainage ditches are present on either side of the corridor along much of its length. Buried utilities have also been installed on the edges of the ROW.

Based on the background research, the Study Area has high archaeological potential for Indigenous archaeological resources based on proximity to watercourses, to well drained soils, and to known archaeological sites. The Study Area also has high archaeological potential for Euro-Canadian archaeological resources based the same environmental criteria, on historic transportation routes, and records of early Euro-Canadian settlement.

The entire Study Area was subjected to a property inspection, which confirmed that the majority of the Study Area has been impacted by modern development, construction and disturbance that have served to remove

the archaeological potential from these areas. Two areas retain high potential. The first is near to site AhGx-785, a small Indigenous lithic scatter, and the second is adjacent to the 19th century St. George's Cemetery.

In summary, the Stage 1: Background Study determined that the Study Area possessed high potential for both Indigenous and Euro-Canadian archaeological resources. Modern disturbances have reduced this to low potential in most of the Study Area. Two areas of archaeological potential remain, described below.

Therefore, FAC recommends the following:

1) That those portions of the Study Area having high potential as depicted on ***Figure 11c*** be subjected to Stage 2: Assessment by means of shovel test at 5 m intervals following MHSTCI *Standards and Guidelines* **Section 2.1.2**;

2) That the area adjacent to St. George's Cemetery depicted as having potential to contain graves on ***Figure 11e*** be subjected to Stage 3: Testing by means of mechanical excavation following MHSTCI *Standards and Guidelines* **Section 3.3.3** The specific purpose for this Stage 3: Testing is to determine if there are any graves within the Study Area.

   The area marked on ***Figure 11e*** as requiring Stage 3: Testing shall be shovel tested prior to stripping. If it is determined to have no near surface Cultural Heritage Value or Interest (CHVI), the overburden and/or topsoil will be removed at least down to the top of subsoil by mechanical means with a flat bladed ditching bucket in order to determine if any graves are present. This work is to be directed by a licensed archaeologist. The stripped surface will then be cleaned by shovel or trowel, and any cemetery and archaeological features will be mapped.

   Stage 3: Testing specifically for the purpose of cemetery/grave identification is conducted under MHSTCI regulations in conjunction with the *Funeral, Burial and Cremation Services Act*, and the Registrar of Cemeteries will be notified prior to commencement. An Order to Investigate must be issued prior to any Stage 3 stripping;

3) That those remaining portions of the Study Area having low potential as depicted on ***Figures 11a - 11e*** require no further archaeological work.

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PROJECT PERSONNEL

Project Manager:	Jacqueline Fisher (P042)
Project Licensee:	Jim Molnar, Ph.D. (P115)
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Field Director:	Jim Molnar
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NPD TABLE FOR IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON, PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA STAGE 1: BACKGROUND STUDY

Permission was obtained to enter the property described in the above report - note: the Study Area Inspection was conducted only from public ROWS.	Yes
The archaeological record will be curated at FAC's facilities	

Date	Weather	Ground Conditions	Field Director
November 6, 2020	Sunny, 20C	Dry	JM
December 5, 2020	Cloudy, 3C	Dry	JM

IMPROVEMENTS TO RYMAL ROAD
BETWEEN UPPER JAMES STREET AND DARTNALL ROAD,
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(PART LOTS 2-15, CONCESSION 8, BARTON TOWNSHIP, AND PART LOTS 5-14, CONCESSION 1, GLANFORD TOWNSHIP, HISTORIC COUNTY OF WENTWORTH, ONTARIO, NOW THE CITY OF HAMILTON)
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA

ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY

FINAL REPORT

1.0 PROJECT CONTEXT

The following is a Stage 1 report prepared for review by the Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries (MHSTCI). Archaeological consultants, licensed by MHSTCI, are required to follow the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) during land use planning as part of the evaluation of cultural heritage resources. This includes reporting all findings to MHSTCI. There are four stages for archaeological work – Stages 1 to 4.

Stage 1 — Background research and Property Inspection. The purpose of the Stage 1 archaeological assessment is two-fold. Firstly, it is to determine the potential for the presence of as yet undocumented cultural heritage resources, and secondly, to determine whether known cultural heritage resources are extant on the subject land(s).

Stage 2 — Field work. Stage 2 is the actual field examination of high potential areas, and involves either surface survey of ploughed fields or shovel testing in areas that are undisturbed or cannot be cultivated.

Stage 3 — Testing. The purpose of the Stage 3 is to ascertain the dimensions of the site, its cultural affiliation (if possible), and to evaluate its significance. If the site in question is determined to be archaeologically significant, then appropriate mitigation measures will be decided upon.

Stage 4 — Mitigation. Stage 4 involves the mitigation of the development impacts to the archaeological site through either site excavation or avoidance (preservation).

Stage 1 determines the amount of Stage 2 work required. Stage 2 determines if Stage 3 is warranted, and Stage 3, in turn, determines if the archaeological resources are significant and warrant proceeding to Stage 4, either a full excavation or avoidance. This report relates solely to Stage 1 of this archaeological process.

The archaeological work was conducted under the Provincial archaeological licence number P115, pertaining to PIF # P115-0066-2020.

1.1 Development Context

Fisher Archaeological Consulting (FAC) was contracted by Dillon Consulting Limited to conduct the Archaeological Stage 1: Background Study for Phases 1 to 4 of the Schedule C Municipal EA for

improvements to Rymal Road between Upper James Street and Dartnall Road in Hamilton (***Figures 1 & 2***). The Study Area is defined by the Right of Way (ROW) of Rymal Road, a corridor that varies between 30m and 36 m wide along its length. Portions of the ROW of cross streets with signalized intersections are also included in the Study Area; these extend 50 m North and South of the centre line of Rymal Road. The Study Area crosses part Lots 2-15, Concession 8, Barton Township, and Lots 5-14, Concession 1, Glanford Township, historic County of Wentworth, Ontario, now the City of Hamilton. It is approximately 22.4 hectares in size. Since the archaeological study is being conducted early in the Environmental Assessment (EA) process, no development plan is available yet. ***Figures 2a-2e*** depict the Study Area shapefile that was provided by the proponent projected onto aerial images from 2015. Unless specifically noted, all references in the text to Rymal Road, refer to Rymal Road East.

The archaeological condition was assigned by the City of Hamilton during a Municipal Class EA for the Improvements to Rymal Road. A property inspection was conducted on the 6th of November and the 5th of December, 2020 as part of the Stage 1: Background Study of the Study Area. FAC had permission from the proponent to access the Study Area to conduct all required archaeological fieldwork activities, as the inspection was carried out only from the public ROWs.

The City of Hamilton acknowledges that "the City of Hamilton is situated upon the traditional territories of the Erie, Neutral, Huron-Wendat, Haudenosaunee and Mississaugas. This land is covered by the Dish With One Spoon Wampum Belt Covenant, which was an agreement between the Haudenosaunee and Anishinaabek to share and care for the resources around the Great Lakes" (City of Hamilton 2020b).

1.2 Archaeological Context

Rymal Road passes through the southern edge of the urban zone of the City of Hamilton. The sections of Rymal Road both East and west of the Study Area are now five lanes wide (two in each direction with one turning lane). The Study Area itself is primarily a three lane road with one travel lane in each direction and a centre turning lane. This improvement project will widen the road and improve the stormwater drainage in this corridor.

The Study Area is generally level, with some minor variations in surface topography where natural watercourses cross the ROW. Much of the Study Area is bordered by residential subdivisions, with commercial and light industrial developments. A very small portion of the properties that border the ROW are still farm fields. Sidewalks line much of the corridor, although they are not continuous nor uniform in their design. Drainage ditches are present on either side of the corridor along much of its length. Buried utilities have also been installed on the edges of the ROW.

1.2.1 Physiographic Features

The Study Area is located within the Haldimand Clay Plain physiographic region, and the most prominent nearby physiographic feature is the Niagara Escarpment (Chapman and Putnam 1984). The surficial geology is also characterised by a number of less prominent features, remnants of Ontario's glacial and post-glacial geologic history.

The Niagara Escarpment is the dominant physiographic feature of the region, and passes within 1.6 kilometres of the Study Area where it bends southward at the Red Hill Valley. The Escarpment, an exposed bedrock cuesta, stretches from the Niagara River West to Dundas and then northward to Tobermory and Manitoulin Island (Kor 1992:3). It is an erosional feature, modified by glacial action and post-glacial fluvial activities

(Kor 1992:5). The Escarpment provides a distinctive set of microclimates; the "dolostone cliffs, talus slopes, terraces and bedrock gorges associated with the Niagara Escarpment landform provide specialized habitats which support a distinctive suite of biotic communities" (Heagy 1995:1-16).

The Haldimand Clay Plain physiographic region, which covers most of the Niagara Region, is an area of clay and silt soils laid down by glacial Lakes Whittlesey and Warren (Chapman and Putnam 1984; Presant and Acton 1984:12). These soils are generally thinly-deposited over bedrock at the northern end of the clay plain along the Escarpment, with morainic till visible on the surface in some areas (Chapman and Putnam 1984:156). The poorly-drained soils of the clay plain are not especially well-suited for agriculture, though orchards and vineyards can be found in silt loam soils along the Escarpment (Chapman and Putnam 1984:158-159).

The Study Area is parallel to the Niagara Falls Moraine, situated in the middle of the three till moraines on the South side of the Niagara Escarpment. The Niagara Falls Moraine is broad and gently sloped; it stretches discontinuously from Ancaster East to western New York State (Chapman and Putnam 1984:51-52).

1.2.2 Soils and Bedrock Geology

The underlying bedrock generally determines the surface topography in Ontario. The Upper Silurian Guelph Formation forms the bedrock of the Study Area (OGS 2011). This dolostone formation with carbonate lithologies runs parallel to the Niagara Escarpment (Armstrong and Dodge 2007:6,8) (***Figure 3***). The Study Area crosses a number of surficial soil types, varying in composition and quality of drainage (**Table 1**; ***Figure 3***).

Table 1
Study Area Soils*

Name	Soil Type	Great Group	Parent Materials	Drainage	Stoniness
Binbrook	Silt loam	Grey-Brown Podzolic	Silt loam over clay till	Imperfectly drained	Stonefree
Brantford	Silt loam	Grey-Brown Podzolic	Lacustrine silty clay loam and silty clay	Well-drained	Stonefree
Farmington	Loam	Brown Forest	Till loam (less than 12" over bedrock)	Well-drained	Slightly stony
Oneida	Silt loam	Grey-Brown Podzolic	Clay loam till	Well-drained	Slightly stony
Smithville	Silt loam	Grey-Brown Podzolic	Silt loam over clay till	Moderately well-drained	Stonefree
Toledo	Silty clay loam	Humic Gleysol	Lacustrine silty clay loam and silty clay	Poorly drained	Stonefree

*Information taken from Presant et al. 1965:soil map

Generally, a preference for Indigenous settlement sites would be on well-drained soils such as Brantford, Farmington, and Oneida soils. However, soil type cannot be used as the sole criterion for predictive modelling of site locations, as has been observed through archaeological survey and excavation.

1.2.3 Water Sources and Vegetation

Proximity to water sources is a key criterion for considering archaeological site potential. The availability of water is crucial to settlement viability, varied resource procurement, and transportation. Areas located within 300 metres of a water source is considered of high archaeological potential in **Section 1.4.1 Standard 1 cii** of the *Standards and Guidelines* (MHSTCI 2011).

Unnamed tributaries of the Red Hill Creek cross the Study Area at multiple points. Those which are still present today are located near the intersection with Upper James Street, between Upper Ottawa Street and Nebo Road, and between Nebo Road and Dartnall Road. Over the course of the 20th century, many tributaries have been buried, or have run dry. The 1934 NTS map shows the pre-urbanized watercourses (***Figure 7***). All of the Study Area is within 300 m of an historic watercourse, except for a short stretch from Acadia Drive to Upper Sherman Avenue which is at a greater distance.

The forest vegetation of southern Ontario has undergone considerable change since the last deglaciation. Following the retreat of the Laurentide Ice Sheet beginning *ca.* 15,000 BP, the region was colonised first by small tundra plants, similar to the landscape North of the tree line in Ontario today (McCarthy *et al.* 2015:14; Stewart 2013; Yu 2003). Tree species like poplar, tamarack, and spruce began to establish themselves within a few hundred years, creating a "harsh forest-tundra transitional habitat", home to caribou, mammoth, mastodon, giant beaver, and a few other large mammal species, but incapable of supporting large human populations (CARF 1992; Stewart 2013:26-27; Storck and Spiess 1994; Suffling *et al.* 2003:486; Yu 2003). Over the next several thousand years, this spruce parkland gradually gave way to a boreal forest dominated by jack and red pine, which in turn was succeeded by white pine boreal woodland (McCarthy *et al.* 2015:14; Stewart 2013:28). The climate was "colder and drier than present" until around 8,000 BP (O'Shea and Meadows 2009:10120; also McCarthy *et al.* 2015:15) when a "rapid increase in mean annual precipitation" across eastern North America shepherded the migration of deciduous woodland species from regions to the South (McCarthy *et al.* 2015:15; also Julig and Beaton 2015; Suffling *et al.* 2003:486).

Between 9,500 and 7,000 BP, deciduous tree species overtook boreal species to become dominant, creating woodland of a decidedly different character and one much more similar to modern conditions (Julig and Beaton 2015:54; Stewart 2013:28). Species such as sugar maple, beech, hemlock, and birch provided the preferred habitat for white-tailed deer, eastern cottontail, and important fur-bearing species such as striped skunk and muskrat (Maynard and Wilcox 1997:60; Stewart 2013:28). Warmer environmental conditions between 6,000 and 4,000 BP saw the establishment of areas of oak savanna and tallgrass prairie North of Lake Erie, as well as a significant decrease in hemlock in the latter half of this period, until its reversal after 4,000 BP (McCarthy *et al.* 2015:14; Stewart 2013:28; Suffling *et al.* 2003:487).

The modern Hamilton area is within the Deciduous Forest Region, sometimes referred to as the Carolinian Forest Zone. Considered "one of the most biologically diverse regions of Canada", the Deciduous Forest Region is defined by the presence of maple, ash, hemlock, oak, elm, and beech, among many other species of flora (Riley et al. 1996:3; also McCarthy *et al.* 2015:15). Historical observations by Augustus Jones, the surveyor of Glanford Township, record a predominance of pines along the length of the Study Area, with maples appearing at the East end and oaks at the West end (Findlay 1973). Jones also noted a swampy area

where a tributary of Red Hill Creek crossed the ROW just East of what is today Upper James Street. Some of these ecosystems in the past may have been actively managed by Indigenous groups living in the area to maintain ideal landscapes for hunting and agriculture, and to encourage the propagation of desirable wild plant species. Widespread deforestation by Euro-Canadian settlers for conversion of the land to agriculture began in the late 18th and early 19th centuries, and today the natural vegetation has been largely replaced, first by cleared farmland, and later by urban development.

1.2.4 Lithic Sources

Sources of siliceous stone, specifically chert, for making tools were often focal areas for pre-Contact Indigenous peoples. Lockport Formation (Ancaster) chert outcrops along the bed of the Red Hill Creek, approximately 2.5 km northeast of the Study Area (MHSTCI 2016). Lockport Formation chert outcrops in other areas nearby along the Escarpment, and Bois Blanc, Onondaga, and Dundee Formation cherts outcrop farther to the South along the North shore of Lake Erie (Eley and von Bitter 1989).

1.2.5 Registered Sites

FAC conducted a data request for registered archaeological sites listed in the Ontario Archaeological Sites Database (OASD), within a one kilometre radius of the Study Area. A request for a search of the MHSTCI archaeological site database was issued to Rob von Bitter, as all corridor studies require assistance from the Ministry. Ninety five sites were identified within this radius (**Table 2**). Three of the sites are within 50 m of the Study Area (see **Section 1.2.6** below).

Sites in the vicinity of the Study Area represent both pre- and post-Contact Indigenous use and habitation of the region and include isolated findpots; Indigenous camps, burials, and villages; and post-Contact farmsteads, houses, and middens, and reflect the types of archaeological resources which may also be present in the Study Area. The four sites closest to the Study Area are described below.

AhGx-35, the Almas site, is a post-Contact Euro-Canadian scatter. The site was identified by Christine Dodd in 1985 and registered the following year. In 1992, ASI undertook a full Stage 4: Excavation of this site, with the result that it possessed no further Cultural Heritage Value or Interest (CHVI), see **Section 1.2.6**, below.

AhGx-328 is a point base, possibly dating to the Middle Period, found in 1992 by ASI. It was an isolated find with no further CHVI.

AhGx-784, the Young Site, is a multi-component site encompassing an Indigenous findspot and Euro-Canadian homestead. The site was identified by ASI and subjected to Stage 3: Testing and determined to represent an Indigenous findspot (five lithics), and an 1870-1900 settler residence. Neither component was determined to have further CHVI.

AhGx-785 is a pre-Contact Indigenous camp, identified by ASI during a Stage 2 Assessment. Three lithics were found and based on this, a determination that the site had no further CHVI , see **Section 1.2.6**, below. However, given the proximity of the site to the Study Area (10 metres), the area within the ROW that is in close proximity of this site will be further discussed in **Section 4.0**, below.

Table 2
Registered Sites within 1 km of the Study Area

Borden Number	Site Name	Time Period	Affinity	Site Type	Comments	Within 50m
AhGw-69		Other	Indigenous	Findspot		N
AhGw-197		Pre-Contact	Indigenous	Scatter		N
AhGw-218		Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGw-236		Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGw-266	Horning	Post-Contact	Euro-Canadian	Unknown	Further CHVI (as of 2018)	N
AhGw-281	Mount Albion I	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGw-282	Mount Albion II	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGw-283	Mount Albion III	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGw-284	Mount Albion IV	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGw-539	Susannah Fletcher Site	Post-Contact	Euro-Canadian	Farmstead; house	Further CHVI	N
AhGx-32	Olmstead	Late Woodland Post-Contact	Indigenous (Iroquoian) Euro-Canadian	Village; burial Midden; other	Protected (Ryckman's Park)	N
AhGx-35	Almas	Post-Contact	Euro-Canadian	Scatter	No Further CHVI	Y
AhGx-36	Comley 1	Early and Middle Archaic	Indigenous	Camp	No Further CHVI	N
AhGx-37	Comley 2	Early, Middle, and Late Archaic	Indigenous	Camp		N
AhGx-38	Comley 3	Late Archaic Late Woodland	Indigenous Indigenous (Iroquoian)	Camp		N
AhGx-39	Comley 4	Early Woodland	Indigenous	Camp		N
AhGx-40	Comley 5	Early and Middle Archaic	Indigenous	Camp		N
AhGx-41		Post-Contact	Euro-Canadian	Homestead; midden	No Further CHVI	N

Borden Number	Site Name	Time Period	Affinity	Site Type	Comments	Within 50m
AhGx-42	Goodale 1	Early Woodland (Meadowood) Post-Contact	Indigenous Euro-Canadian	Camp House		N
AhGx-43	Goodale 2	Post-Contact	Euro-Canadian	House		N
AhGx-46	Comley 6	Pre-Contact	Indigenous	Scatter		N
AhGx-47	Comley 7	Early, Middle, and Late Archaic	Indigenous	Camp		N
AhGx-50	Bethune 1	Pre-Contact Post-Contact	Indigenous Euro-Canadian	Scatter Scatter		N
AhGx-51		Post-Contact	Euro-Canadian	Scatter		N
AhGx-76	Henry Long Homestead	Post-Contact	Euro-Canadian	Homestead		N
AhGx-83	UG Kirkwall 31	Archaic	Indigenous	Camp		N
AhGx-88	UG Kirkwall 37	Pre-Contact	Indigenous	Scatter	Further CHVI	N
AhGx-101		Late Archaic	Indigenous	Findspot		N
AhGx-102		Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGx-103		Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGx-104		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-105		Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGx-106		Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGx-107		Early Archaic	Indigenous	Findspot	No Further CHVI	N
AhGx-108		Early Archaic Post-Contact	Indigenous Euro-Canadian	Camp Homestead		N
AhGx-113	Jeremiah Horning	Post-Contact	Euro-Canadian	Homestead		N
AhGx-225	Daniel Young site	Late Archaic Late Woodland Post-Contact	Indigenous Indigenous (Iroquoian) Euro-Canadian	Camp Camp Homestead	No Further CHVI	N
AhGx-227		Pre-Contact	Indigenous	Findspot	No Further CHVI	N

Borden Number	Site Name	Time Period	Affinity	Site Type	Comments	Within 50m
AhGx-228		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-229		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-230		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-232	Oakdale 1	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-233	Oakdale 2	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-234	Oakdale 3	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGx-235	Oakdale 4	Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGx-236	Oakdale 5	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-237	Oakdale 6	Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGx-238	Oakdale 7	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-239	Oakdale 8	Late Woodland	Indigenous (Iroquoian)	Findspot	No Further CHVI	N
AhGx-240	Oakdale 9	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-241	Oakdale 10	Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGx-242	Oakdale 11	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-243	Oakdale 12	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-245		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-246		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-252	B. Drinkwater	Late Archaic	Indigenous	Camp		N
AhGx-254	Abby Hill 1	Pre-Contact	Indigenous	Camp		N
AhGx-255	Abby Hill 2	Pre-Contact	Indigenous	Camp	Further CHVI	N
AhGx-270	Jacob Smith	Post-Contact	Euro-Canadian	Outbuilding		N
AhGx-274	Serena	Late Archaic Early Woodland Late Woodland	Indigenous	Camp	Further CHVI	N

Borden Number	Site Name	Time Period	Affinity	Site Type	Comments	Within 50m
AhGx-301	Cadham	Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-302	Ossington	Middle Archaic Middle Woodland	Indigenous	Camp	No Further CHVI	N
AhGx-303	Upper Gage North	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGx-304	Upper Gage South	Late Archaic	Indigenous	Camp	No Further CHVI	N
AhGx-305	Terni	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGx-306	Long Dump	Post-Contact	Euro-Canadian	Dump	No Further CHVI	N
AhGx-325		Pre-Contact	Indigenous	Findspot		N
AhGx-326		Pre-Contact	Indigenous	Findspot		N
AhGx-327		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-328		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-329		Pre-Contact	Indigenous	Findspot	No Further CHVI	N
AhGx-330		Late Archaic	Indigenous	Findspot	No Further CHVI	N
AhGx-401	Jacqueline	Pre-Contact	Indigenous	Camp		N
AhGx-402	Hydro	Pre-Contact	Indigenous	Camp		N
AhGx-485	Mantis	Archaic	Indigenous	Camp; scatter	Further CHVI	N
AhGx-486	Chicory	Middle Archaic	Indigenous	Camp; scatter	No Further CHVI	N
AhGx-487	-	Middle Archaic	Indigenous	Findspot	No Further CHVI	N
AhGx-488	-	Late Archaic	Indigenous	Camp; scatter	Further CHVI	N
AhGx-611		Pre-Contact	Indigenous	Scatter	No Further CHVI	N
AhGx-614		Pre-Contact	Indigenous	Scatter	Further CHVI	N
AhGx-615		Pre-Contact	Indigenous	Scatter	Further CHVI	N
AhGx-616		Pre-Contact	Indigenous	Scatter	Further CHVI	N
AhGx-666		Unknown	Unknown	Unknown		N

Borden Number	Site Name	Time Period	Affinity	Site Type	Comments	Within 50m
AhGx-667	Miles Estates II	Pre-Contact	Indigenous	Camp	No Further CHVI	N
AhGx-677	Hess	Early Woodland Post-Contact	Indigenous Euro-Canadian	Scatter Homestead	Further CHVI	N
AhGx-678	Park I	Post-Contact	Euro-Canadian	Midden	No Further CHVI	N
AhGx-679	Park II	Post-Contact	Euro-Canadian	Midden	No Further CHVI	N
AhGx-680	AhGx-680-P1	Pre-Contact	Indigenous	Findspot		N
AhGx-720		Middle Archaic Post-Contact	Indigenous Euro-Canadian	Camp Homestead	Further CHVI/No Further CHVI	N
AhGx-724		Late Archaic	Indigenous	Camp	Further CHVI/No Further CHVI	N
AhGx-726		Pre-Contact	Indigenous	Findspot?	No Further CHVI	N
AhGx-784	Young Site	Pre-Contact Post-Contact	Indigenous Euro-Canadian	Findspot Homestead	Further CHVI/No Further CHVI	Y
AhGx-785		Pre-Contact	Indigenous	Camp	No Further CHVI	Y
AhGx-789	P1	Pre-Contact	Indigenous	Scatter	Further CHVI	N
AhGx-797		Post-Contact	Euro-Canadian	Homestead	Further CHVI	N

1.2.6 Previous Archaeological Work

A search of the MHSTCI archaeological report database for previous work within 50 m of the Study Area was conducted, resulted in 36 reports. Search criteria were based on Lots 2-15, Concession 8, Barton Township; Lots 5-15, Concession 1, Glanford Township; Rymal Road; other roads which intersect the Study Area or run closely parallel; on the names of residential subdivisions bordering Rymal Road; and on known sites in the vicinity of the Study Area. Until the beginning of 2011, consultants' archaeological reports were produced and reviewed according to the *Archaeological Assessment Technical Guidelines* (MHSTCI 1993) and the *Draft Standards and Guidelines for Consulting Archaeologists* (MHSTCI 2006).

1) **Archaeological Services Inc. (ASI)**. 1988. *An ARA of Oakdale Estates (Subdivision 25T-87030), City of Hamilton, Ontario*.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

2) **ASI. 1992**. *An Archaeological Assessment of Proposed Rymal Square Estates 25T-89022, City of Hamilton, Regional Municipality of Hamilton-Wentworth*. 92UR-01. Report on file at MHSTCI.

ASI conducted an archaeological assessment of 22 hectares at the northeast corner of the intersection of Rymal Road East and Upper Wentworth Street for the development of the Rymal Square Estates residential subdivision (ASI 1992a). The assessment overlaps the current FAC Study Area between Upper Wentworth Street and Upper Sherman Avenue (***Supplementary Figure 1a***).

Fieldwork for the assessment consisted of a combination of pedestrian survey and shovel test pit survey. Several areas of prior disturbance were identified which were not assessed, including a 140 m stretch North of Rymal Road on the East side of Upper Wentworth Street. Multiple archaeological sites were identified within the subject property, one of which (AhGx-328) is within the current FAC Study Area. Fieldwork also involved the reinvestigation of multiple previously-registered sites, including one located just North of Rymal Road (AhGx-35).

AhGx-35, the Almas Site, is a Euro-Canadian site initially identified in 1985 and "located on a gentle slope in a cultivated field [consisting] of a 1,000 square metre scatter of highly fragmented historic material. It is thought to be related to the homestead of David Almas circa 1820-1830" (ASI 1992a:1). ASI reidentified the site and confirmed the 1820-1830 time period.

Recommendation number four for AhGx-35 was as follows:

> "The Almas site (AhGx-35) represents a significant early 19th century Euro-Canadian occupation which requires additional archaeological research. It is recommended that the topsoil at this location be removed by Gradall under the close supervision of a licensed archaeologist in order to determine whether or not subsurface cultural features are present. Such features should be subjected to a thorough archaeological investigation prior to being disturbed by the proposed development" (ASI 1992a:12).

Other recommendations included that since AhGx-328 was an isolated Indigenous findspot consisting of a possible Middle Archaic projectile point base, the site was not recommended for further archaeological work,

and that apart from AhGx-35, all parts of this ASI project area were considered cleared of further archaeological concern.

3) **ASI. 1992**. *Stage Four Archaeological Investigations of the Almas Site (AhGx-35) and Comley 1 Site (AhGx-36) Proposed Rymal Square Estates 25T-89022, City of Hamilton, Regional Municipality of Hamilton-Wentworth*. 92UR-02. Report on file at MHSTCI.

ASI conducted a Stage 4 investigation of the early 19th century Almas site (AhGx-35), as recommended by a previous report (ASI 1992b; see ASI 1992a, above). The site overlaps the current FAC Study Area on the North side of Rymal Road around the area of Acadia Drive (***Supplementary Figure 1b***).

The original assumption was that the site was related to an early "settler's cabin" by the Almas family when they first occupied Lot 9, ca. 1816, as the site was not located close to any structures recorded on later historic maps and the artifacts clustered around the time period of 1820-1830. Site boundaries were defined by the artifacts that remained on the surface in 1992, and not by artifacts recovered during the initial 1986 recording of the site. Topsoil was stripped from within the site boundaries and the subsoil was examined for features, but none were identified (ASI 1992b:5-6). No further archaeological work was recommended for the area of AhGx-35.

4) **ASI. 1993**. *An Archaeological Assessment of Allison Estates 25T-91014, City of Hamilton, Regional Municipality of Hamilton-Wentworth, Ontario*. 93U-01. Report on file at MHSTCI.

ASI conducted an archaeological assessment for a property on the South side of Rymal Road E East of Upper James Street, for the development of the Allison Estates subdivision (ASI 1993). The project overlaps the current FAC Study Area for an approximately 100 m stretch of the South side of Rymal Road on the West side of Upper Wellington Street (***Supplementary Figure 1c***). Their background research determined that the property had potential for the recovery of archaeological resources based on the presence of numerous previously-recorded sites in the vicinity.

Fieldwork consisted of pedestrian survey and shovel test pit survey; the area overlapping the current FAC Study Area was entirely assessed via pedestrian survey. No archaeological sites or findspots were recorded for the portion of the project overlapping the current FAC Study Area, and this area was not recommended for further archaeological work.

5) **ASI. 2001**. *Stage ½ A.R.A., Reconstruction of Upper Wentworth Street from Lincoln Alexander Parkway to Rymal Road, Class EA, City of Hamilton, R. M. of Hamilton-Wentworth, Ontario*. 2000-016-034.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

6) **New Directions Archaeology Ltd. (NDA). 2001**. *Stage 1 & 2 & Partial Stage 3 Archaeological Assessment of the Sandrina Gardens Subdivision, City of Hamilton (25T-88031)*. 2001-008-018 & 2001-008-002. Report on file at MHSTCI.

NDA conducted a Stage 1 & 2 archaeological assessment for the 20 acres encompassing the Sandrina Gardens Development residential subdivision, which overlaps the current FAC Study Area on the South side of Rymal Road in the area of Sulmona Drive and halfway between Sulmona Drive and Miles Road (NDA 2001; ***Supplementary Figure 1d***). A Partial Stage 3 assessment was also conducted for site AhGx-486, outside of the current Study Area.

The background research determined that the property had potential for the recovery of Indigenous archaeological resources based on the presence of numerous previously-recorded sites in the vicinity, and on the presence of a tributary of Red Hill Creek crossing the property. Potential for historic archaeological resources was deemed to be high, based on the presence of a structure and orchard within the project area in the 1875 Historical Atlas.

The portion of the project overlapping the current FAC Study Area was assessed via pedestrian survey at five metre intervals. No archaeological resources were identified in this portion of the project area, and it was not recommended for further archaeological work.

7) **AMICK Consultants Limited (AMICK). 2002**. *Report on the 2001 Stage 1-2 A. A. of the Proposed Chappel East Neighbourhood Subdivision, Part of Lot 9, Conc. 1, City of Hamilton, (Former Township of Glanford), R. M. of Hamilton-Wentworth (25T-91007)*. 2001-012-020.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

8) **Griffin-Short, R. 2002**. *Archaeological Assessment Stages 1 and 2 Chappel East and Chappel West, Hamilton, Ontario - Conducted under Licence 2001-048-001 for Benemar Construction Inc.* 2001-048-001.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

9) **AMICK. 2004**. *Report on the 2004 Stage 1-2 A. A. of the Proposed Eleanor Meadows Draft Plan of Subdivision, Part of Lot 7 & 8, Conc. 8, Geographic Township of Barton, Now in the City of Hamilton, R. M. of Hamilton-Wentworth*. P038-078-STG3.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

10) **ASI. 2005**. *Stage 1 Archaeological Assessment: ROPA 9 Master Plan Class Environmental Assessment, City of Hamilton, and Township of Glanbrook, Regional Municipality of Hamilton-Wentworth, Ontario*. P057-139-2005.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

11) **Detritus Consulting Ltd (Detritus). 2006**. *Archaeological Assessment (Stages 1 - 3), DiCenzo Gardens 25T-86-008 Phase 9, City of Hamilton, Regional Municipality of Hamilton Wentworth. P017-086-2006 & P017-088-2006*. Report on file at MHSTCI.

Detritus conducted a Stage 1, 2, & 3 assessment for the development of the DiCenzo Gardens Phase 9 residential subdivision, which overlaps the current FAC Study Area on the North side of Rymal Road from Marilyn Court to 60 m West of Atessa Drive (Detritus 2006; ***Supplementary Figure 1e***).

The background study determined that the property had high potential for the recovery of archaeological resources based on environmental factors, proximity to known archaeological sites, and proximity to historic roads. The report states that the entire property was assessed "Except for a small disturbed area on the north side of Rymal Road"; this area is not marked on any figures, and it is unclear if this statement refers to all parts of the property directly adjacent to Rymal Road, or a specific unmarked part of the property. The remainder of the property was assessed through a combination of shovel test pit survey of wooded areas, and pedestrian survey of ploughed fields.

Fourteen Indigenous or Euro-Canadian findspots were encountered during the Stage 2 assessment, three of which were registered as archaeological sites (AhGx-314, -315, and -316, all outside the current FAC Study Area). The locations of the unregistered findspots is not described, and it is unknown whether or not they overlap the current FAC Study Area. No further archaeological work was recommended for the parts of the property which overlap the current FAC Study Area.

12) **AMICK. 2008**. *Report on the 2008 Stage 1-2 Archaeological Assessment Proposed Shermal Estates Development, Part of Lot 10, Concession 1 (Geographic Township of Glanford, County of Wentworth), City of Hamilton*. P038-035-2008. Report on file at MHSTCI.

AMICK conducted a Stage 1&2 archaeological assessment of the proposed Shermal Estate subdivision, located on the South side of Rymal Road E, between Arrowhead Drive and Miles Road and opposite Upper Sherman Avenue (AMICK 2008). Only a small section of the project area is adjacent to the current FAC Study Area, consisting of the entrance driveway (***Supplementary Figure 1f***). The Stage 1 background study determined that the project area had high potential for both Euro-Canadian and Indigenous archaeological resources.

The Stage 2 assessment was conducted through shovel test pit survey at 5 m intervals, and through pedestrian survey, in June 2008. The footprint of the driveway itself was considered disturbed, and was not assessed. Testing outside the driveway footprint near Rymal Road encountered disturbed soils, and no archaeological resources were identified in this area. Three isolated pieces of chipping detritus were recovered from separate locations elsewhere in the project area, but AMICK did not recommend the findspots for further archaeological assessment.

As of 2020, development work has not yet started on this subdivision.

13) **ASI. 2008**. *Stage 1 Archaeological Assessment, Rymal Road Planning Area (ROPA 9 Lands) Master Plan Class Environmental Assessment Study, City of Hamilton, Ontario (revised)*. P057-280-2006. Report on file at MHSTCI.

ASI conducted a Stage 1 background study for the Dartnall Road Extension of the Rymal Road Planning Area (ROPA 9 Lands), which overlaps the current FAC project between Upper Ottawa Street and the East end of the FAC Study Area (ASI 2008; ***Supplementary Figure 1g***). As a result of the background study,

> "Based on the presence of Twenty Mile Creek, Sinkhole Creek and Red Hill Creek tributaries, the presence of historical features within the study areas as illustrated on 19th century mapping, and the fact that a historic railroad as well as historic settlement roads cut through the study areas, they have the potential for the presence of pre-contact and historic archaeological sites depending on the intensity of more recent development and landscape alterations. The archaeological site potential is also attested to by the presence of 25 registered archaeological sites within the general limits of the two study areas" (ASI 2008:6).

A property inspection conducted in September 2006 identified areas of previous disturbance at the southeast and southwest corners of the intersection of Dartnall Road with Rymal Road E (***Supplementary Figure 1g***). ASI made the following recommendation relevant to the current FAC Study Area:

> "1) With the exception of lands that have been previously assessed and cleared of further heritage concerns by MCL, a Stage 2 archaeological assessment should be conducted of each preferred route option within the … Dartnell [sic] Road Extension project areas, in accordance with the Ministry of Culture's Stage 1-3 Archaeological Assessment Technical Guidelines (1993, 2006). This work would be conducted to identify any archaeological remains that may be present;" (ASI 2008:13).

This Stage 1 background study served as the precursor for the Stage 2 assessment conducted by AMEC of a section of the Rymal Road E ROW (see AMEC 2014, below).

Note: This report served as the Stage 1 background study for part of the Golder 2012 project area (see below).

14) **Jacques Whitford. 2008**. *Stage 1 Archaeological Assessment, Proposed Dartnall Road Widening, Lots 2 and 3, Concession 8, Township of Barton, City of Hamilton, Ontario*. P002-119-2008. Report on file at MHSTCI.

Jacques Whitford conducted a Stage 1 archaeological assessment for Dartnall Road from Rymal Road to Stone Church Road, overlapping the current FAC Study Area on the North side of Rymal Road for an indeterminate distance either side of Dartnall Road (Jacques Whitford 2008; ***Supplementary Figure 1h***).

The background study determined that the project area had potential for archaeological resources "Based on the presence of attractive landscape features for Prehistoric period habitation, the presence of a large number of archaeological sites in the immediate vicinity of the Project Area, a long history of historical occupation on and near the Project Area, and [its] relatively undisturbed nature" (Jacques Whitford 2008:15). Recommendations were made for Stage 2 pedestrian survey for areas "beyond the limits of the existing ditch line that has not been subject to previous disturbance (with the exception of agricultural activities)" (Jacques

Whitford 2008:15); the ditch and areas between the ditch and existing road were considered previously disturbed.

Note: This report served as the Stage 1 background study for part of the Golder 2012 project area (see below).

15) ASI. 2009. *Stage 1 AA, Hannon Creek Subwatershed Study, Class Environmental Assessment, City of Hamilton, Ontario (Revised)*. P264-023-2008. Report on file at MHSTCI.

ASI conducted a Stage 1 archaeological assessment of the Hannon Creek Subwatershed, overlapping the East end of the current FAC Study Area starting at Nebo Road (ASI 2009; ***Supplementary Figure 1i***). Hannon Creek is one of a number of small water courses draining the Escarpment via the Red Hill Creek.

Background research identified potential for archaeological resources based on the presence of numerous previously registered archaeological sites within the project area and in the immediate vicinity. Potential for Indigenous archaeological resources was deemed to exist in within 300 metres of a primary or ancient water source, or within 200 metres of a secondary water source. Potential for Euro-Canadian archaeological sites was deemed to exist in areas within 300 metres of a primary water source or 200 metres of a secondary water source, within 100 metres of an early settlement road, and in the vicinity of the historic Hamilton & Lake Erie Railway.

A site visit was conducted in March 2008 to "to confirm the assessment of archaeological site potential and to determine the degree to which development and landscape alteration may have affected that potential" (ASI 2009:12). Archaeological potential was deemed not to remain in much of the project overlapping the current FAC Study Area; only the St George's Anglican Cemetery, the historic railway bed (now the Trans-Canada Trail), and the land on the South side of Rymal Road for a 120-metre stretch West of Dartnall Road were determined to retain potential.

Recommendations were made for Stage 2 assessment of all areas of identified archaeological potential; the remaining previously-disturbed areas were cleared of further archaeological concern.

16) Archaeological Assessments Ltd (AA). 2010. *The Stage 1-2 Archaeological Assessment of 867 Rymal Road and 1630 Upper Gage Avenue, City of Hamilton*. P013-532-2010. Report on file at MHSTCI.

AA conducted a Stage 1&2 archaeological assessment of 867 Rymal Road E and 1630 Upper Gage Avenue, located at the northwest corner of the intersection of Rymal and Upper Gage (AA 2010; ***Supplementary Figure 1j***). The Stage 1 background study consisted of a local registered archaeological site search, a review of the 1875 Historical Atlas, and brief current physical description, and did not make any explicit determinations of potential for archaeological resources.

Stage 2 assessment via shovel test pit survey at five metre intervals was conducted in May 2010. The South half of the property bordering Rymal Road E was judged to be deeply disturbed and was therefore not tested. No archaeological resources were encountered in the tested section of the property, and AA recommended no further archaeological work.

Note: The Rymal Road ROW is located outside the area assessed by AA for the project.

17) **ASI. 2010**. *Stage 2 Archaeological Assessment (Property Assessment), Hannon Creek Subwatershed Study: Dartnall Road, Twenty Road and Nebo Road, Class Environmental Assessment, City of Hamilton, Ontario*. P057-627-2010. Report on file at MHSTCI.

ASI conducted a Stage 2 archaeological assessment of areas of archaeological potential identified during a Stage 1 background study of the Hannon Creek Subwatershed, prior to the widening of Nebo Road and extension of Dartnall Road South to Twenty Road (see ASI 2009, above; ASI 2010a). The project overlaps the current FAC Study Area at the intersection of Nebo and Rymal Roads (***Supplementary Figure 1k-1***).

The section of the project overlapping the current FAC Study Area was deemed to have no archaeological potential, citing the Stage 1 report (ASI 2009); no fieldwork was conducted in this area. The section was not recommended for further archaeological work.

18) **ASI. 2010**. *Revised: Stage 2 A. A. (Property Assessment) of Hannon Creek Subwatershed Study: Dartnall Road, Twenty Road and Nebo Road, Class Environmental Assessment, City of Hamilton, Ontario. P264-117-2010*. Report on file at MHSTCI.

In December 2010, ASI submitted an addendum/revision to a previous iteration of the Stage 2 archaeological assessment of parts of the Hannon Creek Subwatershed (see ASI 2010a, above; ASI 2010b). The addendum addresses the assessment of additional parts of the Dartnall Road extension and ROW, including the southwest corner of the intersection with Rymal Road East (***Supplementary Figure 1k-2***).

The section of the project within approximately 10 m of the road was considered disturbed, with no archaeological potential remaining. The section of the ROW outside of this 10 m buffer was assessed through shovel test pit survey at 5 m intervals. The assessment "revealed extensive ground disturbance within these areas related to road construction, ditch cutting and grading of the adjacent property" (ASI 2010b:4). No archaeological resources were encountered during the assessment of this section, and the area was cleared of further archaeological concern.

19) **D.R. Poulton & Associates Inc. (DRPA). 2010**. *The 2010 Stage 1-2 Archaeological Assessment of 741 Rymal Road East, Site Plan Application DA-10-067, City of Hamilton, Regional Municipality of Hamilton-Wentworth, Ontario*. P316-081-2010. Report on file at MHSTCI.

DRPA conducted a Stage 1&2 archaeological assessment of the residential property at 741 Rymal Road East prior to its proposed redevelopment (DRPA 2010). The property is located on the North side of Rymal Road on the East side of Eva Street (***Supplementary Figure 1l***). The background study determined that the property possessed archaeological potential based on its proximity to historic Rymal Road East, location within 300 m of a water source, and within 250 m of a registered archaeological site.

The Stage 2 assessment was conducted in August 2010 through shovel test pit survey except in areas deemed previously disturbed. No detail is provided of test pit stratigraphy, so it is unknown if undisturbed soils were encountered in the sections of the property adjacent to the Rymal Road ROW. No archaeological resources were encountered during the assessment, and no further archaeological work was recommended for the property.

Note: The Rymal Road ROW is located outside the area assessed by DRPA for the project.

20) **Jacques Whitford. 2010**. *ADDENDUM: Stage 1 Archaeological Assessment, Proposed Dartnall Road Widening, Lots 2 and 3, Concession 8, Township of Barton, City of Hamilton, Ontario*. P002-119-2008.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

Note: The following reports were produced and reviewed according to the *Standards and Guidelines for Consulting Archaeologists* (MHSTCI 2011).

21) **AA. 2011**. *Revised: Stage 1 Archaeological Assessment of: 705 Rymal Rd., Hamilton, Ontario. P242-005-2011*. Report on file at MHSTCI.

AA conducted a Stage 1 archaeological assessment of the property at 705 Rymal Road, located on the North side of Rymal between Upper Sherman Avenue and Eva Street (AA 2011; ***Supplementary Figure 1m***). The background study determined that the moderate to high potential for Indigenous archaeological resources based on environmental factors, but low to moderate potential for historic archaeological resources based on a lack of documented settlement specifically within the project area. The property was recommended for Stage 2 assessment via shovel test pit survey.

22) **Neill, C. 2011**. *REVISED: Stage 2 Archaeological Assessment of 705 Rymal Road, Hamilton, Ontario. P242-007-2011*. Report on file at MHSTCI.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

23) **Golder Associates (Golder). 2011**. *Revised (second): Stage 1 and 2 Archaeological Assessment, Schlegel Villages Inc., Village of Wentworth Heights, 1620 Upper Wentworth Street, Part of Lot 11, Concession 8, Formerly Geo. Twp. of Barton, Formerly R. M. of Hamilton-Wentworth, Now City of Hamilton, Ontario*. P218-031-2011. Report on file at MHSTCI.

Golder conducted a Stage 1&2 archaeological assessment of the Village of Wentworth Heights retirement village at the northwest corner of Rymal Road and Upper Wentworth Street (Golder 2011; ***Supplementary Figure 1n***). The background study determined that the project area possessed moderate to high potential for Indigenous archaeological resources based on environmental factors and its proximity to registered archaeological sites, and moderate to high potential for Euro-Canadian archaeological resources based on its proximity to the historic City of Hamilton and the historic Hamilton and Lake Erie Railway.

A Stage 2 assessment was conducted in April 2011 via shovel test pit survey at 5 m intervals. The sections of the property closest to the Rymal Road ROW were deemed previously disturbed, and were not tested. No archaeological resources were encountered during the assessment, and the property was not recommended for further archaeological work.

Note: The Rymal Road ROW is located outside the area assessed for the project.

24) Golder. 2012. *Stage 2 Archaeological Assessment, Proposed Road Improvements, Dartnall Road (Rymal Rd to Stone Church Rd), Rymal Road (Dartnall Rd to New Trinity Church Corridor), City of Hamilton, Ontario*. P319-008-2011. Report on file at MHSTCI.

Golder conducted a Stage 2 archaeological assessment of the Dartnall Road and Rymal Road E corridors, overlapping the current FAC Study Area from 58 m West of the centre of the intersection of Rymal Road E and Dartnall Road, to the eastern edge of the FAC Study Area (Golder 2012; ***Supplementary Figure 1o***). The archaeological assessment was conducted under the same Schedule C (Phase 3 & 4) Municipal Class Environmental Assessment process as the current project. The entire study area was determined to have moderate to high potential for Indigenous and Euro-Canadian archaeological resources based on the previous Stage 1 reports.

The Stage 2 assessment was conducted through shovel test pit survey in September 2011, except in areas deemed previously disturbed or permanently wet. The section of the project overlapping the current FAC Study Area was deemed previously disturbed except for a small section at the northwest corner of the intersection between sidewalk and the parking lot for The Pool Court (Golder 2012:Map 4; ***Supplementary Figure 1o***). No archaeological resources were identified from this section, and no further work was recommended.

25) AMEC Environment and Infrastructure (AMEC). 2014. *Revised Report: Stage 2 Archaeological Assessment: Rymal Road East from Approximately 230 Metres West of Dartnall Road to Approximately 30 Metres West of Trinity Church Road to Approximately 250 Metres East of Fletcher Road, City of Hamilton, Ontario*. P141-0201-2013. Report on file at MHSTCI.

AMEC conducted a Stage 2 archaeological assessment of a 200 m stretch of the Rymal Road E ROW just West of the intersection with Dartnall Road, and a longer stretch East of the intersection of Pritchard Road; the former section overlaps with the current FAC Study Area (AMEC 2014:Figure 2; ***Supplementary Figure 1p***). Field work was conducted based on recommendations from a prior Stage 1 background study (ASI 2005, above). A historic burial ground located on the North side of Rymal Road (just West of The Pool Court at the intersection with Dartnall Road), St. Georges Cemetery, was identified as being of particular interest.

The ROW on both sides of Rymal Road E was subjected to shovel test pit survey at five metre intervals, conducted in December 2013. Gravel and asphalt driveways, gravel shoulders, roadside drainage ditches, low-lying wet areas, and steep slopes were all considered disturbed or of low potential and were not tested. Undisturbed soils were encountered in some parts of the ROW, but no archaeological resources were encountered.

AMEC recommended no further archaeological work for the majority of the study area, except in the vicinity of St George's Cemetery. While speculating that well-kept cemetery records and the presence of a previously-installed waterline lowered the potential for unmarked graves within the road ROW, AMEC recommended the following:

> "1) Due to the proximity of St. Georges Cemetery to the study corridor, a Stage 3 cemetery limit assessment (S&Gs Section 2.2, Guideline 4) must be conducted by a licensed archaeologist in order to ensure that unmarked graves in the right-of-way are not disturbed. If grave shafts or human bone is encountered, all work in the immediate area should cease until all

outstanding legal and archaeological concerns have been properly addressed;" (AMEC 2014:9).

This Stage 3 work appears not to have been implemented, according to MHSTCI records.

26) AMICK. 2015. *2014 Stage 1-2 Archaeological Assessment of 820 Rymal Road East, Lot 11, Con. 1 (Geo. Twp. of Glanford, Wentworth Cnty.), City of Hamilton, R.M. of Hamilton-Wentworth. P038-0820-2014*. Report on file at MHSTCI.

AMICK conducted a Stage 1&2 archaeological assessment of the residential property at 820 Rymal Road E, located at the southwest corner of the intersection with Sulmona Drive (AMICK 2015; ***Supplementary Figure 1q***). The Stage 1 background study determined that the Study Area had potential for Indigenous archaeological resources based on environmental factors, and for Euro-Canadian archaeological resources based on the proximity to historic transportation routes (Rymal Road) and in an area of early settlement.

The property was subjected to shovel test pit survey at five metre intervals in July 2014, except in areas with existing structures. No archaeological resources were encountered during the assessment, and AMICK recommended no further archaeological work.

Note: The Rymal Road ROW is located outside the area assessed by AMICK for the project.

27) Detritus. 2016. *Archaeological Assessment (Stage 1-2), 389 Rymal Road East Part of Schlegel Villages, Part of Lot 11, Concession 8, Geographical and Historical Township of Barton, Historical County of Wentworth, City of Hamilton*. P017-0518-2016. Report on file at MHSTCI.

Detritus conducted a Stage 1&2 archaeological assessment for a proposed parking lot for the Schlegel Villages retirement home, located on the North side of Rymal Road E to the East of the intersection with Upper Wentworth Street (Detritus 2016; ***Supplementary Figure 1r***).

Detritus determined that the project area had moderate to high potential for Indigenous archaeological resources based on environmental factors and proximity to registered archaeological sites; and moderate to high potential for Euro-Canadian archaeological resources based on proximity to historic Rymal Road and documented historic settlement by the Young family.

Stage 2 assessment of the project area was conducted in August 2016, via shovel test pit survey at five metre intervals except within the footprints of extant structures and pathways. No archaeological resources were identified during the assessment, and Detritus recommended no further work for the property.

28) NDA. 2016. *Stage 1 Archaeological Assessment of 385 Nebo Road and 1280 Rymal Road East on Lot 14, Concession 1 in the Geographic Township of Glanford, Wentworth County, in the City of Hamilton*. P018-0816-2016. Report on file at MHSTCI.

NDA conducted a Stage 1 background study of 385 Nebo Road and 1280 Rymal Road E, a large property on the South side of Rymal Road E between Nebo Road and the Trans-Canada Trail encompassing the grounds of a former pipe plant facility (NDA 2016; ***Supplementary Figures 1s-1 & 1s-2***).

The background study determined that the property had potential for Euro-Canadian archaeological resources based on its proximity to historic transportation routes (Rymal and Nebo Roads, Hamilton & Port Dover Railroad) and to the historic community of Hannon, and for the blacksmith shop, inn, and farmhouse documented along Rymal Road in the 1875 Historical Atlas. NDA also identified potential for Indigenous archaeological resources based on environmental factors and on proximity to registered archaeological sites. A property inspection conducted in September 2016 identified areas of deep disturbance in the footprints of former pipe plant buildings and remediation work; NDA recommended no further archaeological assessment for these areas. The remainder of the property was recommended for Stage 2 archaeological assessment by shovel test pit survey.

Recommendations for a Stage 2 archaeological assessment for the property were carried out by Golder in November 2016 (see Golder 2017, below). The Rymal Road ROW is located outside the area assessed by NDA for the project.

29) **Golder. 2017**. *Stage 2 Archaeological Assessment, 385 Nebo Rd. & 1280 Rymal Rd. E., Hamilton, ON, Lot 14, Concession 1 in the Geographic Township of Glanford, Wentworth County*. P243-0338-2016. Report on file at MHSTCI.

Golder conducted a Stage 2 archaeological assessment of 385 Nebo Road and 1280 Rymal Road E, a large property on the South side of Rymal Road E between Nebo Road and the Trans-Canada Trail encompassing the grounds of a former pipe plant facility (Golder 2017; ***Supplementary Figure 1s-3***). Field work was conducted based on recommendations from a prior Stage 1 background study (NDA 2016, above).

Property not within the footprint of former industrial buildings or areas of environmental remediation was assessed via shovel test pit survey in November 2016. Test pits were excavated at five metres along the northern edge close to Rymal Road E in the hopes of identifying historic structures highlighted by the background study. Golder encountered disturbed soils across the entire project area, and no archaeological resources were identified. No further archaeological assessment was recommended.

Note: The Rymal Road ROW is located outside of the study area assessed by Golder for the project.

30) **Detritus. 2018**. *Stage 1-2 Archaeological Assessment, 18 Miles Road. P389-0380-2018*. Report on file at MHSTCI.

Detritus conducted a Stage 1&2 archaeological assessment of 18 Miles Road, a property on the West side of Miles Road just South of the intersection with Rymal Road E (Detritus 2018a; ***Supplementary Figure 1t-1***). The Stage 1 background study determined that the property had moderate to high potential for the Indigenous archaeological resources based on environmental factors and the presence of numerous recorded archaeological sites in the surrounding area. Moderate to high potential for Euro-Canadian archaeological resources was identified based proximity to historic transportation routes, location within an area of early settlement, and to recorded historic period archaeological sites.

Assessment of the project area was conducted in September 2018 through shovel test pit survey, and no archaeological resources were identified. Detritus did not recommend further archaeological work for the project area.

31) Detritus. 2018. *Stage 1-2 Archaeological Assessment, 705 Rymal Road East*. P389-0381-2018. Report on files at MHSTCI.

Detritus conducted a Stage 1&2 archaeological assessment of 705 Rymal Road E, a property on the North side of Rymal Road E between Upper Sherman Avenue and Eva Street (Detritus 2018b; ***Supplementary Figure 1t-1***). The Stage 1 background study determined that the property had moderate to high potential for the Indigenous archaeological resources based on environmental factors and the presence of numerous recorded archaeological sites in the surrounding area. Moderate to high potential for Euro-Canadian archaeological resources was identified based proximity to historic transportation routes, location within an area of early settlement, and to recorded historic period archaeological sites.

Assessment of the project area was conducted in September 2018 through shovel test pit survey, and no archaeological resources were identified. Detritus did not recommend further archaeological work for the project area.

Note: The Rymal Road ROW is located outside of the study area assessed by Detritus for the project.

32) ASI. 2019. *Stage 1 and 2 Archaeological Assessment of 323 Rymal Road East, Parts of Lots 11 and 12, Concession 8, Geographic Township of Barton, Wentworth County, City of Hamilton, Ontario*. P449-0280-2019. Report on file at MHSTCI.

ASI conducted a Stage 1&2 archaeological assessment of 323 Rymal Road E, a residential property on the North side of Rymal Road E between Republic Avenue and Massena Drive (ASI 2019a; ***Supplementary Figure 1u***). The Stage 1 background study determined that the property had potential for both Indigenous and Euro-Canadian archaeological resources. Potential for Indigenous sites was based on environmental factors such as the former presence of historic tributaries of Red Hill Creek to the East and West of the property, as well as the presence of numerous recorded archaeological sites in the immediate surrounding area. Potential for Euro-Canadian sites was based on proximity to a historic transportation corridor (Rymal Road East) and to tributaries of Red Hill Creek, as well as to a known archaeological site with a historic component (AhGx-42).

Stage 2 assessment of the property was conducted in May 2019 through a visual review to identify areas of disturbance, followed by shovel test pit survey. Areas of disturbance were identified as the footprints of existing structures, the driveway, and a paved patio. Undisturbed soils were identified over the entire East half of the property; test pits and subsequent test units dug in this area recovered an Indigenous lithic artifact and 19th-century Euro-Canadian material registered as AhGx-784 (Young Site).

As a result of the identification of AhGx-784, ASI recommended the following:

> "1. The Young Site (AhGx-784) represents a mid-nineteenth-century Euro-Canadian historical occupation where the level of CHVI will result in a recommendation to proceed to Stage 4 mitigation. The site also contains a possible pre-contact Indigenous lithic component (Locus P1) of indeterminate CHVI. It is recommended that the site be subject to a comprehensive Stage 3 Archaeological Assessment to more fully identify the character, extent, and significance of the archaeological deposits. In accordance with the S & G. The following

detailed assessment strategy will satisfy the historical component as well as the more intensive assessment requirements appropriate for the pre-contact Indigenous component:

a) The Stage 3 assessment should commence with the creation of a recording grid on a fixed datum, the position of which has been recorded using a GPS;

b) A series of one-metre by one-metre units should then be excavated across the entire site area at ten-metre intervals within an established grid in order to determine the nature and extent of the cultural deposits. An additional 40% of the total number of units excavated on the grid should be strategically excavated at five-metre intervals around Locus P1 and around units of high artifact counts or in other significant areas throughout 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 troweled and all soil profiles examined for undisturbed cultural deposits; and

c) The results of the Stage 3 assessments will be used to evaluate the significance of the site and to develop a series of recommendations concerning any further mitigative options and strategies that may be necessary for both the historical and pre-contact Indigenous components" (ASI 2019a:19-20).

Note: The Rymal Road ROW is located outside of the study area assessed by ASI for the project.

33) **ASI. 2019**. *Stage 1 and 2 Archaeological Assessment of 620 Rymal Road East, Part of Lot 10, Concession 1, Geographic Township of Glanford, Wentworth County, City of Hamilton*. P449-0315-2019. Report on file at MHSTCI.

ASI conducted a Stage 1&2 archaeological assessment for the property at 620 Rymal Road East, located on the South side of Rymal just East of Arrowhead Drive (ASI 2019b; ***Supplementary Figure 1v***). The background study determined that the property possessed potential for the recovery of Indigenous archaeological resources based on its proximity to tributaries of Red Hill Creek and to registered archaeological sites; and potential for Euro-Canadian archaeological resources based on its proximity to historic Rymal Road, the presence of a homestead in the 1875 Historical Atlas, and its proximity to the historic Almas site (AhGx-35).

A Stage 2 assessment was conducted in June 2019 through a combination of pedestrian survey and shovel test pit survey at 5 m intervals. Most of the property adjacent to the current FAC Study Area was assessed through pedestrian survey; a small section close to the northeast corner of the property was assessed through test pit survey. The northeast corner of the property was deemed previously disturbed due to the presence of a house and driveway; the northwest corner of the property was not tested due to being low-lying and wet. Soils in the test pitted area close to Rymal Road exhibited natural stratigraphy and had no evidence of disturbance from the roadway.

The Stage 2 assessment identified two Indigenous findspots and one Indigenous site, AhGx-785. Findspot P2 and AhGx-785 are both located within 50 m of the current FAC Study Area. AhGx-785 comprised two Onondaga flakes fragments and one fragment of Lockport shatter, but no diagnostic artifacts. P2 comprised one Onondaga flake and one fragment of Lockport shatter.

As a result of the archaeological assessment, ASI made the following recommendations:

> "1. Given the isolated and ephemeral nature of Indigenous findspots P2 and P3, these locations do not exhibit CHVI and may be considered free of any further archaeological concern.
>
> "2. Given the non-diagnostic nature and low artifact density of Indigenous site AhGx-785, this location does not exhibit CHVI and may be considered free of any further archaeological concern.
>
> "3. No further archaeological assessment of the property be required" (ASI 2019b:10).

Note: The Rymal Road ROW is located outside of the study area assessed by ASI for the project.

34) ASI. 2019. *Stage 3 Site-Specific Assessment of the Young Site (AhGx-784), Parts of Lots 11 and 12, Concession 8, 323 Rymal Road East, Geographic Township of Barton, Wentworth County, City of Hamilton, Ontario*. P1133-0003-2019. Report on file at MHSTCI.

ASI conducted a Stage 3 archaeological assessment of AhGx-784, identified during a previous Stage 2 assessment (see ASI 2019a; ASI 2019c). The site is a historic Euro-Canadian site located on the North side of Rymal Road between Massena Drive and Republic Avenue (***Supplementary Figure 1w***).

The Stage 2 assessment identified AhGx-784 as a mid-19th century site, possibly having associations with the early 19th century ownership of the property by members of the Young family. The Stage 3 assessment was conducted in October 2019 to test this, and consisted of the excavation of 28 1x1 m test units on a 5 m grid with six infill units. As defined by ASI, "The limits of the Young site (AhGx-784) were determined by physical constraints (the house to the west and fencing to the north and east), consistently low (i.e., n = 25) test unit yields, and disturbed soil profiles directly east of the house" (ASI 2019c:6). Excavations identified a uniform stratigraphy consisting of a dark grey-brown silty loam layer over a yellow-brown silty clay subsoil; no features were identified. The former layer produced 2,604 historic artifacts dating primarily to post-1870; five non-diagnostic Indigenous artifacts were also recovered.

ASI determined that due to the overwhelmingly late date of most of the artifacts, AhGx-784 most likely related to the late 19th and early 20th century occupation of Lots 11 and 12 by James Young and George Calvin Young, rather than by earlier members of the Young family. As a result of this, ASI made the following recommendation:

> "1. The Young site (AhGx-784) represents a secondary deposit of mid-nineteenth to early twentieth century material that does not meet the criteria of a site with cultural heritage value or interest. No further assessment is required" (ASI 2019c:16).

35) Detritus. n.d. *Stage 1-2 Archaeological Assessment, 544-550 Rymal Road East, Part of Lot 9 Concession 1, Geographical Township of Glanford, Historical County of Wentworth, City of Hamilton*. P017-0750-2019.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

36) Markham, S. n.d. *Stage 1 Archaeological Assessment, Twenty Road East and Upper Red Hill Valley Parkway Extensions Project, Lot 15 & 16, Concessions 1 & 2, Geographic Township of Glanford, Wentworth County, Ontario*. P438-0170-2019.

This report is listed in MHSTCI's report database, but was not available for review by FAC.

Supplementary Figures 3a -3f summarize these projects and depict their findings. The intersection of Rymal Road and Dartnall Road has been very intensively examined archaeologically and ***Supplementary Figure 3f*** separates out the most recent projects. While most of the above projects merely abut or minimally overlap the present Study Area, their results are instructive when considering archaeological potential.

1.3 Historical Context

1.3.1 Indigenous History

Indigenous peoples have been living in southwestern Ontario since time immemorial, something that is generally not acknowledged or reflected in the archaeological practice of subdividing the past. Discussions in the Ontario archaeological community have started to recognize the sharp divide between Indigenous and archaeological understandings of the past, and to acknowledge the negative effect that certain archaeological terminology has on the ongoing process of reconciliation (Hazell 2019; Hinshelwood 2019; Sherratt 2019; Taylor-Hollings 2019). In light of this, FAC would like to discuss Indigenous history of southwestern Ontario using the Early, Middle, and Late Periods suggested by Taylor-Hollings, in place of standard terminology.

Early Period

The First Peoples began to move into what is now southwestern Ontario as the ice sheet retreated and water levels in the Great Lakes basins lowered. As populations increased in southeastern North America around 13,000 years ago, small groups of people gradually moved North into a newly-revealed land (Chaput *et al.* 2015; Lothrop *et al.* 2016). The landscape that greeted them would have been open and cold, sparsely vegetated with tundra plants such as lichens and sedges, with spruce and tamarack trees growing up over time (McCarthy *et al*. 2015; Stewart 2013; Yu 2003). The spruce parkland was home to mammoth, mastodon, stag-moose, giant beaver, caribou, arctic fox and snowshoe hare, California condors, and many other boreal species which no longer call the area home (Ellis 2013; Stewart 2013; Storck and Speiss 1994). The first peoples would have moved across this landscape in small groups, following herds of migrating animals and searching for food in a post-glacial landscape that was constantly changing. As they moved across the landscape, they often followed the shoreline of Lake Algonquin or one of the waterways that shifted across the clay plains, camping close to the water's edge: gathering nearby stones to support a portable shelter, cooking meals prepared from animals hunted, trapped, or fished that day, resharpening large fluted spear points or remaking them into smaller tools for other uses (CARF 1992; Ellis 2013; EMCWTF 2002; Julig and Beaton 2015).

Middle Period

As time passed and the first peoples became more familiar with the seasonal changes and the habits of local animals, they began to establish regular camps located close to important resources to return to on a seasonal basis (Ellis 2013; Roosa and Deller 1982). As the climate warmed around 9,000 years ago, the land in southern Ontario became more hospitable and food resources more abundant. Some groups began to establish claims over specific areas of land and to follow the seasonal round within a more restricted territory, often within a particular watershed (Ellis 2013; EMCWTF 2002). One side effect was that access to the highest quality tool stone was no longer available to all groups (Fox 2013). Poorer quality local chert sources were

sufficient for making everyday tools, but as a result the spear points and other lithic objects were never as finely made as those carried by earlier hunters (Ellis 2013; Fox 2013). Groundstone axes and adzes were added to the toolkit as coniferous forests established themselves in southern Ontario and the people made wooden dugout canoes and cooking troughs; other new groundstone tools were used to process a diversifying array of plant resources, or as weights for fishing nets (CARF 1992; Ellis 2013; Kapches 2013).

Ways of life changed over the next few millennia, as deciduous woodlands replaced the coniferous forests, and the post-glacial tundra became a distant cultural memory. Warmer waters in the Great Lakes, and stable stream and river beds provided new habitats for many of the fish species still found in the region today. These were caught using fish hooks made of bone or antler, or copper transported by canoe from the western end of Lake Superior (Ellis 2013; EMCWTF 2002; Fox 2013). Increasingly, large groups of people gathered together during spring and autumn fish spawning runs to catch fish in nets and to cooperate in the cleaning and processing of large catches (Needs-Howarth 2013). In parts of Ontario, fish weirs built at river narrows during this period were subsequently used for thousands of years; even when no longer used to harvest fish, the weirs still served as important gathering places for ceremonies and trading (Needs-Howarth 2013). More changes to food gathering came with the introduction of the bow and arrow, which allowed hunters to target smaller game with something other than traps and snares (Needs-Howarth 2013). A surplus of food, hides, or fur could be exchanged in trade or as gifts for exotic materials, allowing copper from Lake Superior, marine shells from the Atlantic coast and the Gulf of Mexico, and finely-made Onondaga chert bifaces from the Niagara Peninsula to find their way into the hands of people living in diverse parts of eastern North America (Ellis 2013; Fox 2013). By about 3,500 years ago, favoured resource sites on the seasonal round were being re-inhabited year after year, with some groups beginning to establish cemeteries for their dead, marking ritually and territorially important places on the landscape (Ellis 2013; Spence 2013; Stewart 2013).

Late Period

Around 3,000 years ago, people in southern Ontario began to make low-fired ceramics, a change in technology which would eventually have a profound impact on ways of life. Other changes that had begun on a small scale in earlier times were now more entrenched, especially regarding treatment of the dead; yearly gatherings for the spring resource harvest may have included burial ceremonies involving feasting and the presentation of gifts to the ancestors in the form of caches of tools and food(CARF 1992; Spence 2013; Williamson 2013).

Based on archaeological aspects such as new settlement and subsistence strategies, a new type of pottery construction, different pottery decorating techniques, and a variety of projectile point forms, it is generally felt by archaeologists that the Late Period began at around 800 CE and continued until 1650 CE, after which the time frame is designated as the Post-contact period. During the Late Period, the watersheds flowing into Lakes Erie and Ontario were inhabited by Iroquoian speakers during this period, who developed a series of settlements on soils well-suited to horticulture, surrounded by a network of smaller sites placed to access other subsistence resources. The peoples living North of Lake Erie coalesced into the Neutral confederacy (Lennox and Fitzgerald 1990), who resided in the region until they were displaced by the Seneca in the early 1650s (Ferris 2009: 117-118).

The time of Contact between Indigenous Peoples and Europeans around the North shore of Lake Ontario was one of much social upheaval. At the time of Contact, the Five Nations Confederacy (the Iroquois League or Haudenosaunee) were centred South of the Great Lakes. Infectious diseases decimated populations within all First Nations in the early 1600s, and in response, the Five Nations sought replacement adoptees from other

Iroquoian-speaking nations North of the lakes (EMCWTF 2002:39). The Five Nations Confederacy launched a campaign of raids against the Huron-Wendat living in southern Ontario, resulting in their dispersal to other areas such as Quebec and locations North and West of the Great Lakes (EMCWTF 2002:39).

European influences were also felt as the Dutch, British, and French vied for control over the fur trade. The European nations sought Indigenous allies in their North American conflicts, magnifying already present inter-Indigenous tensions. At this time, Jesuit religious proselytizing also strained relations. The Five Nations formed an alliance with the Dutch, and then the English; the Huron-Wendat and Algonkian speaking nations allied with the French (EMCWTF 2002:43). The Huron-Wendat were dispersed in 1649-50 and the Neutral were also dispersed two years later. The Five Nations Confederacy settled into the former territories on the North shores of Lakes Erie and Ontario, and their settlement in this area lasted for perhaps 20 years. By 1700, the wider region surrounding the Study Area came to be inhabited by Mississauga people who spoke the Ojibway language (Konrad 1981).

By 1695, the Ojibwa Peoples began a counter-offensive against the Iroquois Confederacy – partly to remove the Iroquois as the middlemen in trade with the English. This resulted in the Mississaugas asserting control of the North shore of Lake Ontario by 1700:

In exchange for the Confederacy's recognition of the Mississaugas' territorial control and an agreement to allow them direct access to English fur traders, the Mississaugas offered to cease hostilities. The offer of peace was accepted in June 1700, and as a result, the Mississaugas secured their control of the territory between Lake Huron and Lake Ontario (Fullerton *et al.* 2004:238).

The Mississaugas became increasingly entangled in the activities of European peoples following the British defeat of the French in the Seven Years War (1756-1763; Fullerton *et al.* 2004). Britain's Royal Proclamation of 1763 established the procedures for land surrenders from Indigenous Peoples to the British Crown for over the next two centuries. The proclamation stated that only the Crown could purchase lands in the "Indian Territory", the mechanism for this was through formal and public councils between the Crown and the Indigenous People whose lands were involved in the negotiations (Surtees 1994:93). Once the land was acquired, then the Crown could redistribute it either by sale or land grant.

By the time of the American Revolution, the Mississaugas and the British were again allies (Fullerton et al. 2004:241). At this time, a heavy reliance on European goods and the continued spread of infectious diseases exacerbated the social disintegration of many First Nations, including the Mississaugas. "As a consequence, the surrender of land in exchange for those goods would become an attractive option to the Mississaugas in future years" (Fullerton *et al.* 2004:241).

In 1784, three million acres of land were ceded to the Crown from the Mississaugas of the Credit. In 1792, the proper boundaries of this agreement were defined, and the agreement was signed by the Mississaugas and the Crown. This agreement is known as Treaty No. 3, the Between the Lakes Purchase (Surtees 1994:110-111, Duric 2017). A portion of this land, 550,000 acres of land either side of the Grand River, was subsequently granted to the Six Nations, who were also allied to the British,.

The land in the Study Area is covered by Treaty No. 3. The Study Area is within the Traditional Territory of the Mississaugas of the Credit First Nation and other First Nations (see Land Acknowledgement).

1.3.2 Euro-Canadian History

Following the "Between the Lake Purchase", Augustus Jones surveyed Barton and Glanford Townships into 100 and 200 acre lots, and settlement by Euro-Canadians began soon after (Johnston 1958: 33). In 1816, a new county was created in a reorganization of local government. Wentworth County included the townships of Barton, Glanford, Ancaster, Beverly, Binbrook, Flamborough (East and West), and Saltfleet. The administration was in Barton Township below the escarpment where the townplot of Hamilton was laid out.

It is difficult to track the early settlement of the portion of Barton Township that includes the Study Area because written histories concentrate on the town of Hamilton (Johnston 1958, Gouglas 1998) or the escarpment edge (Burkholder 1956). "Ryckman's Corners [at the West end of the Study Area] was first settled in the late 1790s and is named after the Ryckman family, one of the earliest settlers on the mountain" (Hamilton Spectator 2012). "The village of Hannon [at the East end of the Study Area] was located at the intersection of Rymal Road and Nebo Road. The first settler in Glanford in the Hannon area, Mr. Henry Horning, arrived in 1805" (GHS 2007). By 1815, fifty settler families had begun to clear land and create farms in Glanford Township (Page & Smith 1875: xii).

By the 1830s, the Caledonia Road had been built on the sideroads connecting the town of Hamilton and the village of Caledonia. This became the main North-south road in the area (ibid.: 83) and within Hamilton it is now named Upper James Street. The hamlet at Ryckman's Corners was centred on today's intersection of Upper James and Rymal Road. By the 1850's all of the adjacent lots on either side of the Study Area were long settled (Surtees 1856; ***Figure 4***). The Ryckman's Corners Post Office opened in 1854 (Hamilton Beach Community 2016).

In 1859, the route of the Hamilton and Port Dover Railway was marked on the Surtees map. While the tracks may have been built, this railway was not operating at this time. A new company took over construction and by the 1870s the Hamilton and Lake Erie Railway was operating (Cooper 2001), crossing the East end of the Study Area.

In Hannon, worship services began in 1865 at St George's Anglican Church on land donated by the Servos family (McMaster University Library 2020). This church stood in this location until the early 1960s. The cemetery associated with the church is still in use, operated by the City of Hamilton.

Also in Hannon, a stone structure was built in 1874 at the corner of Nebo Road and Rymal Road to house the inn at this corner, the building was demolished in 1959 as a result of road widening (GHS 2007). The Hannon Post Office opened in 1854 (Hamilton Beach Community 2016).

In the 20th century, Rymal Road was incorporated into the province's network of public highways. In 1930, the section between the East end of the Study Area and Upper Gage was designated as part of Hwy. 20, which ran from Hamilton South of the escarpment to Niagara Falls. By 1933, this route was renamed as Hwy. 20a and continued West as a paved road to Upper James and Ryckman's Corners. It was renamed again as Hwy. 53 in 1937 and its operation was downloaded to the City of Hamilton in 1961 (Bevers 2020).

By the 1960s, urban Hamilton had begun to encroach upon the farmland surrounding Rymal Road and this process has continued to the present day, such that today there are very few farm fields bordering the road. All of the remainder of the Study Area has been developed into commercial, or industrial enterprises or housing estates.

1.3.3 Land Use of the Study Area

A number of resources were consulted to determine the historical archaeological potential of the Study Area and to identify any modern disturbances. Resources included historic maps, street maps, and government topographic series maps. The following table summarizes the results:

Table 3
Summary of Visual Historic Records Examined

Title	Date	Comments
Map of the County of Wentworth, Canada West R. Surtees. ***Figure 4***	1859	- few structures are depicted on this map, mostly school houses, churches, and saw mills - owners of larger properties are noted - a toll gate is noted at Ryckman's Corners where Upper James St. crosses Rymal Road - Hannon Post Office is noted - Hamilton and Port Dover Railroad is depicted
Township of Barton and Township of Glanford [composite] *Illustrated Historical Atlas of the County of Wentworth Ont* Page & Smith ***Figure 5***	1875	- structures and orchards are noted on larger properties, along with names of owners - Ryckman's Corners post office is located outside of Study Area - an inn is located at the SE corner of Rymal Road and Nebo Road -St. George's Church is shown North of Rymal Road -The Northern and Northwestern Railway crosses the East end of the Study Area, Rymal Station is located North of the Study Area
Imperial Atlas of Wentworth County, Ontario J.W. Tyrrell ***Figure 6***	1903	- structures are noted on larger properties, along with names of owners - Ryckman's Corners post office is now located closer to the intersection with Rymal Road, exact location is unclear - compared to previous maps, many farm lots have been divided and are now half or quarter lots - Hannon Post Office is noted at corner of Dartnall Road
Grimsby NTS Map 30M4 Scale 1:63,360 ***Figure 7a***	1934	- structures are depicted - a blacksmith's shop (F) is located at the corner with Upper James - a turning lane is depicted between Rymal Road and Upper Gag - numerous small tributary streams cross the Study Area between Lots 11 and 15 of Barton Twp. - another tributary runs South of the Study Area from Miles Road to Dartnall Road - St. George's Church and Cemetery are noted, as well as a post office and a hotel in Hannon

Mount Hope NTS Map 30M4E/ *Mount Albion* NTS Map 30M4F Scale 1:25,000 ***Figure 7b***	1973	- Urban areas are depicted, as are isolated structures, the shapes of larger structures are depicted - a shopping centre and urban neighbourhoods are present on the South side of Rymal Road at Upper James, a row of houses is present on the North side of Rymal - a large cemetery is present S of Rymal near Upper Wellington - rows of houses are present on either side of Rymal between Upper Sherman and Upper Gage - motel is noted on the North side of Rymal East of Upper Gage - a row of houses is on the South side opposite the hotel - auto wrecker located at the SW corner of Rymal and Nebo Rds - St. George's church is no longer shown, nor is the cemetery - more structures are shown at Hannon beside Dartnall Road
Southwestern Ontario Orthophotography Project (SWOOP), MNR Aerial Images **(Fig. 2a-2e**)	2015	- most of the Study Area is now urbanized
Google Earth, Google Maps	2018	-images from June 2018 -sidewalks have been added to many sections of the ROW, especially on the South side - intersection of Rymal Road and Dartnall Road has been rebuilt, now 2 travel lanes in each direction
Google Street View	2019	- images from June 2019 - South side of Rymal from Nebo to Trans-Canada Trail is under development, South edge of ROW has been disturbed - buried utilities (water mains and telephone lines) are present along most of the margins of the ROW

By 2020, most of the lands surrounding the Study Area have been urbanized, much of this development has taken place in the past 30 years. There are only two farm fields that remain on the South side of Rymal Road, and both have developments in planning. A large proportion of the lands bordering the Study Area have been assessed archaeologically (see **Section 1.2.6**).

1.3.4 Historic Plaques

A search for provincial and federal historical plaques returned no results within two kilometres of the current Study Area (CHRP 2020; OHT 2020). A search for municipally designated properties likewise produced no results within two kilometres of the Study Area (City of Hamilton 2020).

1.3.5 Hamilton Archaeology Management Plan

An archaeological management plan has been prepared for the City of Hamilton (2016). The potential maps were updated as part of the Official Plan (City of Hamilton 2019) and these show that the entire Study Area has archaeological potential ***(Supplementary Figure 2***).

2.0 STAGE 1 METHODOLOGY

The Property Inspection consisted of a visit to the Study Area to gain first-hand knowledge of its geography, topography, and current conditions, and to evaluate and map the archaeological potential. The Property Inspection was conducted on the 6th of November and the 5th of December, 2020. The weather was sunny the first day and cloudy the second; lighting and ground conditions were excellent throughout. While some small piles of melting snow were still present on the second day, they did not impede an evaluation of the ground surface. All work was recorded through photo-documentation, field notes, and mapping. Photo arrows for the property inspection plates are presented on ***Figures 8a - 8e*** and ***Supplementary Figures 3b*** and ***3c***.

3.0 RECORD OF FINDS

Documentary Record for Stage 1

Field notes	- FAC 2020 Book 4, and in this report
Field photographs, digital	- see Appendix A, Photographic Catalogue
Maps based on field work	- Results, in this report
	- On field map
GPS Data	- N/A

4.0 ANALYSIS & CONCLUSIONS

Information about the archaeological potential of the Study Area was gathered from various sources. The archaeological potential for pre-Contact/historic Indigenous settlement has been assessed using the data collected from the Ontario Archaeological Sites Database (OASD) and environmental data collected from geological, soils, NTS topographic and Ontario maps. Historic Euro-Canadian site potential has been assessed using data from the OASD system, from primary sources such as the Land Registry records, historic maps, 20th century mapping and aerial photography, and from secondary historic sources.

The *Standards and Guidelines*, **Sections 1.3.1 and 1.4.1** (MHSTCI 2011) indicate that the following features or characteristics indicate archaeological potential:

- Previously identified archaeological sites ✓
- Water sources
  - primary water sources (lakes, rivers, streams, creeks) ✓
  - secondary water sources (intermittent streams/creeks, springs, marshes/swamps) ✓
  - features indicating past water sources
  - accessible or inaccessible shorelines
- Elevated topography (drumlins, plateaux, dunes)
- Pockets of well-drained sandy soil ✓
- Distinctive land formations (waterfalls, caves)
- Resource areas
  - food or medicinal plants (migratory routes, spawning areas)
  - scarce raw materials (copper, chert outcrops)
  - early Euro-Canadian industry (fur trade, logging, prospecting)
- Early historic transportation routes (roads, rail, portages) ✓
- Areas of early Euro-Canadian settlement ✓
- Property listed on a municipal register or designated under the Ontario Heritage Act or that is a federal, provincial or municipal historic landmark or site
- Property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations

Based on the background research, the Study Area has high archaeological potential for Indigenous archaeological resources based on proximity to watercourses, to well drained soils, and to known Indigenous archaeological sites.

Based on the background research, the Study Area has high archaeological potential for Euro-Canadian archaeological resources based the same environmental criteria for Indigenous sites, on historic transportation routes, and records of early Euro-Canadian settlement.

Considering the Study Area as a whole, large portions of the Study Area have been impacted by modern development, construction and disturbance that have served to remove the archaeological potential from these areas. Disturbances are described in **Tables 4** and **5** and mapped on ***Figures 4a - 4e***.All potential disturbances were confirmed during the property inspection. Note that much modern construction has taken place in recent years, and this does not show on the 2015 aerial views of ***Figure 2a-2e***, nor on the Google Street View images from 2018 that were consulted. For example, compare ***Plate 4*** with ***Figures 2c*** and ***4c***. Most of the Study Area has now had sidewalk added on either side of the ROW, and in many places, additional services such as sewers and catch basins were added when the sidewalks were installed. All roadbed surfaces are also disturbed.

The property inspection confirms that the entire length of the ROW fronting the Mount Hamilton cemetery has been extensively landscaped. The tributary of Red Hill Creek that runs across the cemetery and enters a culvert at the South edge of the Study Area has been channelized. No archaeological potential remains in this area because of this modern landscaping activity. Mount Hamilton Cemetery will be discussed further in **Section 4.1**, below.

As noted in **Section 1.2.6** above, some sections of the Study Area have already been assessed, particularly at the East end of the Study Area around Dartnall Road. While Stage 2 Assessment in the Study Area did not find any sites, a recommendation for Stage 3: Testing has been made for the area adjacent to St. George's Cemetery, to ensure that no graves are present within the ROW (AMEC 2014, See section 1.2.6, above). This recommendation has not been acted upon in the years since. St. George's Cemetery will be discussed further in **Section 4.1**, below.

The road allowances of cross streets with signalized intersections are also included in the Study Area. All cross streets have buried water, sewer and electrical utilities on the margins of their ROWs. In addition, buried traffic signalling infrastructure is also present at these intersections. As a result, archaeological potential has been removed from each intersection and cross street ROW.

Site AhGx-785 was found by ASI in a farm field, West of Upper Sherman Avenue. Three Indigenous lithics were found, and the site was not considered to have any further CHVI. However, the site was located in the northeast corner of this farm field within 10 m of the South edge of the ROW of Rymal Road. Given this proximity, there is a possibility that archaeological materials may be found in the narrow strip of the South side ROW, particularly if the site was originally larger before development occurred in the ROW or on adjacent properties.

All of the other archaeological sites in proximity to the Study Area have been thoroughly investigated by previous researchers, and none have further CHVI. In addition, the margins of the ROW adjacent to each site have also been completely disturbed by modern road, sidewalk, and utility construction to the extent that any remaining archaeological potential has been removed.

In summary, there is only one portion of the entire Study Area that retains high potential for both Indigenous and Euro-Canadian archaeological materials. The remainder of the Study Area has low potential due to numerous modern and extensive disturbances, with the exception of St. George's Cemetery, discussed below.

4.1 Cemeteries Adjacent to the Study Area

The presence of two cemeteries adjacent to the Study Area requires further discussion. These are St. George's Anglican Cemetery on the north side of Rymal, west of Dartnall Road, and Mount Hamilton Cemetery, on the south side of Rymal, between Upper James and Upper Wellington. Both are municipal cemeteries operated by the City of Hamilton. The Cemeteries department was contacted and staff were able to provide maps for each and a burial plan for St. George's. In the following paragraphs, each cemetery in turn will be examined to consider 1) whether there is any overlap between the cemetery and the Study Area and 2) the degree of risk that unmarked graves may be present in the Study Area. Mount Hamilton will be examined first.

The first aspect to consider, as *per* a Bereavement Authority of Ontario (BAO) directive dated 12 February 2021, is to compare the boundaries of the Study Area with those of the adjacent cemeteries to ensure that there is no overlap (BAO 2021). The Mount Hamilton Cemetery was established in the mid to late 20th century and good survey mapping exists (***Figure 8***). A comparison with the mapping of the Study Area shows that there is no overlap between the cemetery and the ROW of Rymal Road. The demarcation is clear and consistent on each, with a slight deviation in the boundary where the tributary of Red Hill Creek enters the ROW from the cemetery (compare ***Figure 1b*** and ***Figure 8***).

The second aspect to consider, as per MHSTCI policy guidance is whether unmarked burials may be present in the Study Area adjacent to the cemetery. To date, there have been no burials within 120 metres of the ROW. Since this is a modern cemetery, there is no chance that an unmarked grave could have been placed outside the cemetery in the ROW. While the modern Mount Hamilton Cemetery abuts the ROW, this portion of the Study Area does not require Stage 3: Testing in the ROW.

St. George's Cemetery was associated with St. George's Anglican Church which stood at the southwest corner of the cemetery lot until the early 1960s. This cemetery was surveyed in the 1970s (**Figure 9**). A comparison with the mapping of the Study Area shows that there is no overlap between the cemetery and the ROW of Rymal Road (compare ***Figure 1e*** and ***Figure 9***). An undated plan of burial plots at St. George's was received from the municipal Cemeteries Department (***Figure 10***). This plan is confusing as an historical document, because the cemetery boundaries are not clearly marked. The three eastern rows of grave plots have only been partially depicted, the empty space on the plan is marked with the word "No Records." A comparison of the names on the plan with a photograph of the burial markers (***Plate 6***) deepens the confusion, since the names from the photograph do not match those of the plan, possibly because some graves have been added since the plan was drawn. It is not possible to understand the layout of the plan from the information that is currently available. Finally, since the church and its cemetery was founded in 1865, it is possible that some graves may have been placed at or just outside the edges of the present day surveyed boundary. Thus, is possible that graves may be present in the Study Area adjacent to the cemetery. A space of up to 10 m from the edges of the cemetery should be subjected to Stage 3: Testing to confirm that no graves are present.

Table 4.
Disturbances on North Side of Rymal Road Noted during Property Inspection

Descrption	Comments	Archaeological Potential
From West end of Study Area to Atessa Drive Upper James Street	- adjacent properties are businesses with parking lots extending to edge of Study Area, sidewalk is new, buried electrical vaults at edge of ROW - three houses and a vacant lot have asphalt sidewalk, ditch, and manholes in front	Low
From Atessa Drive to Upper Wellington Street	- adjacent properties are housing subdivisions	Low
From Upper Wellington Street to Republic Avenue	- adjacent properties are housing subdivisions	Low
From Republic Avenue to Acadia Drive	- adjacent properties are businesses	Low
From Acadia Drive to Upper Sherman	- adjacent properties are housing subdivisions, ditch and sidewalk are present	Low
From Upper Sherman to Eva Street	- adjacent properties are a new commerical plaza and mid-20th century houses - a sidewalk and drainage ditch runs in front of the mid-20th century houses and a water main is buried between the ditch and the edge of ROW	Low
From Eva Street to Upper Gage	- adjacent properties are housing subdivisions and a bank branch	Low
From Upper Gage to Rocklands Drive	- adjacent properties are businesses	Low
From Rocklands Drive to Upper Ottawa	- adjacent properties are housing subdivisions, the ROW of Rymal Road is in a cut	Low
From Upper Ottawa to Nebo Road	- adjacent properties are businesses	Low
From Nebo Road to Trans-Canada Trail	- adjacent properties are businesses	Low
From Trans-Canada Trail to East End of Study Area	- St. George's Cemetery is east of the Trans-Canada Trail - other adjacent properties are businesses	Low, except for 50 m in front of cemetery which is High

Table 5.
Disturbances on South Side of Rymal Road Noted during Property Inspection

Descrption	Comments	Archaeological Potential
From East End of Study Area to Trans-Canada Trail	- adjacent properties are business and a vacant lot, sidewalk is new	Low
From Trans-Canada Trail to Nebo Road	- adjacent property is currently under development - roadbed raised on fill, guardrail beside slope to ditch below	Low
From Nebo Road to Upper Ottawa	- adjacent properties are businesses, sidewalk is new	Low
From Upper Ottawa to Grayrocks Avenue	- adjacent properties are businesses, sidewalk is new - one vacant lot is east of Grayrocks Avenue	Low
From Grayrocks to Upper Gage	- adjacent properties are housing subdivisions	Low
From Upper Gage to Miles Road	- adjacent properties from Upper Gage to Sulmona are housing subdivisions - adjacent properties from Sulmona to Miles are detached houses, sidewalk is new, a drainage ditch is south of the sidewalk, buried water and telephone lines are placed between ditch and edge of ROW	Low
From Miles Road to Upper Sherman	- adjacent properties are detached houses	Low
From Upper Sherman to Arrowhead Drive	- adjacent properties are a business, a fallow field and a house, sidewalk is new - AhGx-785 is 10 m from south edge of ROW at 620 Rymal Road	Low, except for 80 m in front of 620 and 630 Rymal Road, which is High
From Arrowhead Drive to Upper Wentworth	- adjacent properties are housing subdivisions and detached houses, sidewalk is new, buried water and telephone lines are between sidewalk and edge of ROW - the hydro corridor is 1 m above the level of the road, a cut slope extends to the south edge of the ROW	Low
From Upper Wentworth to Upper Wellington	- adjacent properties are housing subdivisions, a police station, library, a farm field, and a modern cemetery - Streambed in cemetery where it enters ROW has been landscaped	Low
From Upper Wellington to West end of Study Area	- adjacent properties are housing subdivisions and businesses - sidewalk is new east of Springside Drive with buried water and telephone lines	Low

5.0 SUMMARY & RECOMMENDATIONS

The Stage 1: Background Study determined that the Study Area possessed high potential for both Indigenous and Euro-Canadian archaeological resources. Modern disturbances have reduced this to low potential in most of the Study Area. Two areas of archaeological potential remain, described below.

Therefore, FAC recommends the following:

1) That those portions of the Study Area having high potential as depicted on ***Figure 11c*** be subjected to Stage 2: Assessment by means of shovel test at 5 m intervals following MHSTCI *Standards and Guidelines* **Section 2.1.2**;

2) That the area adjacent to St. George's Cemetery depicted as having potential to contain graves on ***Figure 11e*** be subjected to Stage 3: Testing by means of mechanical excavation following MHSTCI *Standards and Guidelines* **Section 3.3.3** The specific purpose for this Stage 3: Testing is to determine if there are any graves within the Study Area.

   The area marked on ***Figure 11e*** as requiring Stage 3: Testing shall be shovel tested prior to stripping. If it is determined to have no near surface Cultural Heritage Value or Interest (CHVI), the overburden and/or topsoil will be removed at least down to the top of subsoil by mechanical means with a flat bladed ditching bucket in order to determine if any graves are present. This work is to be directed by a licensed archaeologist. The stripped surface will then be cleaned by shovel or trowel, and any cemetery and archaeological features will be mapped.

   Stage 3: Testing specifically for the purpose of cemetery/grave identification is conducted under MHSTCI regulations in conjunction with the *Funeral, Burial and Cremation Services Act*. A Cemetery Investigation Authorization must be obtained from the Bereavement Authority of Ontario prior to any Stage 3 stripping;

3) That those remaining portions of the Study Area having low potential as depicted on ***Figures 11a - 11e*** require no further archaeological work.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

Standard 1

1) 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*, R.S.O. 1990, c0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism, and Culture Industries, a letter will be issued by the minister stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

2) 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 complete archaeological fieldwork 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*.

3) 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*.

4) The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, c.33 requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries, Ministry of Government and Consumer Services (416 212-7499).

Standard 2

1) 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, or have artifacts removed from them, except by a person holding an archaeological licence.

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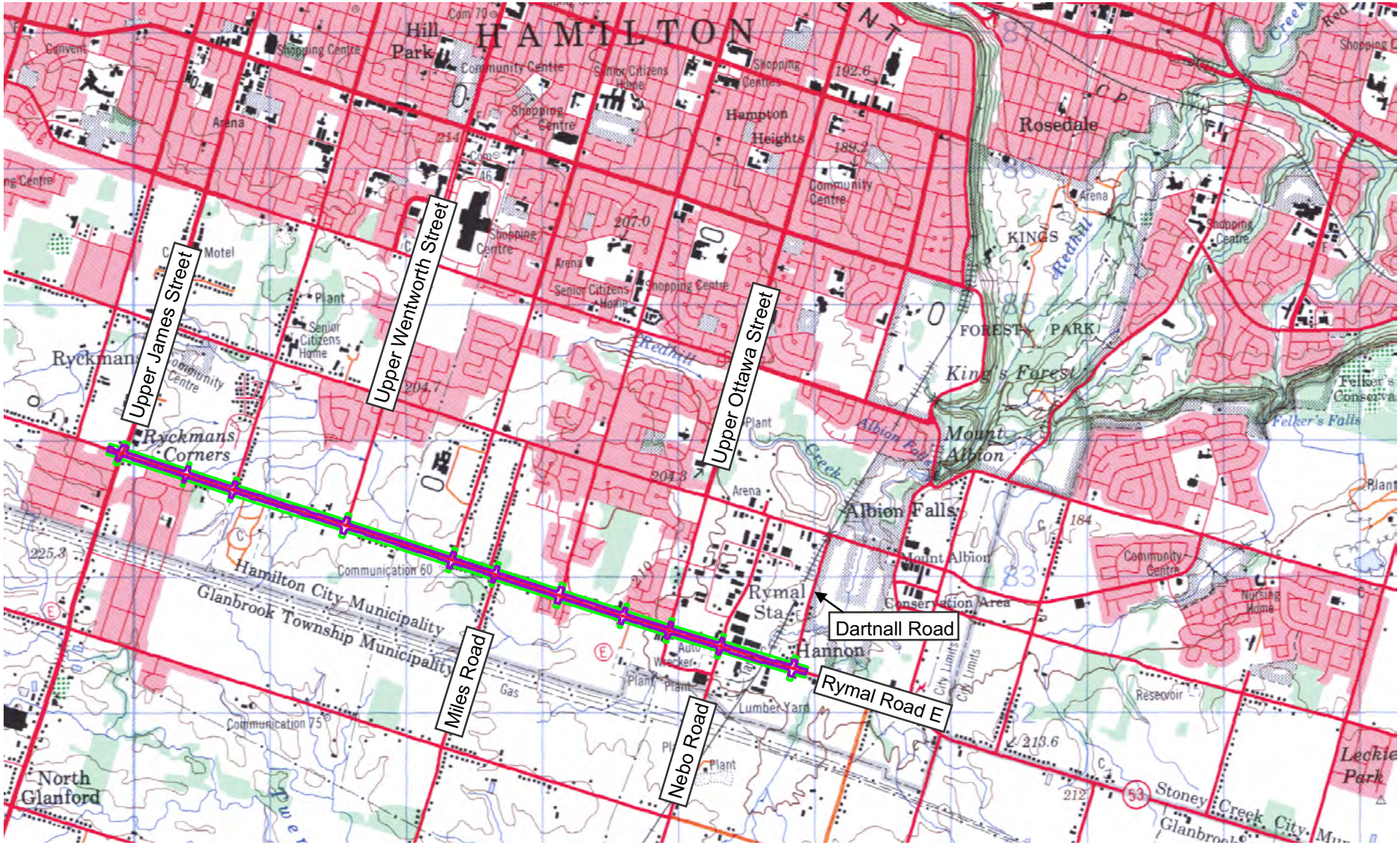

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FAC

Date: 28/11/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

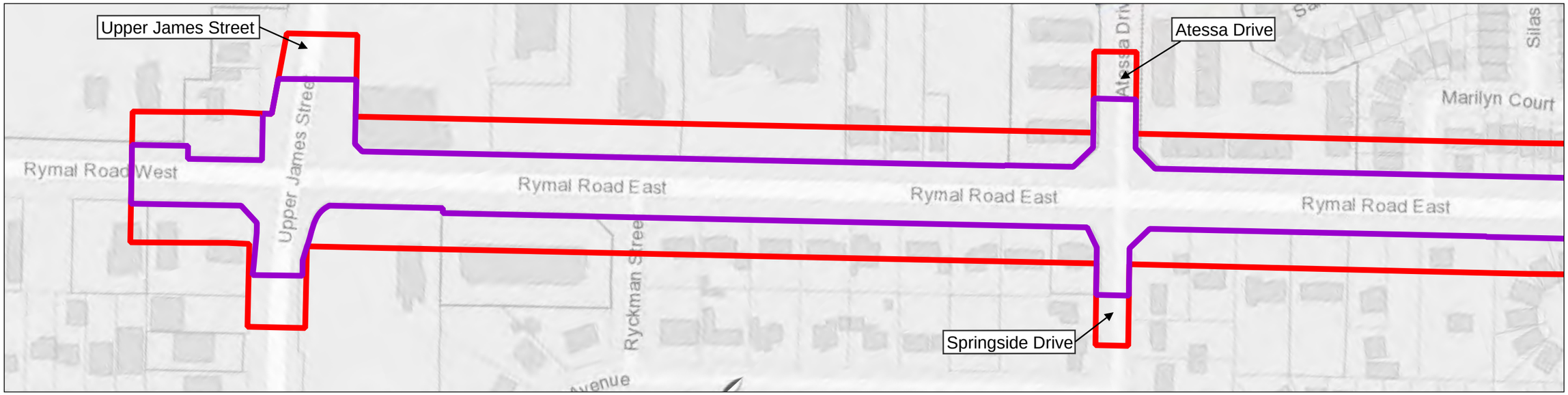
GN TN

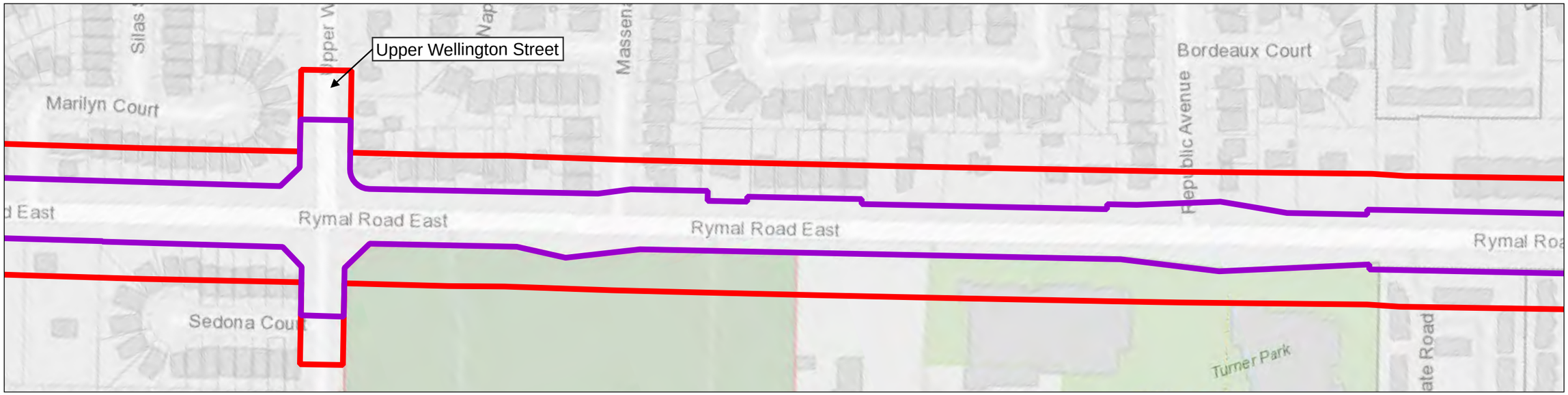
Scale

0 2km

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 1a: Location and Topography of Study Area





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FAC
Date: 30/11/2020
Designer: JW

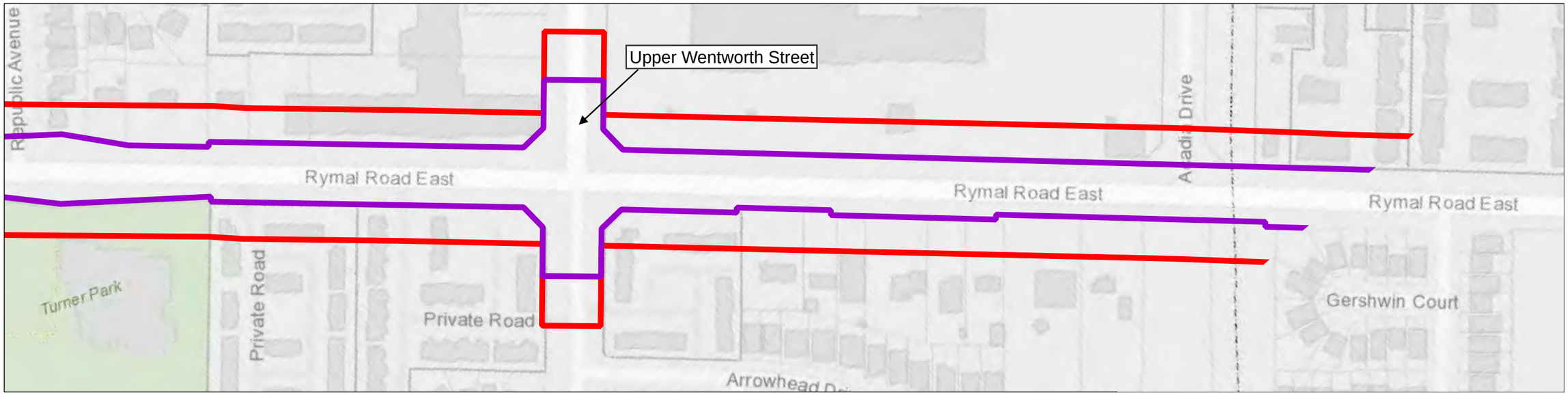
KEY
- Archaeology Study Area
- EA Study Area

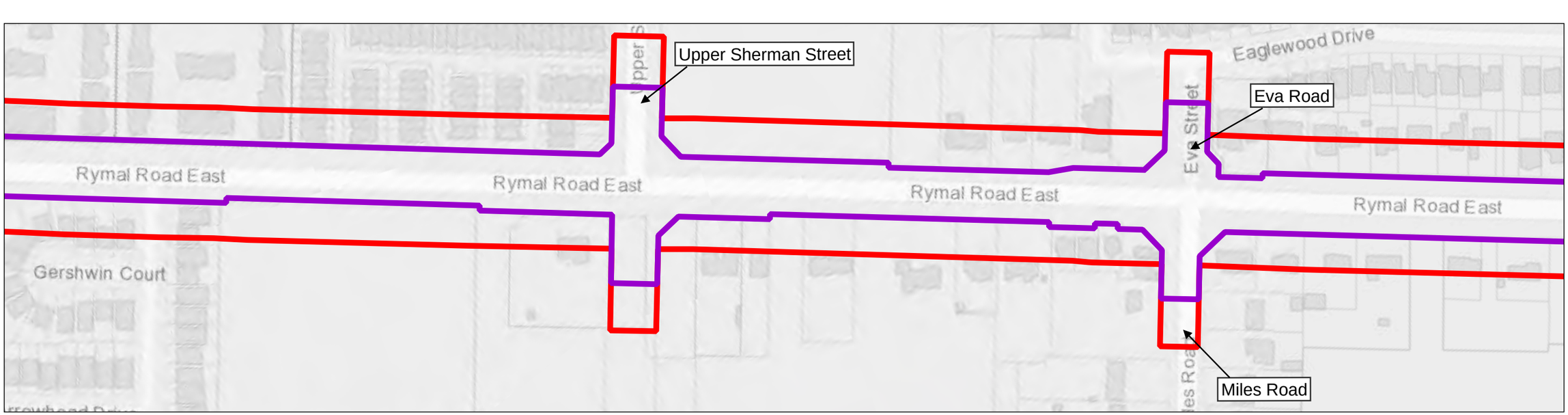
Scale
0 — 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 1b: Location and Topography of the Study Area, Upper James Street to Turner Park





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FAC
Date: 30/11/2020
Designer: JW

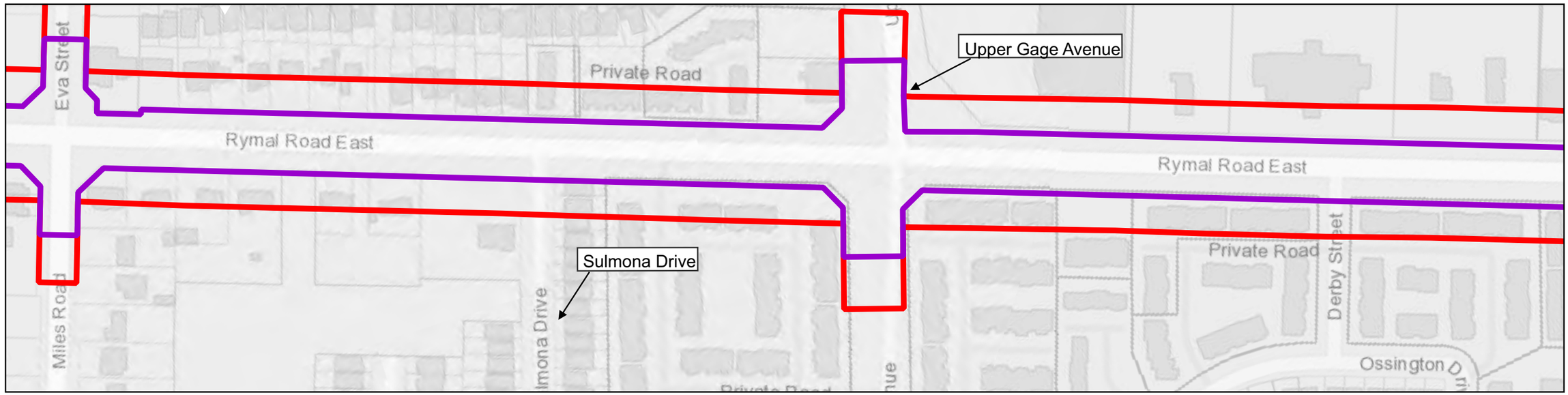
KEY
- Archaeology Study Area
- EA Study Area

Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 1c: Location and Topography of the Study Area, Turner Park to east of Miles Road



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FAC
Date: 12/11/2020
Designer: JW

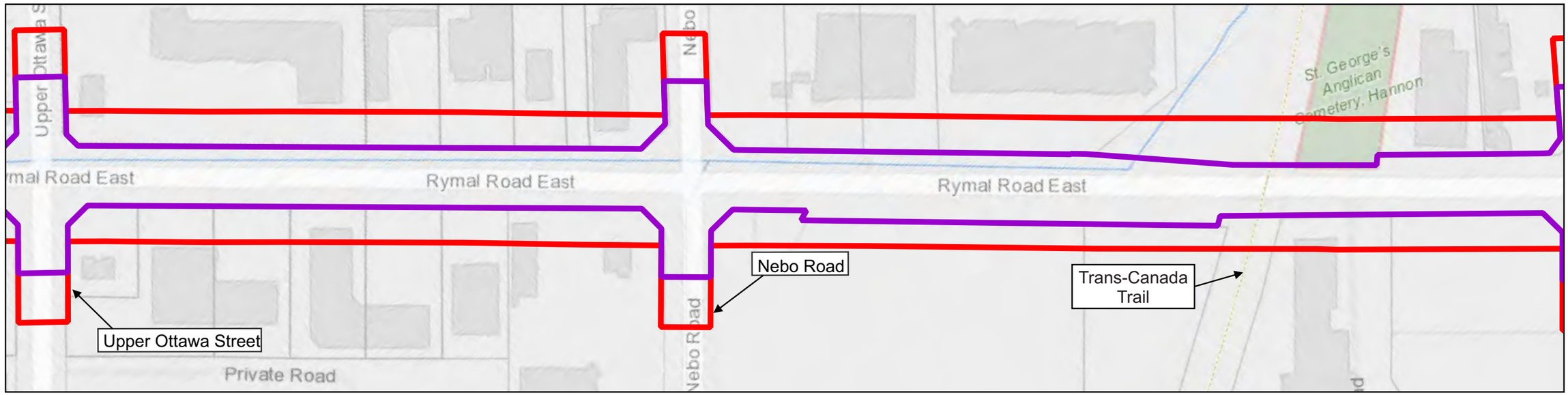
KEY
- Archaeology Study Area
- EA Study Area

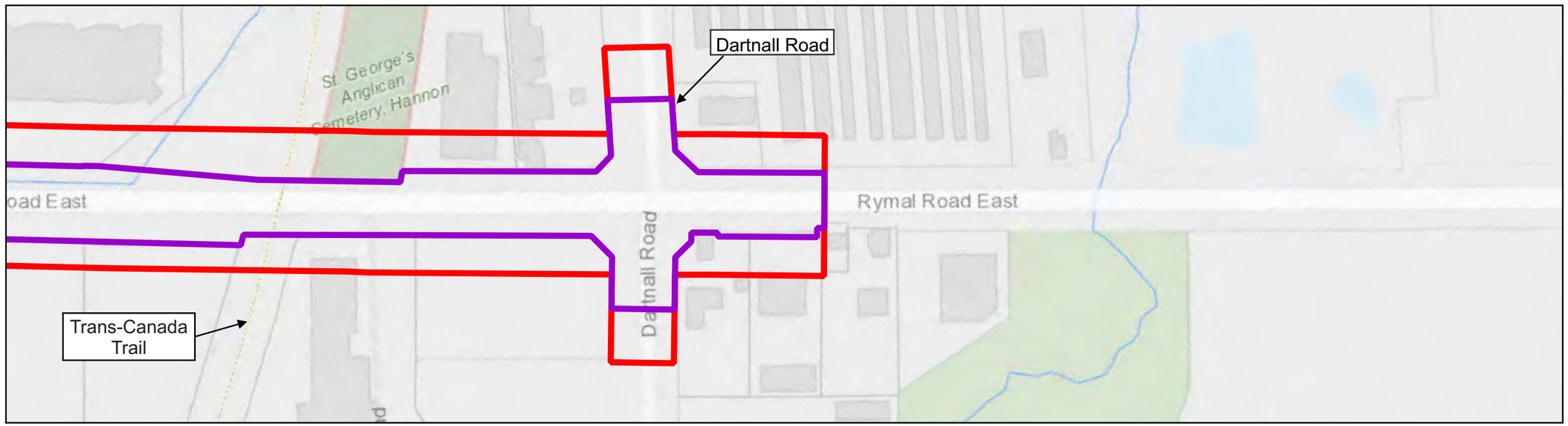
Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 1d: Location and Topography of the Study Area, Miles Road to east of Upper Ottawa Street





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FAC
Date: 30/11/2020
Designer: JW

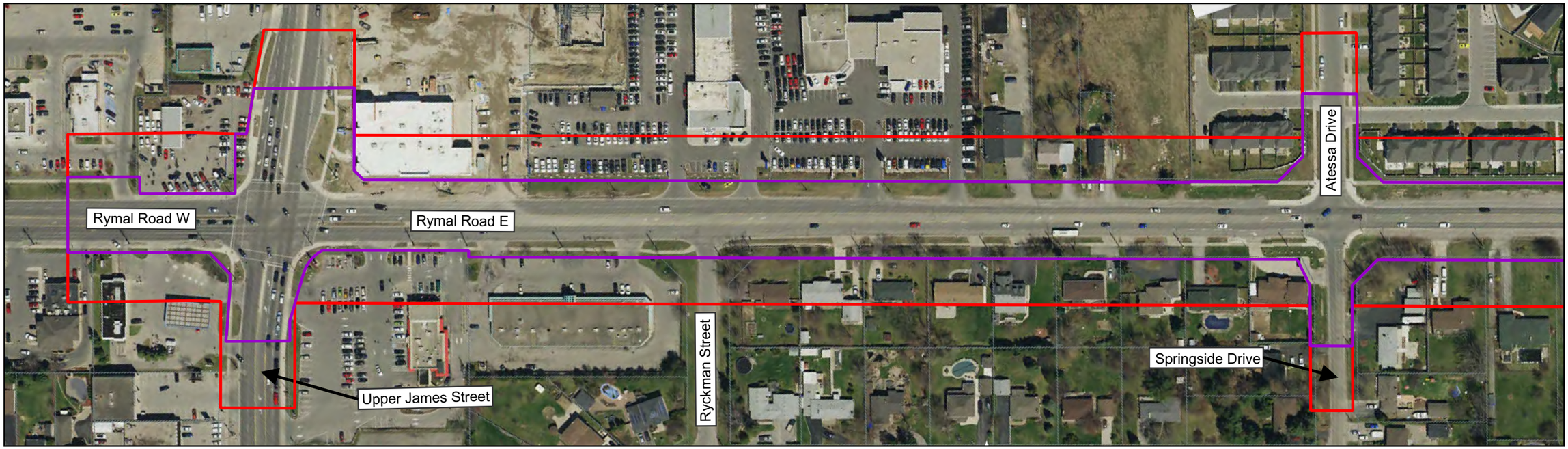
KEY
- Archaeology Study Area
- EA Study Area

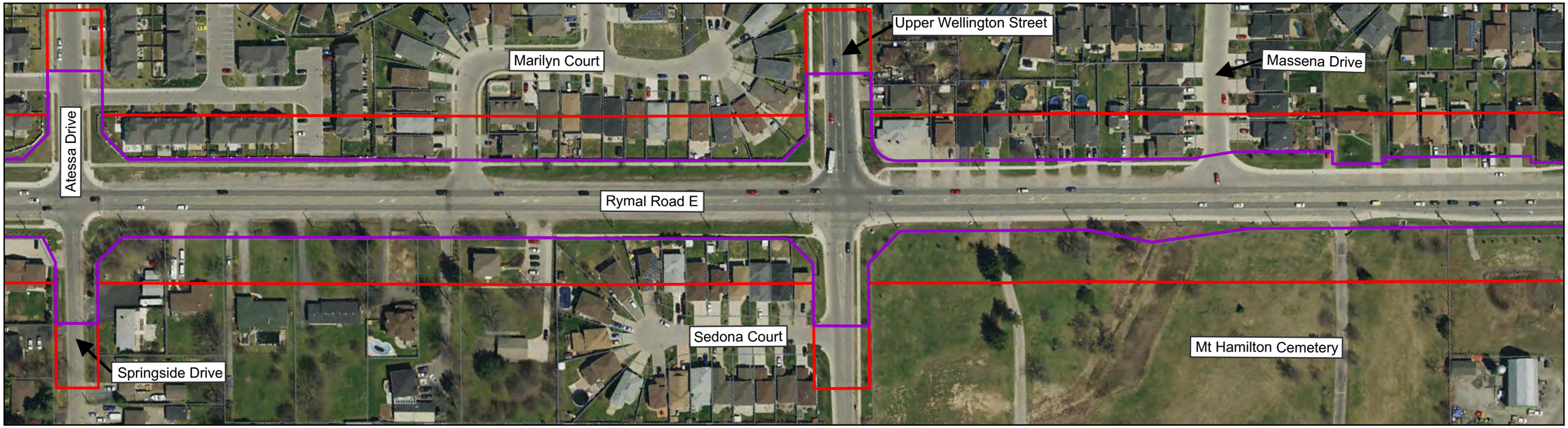
Scale
0 — 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 1e: Location and Topography of the Study Area, Upper Ottawa Street to east of Dartnall Road





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FAC
Date: 30/11/2020
Designer: JW

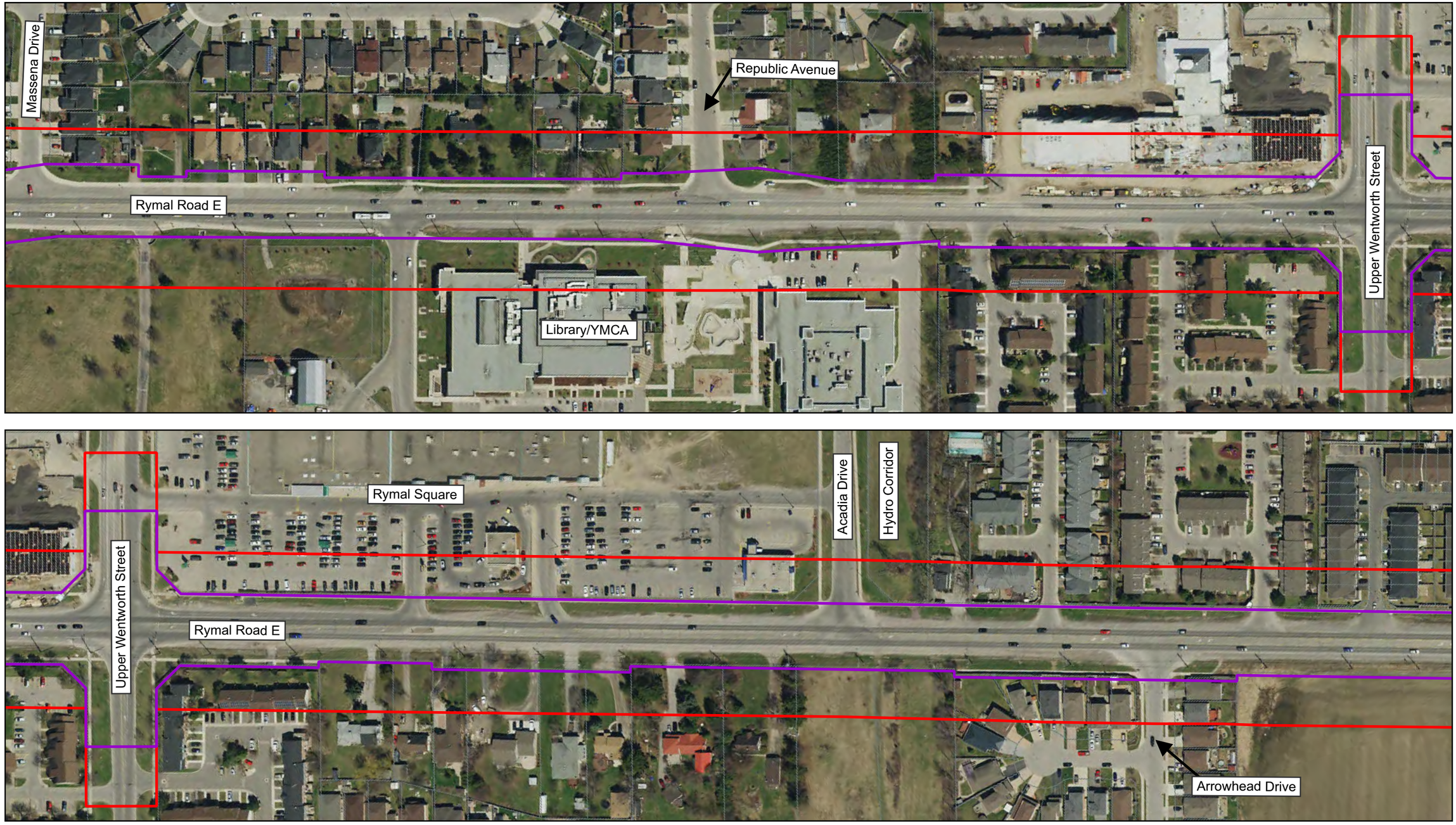
KEY
- Archaeology Study Area
- EA Study Area

Scale
0 — 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 2a: Aerial View of the Study Area, Upper James Street to Massena Drive



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FAC
Date: 30/11/2020
Designer: JW

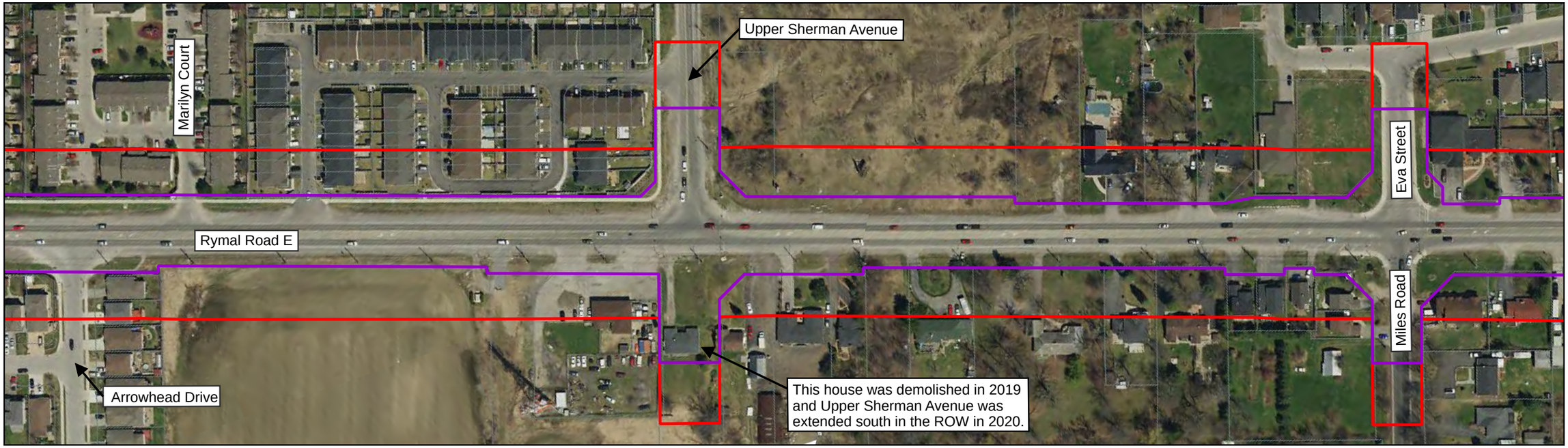
KEY
- Archaeology Study Area
- EA Study Area

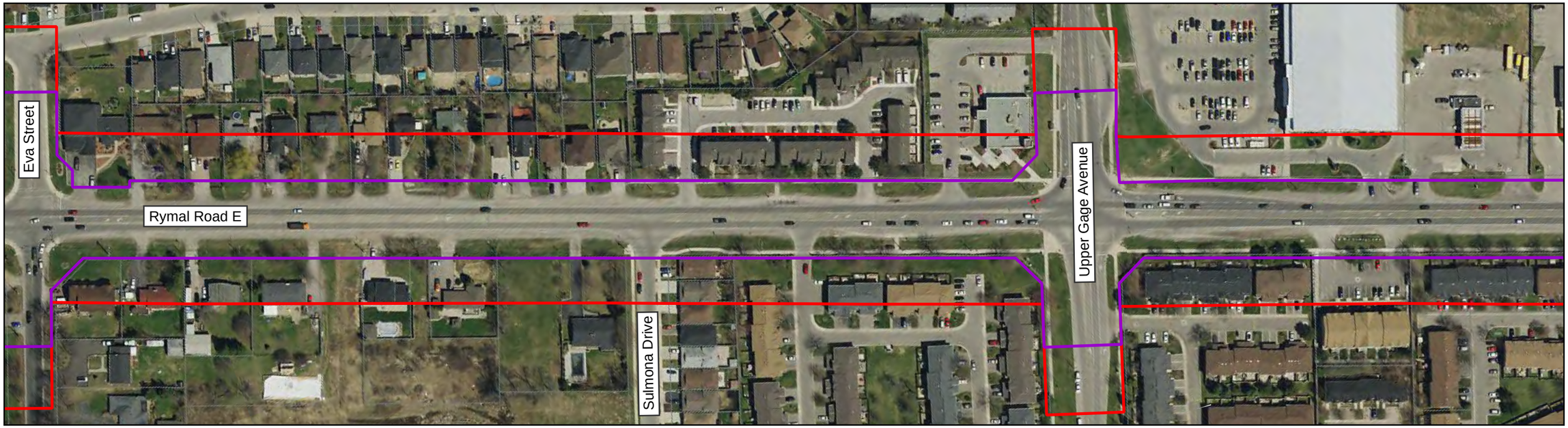
Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 2b: Aerial View of the Study Area, Massena Drive to Arrowhead Drive





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FAC
Date: 30/11/2020
Designer: JW

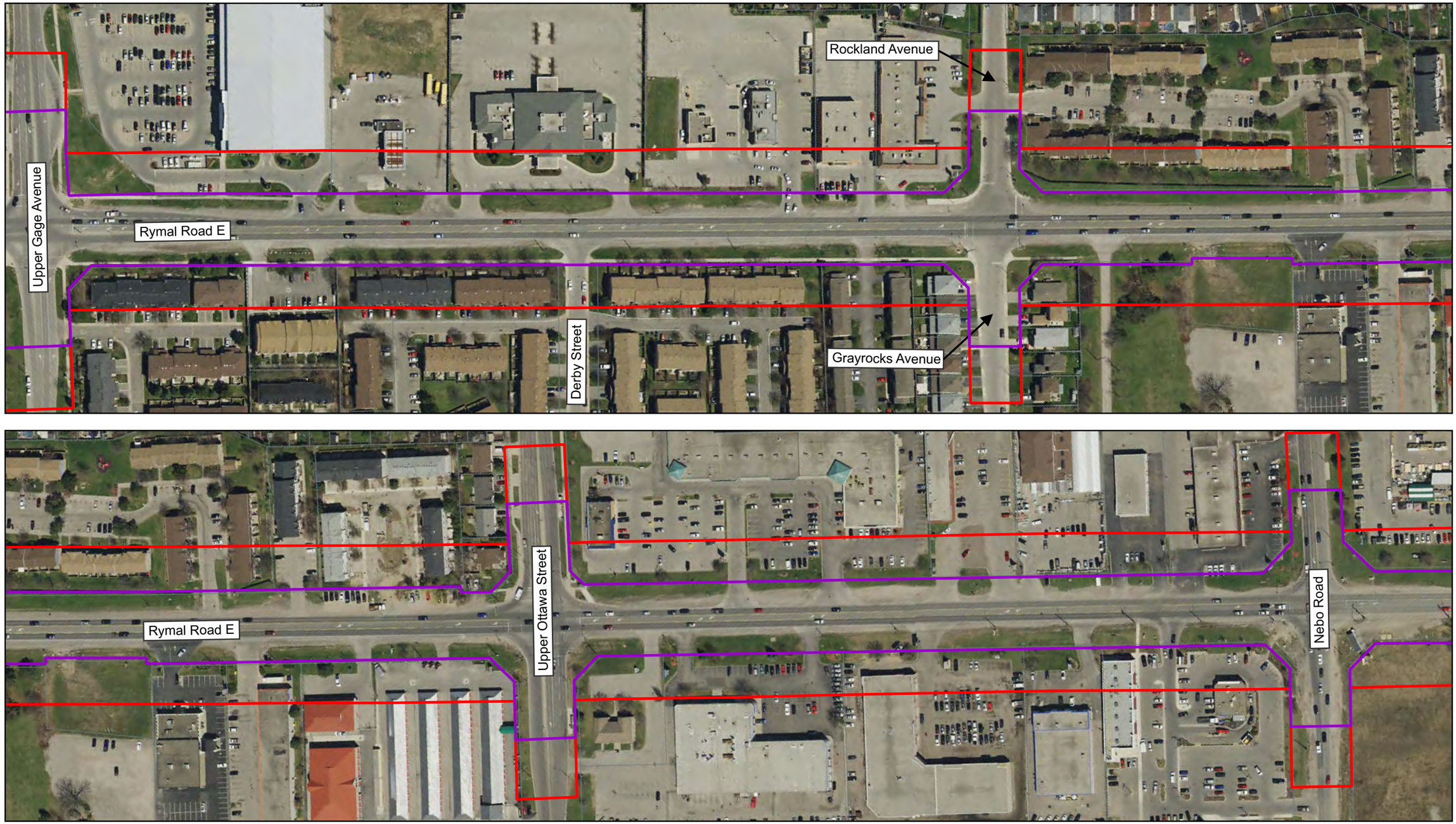
KEY
- Archaeology Study Area
- EA Study Area

Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 2c: Aerial View of the Study Area, Arrowhead Drive to Upper Gage Avenue



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FAC
Date: 30/11/2020
Designer: JW

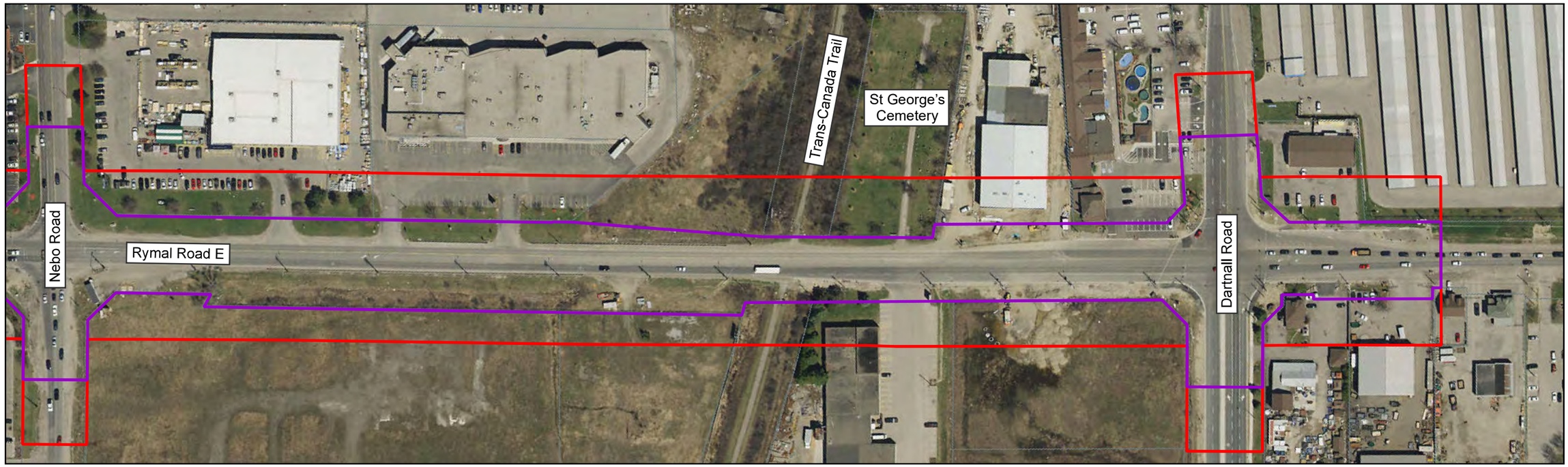
KEY
- Archaeology Study Area
- EA Study Area

Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 2d: Aerial View of the Study Area, Upper Gage Avenue to Nebo Road



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FAC
Date: 30/11/2020
Designer: JW

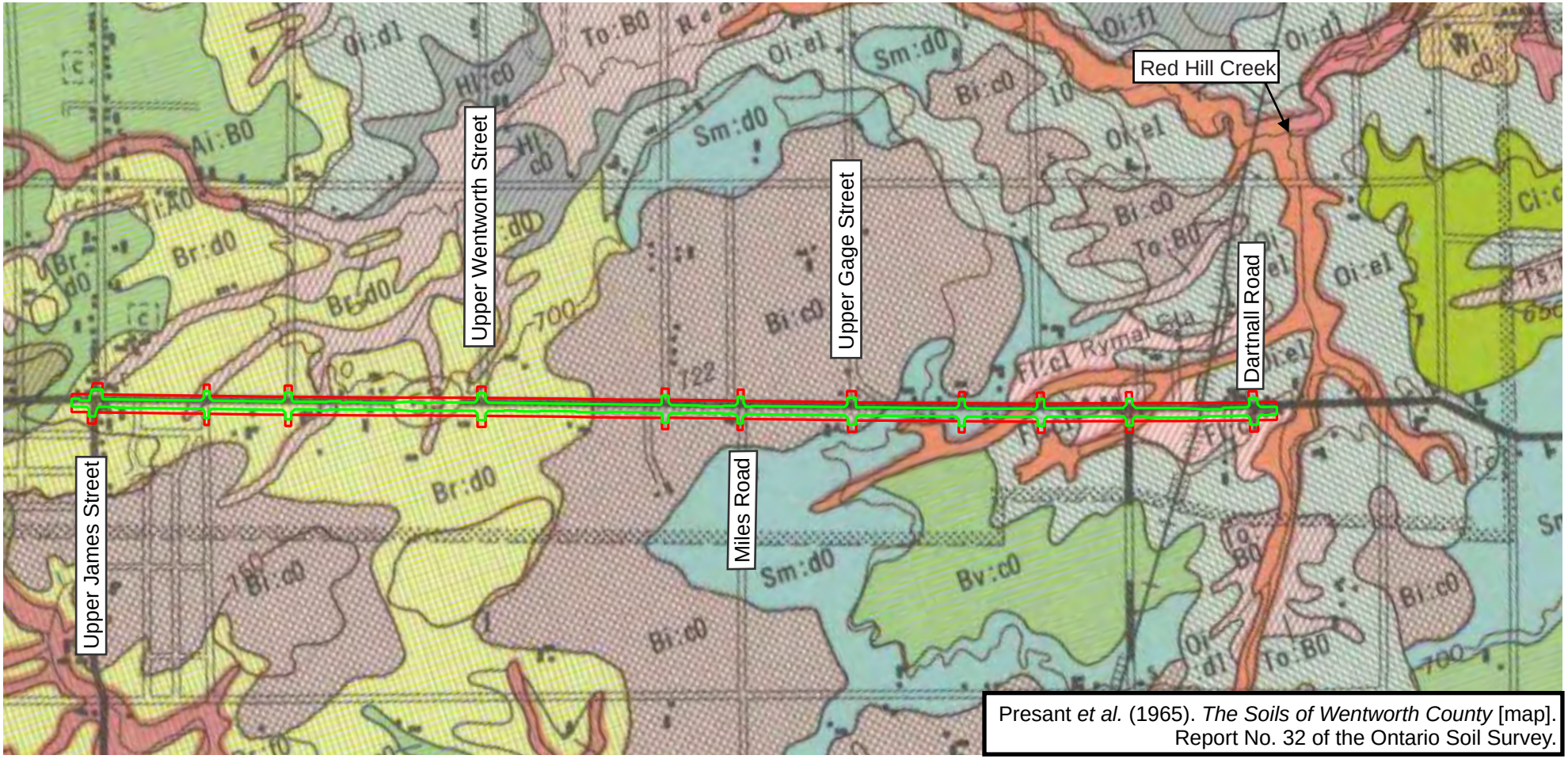
KEY
Archaeology Study Area
EA Study Area

Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 2e: Aerial View of the Study Area, Nebo Road to east of Dartnall Road



Map Symbol		Parent Materials	Soil Moisture CL
Bi	Binbrook	Silt loam over clay till	Imperfectly drained
Br	Brantford	Lacustrine silty clay loam and silty clay	Well drained
Fl	Farmington	Less than 12" loam till over bedrock	Well drained
Oi	Oneida	Clay loam till	Well drained
Sm	Smithville	Silt loam over clay till	Moderately well drained
To	Toledo	Lacustrine silty clay loam and silty clay	Poorly drained
10	Stream courses		

FAC

Date: 30/11/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

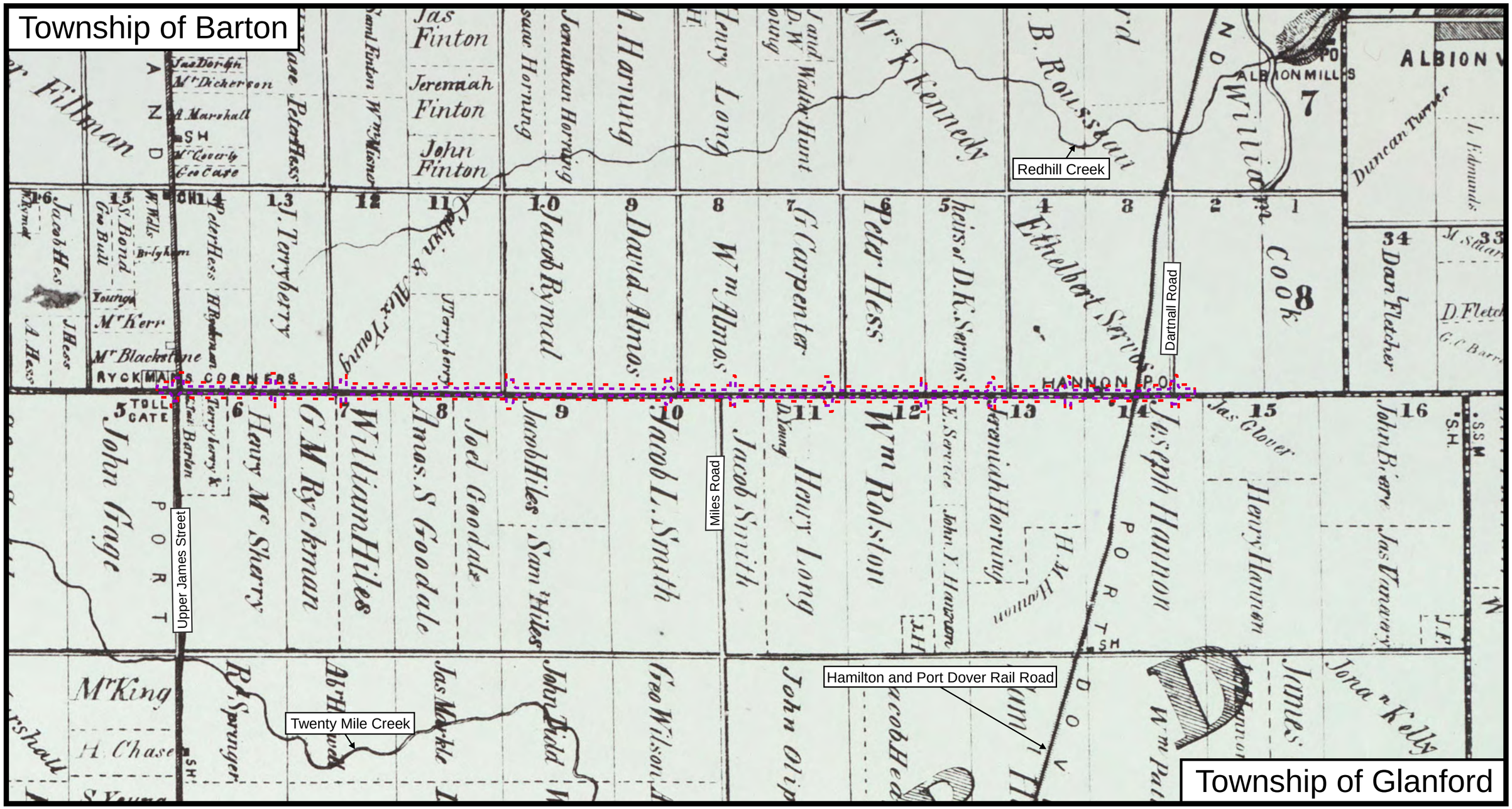
Scale (approx.)

0 1km

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 3: Soils in the Vicinity of the Study Area



Robert Surtees (1859). *Map of the County of Wentworth, Canada West.*

FAC
Date: 09/12/2020
Designer: JW

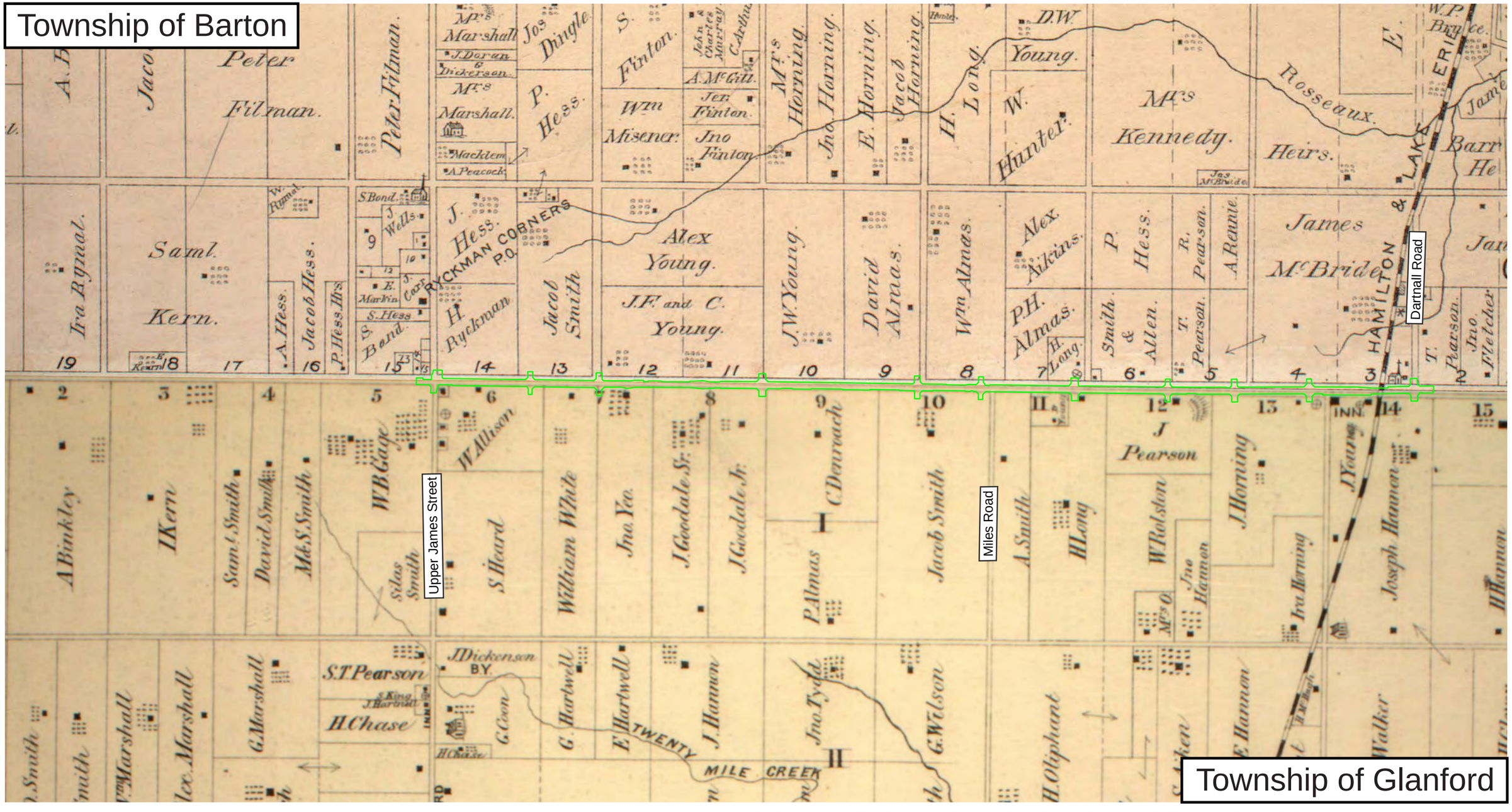
KEY
- Archaeology Study Area
- EA Study Area

Scale
(approximate)
0 — 2km

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 4: Townships of Barton and Glanford, 1859 Surtees Map



Page & Smith (1875). Township of Barton and Township of Glanford [composite]. *Illustrated Historical Atlas of the County of Wentworth Ont*.

FAC
Date: 30/11/2020
Designer: JW

KEY

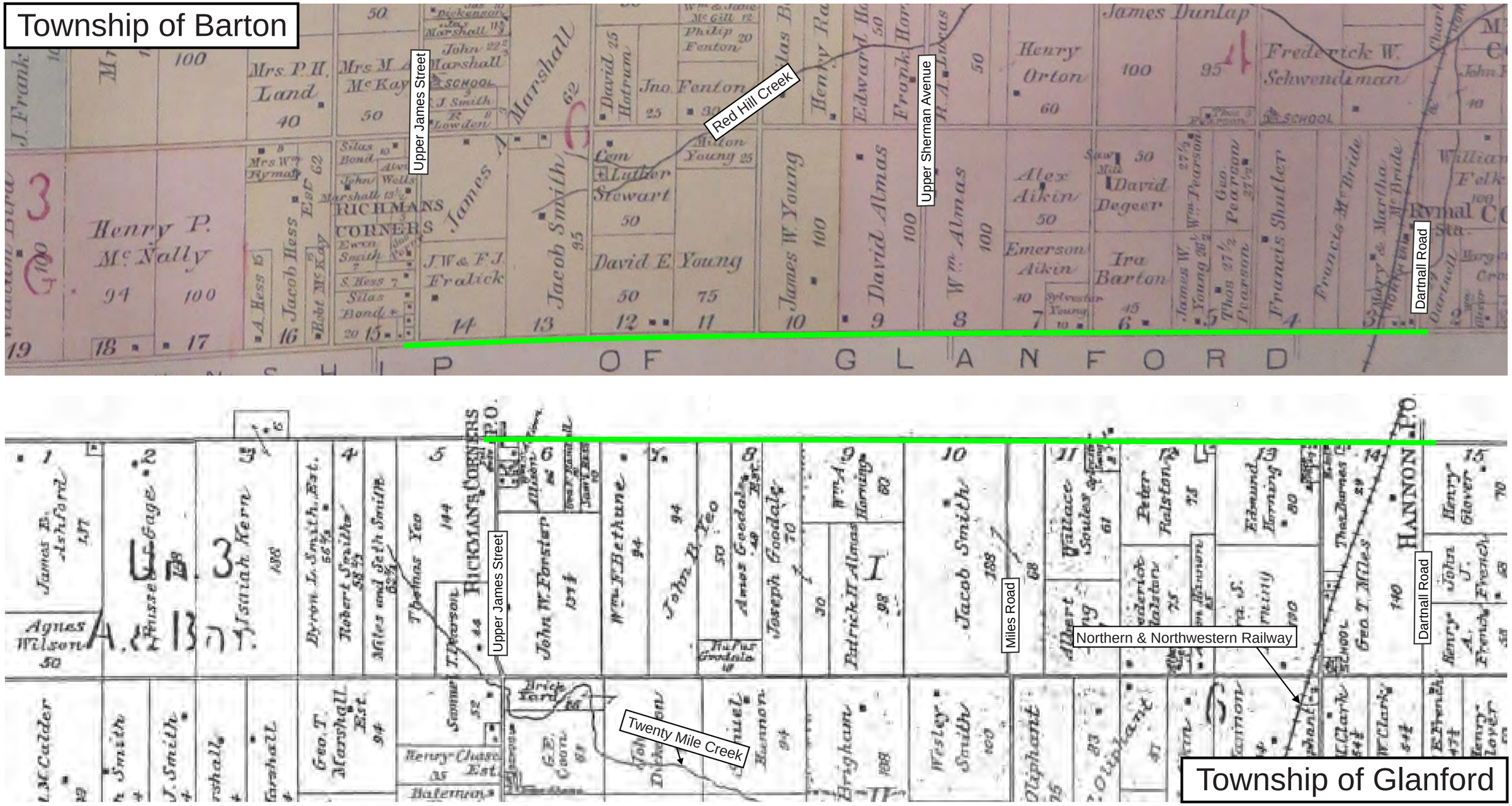
Study Area

Scale (approximate)
0 2km

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 5: Townships of Barton and Glanford, 1875 *Historical Atlas*



J.W. Tyrrell (1903). Township of Barton and Township of Glanford [composite]. *Imperial Atlas of Wentworth County Ontario.*

FAC
Date: 30/11/2020
Designer: JW

KEY

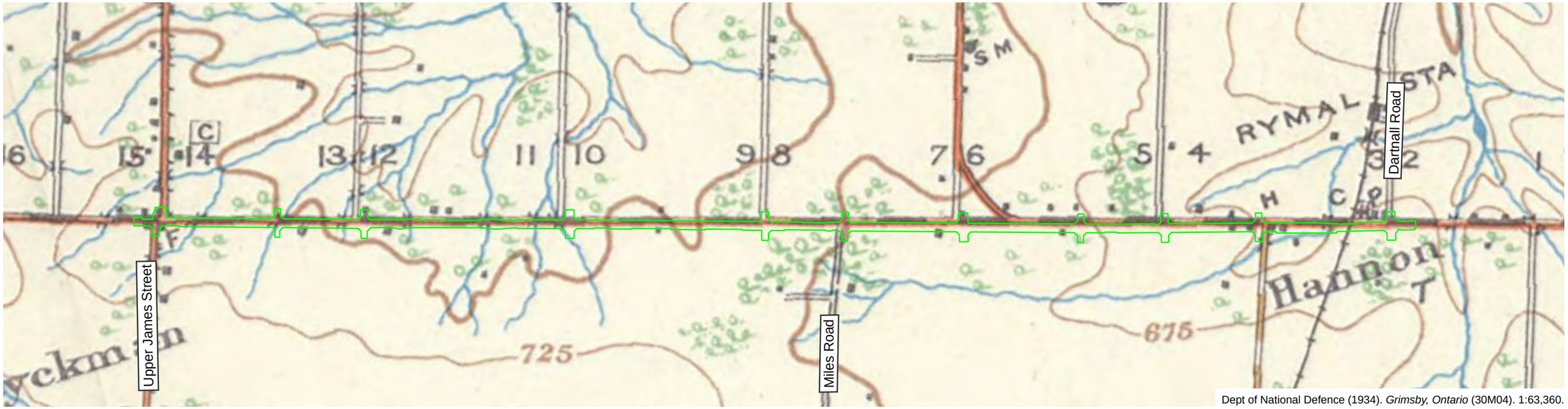
Rymal Road Corridor within Study Area

Scale (approximate)
0 2km

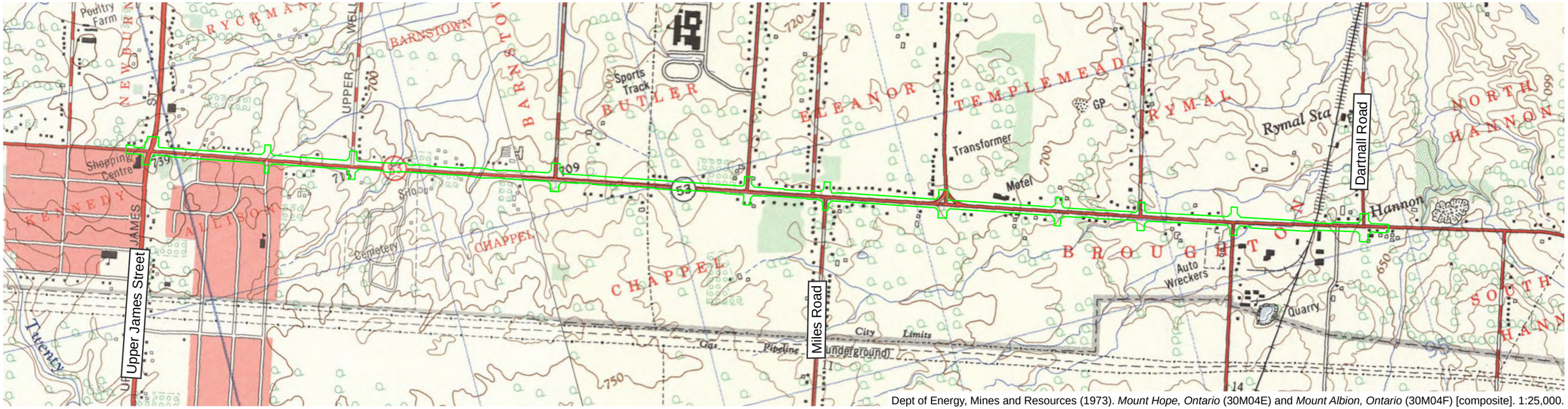
N (approximate)

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 6: Townships of Barton and Glanford, 1903 *Imperial Atlas*



Dept of National Defence (1934). *Grimsby, Ontario* (30M04). 1:63,360.



Dept of Energy, Mines and Resources (1973). *Mount Hope, Ontario* (30M04E) and *Mount Albion, Ontario* (30M04F) [composite]. 1:25,000.

FAC
Date: 30/11/2020
Designer: JW

KEY

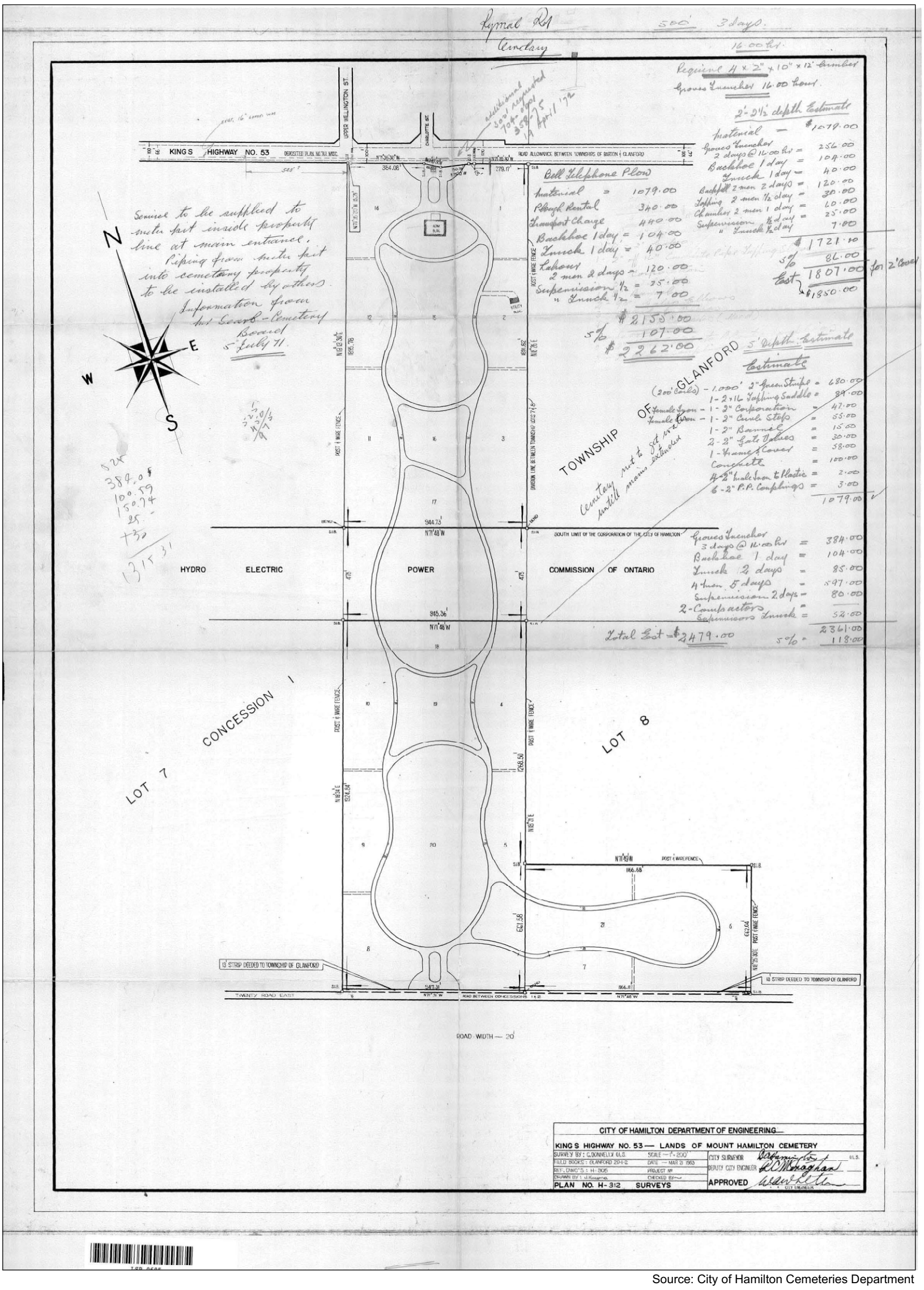
Archaeology Study Area

Scale
0 2km

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 7: Superceded NTS Topographic Maps, 1934 & 1973



Source: City of Hamilton Cemeteries Department

FAC

Date: 05/07/21

Designer: JM

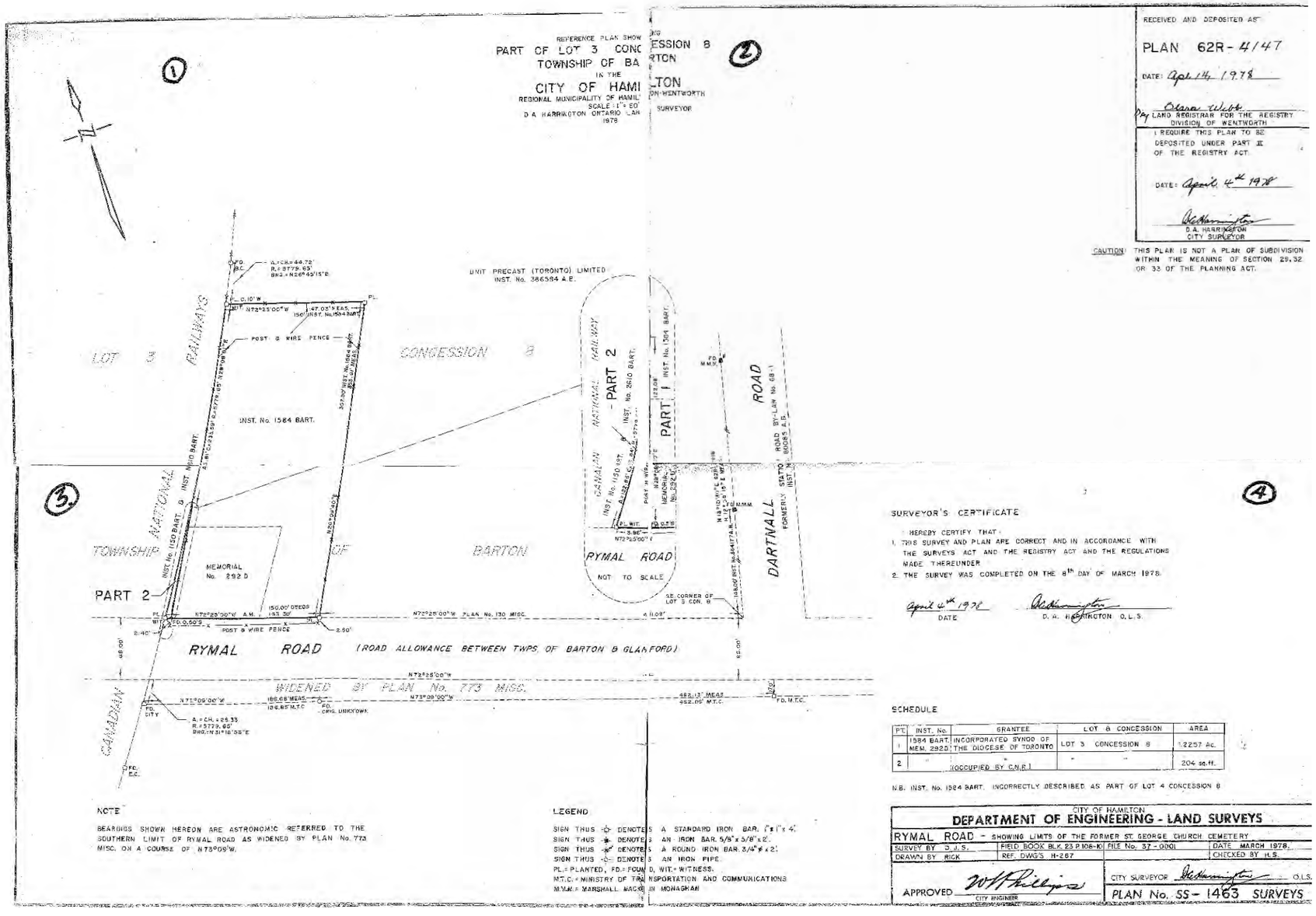
N

Scale

0 250 m

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 8: Survey Plan of Mount Hamilton Cemetery



Source: City of Hamilton Cemeteries Department
(Stiched together from four scanned pages)

FAC
Date: 05/07/2021
Designer: JM

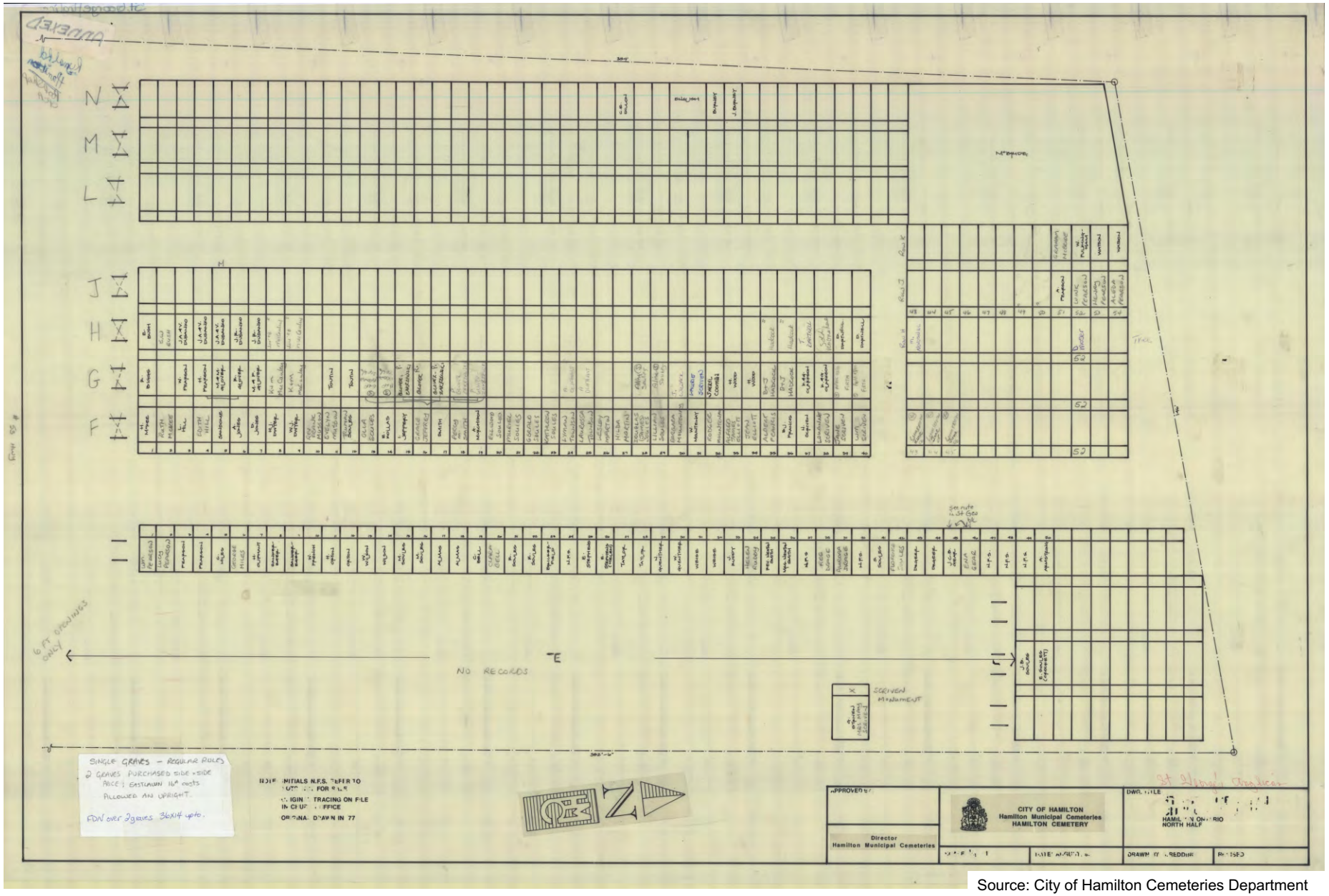
KEY
- Archaeology Study Area
- EA Study Area

Scale
0 — 100 m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 9: St. George's Cemetery Survey Plan



Source: City of Hamilton Cemeteries Department

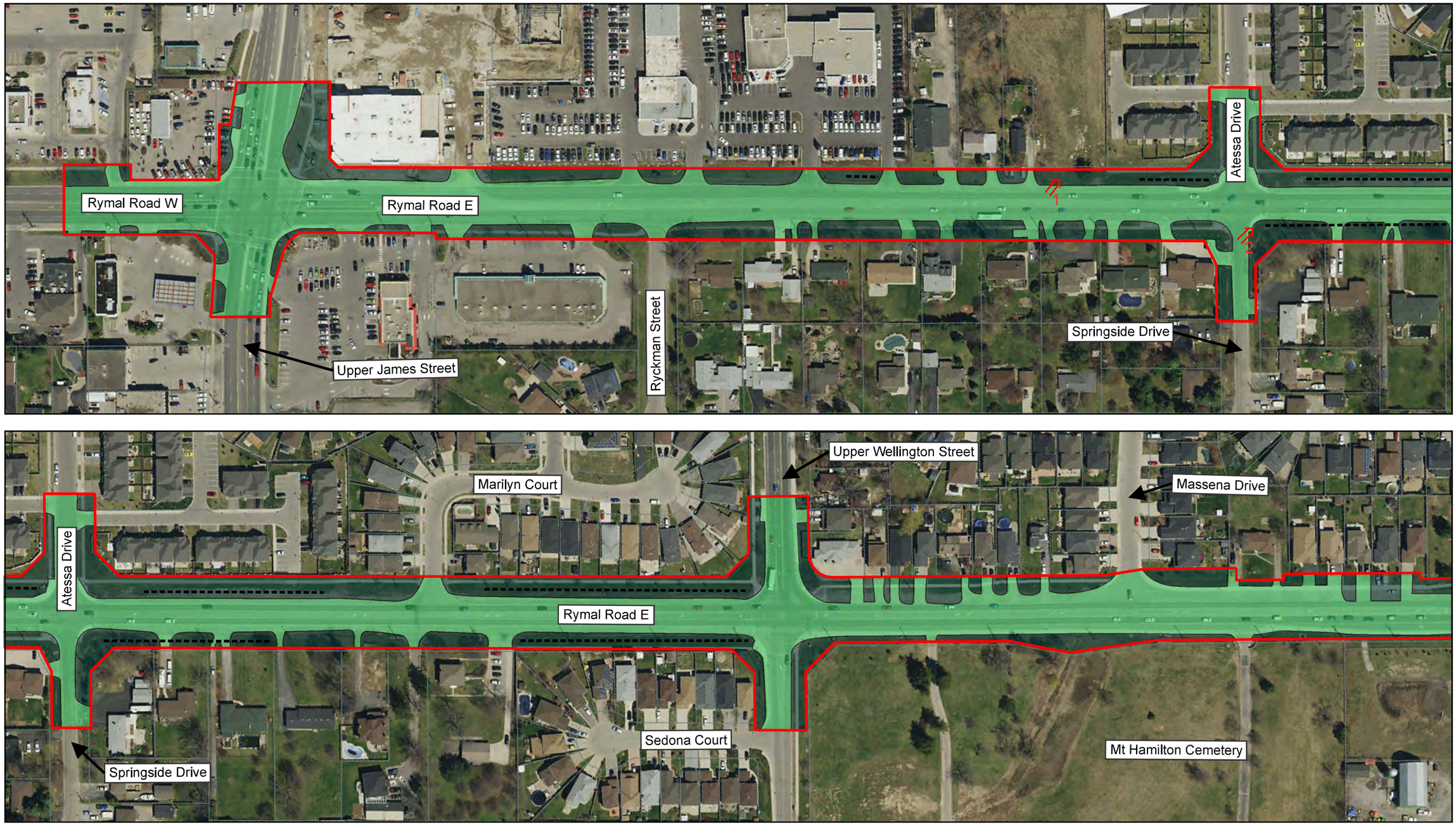
FAC

Date: 05/07/2021

Designer: JM

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 10: Burial Plan of St. George's Cemetery



Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 09/12/2020
Designer: JW

KEY

- Archaeology Study Area
- Drainage Ditch
- Photo Location and Direction

Disturbed by Modern Road Construction/Grading, Sidewalk and Utility Installation (Water Main, Sewer, Hydro), Low Potential, No Further Work Recommended

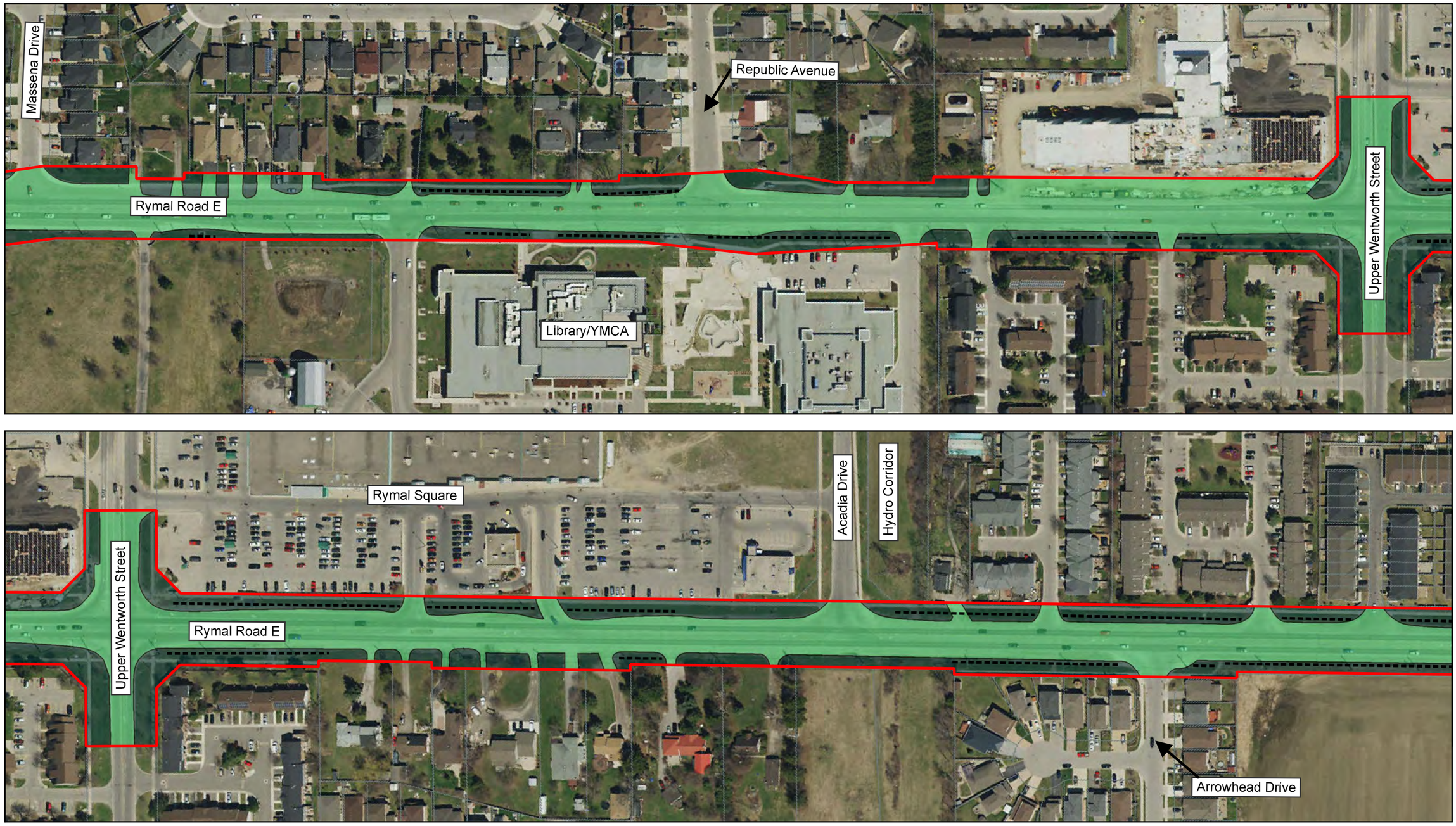
Roadbed, Asphalt and Gravel Shoulder, Low Potential, No Further Work Recommended

N

Scale
0 200m

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 11a: Stage 1 Recommendations from Upper James Street to Massena Drive



Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 09/12/2020
Designer: JW

KEY

Archaeology Study Area

Drainage Ditch

Disturbed by Modern Road Construction/Grading, Sidewalk and Utility Installation (Water Main), Low Potential, No Further Work Recommended

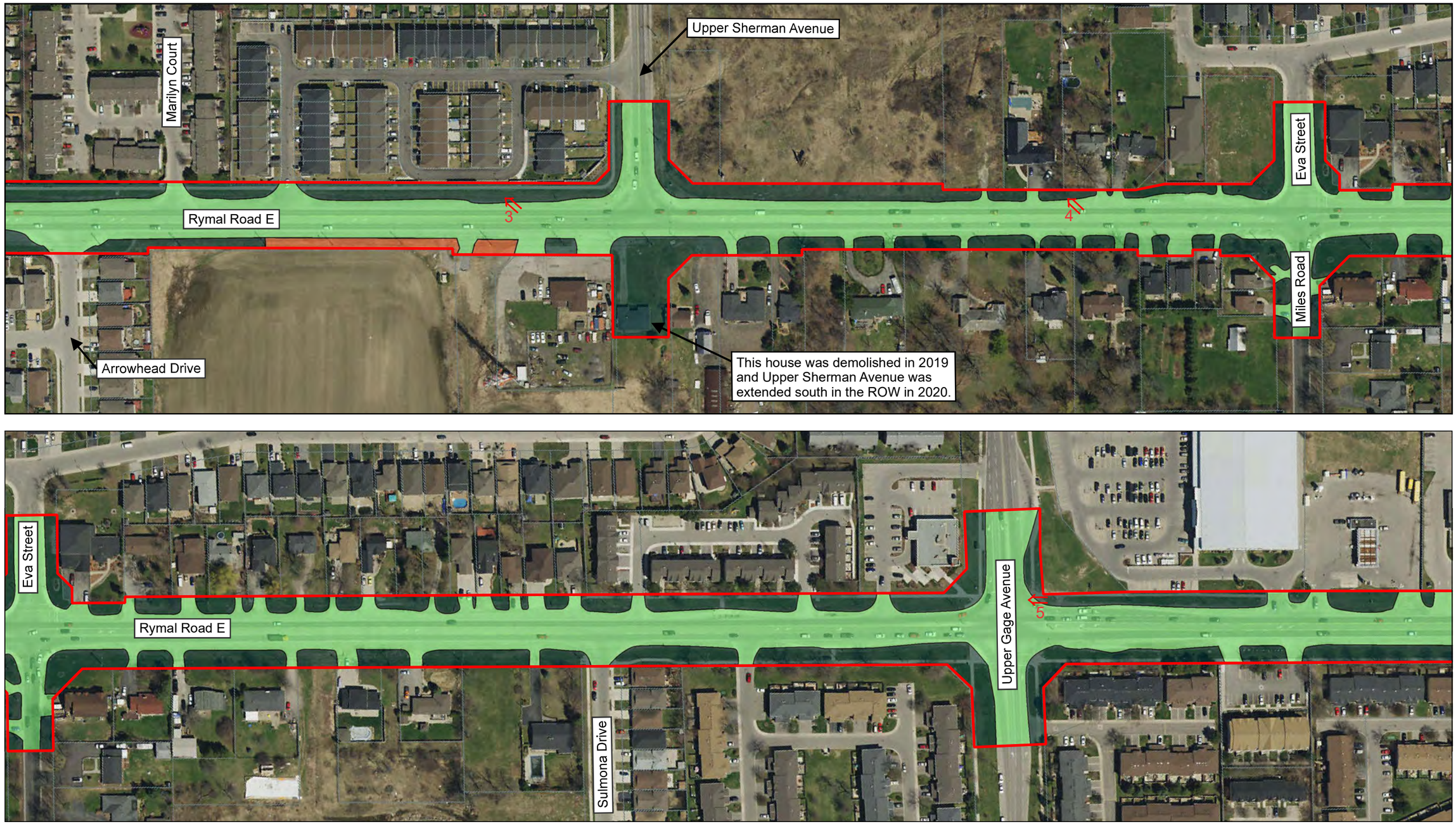
Roadbed, Asphalt and Gravel Shoulder, Low Potential, No Further Work Recommended

Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 11b: Stage 1 Recommendations from Massena Drive to Arrowhead Drive



Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 09/12/2020
Designer: JW

KEY

Archaeology Study Area

Photo Location and Direction

Stage 2: Assessment Recommended

Disturbed by Modern Road and Utility Construction, Low Potential, No Further Work Recommended

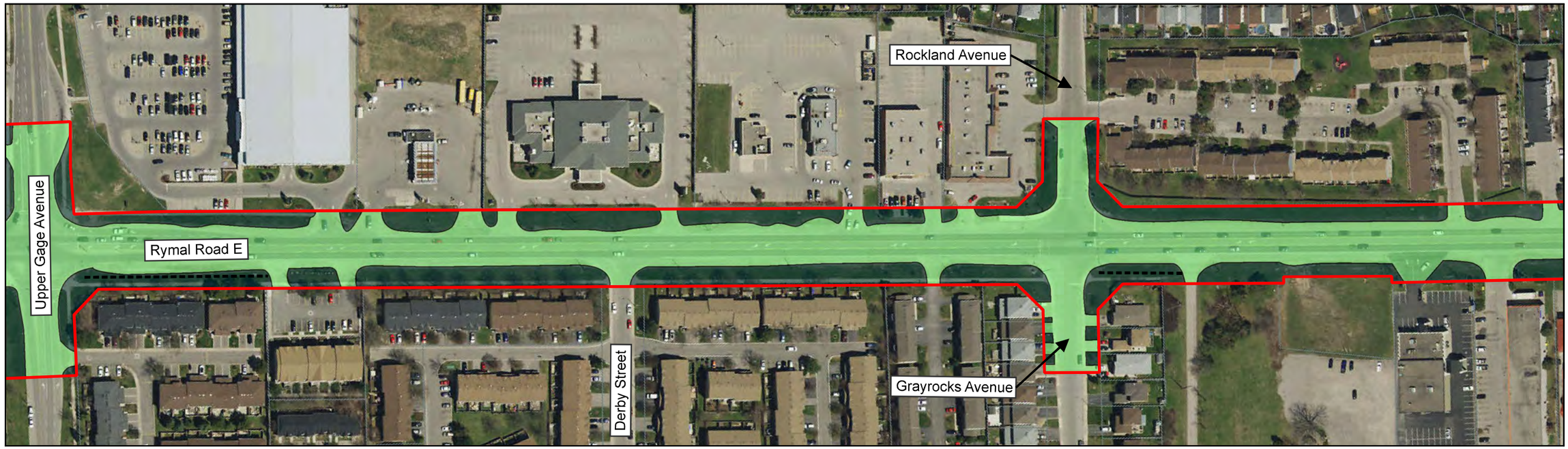
Roadbed, Asphalt and Gravel Shoulder, Low Potential, No Further Work Recommended

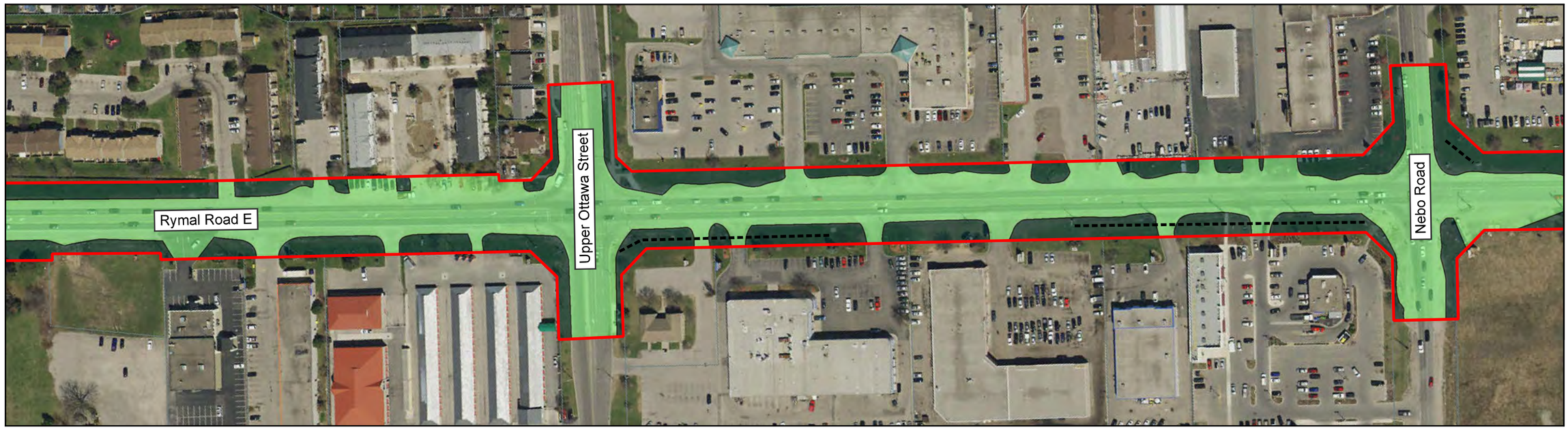
Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure11c: Stage 1 Recommendations from Arrowhead Drive to Upper Gage Avenue





Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 09/12/2020
Designer: JW

KEY

Archaeology Study Area

Drainage Ditch

Disturbed by Modern Road Construction/Grading, Sidewalk and Utility Installation (Water Main), Low Potential, No Further Work Recommended

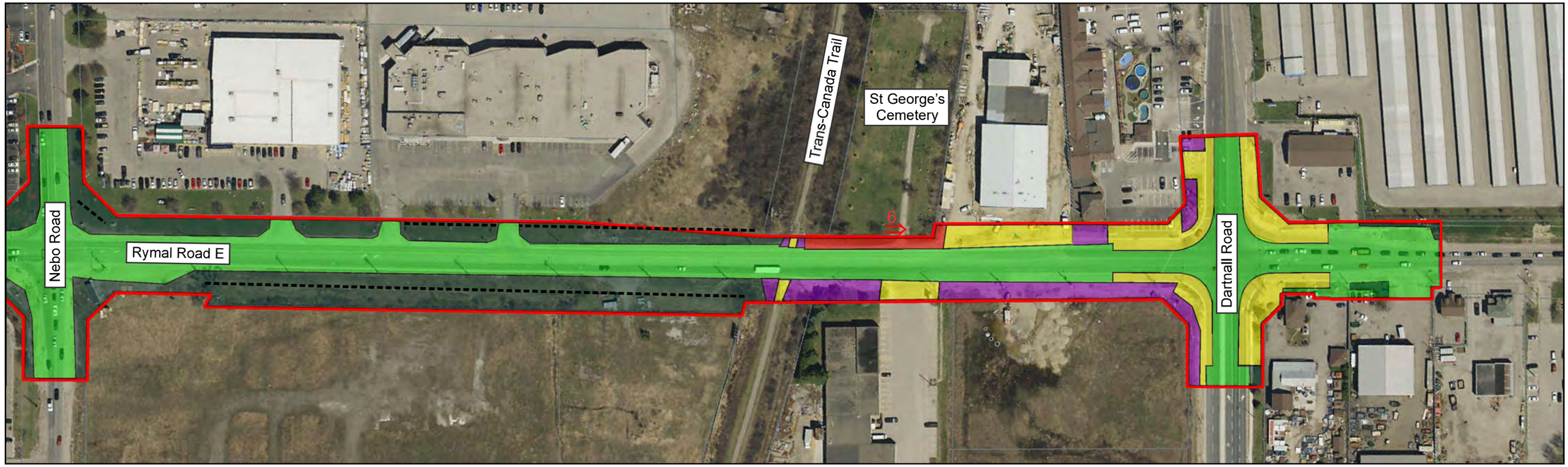
Roadbed, Asphalt and Gravel Shoulder, Low Potential, No Further Work Recommended

Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 11d: Stage 1 Recommendations from Upper Gage Avenue to Nebo Road



Scale
0 200m

Photo Location and Direction

Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 30/11/2020
Designer: JW

KEY

- Archaeology Study Area
- Drainage Ditch
- Stage 3: Testing Recommended
- Previously Determined to Be Disturbed, No Further Work Recommended (Golder 2012, Amec 2014)
- Previously Shovel Tested, Nothing Found, No Further Work Recommended (Golder 2012, Amec 2014)
- Disturbed by Modern Road and Utility Construction, Low Potential, No Further Work Recommended
- Roadbed, Asphalt and Gravel Shoulder, Low Potential, No Further Work Recommended

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Figure 11e: Stage 1 Recommendations from Nebo Road to east of Dartnall Road



Plate 1: Rymal Road north side between Upper James and Atessa Drive, showing cut slope of ROW, manholes, and new asphalt sidwalk; facing NE (Photo 1011).



Plate 2: Drainage ditches and catch basin at SE corner of Rymal Road and Springside Drive; facing NE (Photo 0972).



Plate 3: Rymal Road north side between Acadia Drive and Upper Sherman, showing wide gravel shoulder, drainage ditch and sidewalk; facing NW (Photo 1001).



Plate 4: Rymal Road north side between Upper Sherman and Eva Street, showing new sidewalk, catch basin for roadbed and drainage ditch, facing NW (Photo 0998).

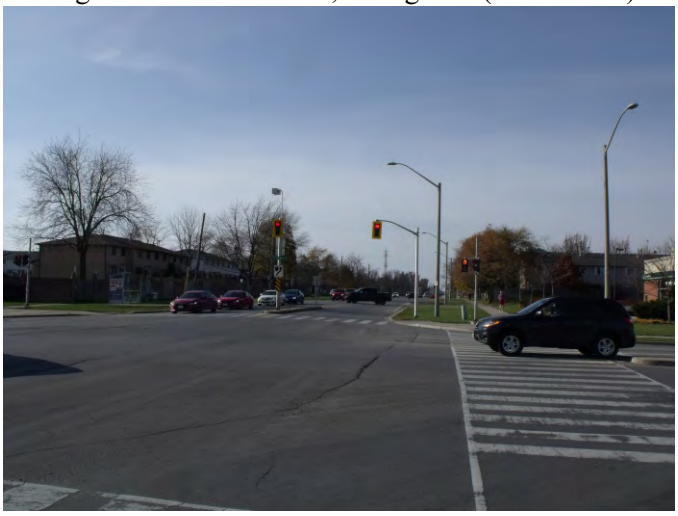


Plate 5: North side Rymal Rd looking across Upper Gage; facing W (Photo 7600).



Plate 6: St George's Cemetery, showing utility vault just inside the limit of the cemetery; facing E (Photo 7595).

APPENDIX A: PHOTOLOGUE
Improvements to Rymal Road Between Upper James Street and Dartnall Road,
City of Hamilton, Ontario
Archaeological Stage 1: Background Study

Photo # (DSCF...)	Description	Direction	Date
7592	South side Rymal Rd. looking towards Upper James	E	6 Nov. 2020
7593	West side Upper James	S	6 Nov. 2020
7594	West side Upper James	N	6 Nov. 2020
7595	St. George's Cemetery, showing utility vault just inside the limit of the cemetery.	E	6 Nov. 2020
7596	Gravestone closest to Rymal Rd., death dates are 1928 and 1939	E	6 Nov. 2020
7597	Rymal Rd. looking towards Dartnall from St. George's Cemetery	E	6 Nov. 2020
7598	Rymal Rd. looking towards Nebo from St. George's Cemetery	W	6 Nov. 2020
7599	North side Rymal Rd. from Upper Gage	E	6 Nov. 2020
7600	North side Rymal Rd. looking across Upper Gage	W	6 Nov. 2020
7601	East side Upper Gage looking across Rymal Rd.	S	6 Nov. 2020
7602	East side Upper Gage from Rymal Rd.	N	6 Nov. 2020
0972	Drainage ditches and catchbasin at SE corner of Rymal Road and Springside Drive	NE	5 Dec. 2020
0992	Rymal Road south side between Arrowhead Drive and Upper Sherman , showing new sidewalk and catch basin for roadbed. Area recommended for Stage 2: Assessment is on south edge of ROW	SW	5 Dec. 2020
0998	Rymal Road north side between Upper Sherman and Eva Street , showing new sidewalk, catch basin for roadbed and drainage ditch	NW	5 Dec. 2020
1001	Rymal Road north side between Acadia Drive and Upper Sherman , showing wide gravel shoulder, drainage ditch and sidewalk	NW	5 Dec. 2020
1003	Rymal Road north side between Acadia Drive and Upper Sherman, showing wide gravel shoulder, drainage ditch and sidewalk	NW	5 Dec. 2020
1007	Northwest corner of Acadia Drive and Rymal Road, showing new construction at location of AhGx-328 findspot	W	5 Dec. 2020
1011	Rymal Road north side between Upper James and Atessa Drive, showing cut slope of ROW, manholes, and new asphalt sidewalk.	NE	5 Dec. 2020

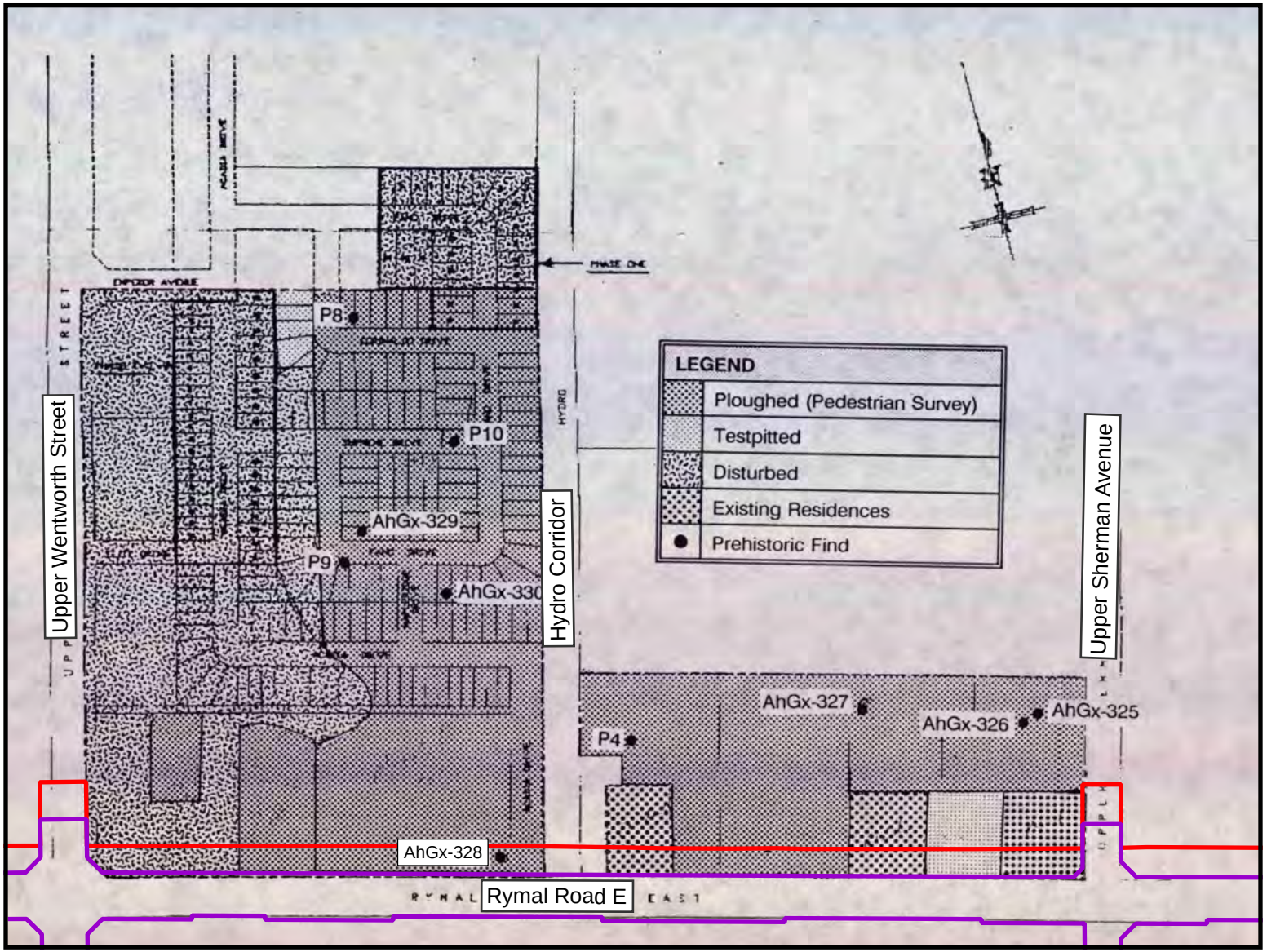


Figure 3, ASI 1992a

FAC

Date: 30/11/2020

Designer: JW

KEY

Archaeology Study Area

Archaeology Study Area

Scale (approx.)

0 200m

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1a: Study Area in Relation to ASI 1992a (Stages 1&2)

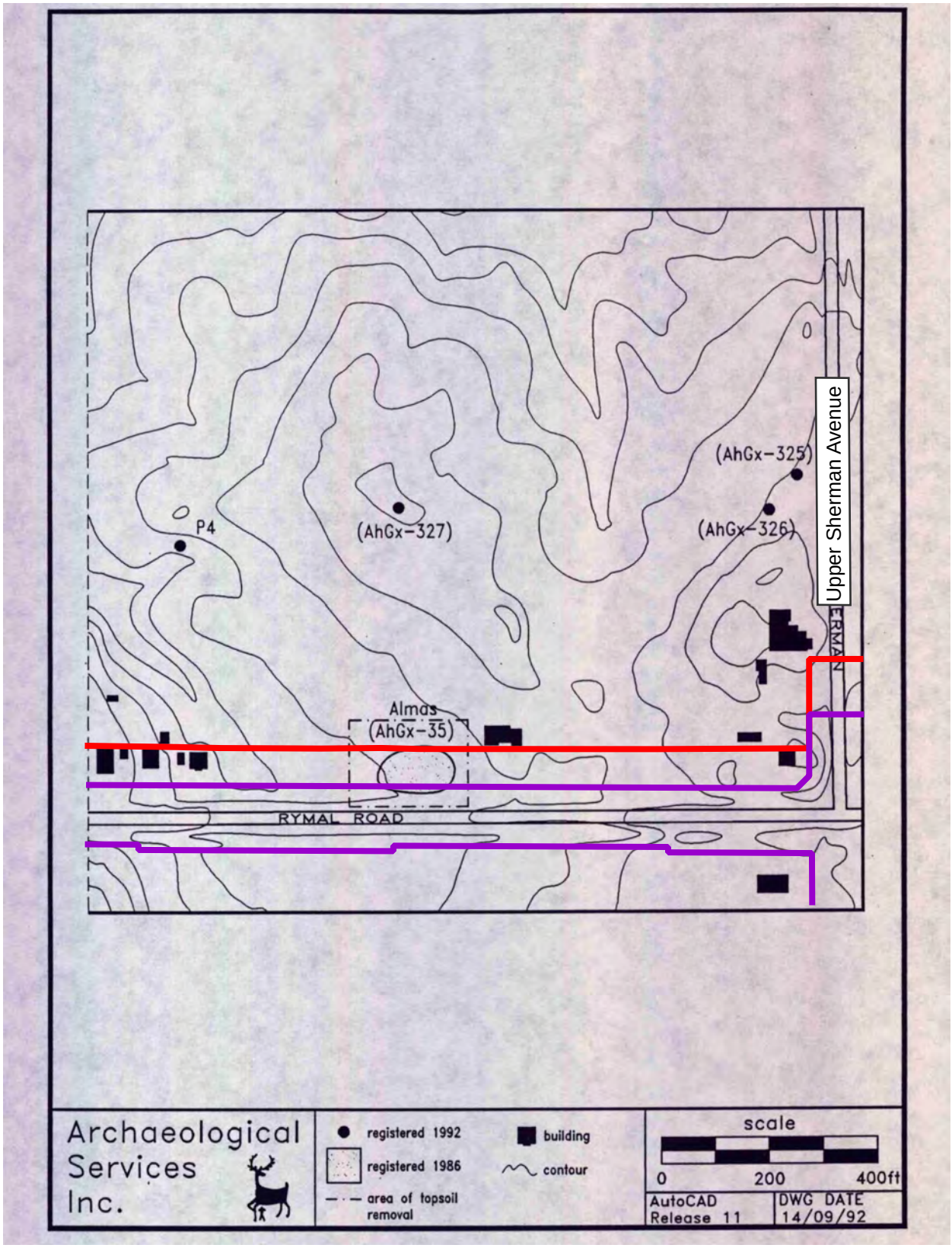


Figure 3, ASI 1992b

FAC

Date: 02/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1b: Study Area in Relation to ASI 1992b (Stage 4)

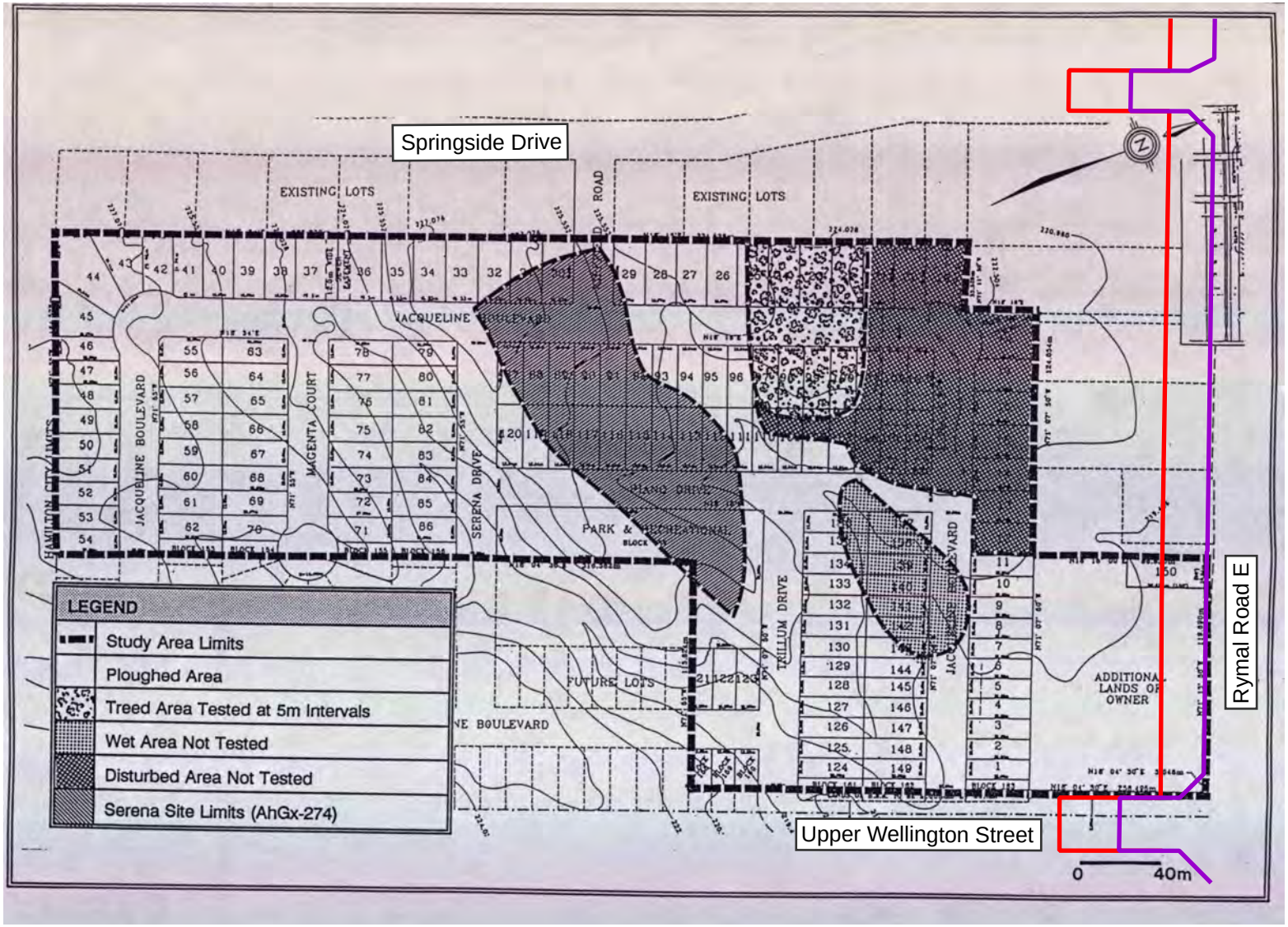


Figure 2, ASI 1993

FAC

Date: 02/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1c: Study Area in Relation to ASI 1993 (Stages 1&2)

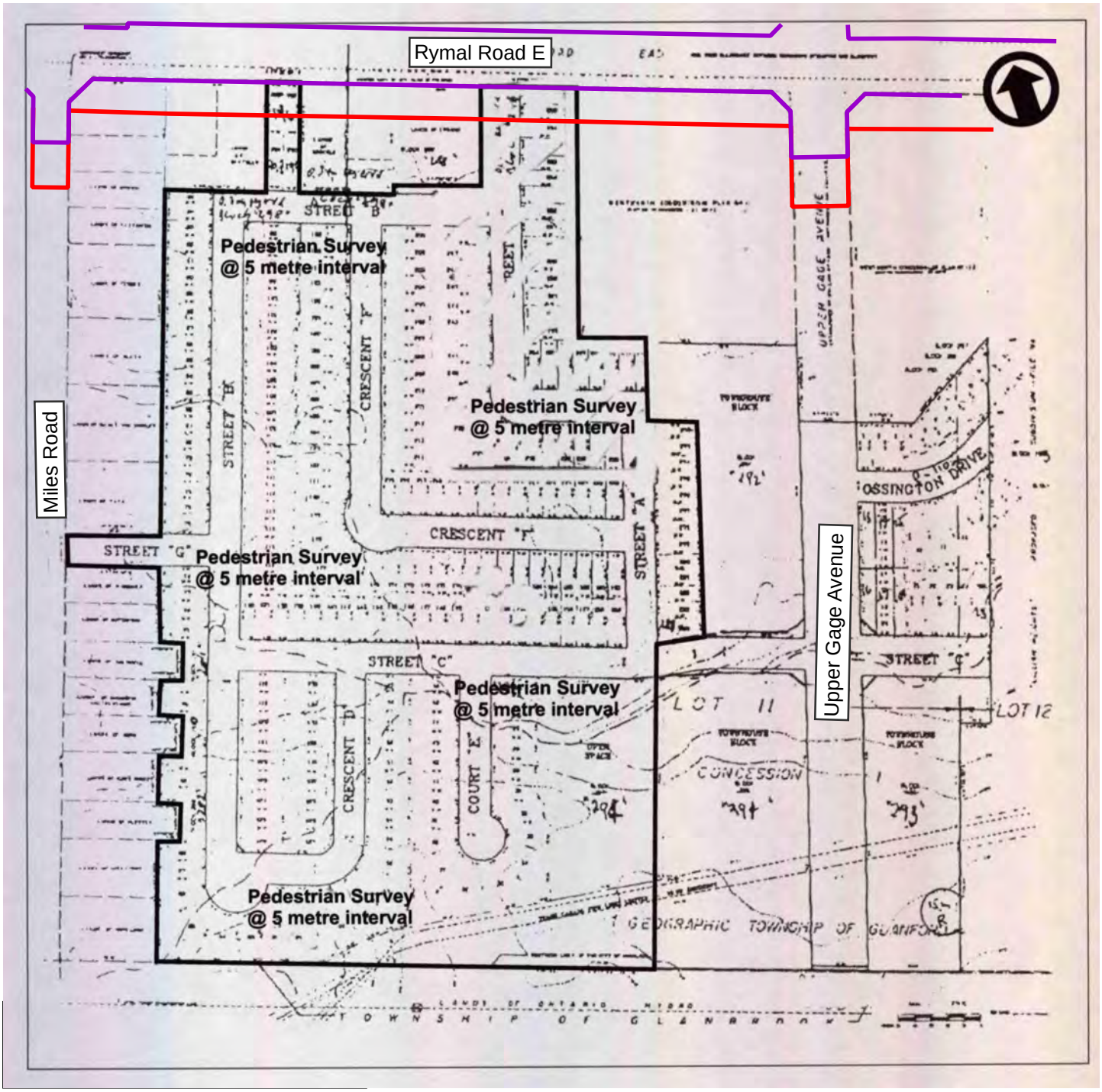


Figure 2, NDA 2001

FAC

Date: 02/12/2020

Designer: JW

KEY

Archaeology Study Area

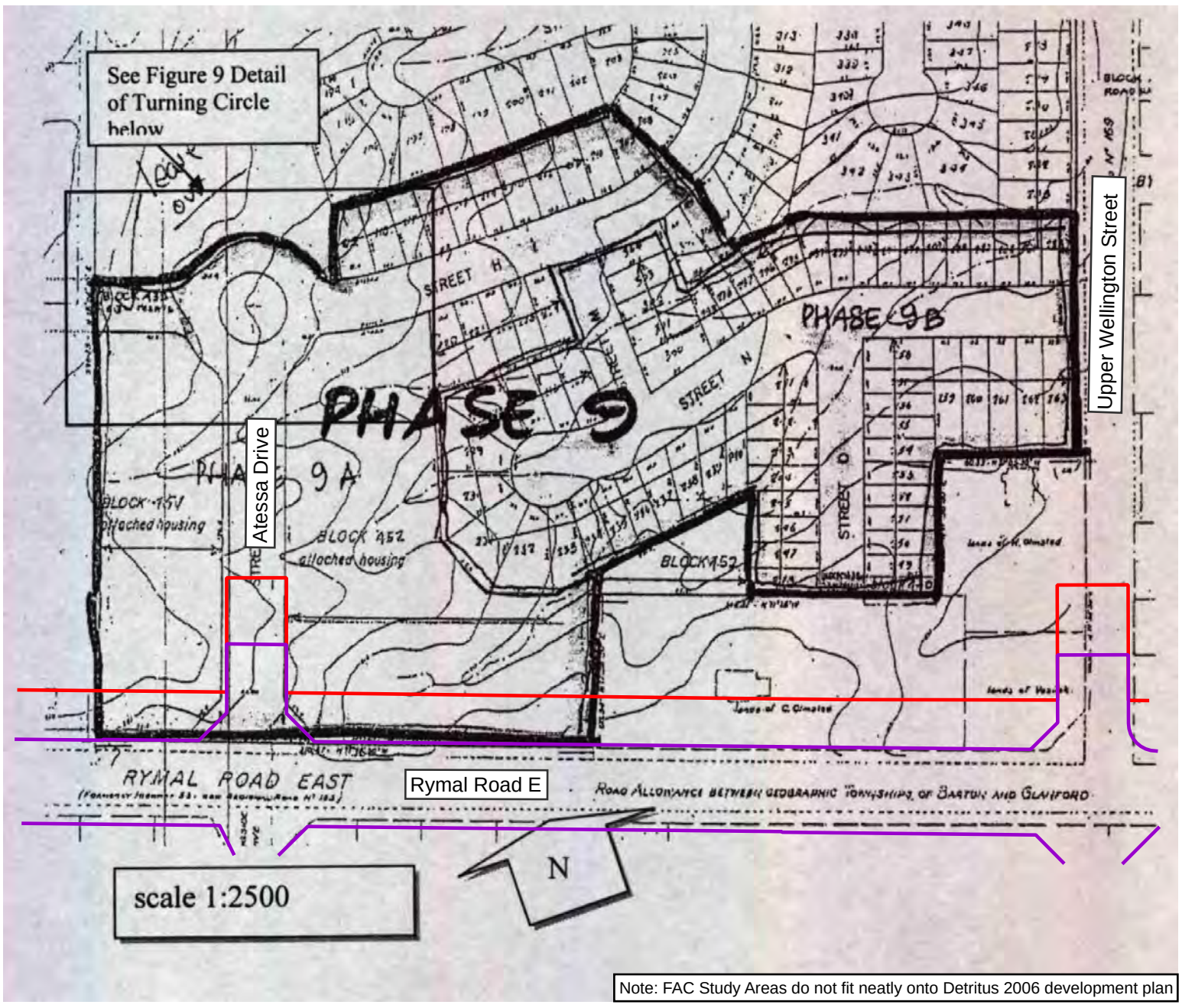
EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1d: Study Area in Relation to NDA 2001 (Stages 1&2)



Supplementary Figure 1e-1: Aerial Photograph of Subject Property (Figure 3, Detritus 2006)



Supplementary Figure 1e-2: Draft Plan Section (Figure 4, Detritus 2006)

FAC
Date: 02/12/2020
Designer: JW

KEY
- Archaeology Study Area
- EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1e: Study Area in Relation to Detritus 2006 (Stages 1-3)

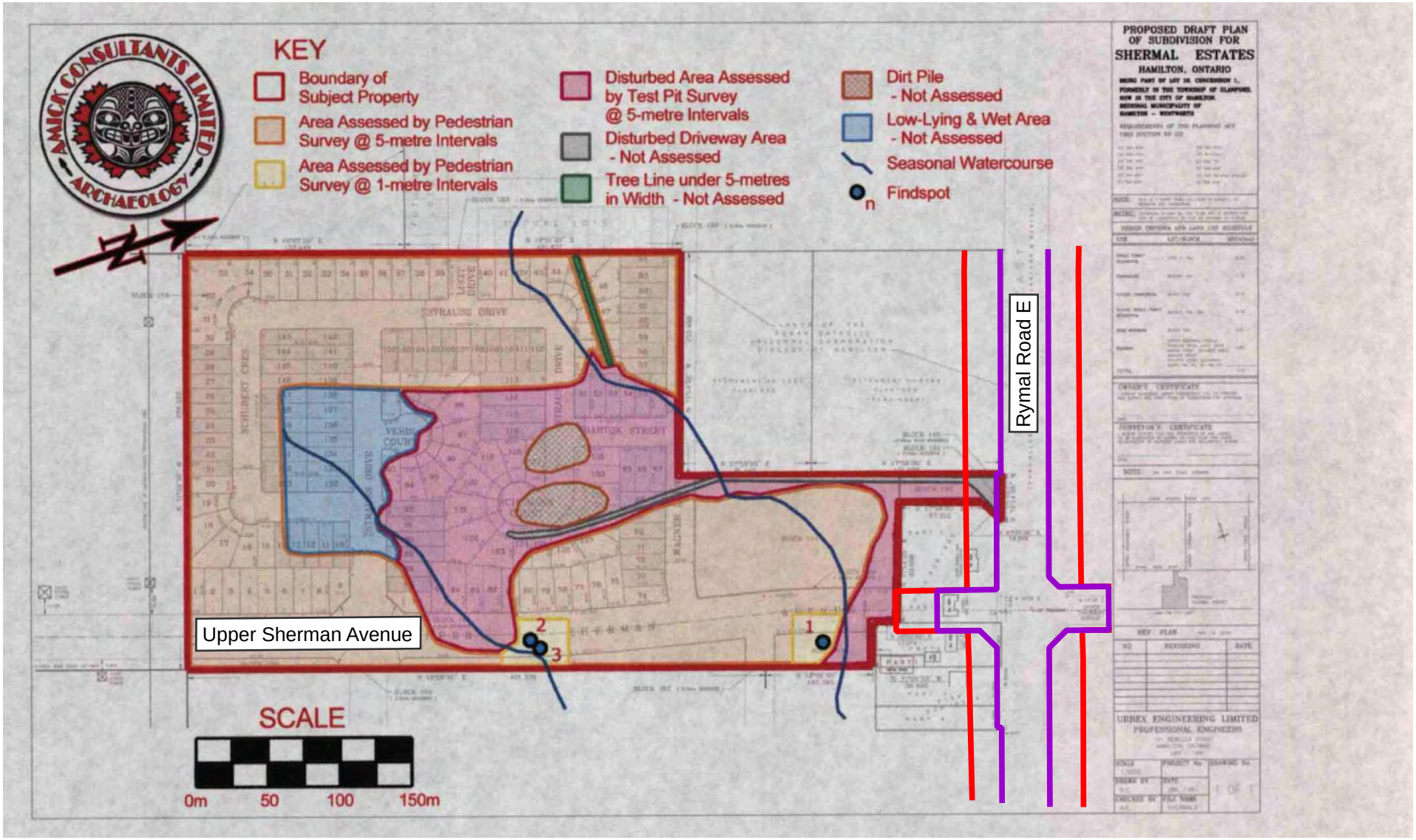


Figure 3, AMICK 2008

FAC

Date: 05/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1f: Study Area in Relation to AMICK 2008 (Stages 1&2)

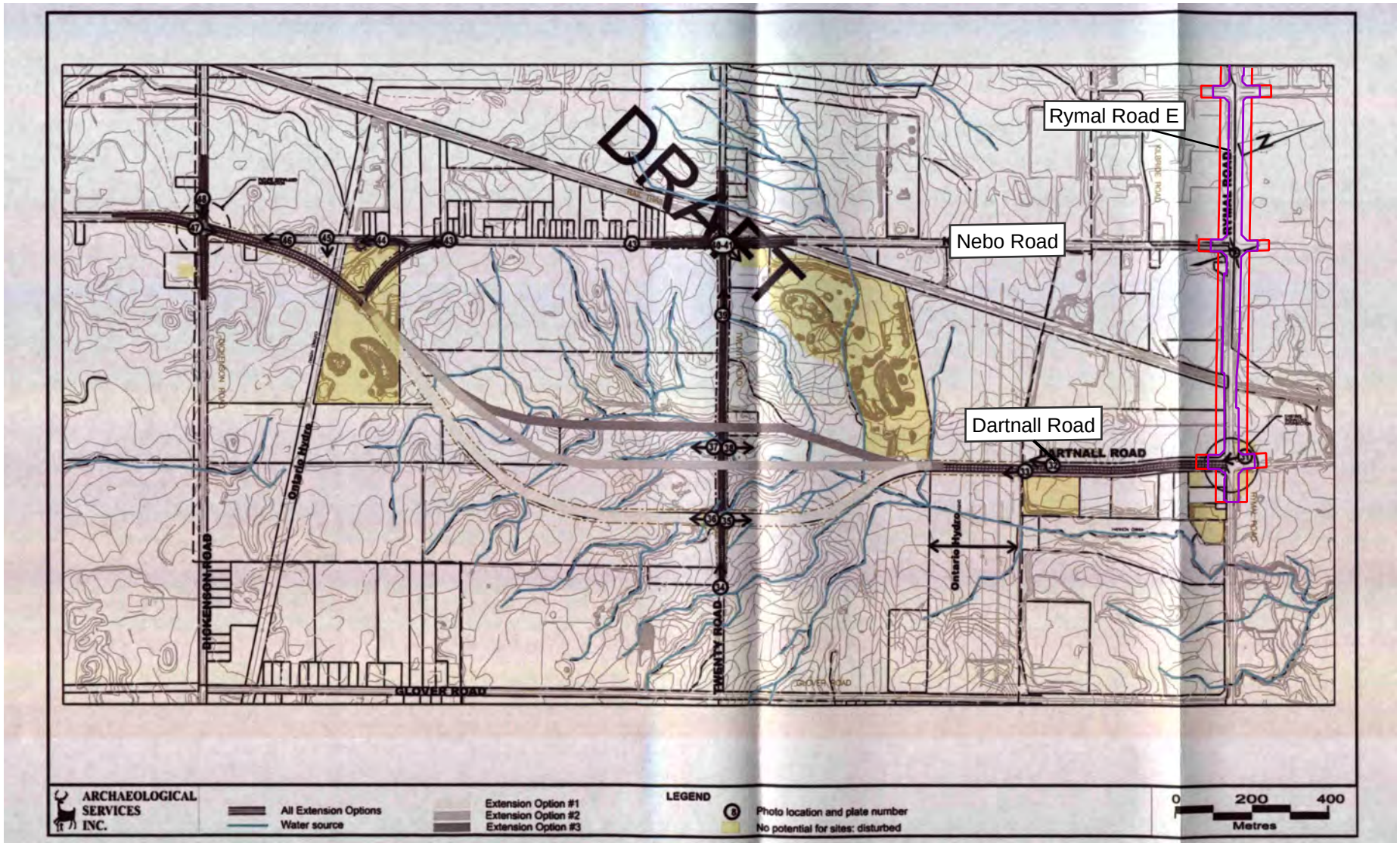


Figure 5, ASI 2008

Note: FAC Study Areas do not fit on ASI 2008 map due to the scanning method used for the latter report

FAC

Date: 05/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

No potential for sites, disturbed

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1g: Study Area in Relation to ASI 2008 (Stage 1)

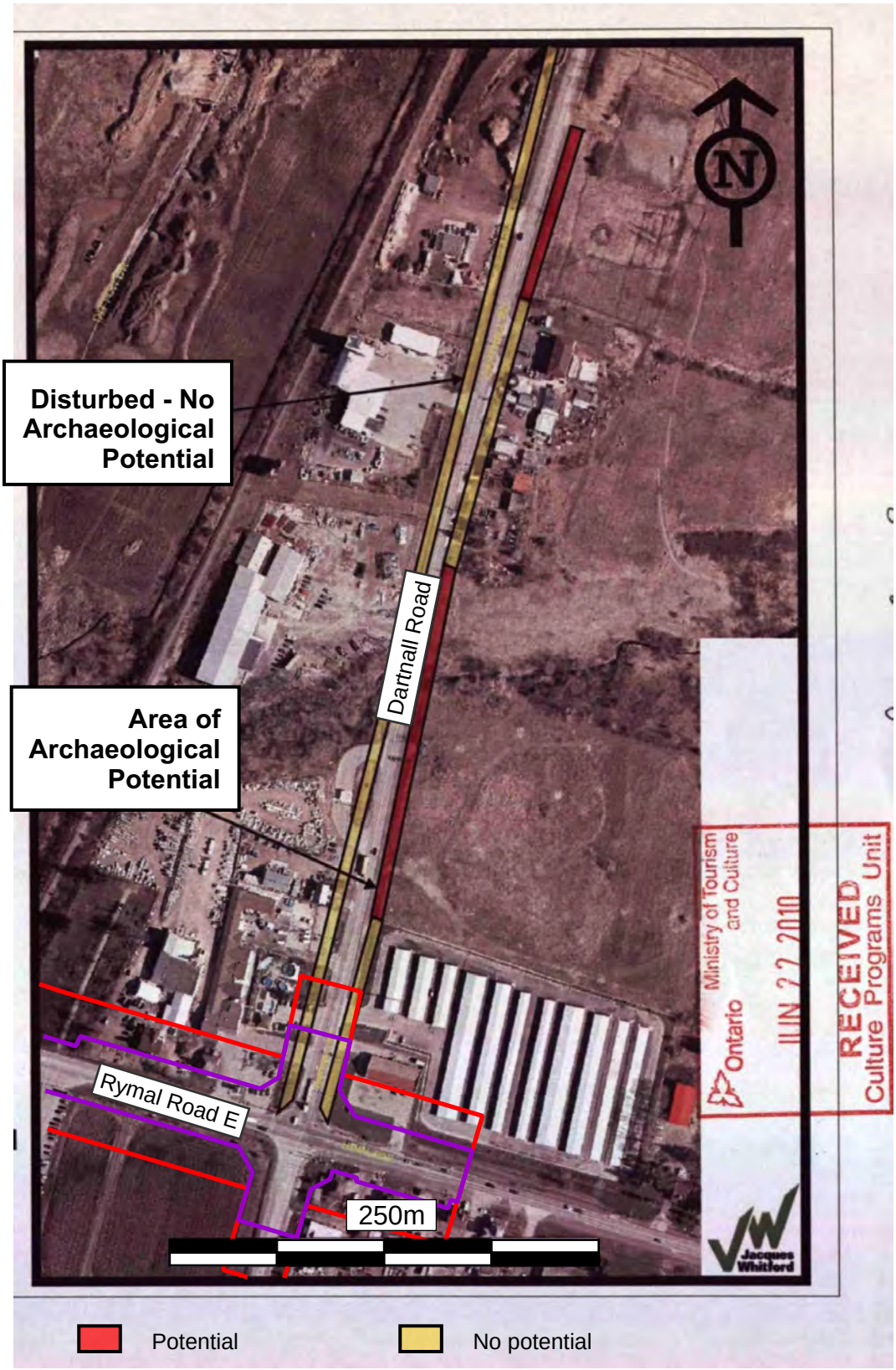


Figure 5.1, Jacques Whitford 2008

FAC

Date: 05/12/2020

Designer: JW

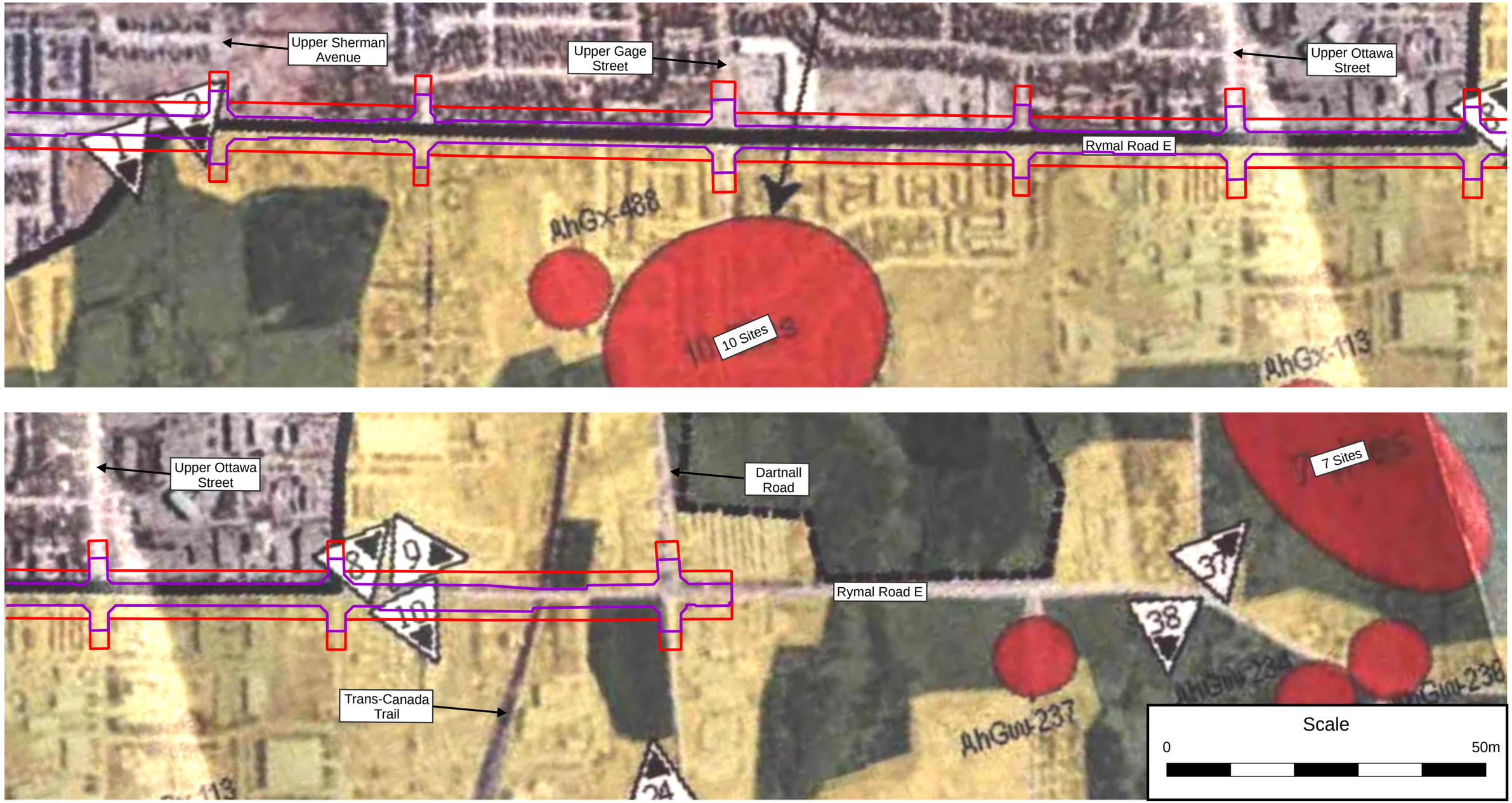
KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1h: Study Area in Relation to Jacques Whitford 2008 (Stage 1)



from Figure 6: Hannon Creek Subwatershed Study Class EA - Results of the Stage 1 Archaeological Assessment (ASI 2009)

FAC
Date: 05/12/2020
Designer: JW

KEY

- Archaeology Study Area
- Archaeological potential, testing required
- Disturbed, no archaeological potential
- EA Study Area
- Approximate location of registered archaeological site
- ASI plate location and number
- ASI 2009 Study Area
- Mount Albion Conservation Area

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1i: Study Area in Relation to ASI 2009 (Stage 1)

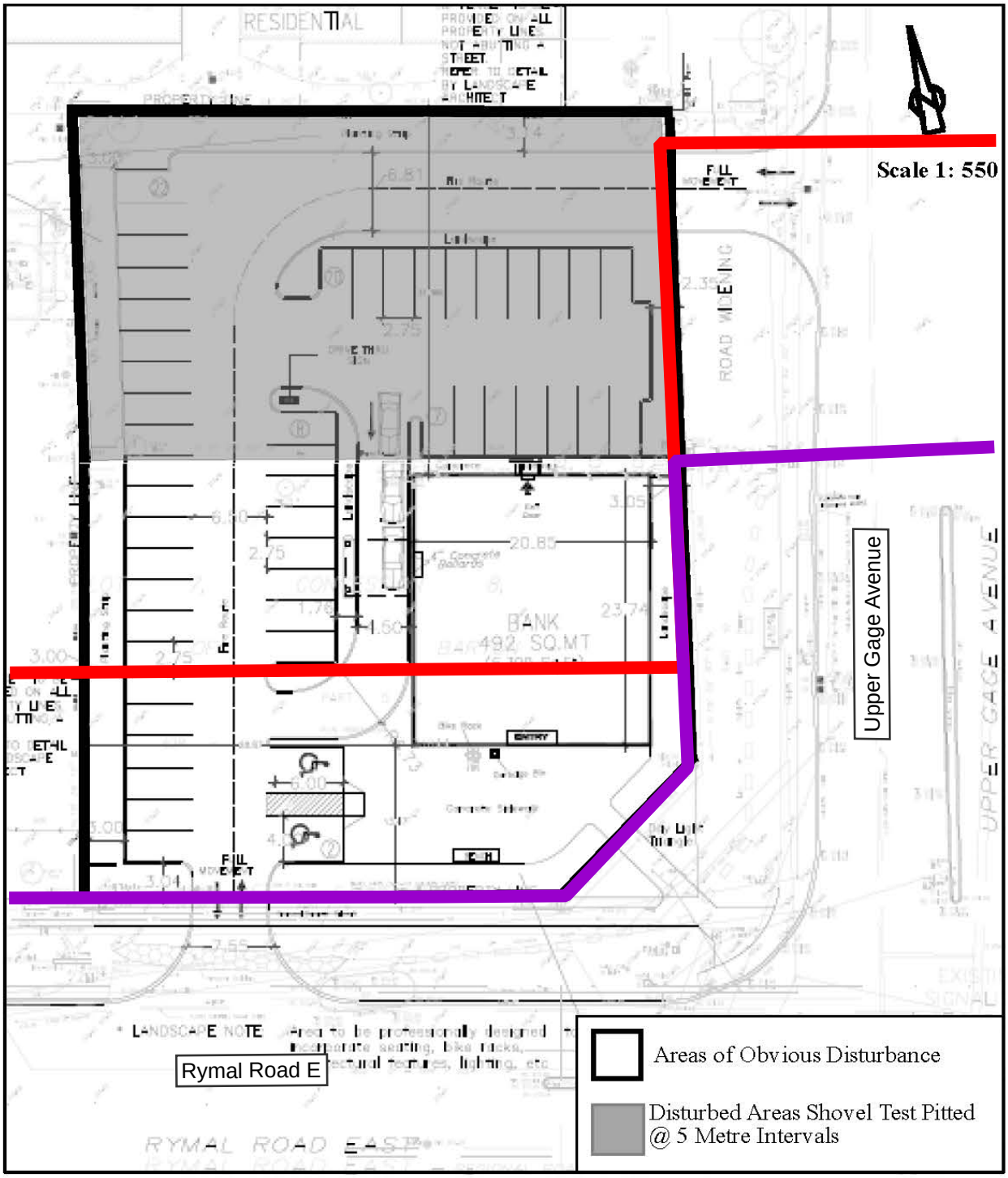


Figure 4: Archaeological Survey Cover and Techniques (AA 2010)

FAC

Date: 05/12/2020

Designer: JW

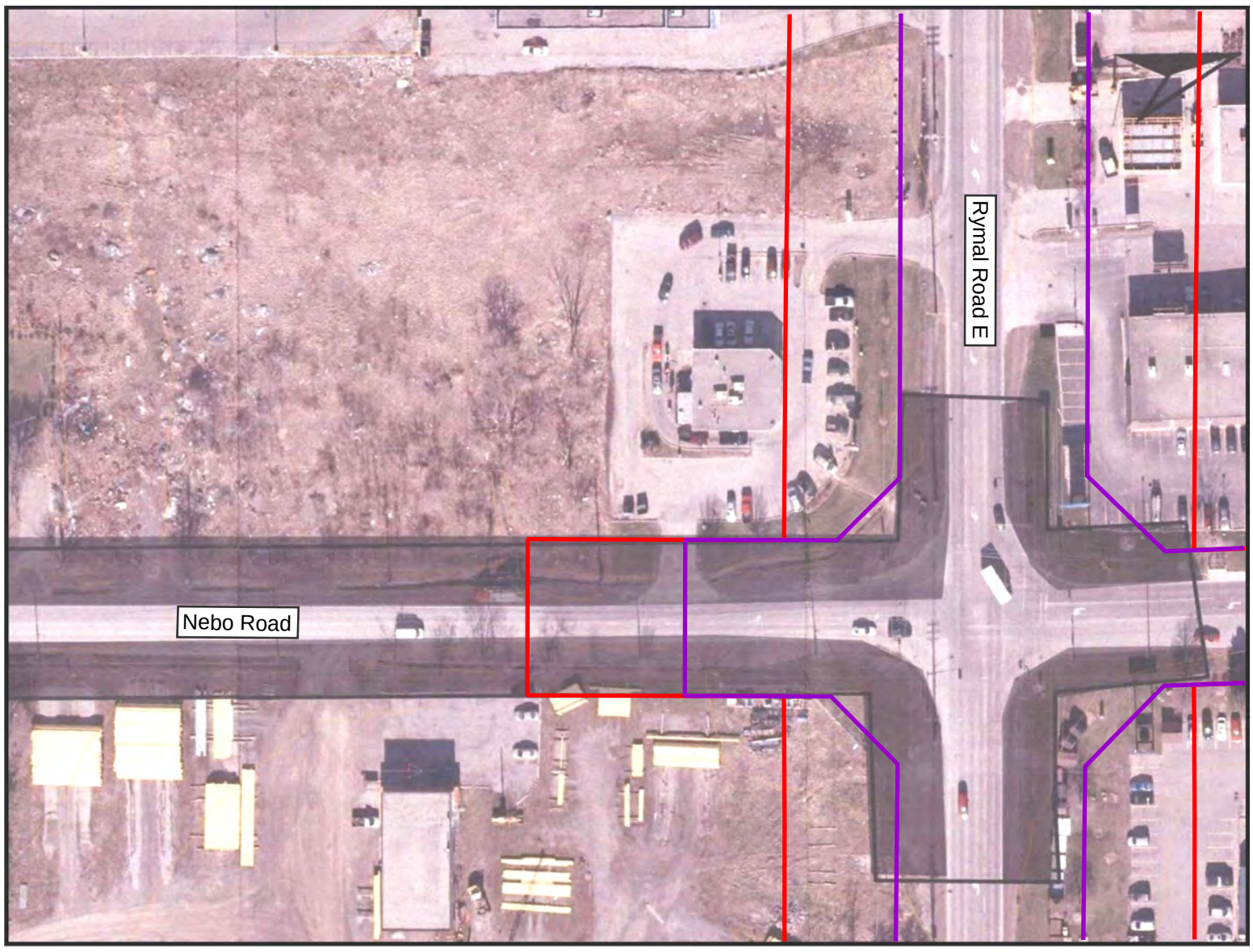
KEY

Archaeology Study Area

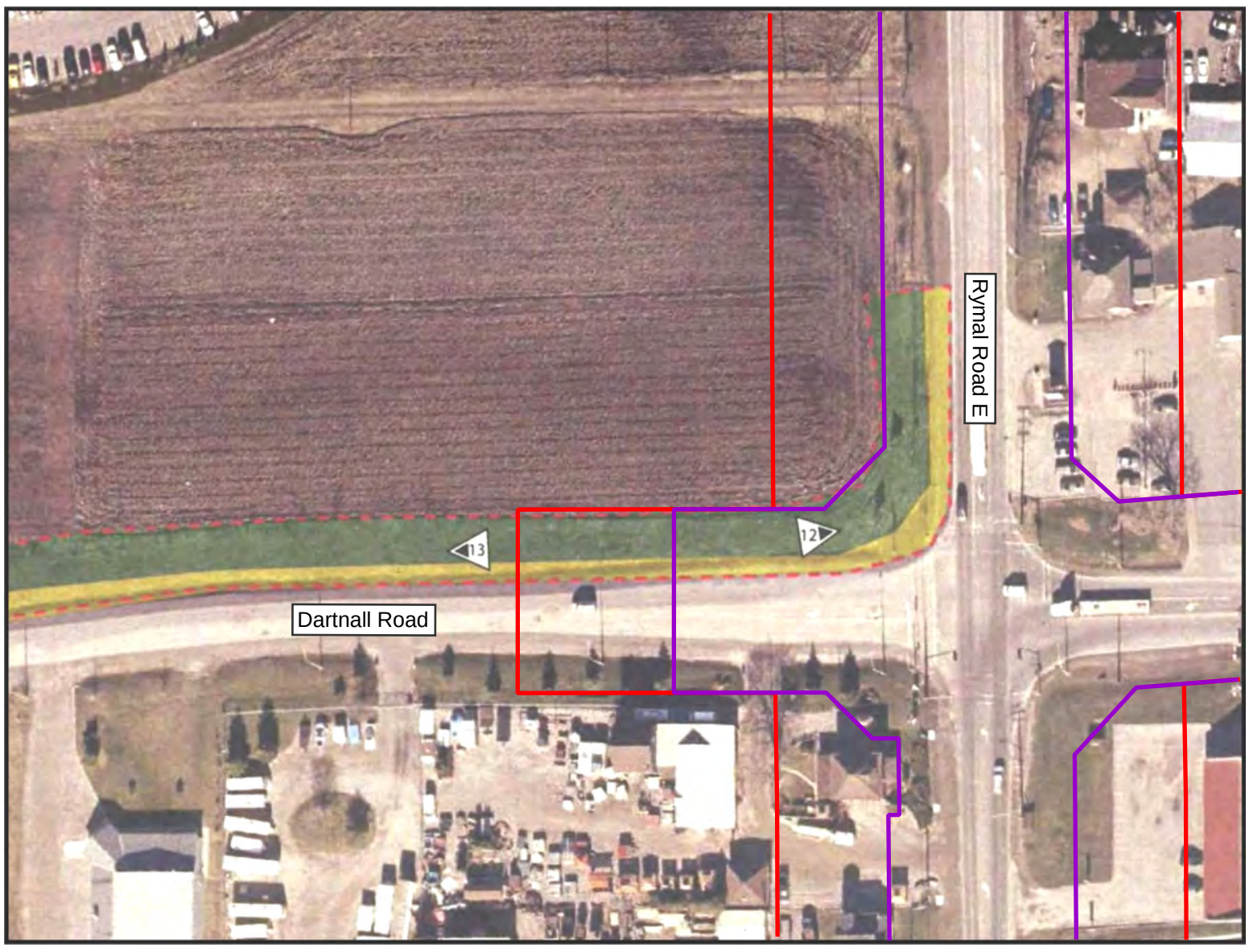
EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1j: Study Area in Relation to AA 2010 (Stages 1&2)



Supplementary Figure 1k-1: Nebo Road ROW Stage 2 Assessment Results, Sheet 5 of 5 (Figure 4.5, ASI 2010a)



Supplementary Figure 1k-2: Dartnall Road ROW Stage 2 Assessment Results, Sheet 4 of 4 (Figure 2.4, ASI 2010b)

- No archaeological potential (ASI 2008)
- Test pit survey at 5m intervals
- Disturbed, no archaeological potential
- Limits of ROW
- Limits of Stage 2 Study Corridor
- ASI plate location and number

FAC
Date: 05/12/2020
Designer: JW

KEY
- Archaeology Study Area
- EA Study Area

N

Scale
0 50m

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1k: Study Area in Relation to ASI 2010a (Stage 2) and ASI 2010b (Stage 2)

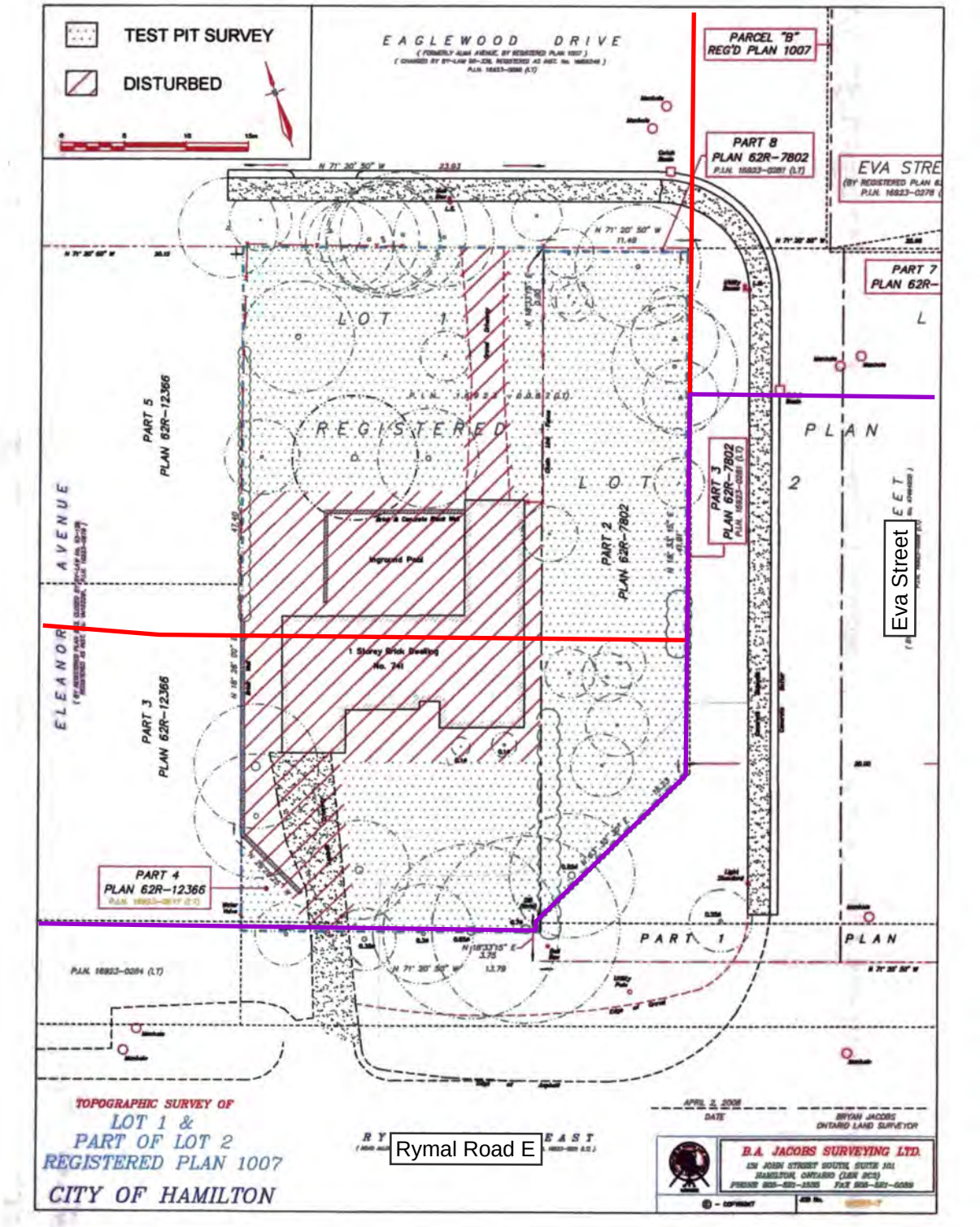


Figure 3: Detail of Archaeological Survey Coverage (DRPA 2010)

FAC

Date: 05/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1I: Study Area in Relation to DRPA 2010 (Stages 1&2)

Figure 4. Study Area Showing Zones of Archaeological Potential

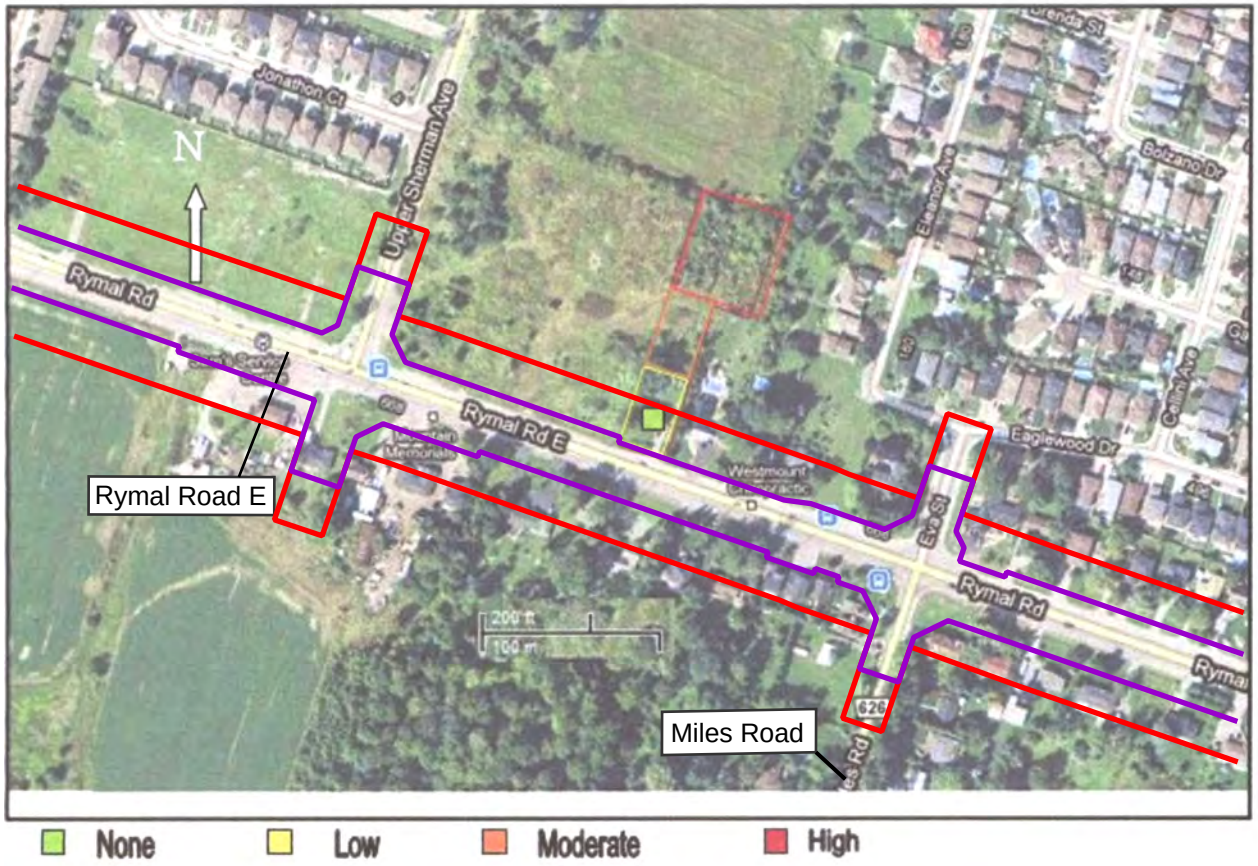


Figure 4, AA 2011

FAC
Date: 02/12/2020
Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1m: Study Area in Relation to AA 2011 (Stage 1)

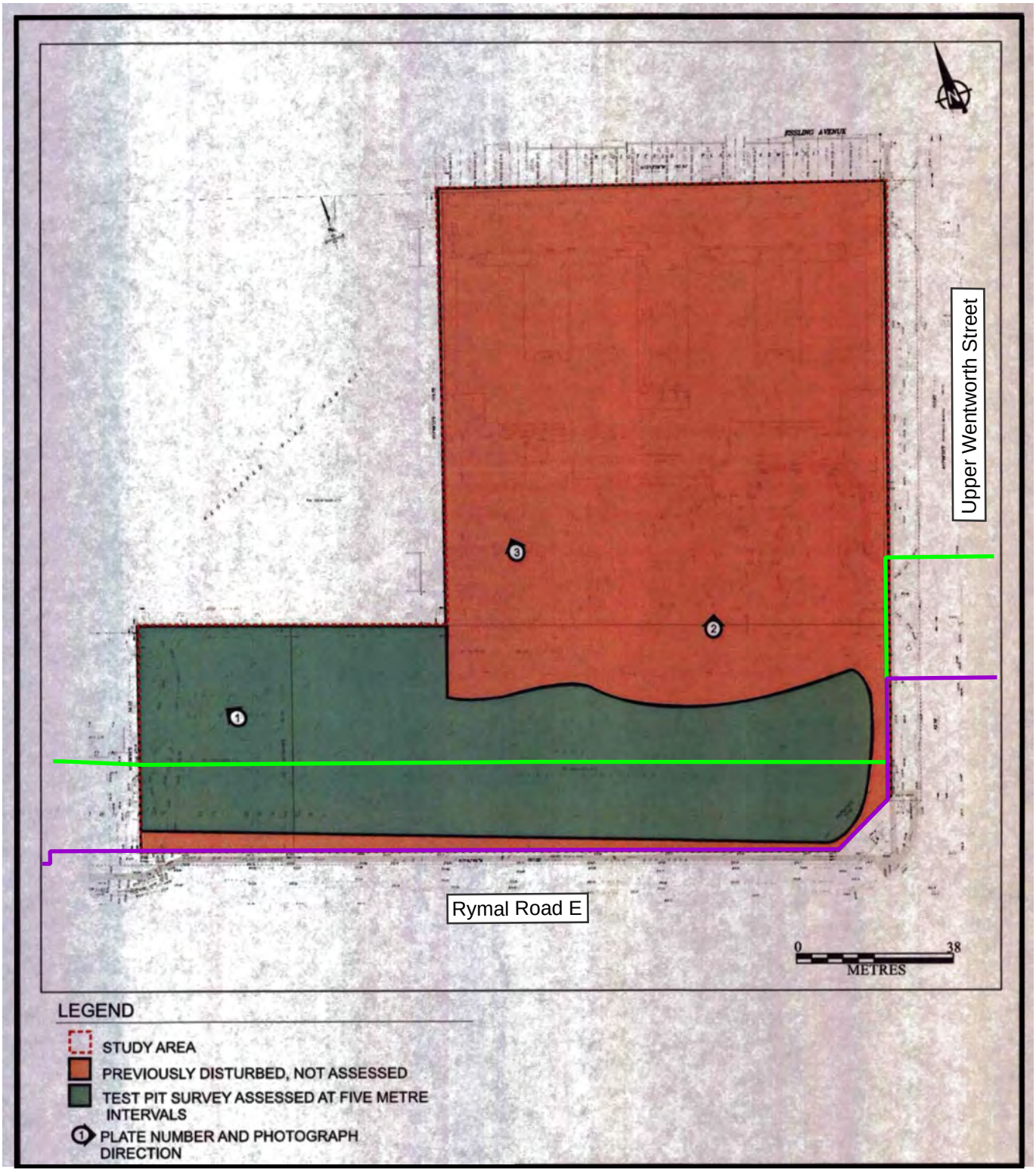


Figure 3: Methods and Results of the Stage 2 Field Investigation (Golder 2011)

FAC

Date: 05/12/2020

Designer: JW

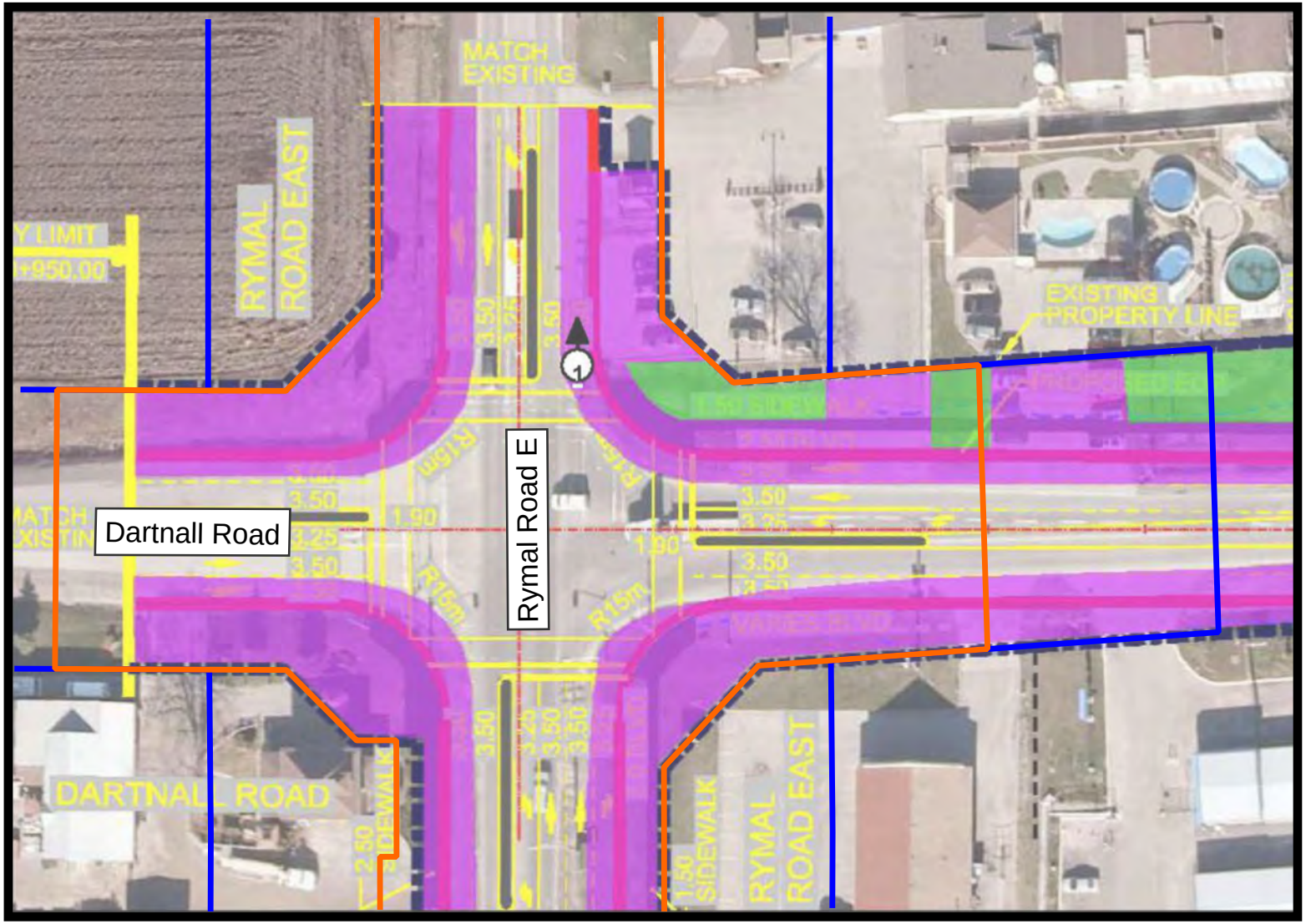
KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1n: Study Area in Relation to Golder 2011 (Stages 1&2)



Map 4: Stage 2 Methods and Results (Golder 2012)

FAC

Date: 05/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

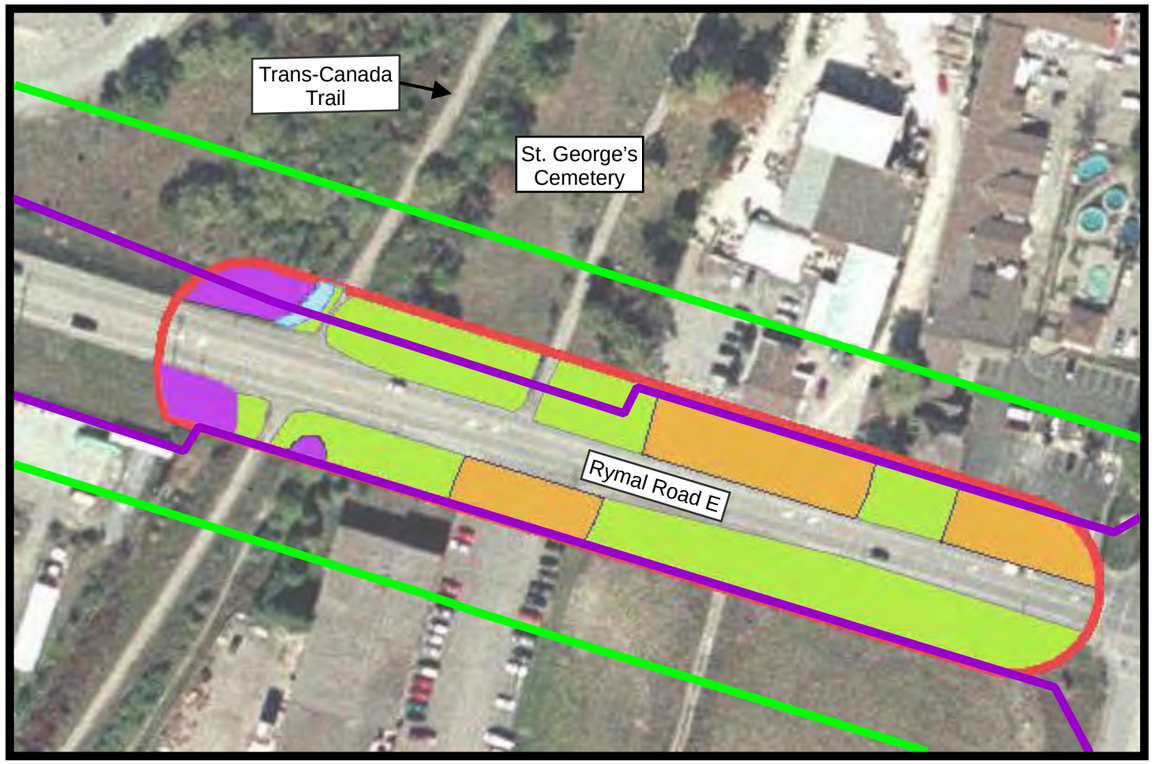
N

Scale

0 100m

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1o: Study Area in Relation to Golder 2012 (Stage 2)



Supplementary Figure 1r-1: Figure 6a, Stage 2 Results: Study Area 1 (AMEC 2014)



Supplementary Figure 1r-2: Figure 7, Area for Additional Archaeological Monitoring (AMEC 2014)

FAC
Date: 05/12/2020
Designer: JW

KEY

- Archaeology Study Area
- EA Study Area
- AMEC Study Area
- Disturbed
- Low & Wet
- Sloped
- Test-pitted @ 5m
- Area to be monitored by a licenced archaeologist

Scale
0 40m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1p: Study Area in Relation to AMEC 2014 (Stage 2)

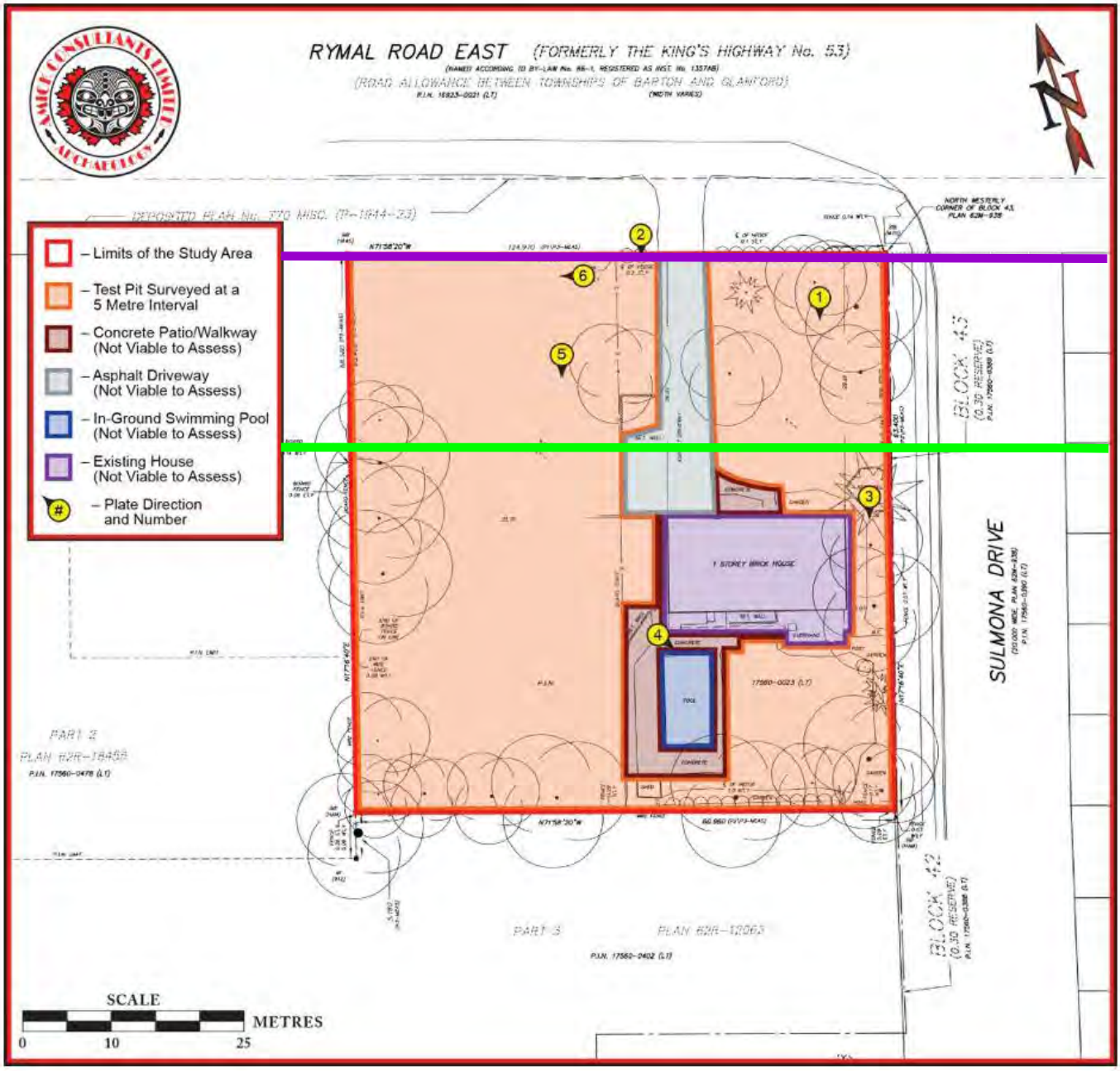


Figure 5: Detailed Plan of the Study Area (AMICK 2015)

FAC

Date: 05/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1q: Study Area in Relation to AMICK 2015 (Stages 1&2)

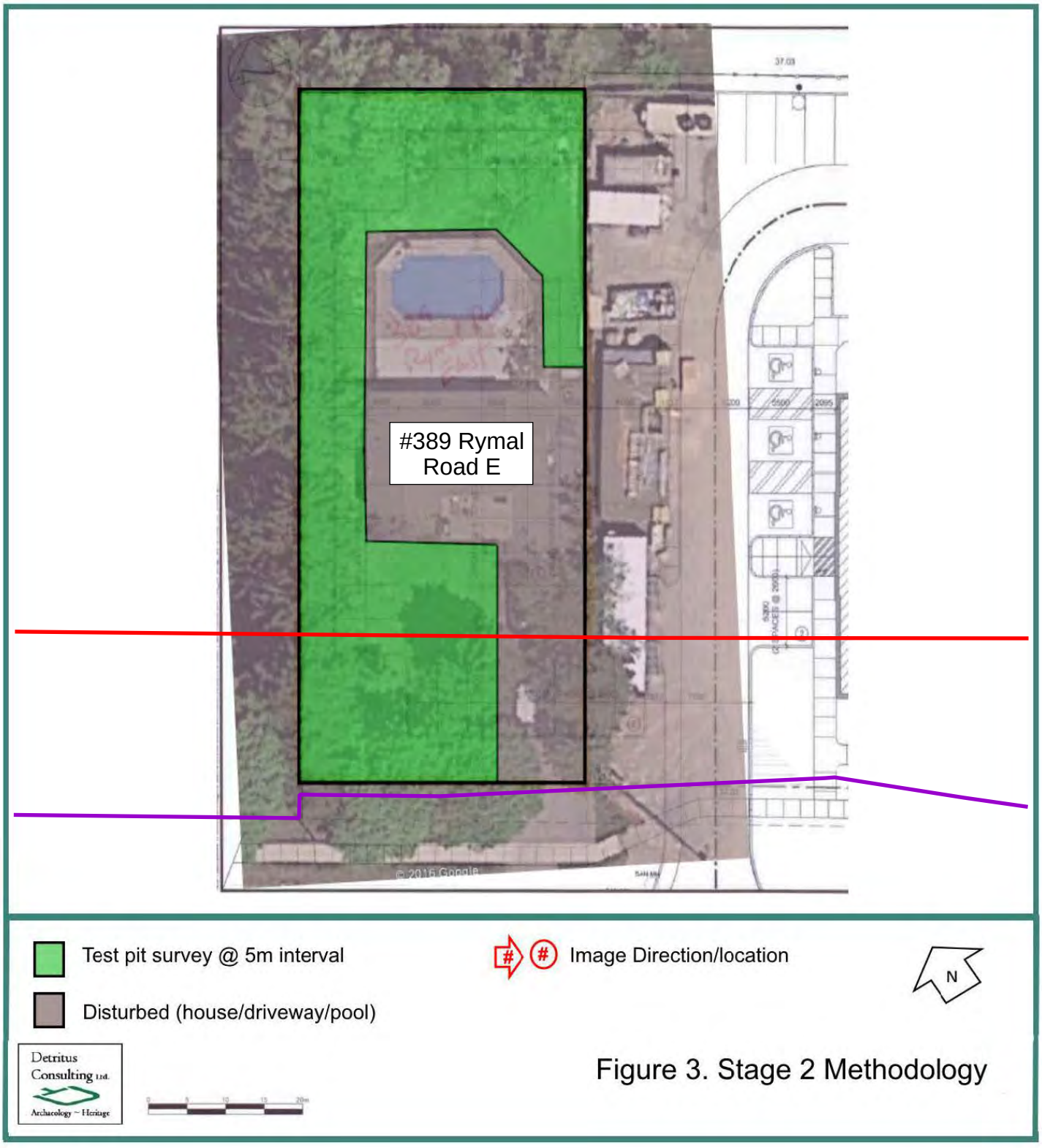


Figure 3 (Detritus 2015)

FAC

Date: 05/12/2020

Designer: JW

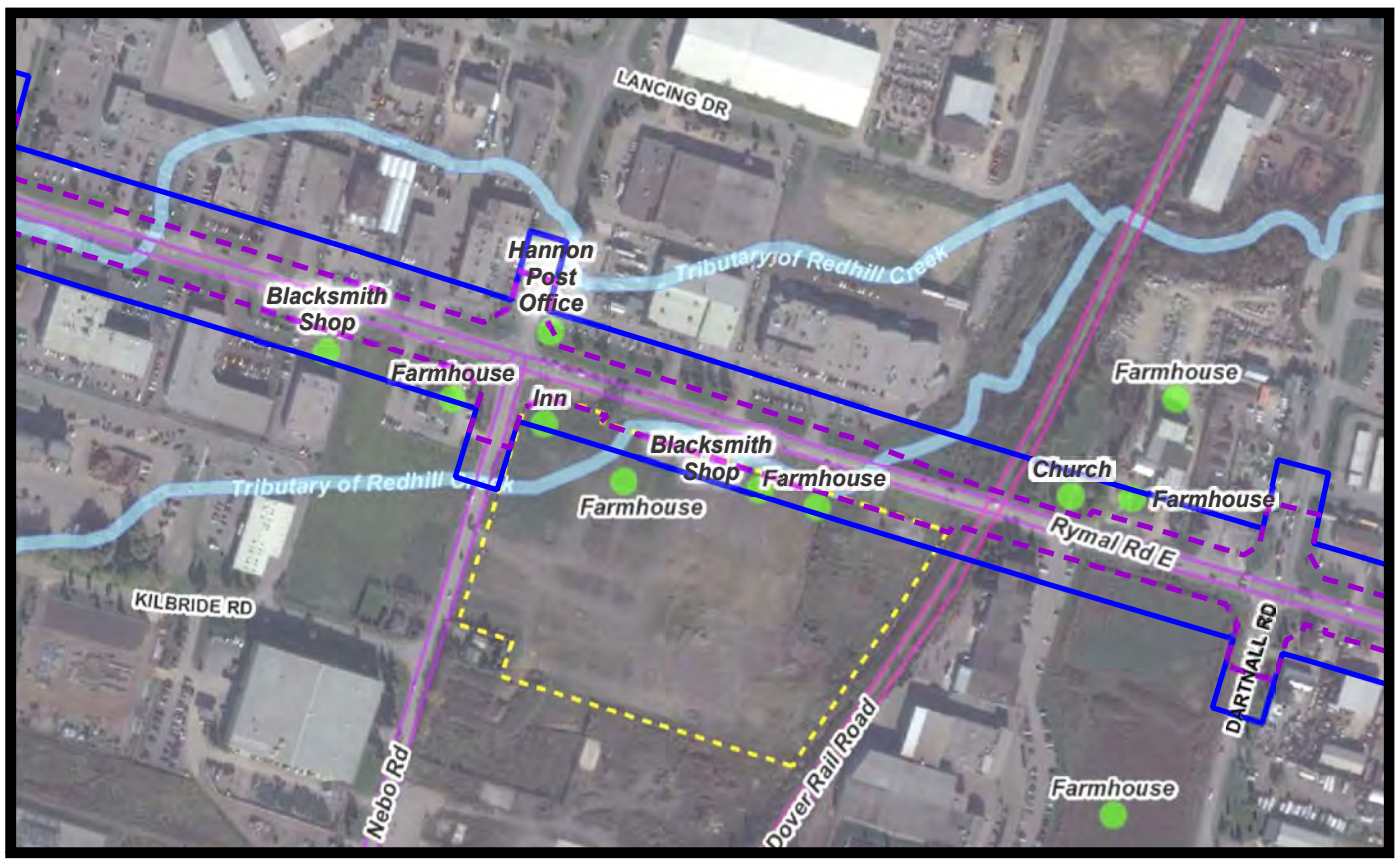
KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

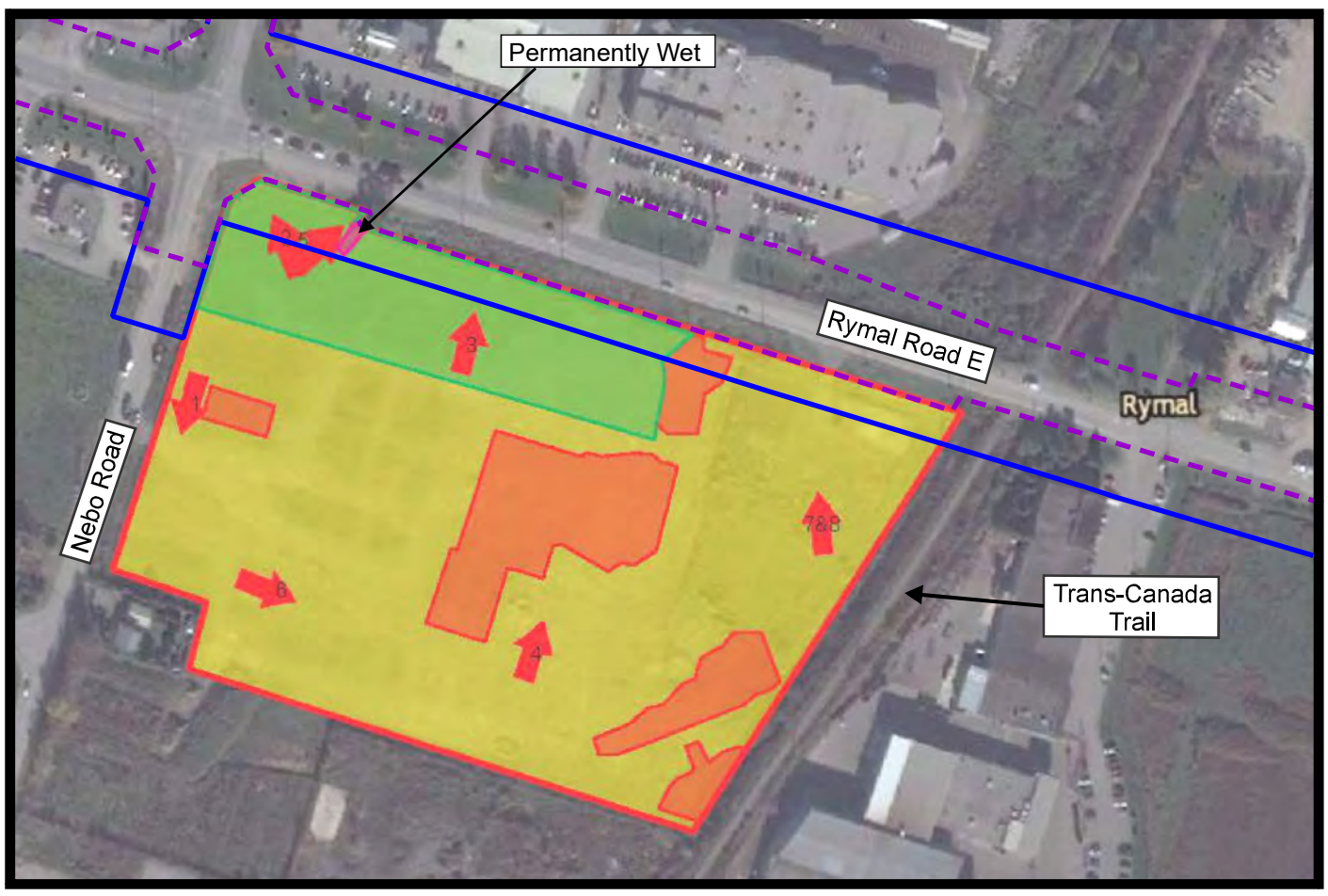
Supplementary Figure 1r: Study Area in Relation to Detritus 2016 (Stages 1&2)



Supplementary Figure 1s-1: Map 8: Features of Potential within Study Area (NDA 2016)



Supplementary Figure 1s-2: Map 9: Assessment Results and Location and Direction of Photographs (NDA 2016)



Supplementary Figure 1s-3: Map 5: Project Location - Stage 2 Results (Golder 2017)

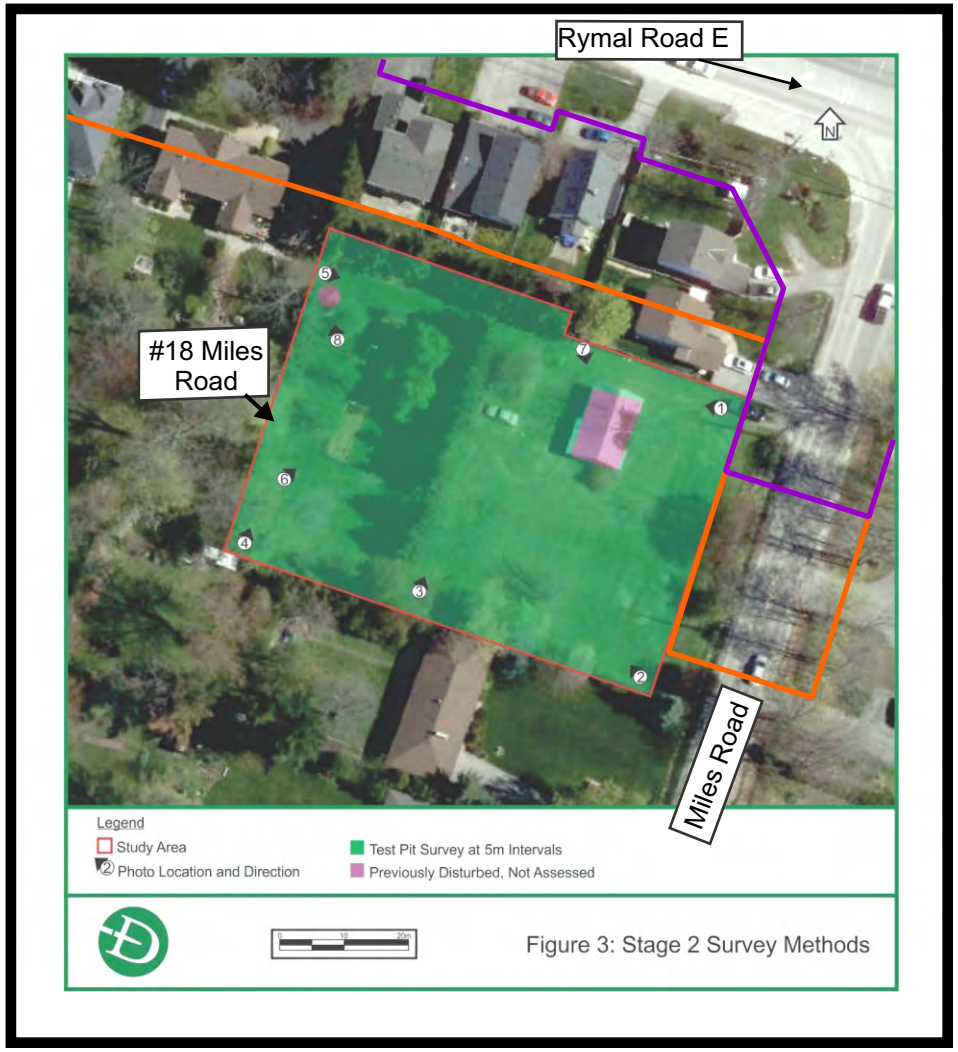
FAC
Date: 05/12/2020
Designer: JW

KEY
Archaeology Study Area
EA Study Area

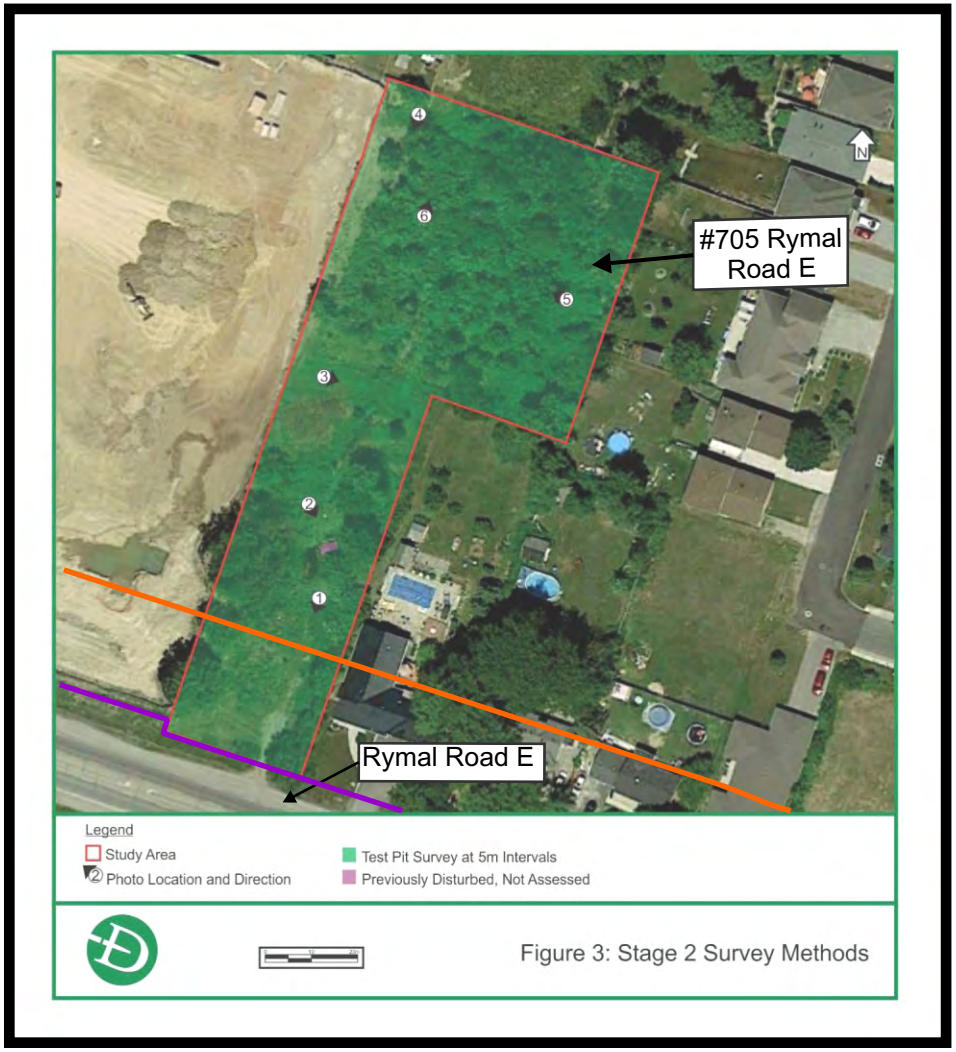
N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1s: Study Area in Relation to NDA 2016 (Stage 1) & Golder 2017 (Stage 2)



Supplementary Figure 1t-1: 18 Miles Road Stage 2, Figure 3, Detritus 2018a



Supplementary Figure 1t-2: 705 Rymal Road E Stage 2, Figure 3, Detritus 2018b

FAC

Date: 05/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1t: Study Area in Relation to Detritus 2018a (St1&2) & 2018b (St1&2)

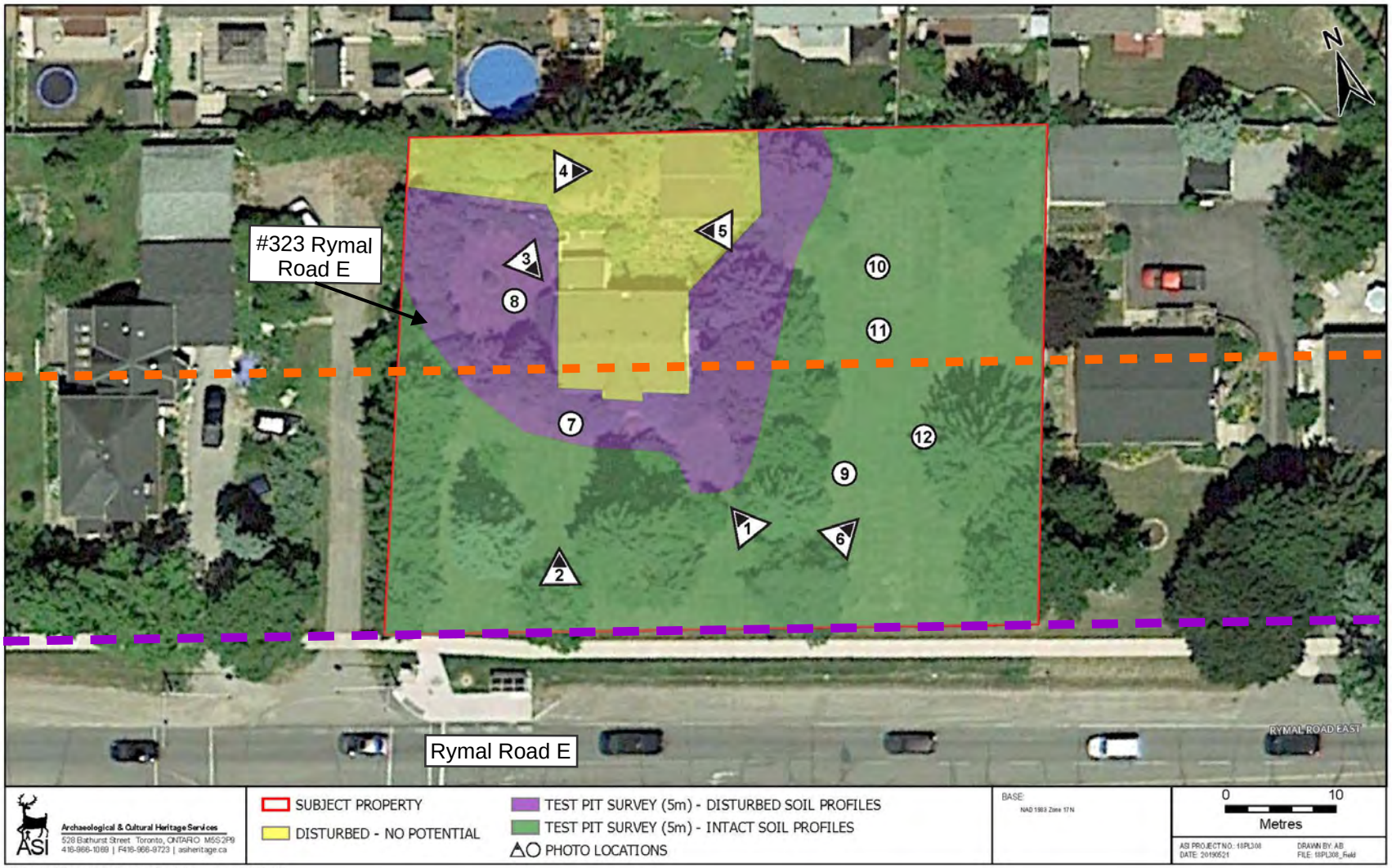


Figure 7: Stage 2 Archaeological Assessment Results

Figure 7, ASI 2019a

FAC

Date: 05/12/2020

Designer: JW

KEY

Archaeology Study Area

EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1u: Study Area in Relation to ASI 2019a (Stages 1&2)



Figure 6: Stage 2 Archaeological Assessment Results

Supplementary Figure 1v-1: Stage 2 Archaeological Assessment Results (Figure 6, ASI 2019b)



Figure 1: Location of Site AhGx-785 and Findspots P2 and P3.

Supplementary Figure 1v-2: Location of Site AhGx-785 and Findspots P2 and P3 (Figure 1, ASI 2019b)

FAC Date: 05/12/2020 Designer: JW	KEY Archaeology Study Area EA Study Area	IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA Archaeological Stage 1 Background Study **Supplementary Figure 1v:** Study Area in Relation to ASI 2019b (Stages 1&2)

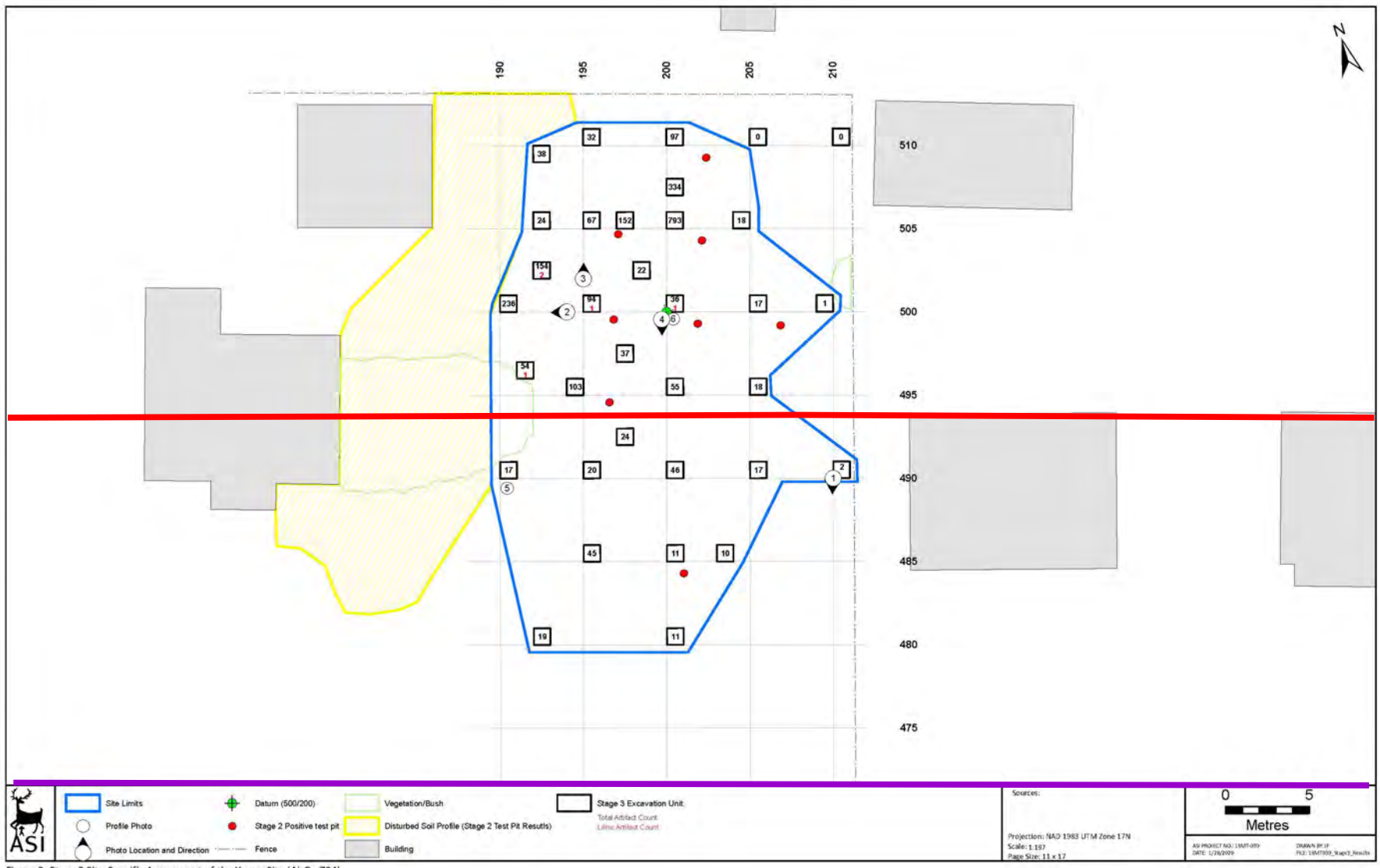


Figure 2: Stage 3 Site-Specific Assessment of the Young Site (AhGx-784).

Supplementary Figure 1w-1: Stage 3 Site-Specific Assessment of the Young Site (AhGx-784) (Figure 2, ASI 2019c)

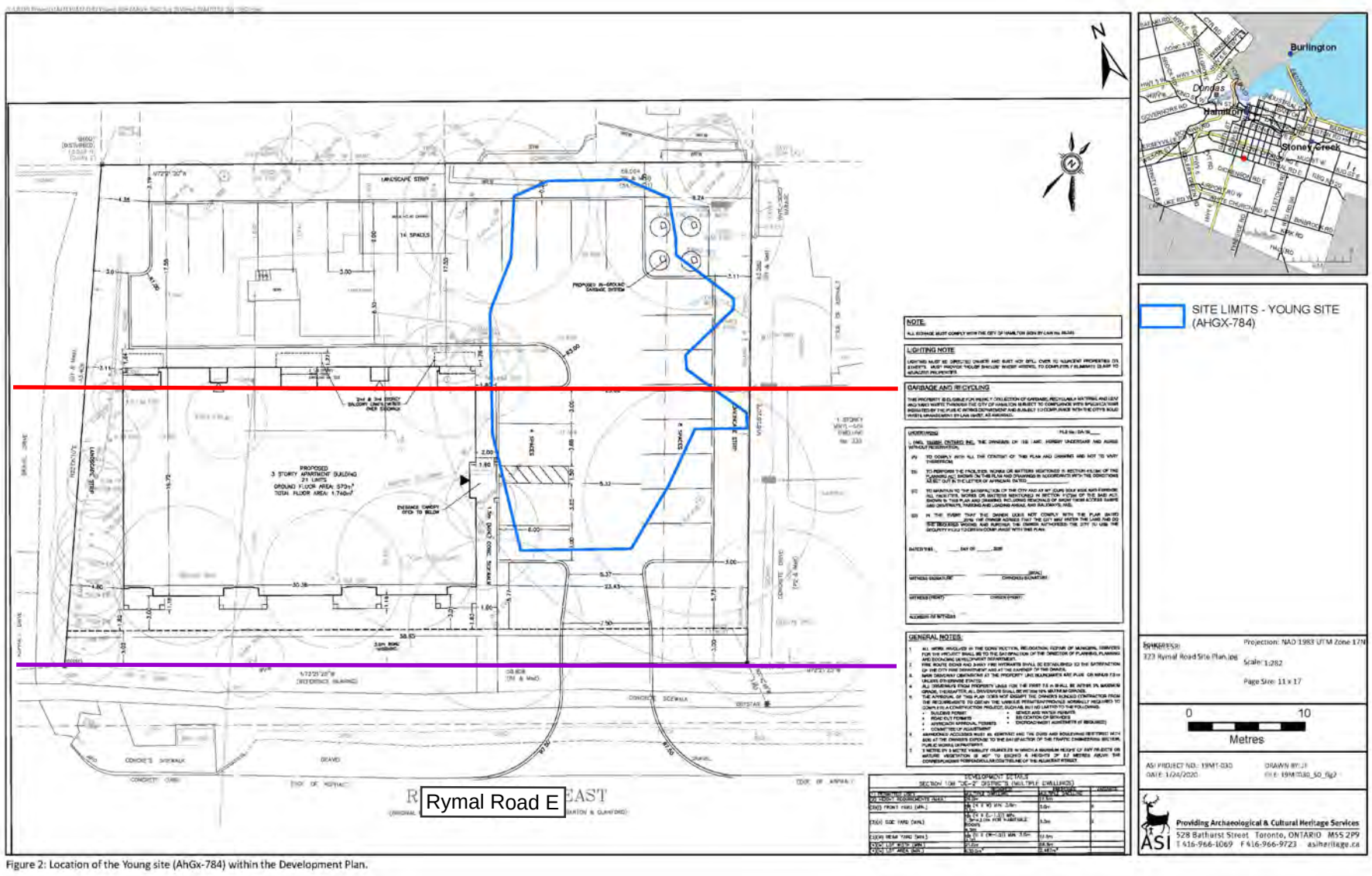


Figure 2: Location of the Young site (AhGx-784) within the Development Plan.

Supplementary Figure 1w-2: Location of the Young site (AhGx-784) within the Development Plan (Figure 2, ASI 2019c)

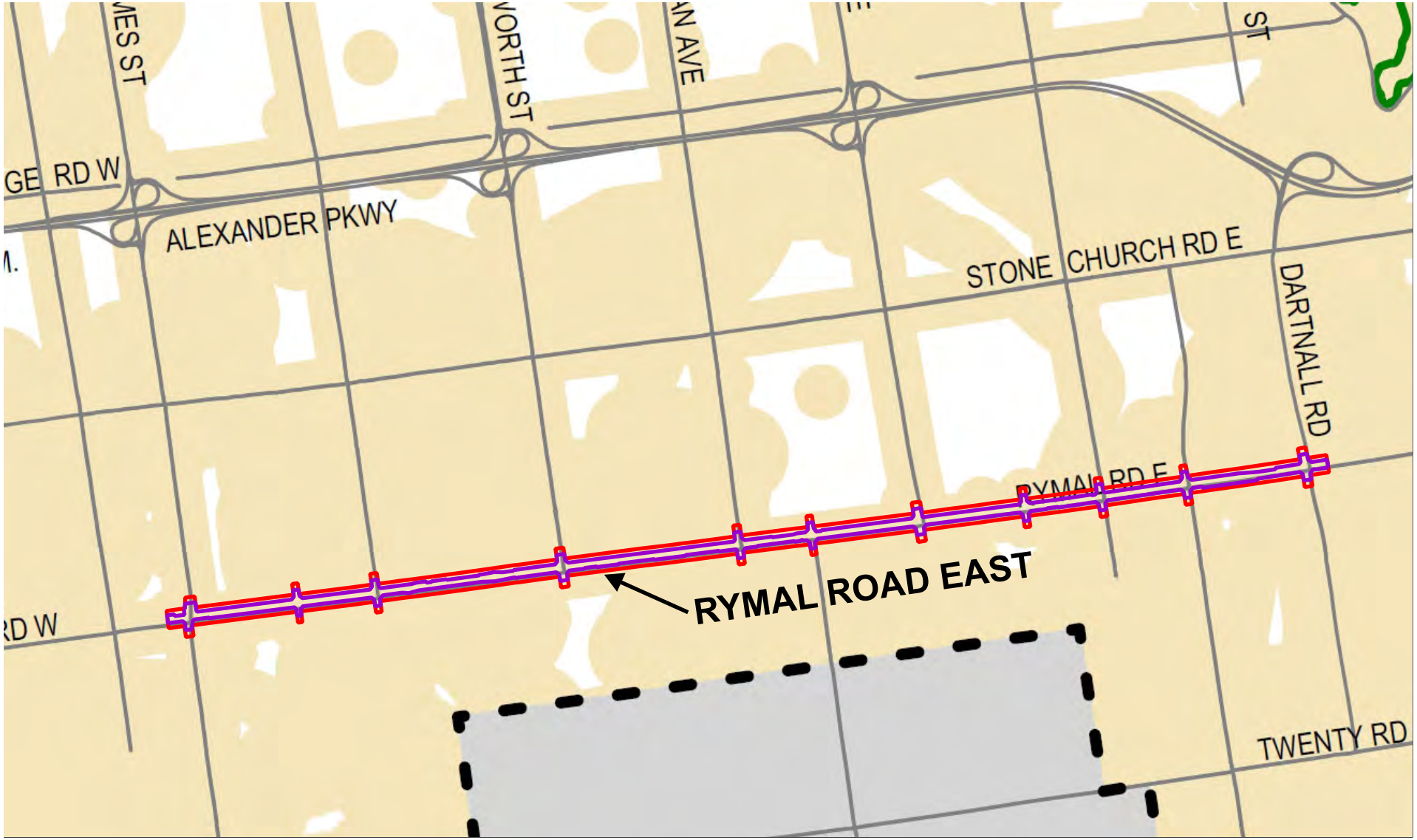
FAC
Date: 05/12/2020
Designer: JW

KEY

- Archaeology Study Area
- EA Study Area

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 1w: Study Area in Relation to ASI 2019c (Stage 3)



City of Hamilton 2019

FAC

Date: 08/12/2020

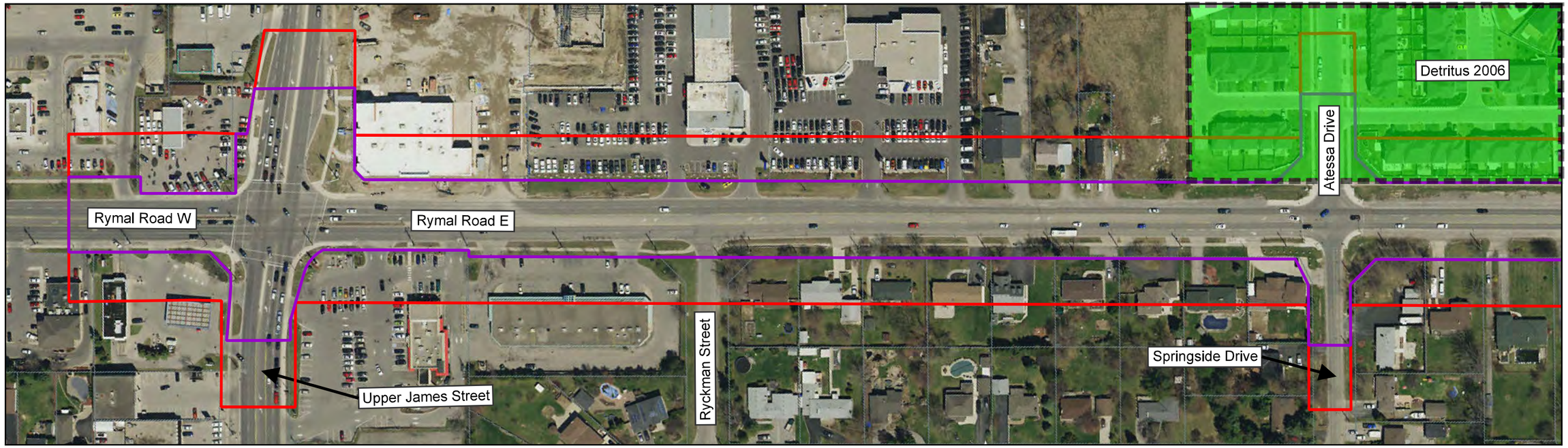
Designer: JM JW

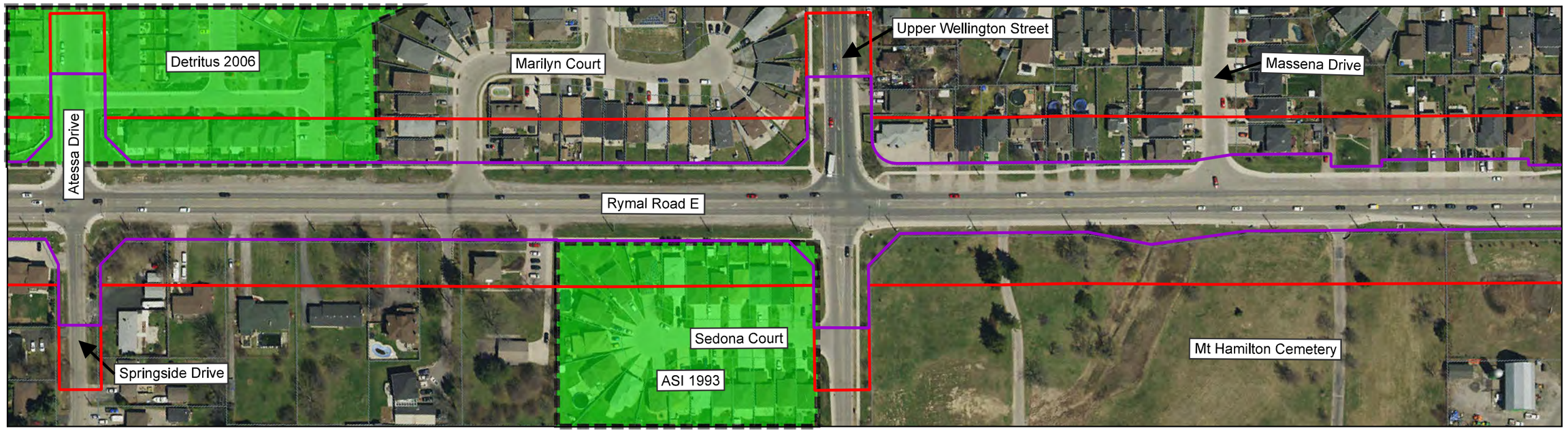
KEY

- Archaeology Study Area
- EA Study Area
- Area of Archaeological Potential

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 2: Study Area in Relation to Hamilton Archaeology Management Plan 2019





Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 05/12/2020
Designer: JW

KEY

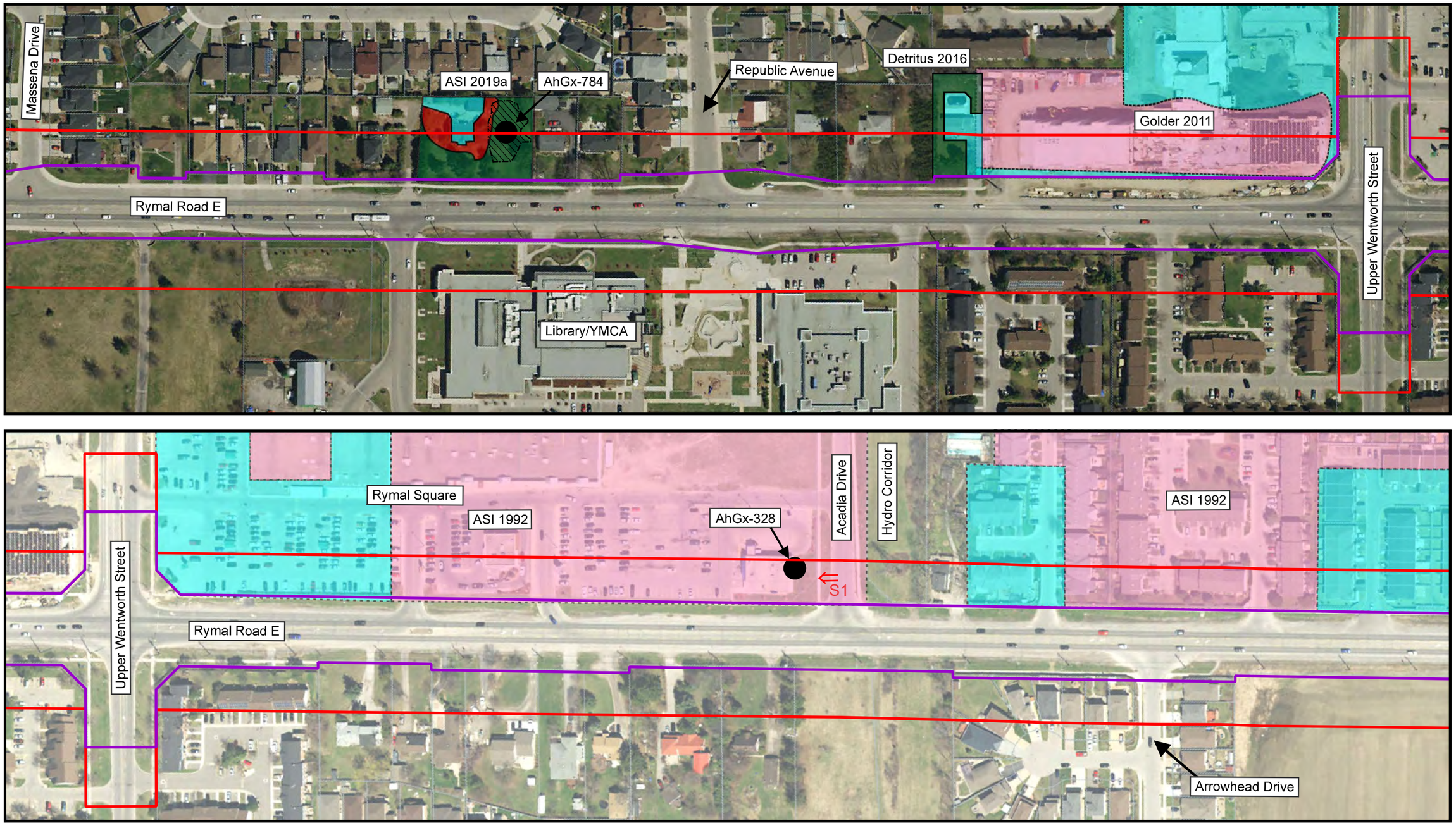
- Archaeology Study Area
- EA Study Area
- Pedestrian survey, soil profile unknown
- Assessment undertaken pre-2011

Scale
0 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 3a: Overlay of Previous Work



Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 10/12/2020
Designer: JW

KEY

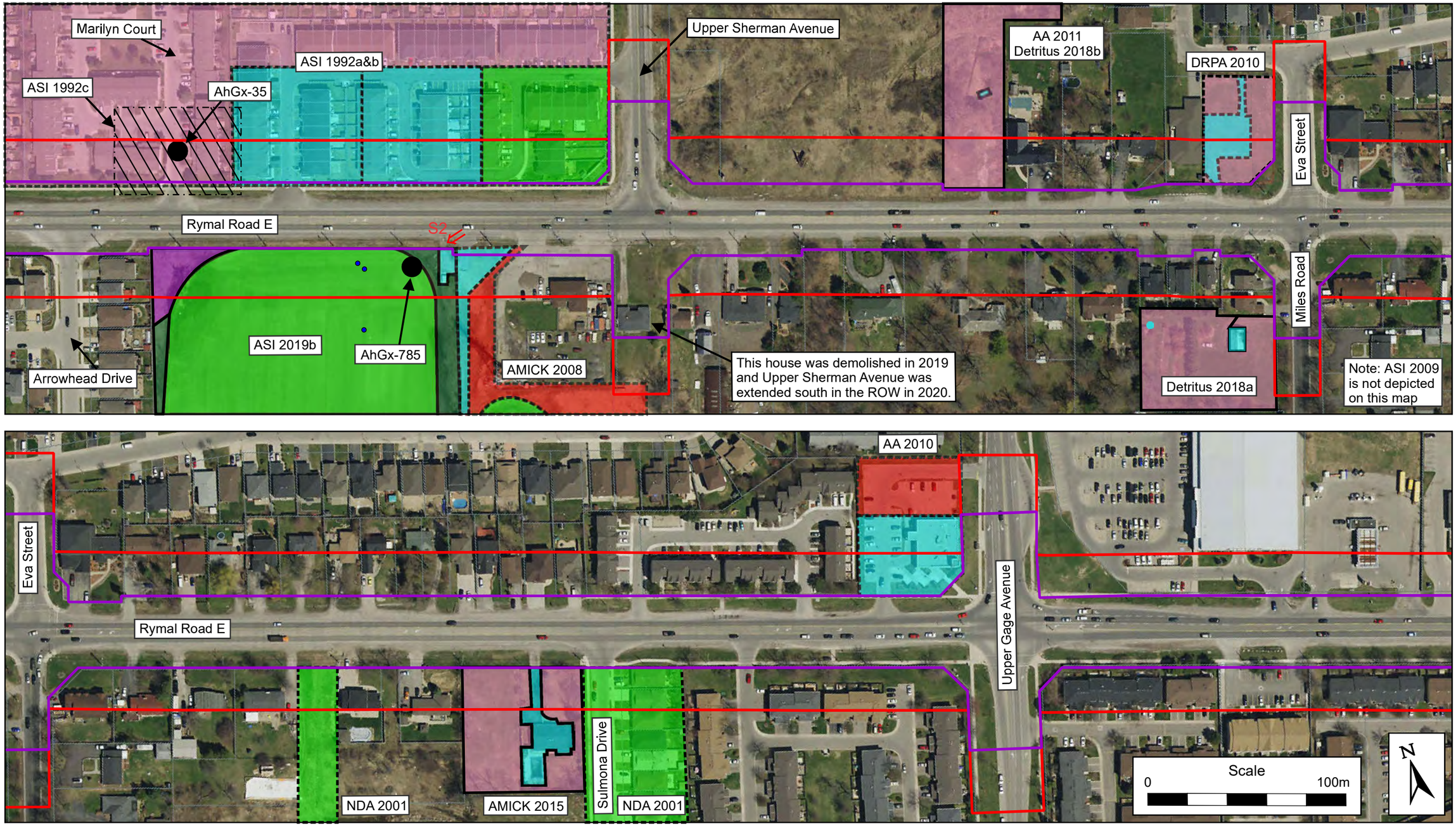
- Archaeology Study Area
- EA Study Area
- Registered site - no further CHVI
- St4 stripped to subsoil, no further CHVI
- Assessment undertaken pre-2011
- Assessment undertaken post-2011
- Test pit at 5m, soil profile intact
- S1 Photo Location and Direction
- St2 test pit at 5 m, soil profiles unknown
- St2 test pit, disturbed profile
- St2 not tested (previous disturbance)

Scale: 0 — 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 3b: Overlay of Previous Work



Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

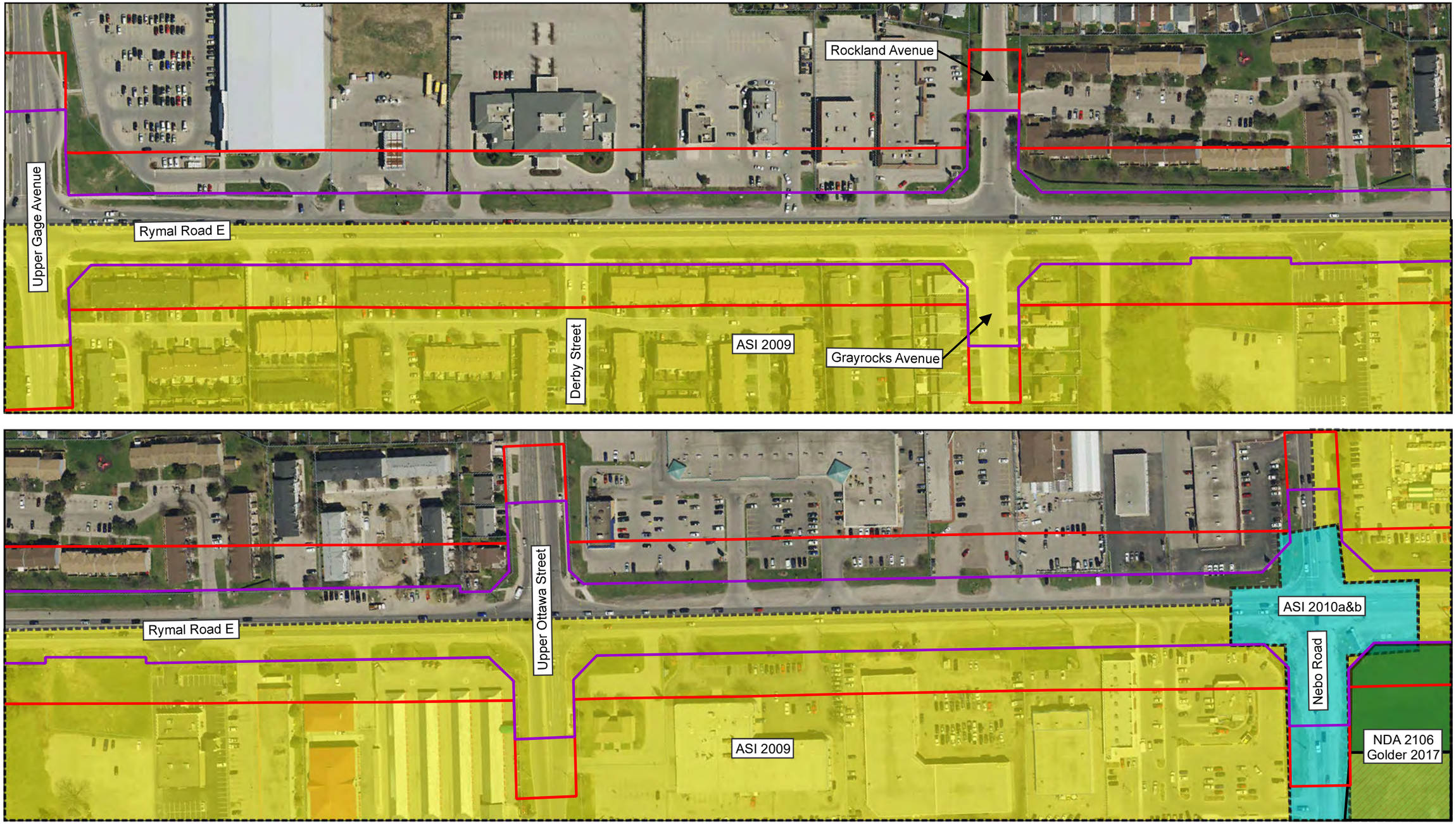
FAC
Date: 10/12/2020
Designer: JW

KEY

- Archaeology Study Area
- EA Study Area
- Findspot - no further CHVI
- Registered site - no further CHVI
- Assessment undertaken pre-2011
- Assessment undertaken post-2011
- St4 stripped to subsoil, no further CHVI
- Pedestrian survey, soil profile unknown
- St2 test pit at 5 m, soil profile intact
- St2 test pit at 5 m, soil profiles unknown
- St2 test pit, disturbed profile
- St2 not tested (previous disturbance)
- St2 not tested - slope or low/wet
- S1 Photo Location and Direction

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 3c: Overlay of Previous Work



Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 05/12/2020
Designer: JW

KEY

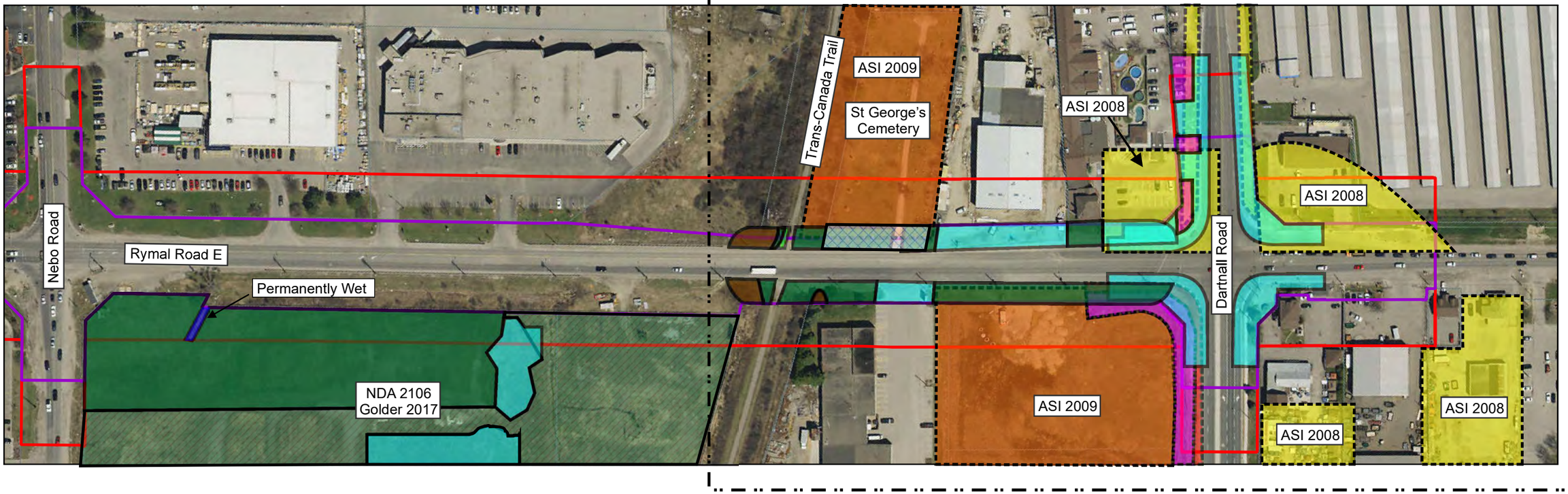
- Archaeology Study Area
- EA Study Area
- Assessment undertaken pre-2011
- Assessment undertaken post-2011
- Disturbed - no potential determined by Stage 1
- St2 not tested (previous disturbance)
- St2 test pit at 5m, soil profile intact
- St2 test pit at 10-20 m, soil profile intact

Scale: 0 — 200m

N

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 3d: Overlay of Previous Work



See Supplementary Figure 3f for separate views of this intersection.

Scale
0
200m

N

Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

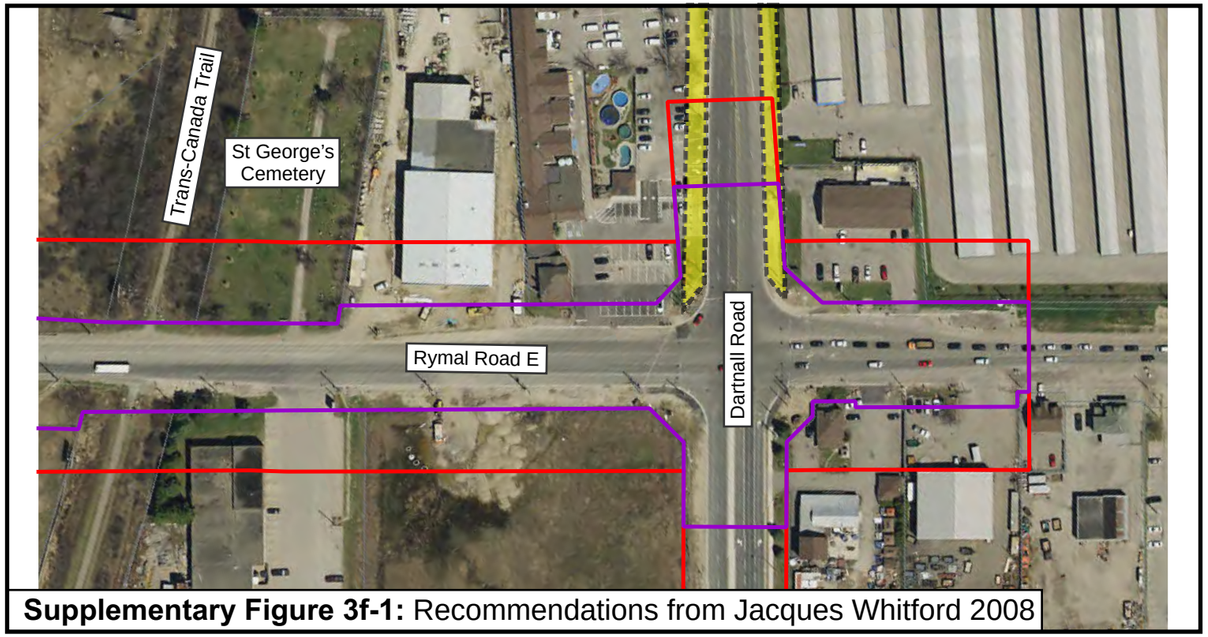
FAC
Date: 05/12/2020
Designer: JW

KEY

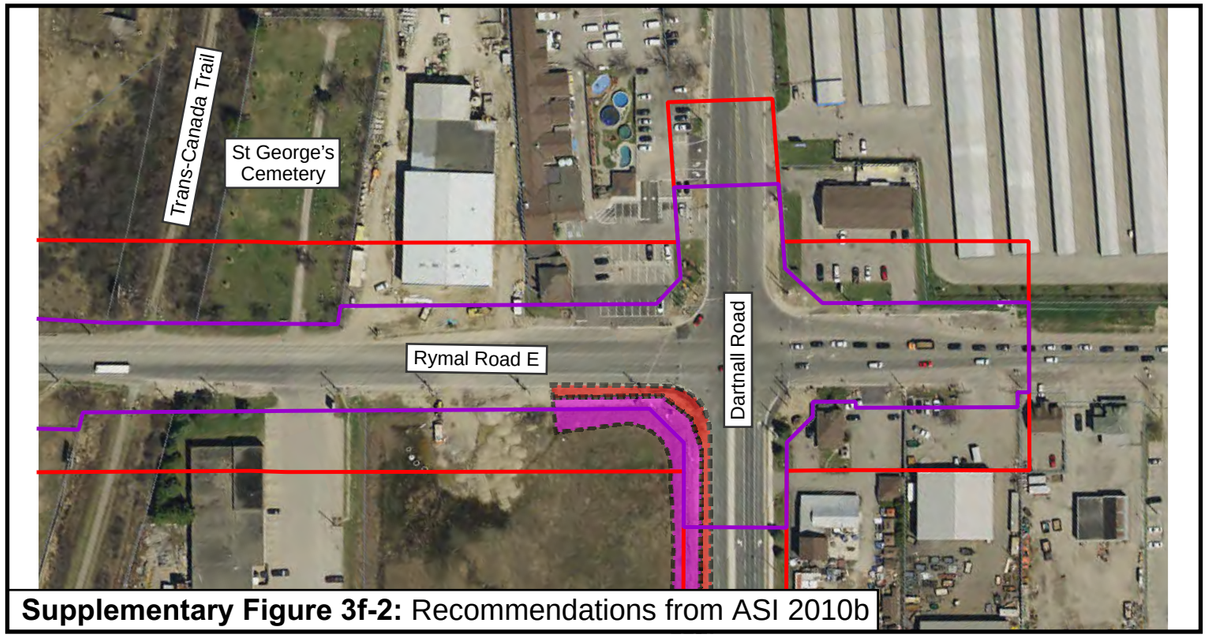
- Archaeology Study Area
- EA Study Area
- Assessment undertaken pre-2011
- Assessment undertaken post-2011
- Potential - requires Stage 2
- Disturbed - no potential determined by Stage 1
- St2 test pit at 5m, soil profile intact
- St2 test pit at 5m, soil profiles unknown
- St2 test pit, disturbed profile
- St2 not tested (previous disturbance)
- St2 test pit at 10-20 m, soil profile intact
- Requires Stage 3 monitoring
- St2 not tested - slope or low/wet

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

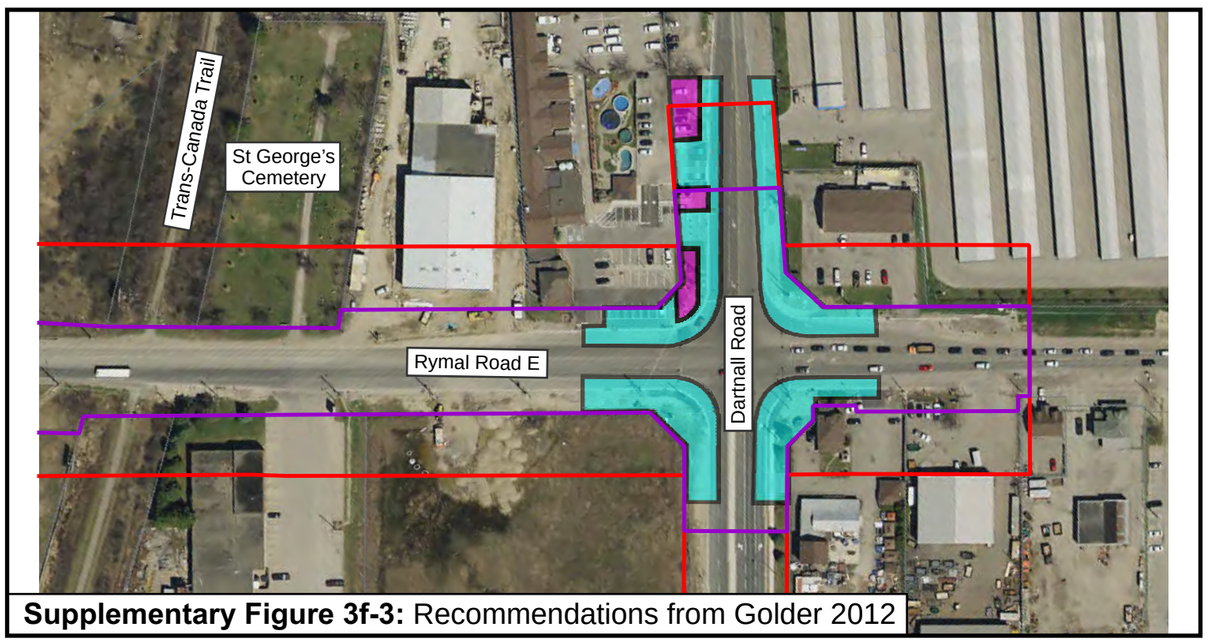
Supplementary Figure 3e: Overlay of Previous Work



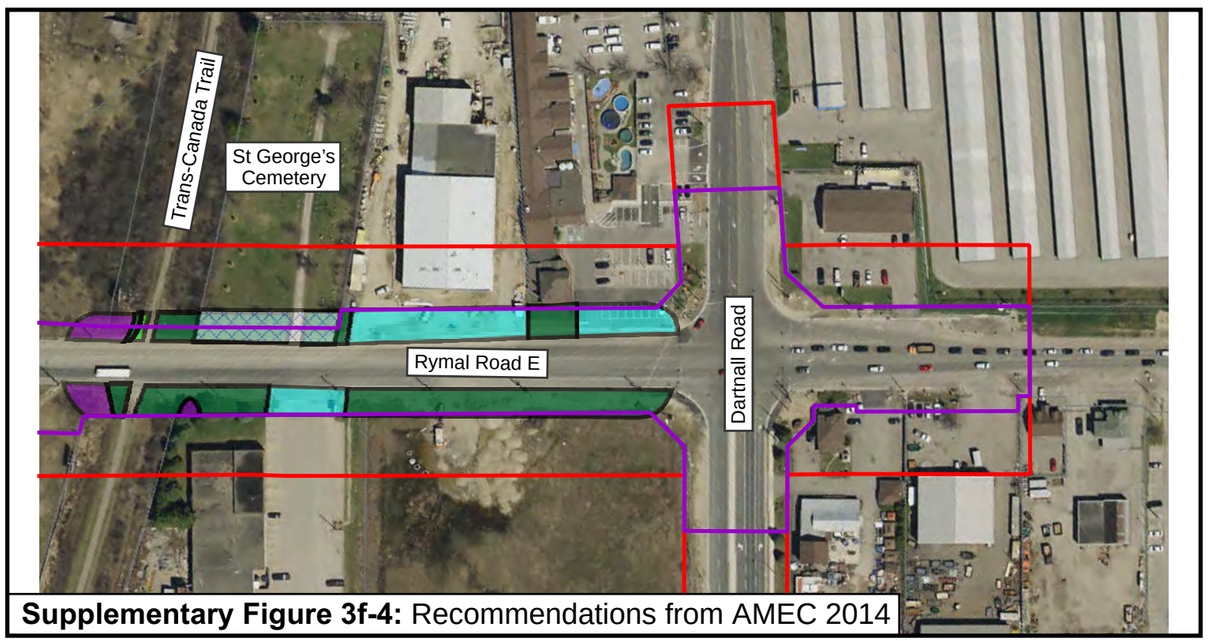
Supplementary Figure 3f-1: Recommendations from Jacques Whitford 2008



Supplementary Figure 3f-2: Recommendations from ASI 2010b



Supplementary Figure 3f-3: Recommendations from Golder 2012



Supplementary Figure 3f-4: Recommendations from AMEC 2014

Land Information Ontario/Ontario Ministry of Natural Resources and Forestry (2015). *Southwestern Ontario Orthophotography Project (SWOOP)*. Accessed via OMNR Make A Topographic Map.

FAC
Date: 10/12/2020
Designer: JW

KEY

- Archaeology Study Area
- EA Study Area
- Assessment undertaken pre-2011
- Assessment undertaken post-2011
- St2 not tested - slope or low/wet
- St2 not tested (previous disturbance)
- Disturbed - no potential determined by Stage 1
- St2 test pit at 5m, soil profile intact
- St2 test pit at 5m, soil profiles unknown
- St2 test pit, disturbed profile
- Requires Stage 3 monitoring

N

Scale
0 100m

IMPROVEMENTS TO RYMAL ROAD BETWEEN UPPER JAMES STREET AND DARTNALL ROAD, CITY OF HAMILTON
PHASES 1 TO 4, SCHEDULE C MUNICIPAL EA
Archaeological Stage 1 Background Study

Supplementary Figure 3f: Close-up of Previous Work at Dartnall Road Intersection



Supplementary Plate 1: Rymal Road south side between Arrowhead Drive and Upper Sherman, showing new sidewalk and catch basin for roadbed. Area recommended for Stage 2: Assessment is on south edge of ROW; facing SW (Photo 0992).



Supplementary Plate 2: Northwest corner of Acadia Drive and Rymal Road, showing new construction at location of AhGx-328 findspot; facing W (Photo 1007).