ORIGINAL REPORT:

STAGE 1 & 2 ARCHAEOLOGICAL ASSESSMENT KEMSLEY FARM SUBDIVISION 42537 SOUTHDALE LINE, PART LOTS 2 & 3, CONCESSION 6, TOWNSHIP OF YARMOUTH, MUNICIPALITY OF CENTRAL ELGIN, ELGIN COUNTY, ONTARIO

Submitted to:
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AND

THE ONTARIO MINISTRY OF TOURISM, CULTURE AND SPORT

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P.I.F. # P066-0273-2017 (Stage 1 and 2)

Amec Foster Wheeler Project # SWW171219
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EXECUTIVE SUMMARY

Amec Foster Wheeler Environment & Infrastructure ("Amec Foster Wheeler") was retained by Doug Tarry Limited (the CLIENT) to conduct a Stage 1 and 2 archaeological assessment in support of the application for a draft plan of subdivision for the proposed 29.4 hectare Kemsley Farm Development. This archaeological assessment was triggered under the Planning Act and was conducted prior to development. The property is located at 42537 Southdale Line, in the City of St. Thomas, Municipality of Central Elgin, Ontario ("Study Area"). The study area was historically described as Part Lots 2 & 3, Concession 6, Township of Yarmouth, Elgin County, Ontario (Appendix A: Figures 1, 2 and 3).

The Stage 1 & 2 archaeological assessment was carried out in accordance with the Ontario Ministry of Tourism, Culture and Sport's ("MTCS") *Standards and Guidelines for Consultant Archaeologists* (2011), under an Ontario Professional Licence to Conduct Archaeological Fieldwork (P066) held by Kristy O'Neal, Senior Archaeologist at Amec Foster Wheeler. The project information was acknowledged by the MTCS on 1 May 2017 with the approval of PIF number P066-0273-2017 (Stage 1 and 2). Permission to conduct the property inspection was granted to Amec Foster Wheeler by Doug Tarry Limited on 15 May 2017. Permission to conduct the property inspected included all required archaeological fieldwork activities, including the recovery and removal of artifacts.

The Stage 1 property inspection was conducted by Kristy O'Neal (P066) of Amec Foster Wheeler on 26 May, 29 May and 2 June 2017. The weather during those days was overcast to sunny and did not impede the inspection in any way. The Stage 2 test pit survey and pedestrian survey was conducted on 26 May, 29 May and 2 June 2017 under the direction of Kristy O'Neal (P066) with the assistance of Amanda Black (R375). The weather during the Stage 2 survey was overcast to sunny with a temperature range of between 17 and 26 Celsius, which did not impede the survey in any way.

The Stage 1 background study indicated that undisturbed portions of the subject property have archaeological potential and warrant Stage 2 property assessment due to the presence of: 1) a natural water source within the study area; 2) 14 previously registered archaeological sites within a one-kilometre radius; 3) historical transportation routes within 100 metres; and 4) an original one-storey log house and other documented historic Euro-Canadian buildings within or near the study area.

On the basis of the Stage 1 property inspection and a review of recent land use history, Amec Foster Wheeler has identified that: 1) 15% (4.6 hectares) of the study area does not require Stage 2 assessment as it has low potential due to steeply sloping topography; 2) 1.5% (0.2 hectares) does not require Stage 2 assessment as archaeological potential has been removed during the recent construction of a house, shed, barn and gravel driveway; and 3) the balance of the property (83.5%/25.39 hectares) has archaeological potential and warrants Stage 2 assessment (Appendix A: Figure 6). Areas of archaeological potential include 24.39 hectares of ploughed agricultural field and 1.0 hectare of

unploughable land (landscaped land in an urban setting/woodlot areas). Unploughable land includes a residential lot with a house, outbuildings and a driveway, and wooded areas. These portions of the property could not be ploughed because of damage to existing landscaping and infrastructure or because a plough could not access these portions of the property, meeting the requirements of Section 2.1.2 Standard 1e, that ploughing or cultivation is not viable.

The areas identified during the initial Stage 1 assessment as having archaeological potential were systematically tested at five-metre intervals. The ploughed agricultural field was subjected to pedestrian survey, while all unploughable areas were subjected to test pit survey.

Four locations containing archaeological resources were identified during the Stage 1 and 2 assessment, including two small Euro-Canadian artifact scatters and two isolated Aboriginal artifacts (Locations 1 to 4). Location 1 has been accorded a Borden designation as it consists of a culturally diagnostic artifact. Nevertheless, it is argued that the cultural heritage value or interest of Locations 1 to 4 has now been sufficiently assessed and that no further assessment of these locations is required.

Consequently, the following recommendations are made, subject to the conditions outlined below and in Section 5.0:

1) The Middle Archaic Aboriginal site identified as Location 1, AeHh-151, does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Site AeHh-151 is constituted by an isolated diagnostic artifact that is considered to have been sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Site AeHh-151.

2) The Euro-Canadian artifact scatter identified as Location 2 does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 2 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 2.

3) The Euro-Canadian artifact scatter identified as Location 3 does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 3 is deemed to have little cultural heritage value or interest and it is considered

sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 3.

4) The Aboriginal findspot identified as Location 4 does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 4 is an isolated non-diagnostic artifact that is deemed to have little cultural heritage value or interest. It is considered sufficiently assessed at Stage 2 and no additional fieldwork or assessment is recommended.

5) The balance of the study area likewise does not require further archaeological assessment.

The above recommendations are subject to Ministry of Tourism, Culture and Sport approval, and it is an offence to alter any of the Study Area without Ministry of Tourism, Culture, and Sport concurrence.

No grading or other activities that may result in the destruction or disturbance of the Study Area is permitted until notice of Ministry of Tourism, Culture, and Sport approval has been received.

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1.0 PROJECT CONTEXT

1.1 Development Context

Amec Foster Wheeler Environment & Infrastructure ("Amec Foster Wheeler") was retained by Doug Tarry Limited (the CLIENT) to conduct a Stage 1 and 2 archaeological assessment in support of the application for a draft plan of subdivision for the proposed 29.4 hectare Kemsley Farm Development. This archaeological assessment was triggered under the Planning Act and was conducted prior to development. The property is located at 42537 Southdale Line, in the City of St. Thomas, Municipality of Central Elgin, Ontario ("Study Area"). The study area was historically described as Part Lots 2 & 3, Concession 6, Township of Yarmouth, Elgin County, Ontario (Appendix A: Figures 1, 2 and 3).

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This report presents the research, the field methods and results, and the conclusions and recommendations based on the Stage 1 background study and Stage 2 property assessment and makes pertinent recommendations. All documents, records, and artifacts recovered will be curated at the offices of Amec Foster Wheeler, in accordance with subsection 66(1) of the Ontario Heritage Act.

1.2 Scope of Work

This Stage 1 and 2 archaeological assessment was carried out in accordance with the Terms of Reference provided in Amec Foster Wheeler's work agreement dated 15 May 2017.

A Stage 1 archaeological assessment is a systematic qualitative process executed in order to assess the archaeological potential of a property based on its historical use and

its potential for early Euro-Canadian (early settler) and pre-contact Aboriginal occupation. The objectives of a Stage 1 background study are: 1) to provide information about the property's geography, history, previous archaeological fieldwork and current land condition; 2) to evaluate in detail the property's archaeological potential which will support recommendations for Stage 2 property assessment for all or parts of the property if warranted; and, 3) to recommend appropriate strategies for Stage 2 property assessment if warranted

The Stage 1 background study was conducted in accordance with the *Standards and Guidelines for Consultant Archaeologists, 2011,* set out by the MTCS, and with the Ontario Heritage Act, R.S.O. 1990, c.0.18.

The scope of work for the Stage 1 background study consisted of the following tasks:

- Contacting the MTCS to determine if recorded archaeological sites exist in the vicinity (one-kilometre ["km"] radius) of the property, through a search of the Ontario Archaeological Sites Database maintained by that Ministry;
- Contacting the MTCS to determine if there are any known reports of previous archaeological field work within a radius of 50 metres ("m") around the study area;
- A desktop review of the study area's physical setting to determine its potential for both historic and pre-contact human occupation, including its topography, hydrology, soils, vegetation, and proximity to important resources and historic transportation routes;
- A review of the potential for historic occupation as documented in historical atlases and other archival sources; and,
- The formulation of Stage 2 recommendations.

The objectives of a Stage 2 property assessment are to document all archaeological resources present on the property and to make a determination about whether these resources, if present, have cultural heritage value or interest. Archaeological resources consist of artifacts (Aboriginal stone tools, pottery and subsistence remains as well as Euro-Canadian objects), subsurface settlement patterns and cultural features (post moulds, trash pits, privies, and wells), and sites (temporary camps and special purpose activity areas, plus more permanent settlements such as villages, homesteads, grist mills and industrial structures).

The scope of work for the Stage 2 archaeological assessment consisted of the following tasks:

- Organizing public underground utility locates. In addition, Amec Foster Wheeler retained a private utility locator to clear underground utilities;

- A pedestrian survey conducted at five-metre ("m") intervals for any ploughable land employing strategies that adhere to the technical standards for Stage 2 archaeological assessments as prescribed by the MTCS (2011);
- A test pit survey conducted at five-metre ("m") intervals of areas of archaeological potential employing strategies that adhere to the technical standards for Stage 2 archaeological assessments as prescribed by the MTCS (2011);
- Mapping, photographing and other relevant graphics;
- Artifact processing and analysis; and,
- Preparing a report of findings with recommendations regarding the need for further archaeological work if deemed necessary.

Sites discovered during a Stage 2 assessment that are determined to have cultural value or interest may be recommended for a Stage 3 site-specific assessment.

2.0 STAGE 1 BACKGROUND STUDY

As part of the Stage 1 archaeological assessment, Amec Foster Wheeler searched MTCS's PastPort system to determine if archaeological sites have been registered within 1 km of the property (Section 2.1.1), and if previous archaeological assessments have been carried out within a 50-m radius (Section 2.1.2). Secondly, the principal determinants of archaeological potential–proximity to water, topography, drainage, soils, vegetation, and proximity to important resources and historically significant transportation routes–were examined in order to evaluate the property's overall archaeological potential (Sections 2.1, 2.1.3, 2.2, and 2.2.1). Thirdly, the specific potential for historic archaeological resources was assessed through an examination of available historical maps and other archival sources (Section 2.2).

2.1 Archaeological Context

2.1.1 Registered Archaeological Sites

Amec Foster Wheeler conducted the requisite Stage 1 background research. First, Amec Foster Wheeler searched the Ontario Archaeological Sites Database in order to ascertain if previously registered archaeological sites have been identified in close proximity to the study area.

In Ontario, information concerning archaeology sites is stored in the Ontario Archaeological Sites Database (OASD) maintained by the MTCS. This database contains archaeological registered sites within the Borden system. Under the Borden system, Canada has been divided into grid blocks based on longitude and latitude. A Borden block is approximately 13 km east to west, and approximately 18.5 km north to south. Each Borden block is referred to by a four-letter designation and sites located within the block are numbered sequentially as they are found. The subject property is located within the

AeHh Borden Block. On the basis of a search of the OASD through PastPort, there are 14 registered archaeological sites located within a 1-km radius: six Aboriginal sites, two historic Euro-Canadian sites, two multi-component sites; and four sites with unknown temporal or cultural affiliations. One of these sites, AeHh-118, is located within 250 metres of the study area.

Table 1 provides a summary of these sites.

Table 1: Registered Archaeological Sites within a 1-km Radius

Borden Number	Site Name	Cultural Affiliation	Site Type	Researcher	Distance to Study Area	Current Development Review Status
AeHh-100	Shawside #10	Aboriginal	Findspot	Poulton (1998)	770 m	No further CHVI*
AeHh-101	Shawside #14	Middle Archaic	Findspot	Poulton (1998)	650 m	No further CHVI
AeHh-113	Parish Farm Site	Late Woodland (Glen Meyer)	Campsite	Wilson (2000)	500 m	No further CHVI
AeHh-115		Early Archaic	Findspot	Wilson (2000)	580 m	No further CHVI
AeHh-118	S. S. #17	Euro-Canadian	Homestead	Dieterman (2003)	235 m	Further CHVI
AeHh-142	Orchard site	Aboriginal/Euro-Canadian	Unknown	Martin (2011)	300 m	No further CHVI
AeHh-144	Halfway House	Euro-Canadian 1850-1900	Inn	Dann (1981)	900 m	Unknown
AeHh-145	John Butler site	Aboriginal/Euro-Canadian	Unknown	Pearce (2013)	295 m	Unknown
AeHh-29	Begg 3	Unknown	Unknown	Smith (1977)	850 m	Unknown
AeHh-31	Begg 5	Unknown	Unknown	Smith (1977)	1000 m	Unknown
AeHh-32	Begg 6	Unknown	Unknown	Smith (1977)	750 m	Unknown
AeHh-8		Unknown	Unknown	Unknown (1977)	725 m	Unknown
AeHh-97	Shawside #3	Late Archaic	Findspot	Poulton (1998)	575 m	No further CHVI
AeHh-99	Shawside #9	Late Archaic	Findspot	Poulton (1998)	415 m	No further CHVI

*CHVI – cultural heritage value or interest

2.1.2 History of Archaeological Investigations

The response to our request to the MTCS for relevant reports within 50 m of the study area was that no previous archaeological assessments have been conducted within this radius.

2.1.3 Environmental Context

Fieldwork for this project was conducted on 26 May, 29 May and 2 June 2017. At that time, most of the 29.4-hectare study area was comprised of cultivated agricultural fields. There is a small wooded area in the northwest corner of the study area which is transected by a ravine, a small treeline separating agricultural fields in the northwest,

and a residential lot with a house, shed, barn and gravel driveway. A ravine with a tributary of Kettle Creek cuts across the western edge of the study area, and there is another ravine along the southern edge. To the north of the subject property there is a long established residential area along Southdale Line. Directly to the east there is a railway track, with long established residences beyond. To the west, the property is surrounded by forested ravine, while to the south is a residential area.

The study area (Appendix A: Figures 1–3) is situated in the Mount Elgin Ridges physiographic region of Ontario (Chapman and Putnam 1984: 113). The Mount Elgin Ridges spans an area of approximately 145.7 hectares (360 acres) and is located between the Thames Valley and the Norfolk sand plain. The ridges within this region consist of calcareous clay or silty clay, whereas the vales contain gravel, sand or silt (Chapman and Putnam 1984: 145). This physiographic region is primarily drained by the Thames River system, including Reynolds Creek, Dingman Creek, and several other smaller streams. The Mount Elgin Ridges was reportedly once one of the most prosperous dairy and livestock areas in Ontario. Farmers on the ridges would use low-lying land for pasture and the rolling fields for cultivation (Chapman and Putnam 1984: 145).

The *Soils of Elgin County* (Schut 1992) indicates that there are two soil types present in the study area. Soils within the ravines are identified as Valley Complex soil, characterized by undifferentiated material composing side walls and terraces or flood plains of valleys associated with creeks, rivers, and their major tributaries. Drainage ranges from poor in the lowlands to rapid to in the steeply sloping valleys. The remainder of the study area is made up of Tavistock silt loam, characterized by nearly level to gently sloping topography and poor drainage (Schut 1992).

It is crucial to consider the proximity of water sources in any evaluation of archaeological potential because the availability of water is arguably the single most important determinant of human land use, past and present. The Standards and Guidelines for Consultant Archaeologists (MTCS 2011) lists proximity to water as one of the prime indicators of potential for the presence of archaeological sites. Water, both potable and non-potable, facilitated the transportation of people and goods and served to focus animal and vegetable resources. According to the 2011 Standards and Guidelines for Consultant Archaeologists, lands within 300 metres of an extant or formerly mapped river or creek have potential for the presence of early Aboriginal and Euro-Canadian archaeological sites. The nearest water sources in the current study area are tributaries of Kettle Creek, one of which transects the western portion of the subject lands and another which runs along the southern edge (Appendix A: Figures 1 to 3).

In summary, a review of the archaeological context supports a conclusion of overall archaeological potential and the need for a Stage 2 assessment. Natural water sources are located within 300 metres of the study area, including two tributaries of Kettle Creek within the current study area limits. Moreover, we have direct evidence that this general

area had been intensively exploited by both pre-contact Aboriginal and/or historic Euro-Canadian peoples in that 14 sites have been previously registered within a 1-km radius, including one Euro-Canadian homestead site (AeHh-118), located within 250 metres (see Table 1).

2.2 Historical Context

2.2.1 *A Cultural History for Southwestern Ontario*

The majority of interpretations of pre-contact Aboriginal adaptations in Ontario derive from the analysis and interpretation of stone tools. Stone tools are made from specific types of rocks that fracture in ways that can be controlled, so that they are easily shaped into useful forms. These rocks include chert, chalcedony, quartzite, petrified wood, and volcanic glass, known as obsidian. Most stone tools found in southern Ontario are formed from types of chert that outcrop in local limestone formations, such as: Onondaga and Haldimand cherts, found near the north shore of Lake Erie; Kettle Point chert, which outcrops near Lake Huron; and Collingwood chert, which outcrops along the Niagara Escarpment near Georgian Bay.

Stone tools used as spear tips and arrowheads are the most commonly studied tool type. These are referred to as projectile points. As projectile point technology changed over time, styles and shapes of points changed also. Studying these changing point types has resulted in the development of a chronological framework for pre-contact times prior to 3,000 years ago, when First Nations groups began to make clay pottery. Later periods are defined both by point types and pottery characteristics. Radiocarbon dating of archaeological sites can only be done when organic materials are collected from those sites, so the dating of most sites is done by comparing the artifacts from dated sites to those from undated sites. The following is an overview of the pre-contact history of southern Ontario as understood by archaeologists.

The cultural history of southern Ontario began approximately 11,000 years ago when the glaciers had melted and the land was re-exposed. The land was quickly settled by bands of hunters and gatherers who are thought to have been large game hunters. These people used large spear points that are distinctively shaped with long central grooves, called “flutes”. Archaeologists have defined a number of point types that date to this time, including Gainey, Barnes, Crowfield, and Hi-Lo types. This period is referred to as the Palaeo-Indian Period and it is thought to have lasted until approximately 9,000 years ago.

After 9,500 years ago, there was a long period when the climate was variable and the bare lands left by the glaciers were becoming re-forested, resulting in patchier, more diverse ecozones. During this time, which lasted until 3,000 years ago, people were adapting to diverse environmental settings. There appears to have been more reliance on local stone for making tools and more variable tool manufacturing technologies. The adoption of a spear-throwing board, known as an atlatl, was an important innovation, resulting in the ability to throw smaller darts with more force. Projectile points from this period, called the

Archaic Period, are commonly side or corner-notched and are smaller than those of the preceding period. The Archaic adaptation is generally thought to have centred on localized resources, often forest resources, and groups of people are thought to have been less mobile, an adaptation that continued to develop until the arrival of Europeans.

In southern Ontario, the Archaic Period is divided into the Early, Middle and Late Archaic. Early point types include serrated Nettling and Bifurcate Base points. Middle types include Brewerton Corner Notched and Otter Creek, and Late types include Lamoka, Genesee, Crawford Knoll, and Innes. Most of these are named after sites where they were first identified.

The Archaic Period is followed by the Woodland Period. The major technological change in the Early Woodland Period is the introduction of pottery. During this time, people are thought to have developed more community organization and the manufacture of clay pottery is thought to indicate less residential mobility. Burial sites dating to this time often display evidence of ceremonial activities. Projectile points made at this time include much smaller types, probably used as arrow tips. Point types include Meadowood and Kramer and early ceramics were crudely-made vessels with conoidal (pointed) bases. The Early Woodland Period transitioned into the Middle Woodland Period approximately 2,400 years ago.

During the Middle Woodland Period in southern Ontario community and kin identity became more deeply entrenched, and more sedentary communities developed. Point types made at this time include Saugeen, Vanport, and Snyders. Ceramic vessels were conoidal in shape, but were decorated with stamped designs in the soft clay. The Middle Woodland Period transitioned into the Late Woodland Period A.D. 500–900 with the earliest direct evidence for agriculture.

The Late Woodland Period saw the development of recognizable Iroquoian and Algonkian cultures in southern Ontario, characterized by the intensification of agriculture and the increased utilization of corn. Greater sedentism led to increasing settlement populations and greater complexity of settlement organization. Sites dating to this time are often found on terraces overlooking the floodplains of large rivers. Iroquoian villages tended to be small, palisaded compounds with longhouses occupied by families. As the Late Woodland Period progressed, more intercommunity communication and integration became necessary to maintain the sedentary agricultural way of life. Later Iroquoian villages were larger and more heavily palisaded and longhouses were larger also.

Table 2: Simplified Cultural Chronology of Southern and Eastern Ontario	
Period	**Complexes/Cultures, Some Diagnostic Artifacts**
Early Paleo-Indian (9000–8500 B.C.)	Small nomadic hunter-gatherer bands. EPI rarely found in Eastern Ontario. Gainey, Barnes, Crowfield fluted points.
Late Paleo-Indian (8500–7500 B.C.)	Small nomadic hunter-gatherer bands. Hi-Lo, Holcombe points, Lanceolate Bifaces.
Early Archaic (7500–6000/4500 B.C.)	Small nomadic hunter-gatherer bands. Nettling, Stanley/Neville points.
Middle Archaic (6000/4500–2500 B.C.)	Transition to territorial settlements. Seasonal round of subsistence introduced. Thebes (6000–5000 B.C.), Otter Creek points (4500–3000 B.C.). **Brewerton Complex (3000–2500 B.C.).** Brewerton points. **Laurentian Complex (6000 B.C.–2500 B.C.)** (Eastern Ontario)
Late Archaic (2500–1000 B.C.)	More numerous territorial hunter- gatherer bands, increasing use of exotic materials and artistic items for grave offerings, regional trade networks. **Narrowpoint Complex (2500–1850 B.C.).** Lamoka points. **Broadpoint Complex (1850–1650 B.C.).** Adder Orchard, Genesee points. **Smallpoint Complex (1650–1000 B.C.).** Crawford Knoll, Innes points. **Terminal Archaic (1100–1000 B.C.) Glacial Kame Complex.** Hind points.
Early Woodland (1000–400 B.C.)	Pottery introduced. Meadowood Notched points, Meadowood Cache Blades, Kramer, Adena points. **Meadowood Complex (1000–400 B.C.).** **Middlesex Complex (650–400 B.C.).** Introduction of true cemeteries.
Middle Woodland (400 B.C.–A.D. 500/900)	Saugeen, Snyders, Vanport, Port Maitland points. **Point Peninsula Complex** (Southcentral and Eastern Ontario) **Saugeen Complex** (southeast of Lake Huron and the Bruce Peninsula, London area, and possibly as far east as the Grand River) **Couture Complex** (Lake St. Clair and the western end of Lake Erie). Burial ceremonialism.
Transitional Woodland (A.D. 500–900)	Agriculture introduced. Levanna, Jacks Reef points. **Princess Point Complex** (Eastern end of Lake Erie and the western end of Lake Ontario). **Sandbanks Complex** (Kingston area).
Late Woodland (A.D. 900–1650)	Tribal differentiation. Transition to settled village life. Dewaele, Glen Meyer Tanged, Triangular Nanticoke, Notched Nanticoke, Triangular Daniels/Madison points. **Ontario Iroquoian and St. Lawrence Iroquoian Traditions** (Southcentral and Eastern Ontario, respectively). **Algonkian Western Basin Tradition** (Lake St. Clair and the western end of Lake Erie).
Early Post-Contact (A.D. 1650–1763)	Iroquoian, Algonkian migrations and resettlement. French exploration and colonization
Late Post-Contact (A.D. 1763–1867)	Iroquoian, Algonkian migrations and resettlement. British and other European immigration increases.

When European explorers and missionaries arrived in southern Ontario in the early seventeenth century, they described the local Iroquoian social organization as being under the direction of elected chiefs. Tribal confederacies and allegiances resulted in intertribal warfare, which was only made worse by the European presence. Three Ontario Iroquoian confederacies, the Huron, Petun, and Neutral, were driven from their traditional territories before the middle of the seventeenth century.

Archaeologists tend to describe a period of transition from Late Woodland to Historic times as "proto-historic". The dating of this period is variable and may be different from site to site within a region as it describes a time when local First Nations were acquiring European trade goods indirectly through other Aboriginal middlemen rather than directly from European traders. This period was generally very short and is often difficult to differentiate archaeologically from later historic times, when trade goods were widely available, but it usually is identified by evidence of an intact traditional cultural adaptation with occasional European items used in traditional ways.

Archaeologically, the years since the arrival of Europeans are referred to as the Historic Period. In southern Ontario, significant Historic sites are those that have an affiliation with an important historic event, figure, or family, but can also be anything dating to the original European settlement of a region. Often, these sites date to before AD 1830.

2.2.2 Review of Historical Records

The study area is located within the Township of Yarmouth, County of Elgin. Originally, Elgin County was part of Middlesex County. In 1852, Elgin was separated from Middlesex County, and the area was named after Governor-General James Bruce, the Eighth Earl of Elgin (Mika & Mika 1977). Early settlement in Elgin County was largely influenced by Colonel Thomas Talbot. Talbot was born in Dublin, Ireland in 1771, and was provided a Colonel's commission and made an Aide-de-camp of Lieutenant Governor John Graves Simcoe in 1791 (Page 1877). He became enamoured with the area, and settled in Dunwich Township in 1803, while encouraging others to do the same. In 1852, Elgin County had a population of 25,818 (Carter 1984a).

Yarmouth was incorporated 1 January 1850 as a township attached to the County of Middlesex. The first meeting of the township council was held in the Mansion House in the Village of St. Thomas on 21 January 1850 (Carter 1984b). The Township of Yarmouth became one of the inaugural townships when the County of Elgin was incorporated in 1852. Yarmouth Township was named after a seaport in the County of Norfolk, England and as a compliment to Francis Seymour or Lord Conway, who in 1793 was made Earl of Yarmouth (Mika & Mika 1983). The original survey of Yarmouth encompassed approximately 71,000 acres, including all of what is now the City of St. Thomas. At various times, however, parts of its original territory were removed by municipal adjustments. Unincorporated villages in the Township of Yarmouth included: Sparta, Union, New Sarum, Mapleton, Dexter, Yarmouth Centre and Orwell. The Township offices were

located in St. Thomas. On January 1st, 1998, Yarmouth Township amalgamated with the former Village of Port Stanley and Village of Belmont to create the Municipality of Central Elgin (Elgin County Archives).

The study area is today located just south of the St Thomas city limits. But when St. Thomas was still a town, the study area was situated 1.3 km to the south (Appendix A: Figure 4). St. Thomas was originally known as Kettle Creek Village, but took its present name in honour of Colonel Thomas Talbot, who colonized much of the Elgin County, especially along the early pioneer thoroughfare dubbed Talbot Road (Mika & Mika 1983). Early settlers of St. Thomas included veterans of the War of 1812, such as Captain R. D. Drake and Captain Daniel Rapelje, who was a Captain of the 1st Middlesex Militia. When the War of 1812 ended, Rapelje built a grist mill on his property (Sims 1988). He also laid out lots on his property and sold them to settlers. And he donated land to build the St. Thomas Anglican Church, which was completed in 1824.

St. Thomas was incorporated as a village in 1853 and at that time had a population of 1,300 (Carter 1984b). The London and Port Stanley Railway, running through St. Thomas, was completed between 1854 and 1856 (Sims 1988). Growth in the village was slow until the 1870's when the Canada Southern and Great Western Railways built lines through St. Thomas (Hall 1972).

During pre-contact and early contact times, the vicinity of the study area would have comprised a mixture of deciduous trees, coniferous trees and open areas. In the early nineteenth century, Euro-Canadian settlers arrived and began to clear the forests for agricultural purposes. In the nineteenth and early twentieth centuries the study area and surrounding land were primarily used for agricultural purposes.

Historical records and mapping were examined for evidence of early Euro-Canadian use of the study area. The 1864 *Tremaine's Map of the County of Elgin* was examined first. At that time, both Lot 3 and the portion of Lot 2 within the current study area were under the ownership of Andrew Hepburn (Appendix A: Figure 4). Historical features are not illustrated within the study area; however, the London and Port Stanley Railway is shown running directly to the east of the property. A roadway, Southdale Line, is located immediately to the north.

The 1877 *Illustrated Historical Atlas of Elgin County* (Page 1877; Appendix A: Figure 5) was examined next. In 1877, Lot 2 was owned by J. Oliver and Lot 3 was owned by N. & H. Kettle. An orchard is illustrated within the study area on Lot 2, with a farmstead and orchard 200 metres to the west. Two historic farmsteads are shown on Lot 3; both are approximately 500 metres to the south of the current study area. A schoolhouse is shown on Lot 4, 250 meters to the southeast of the study area. Southdale Line is located directly north of the subject property and Sunset Drive; another historic road is situated 150 metres

to the east. The London and Port Stanley Railroad is depicted directly east of the study area, with a station on Talbot St. in St. Thomas.

Historical census records were reviewed to obtain additional information (Library and Archives Canada 2017). Andrew Hepburn, the landowner shown on Figure 4, was recorded in the 1861 and 1871 Canada census records. In 1871 he was listed as a 60-year-old farmer married to 45-year-old Catharine. Records indicate they were both born in Scotland and were Presbyterian. The 1861 census records associated with Andrew Hepburn note that there was a 1-storey log house on the lot. Nelson Kettle, the landowner shown on Lot 3 in Figure 5, appears only in the 1881 census. He is listed as a farmer of English descent, aged 32, and married to Tryphena, age 35. They had one child, Edith, aged 8. K. Kettle and J. Oliver, who were both listed as owners on Figure 5, do not appear in any census documents.

In summary, a review of the historical context supports a conclusion of overall archaeological potential and the need for Stage 2 assessment since the study area is located adjacent to historical roadways as illustrated in the 1864 and 1877 historical maps. Moreover, the presence of a 1-storey log house is listed in the 1861 census and numerous farmsteads and a schoolhouse are depicted in the vicinity of the study area (Appendix A: Figure 5). As per the MTCS's *Standards and Guidelines for Consultant Archaeologists*, any areas within 100 m of early historic transportation routes and 300 m of early Euro-Canadian settlement warrant the need for Stage 2 property assessment.

2.3 Stage 1 Property Inspection

2.3.1 Methodology

The Stage 1 property inspection was conducted by Kristy O'Neal (P066) of Amec Foster Wheeler on 26 May, 29 May and 2 June 2017 to confirm archaeological site potential and to determine the degree to which recent development and landscape alteration have affected that potential. The weather those days were overcast to sunny and did not impede the inspection in any way. Table 3 provides the weather conditions for each day of inspection.

The Stage 1 property inspection included a walk-through of the entire property, which measures approximately 29.4 hectares (72.65 acres). The property inspection was thoroughly photo-documented. Field observations were recorded on aerial maps and field forms. Areas identified as disturbed, including buildings / buildings with basements/ and driveways have had the integrity of the topsoil compromised by earth moving activities to the point where archaeological potential has been removed. Steeply sloping and permanently wet areas are presumed to have low archaeological potential. Landscaped sections/undeveloped sections of the study area were assumed to have retained archaeological potential. All land conditions were recorded as shown in Appendix A: Figure 6 and Appendix B: Photographs 1-14.

2.3.2 Results

The 29.4-hectare study area consists largely of an agricultural field. There is a small wooded area transected by a ravine in the northwest corner, a small treeline separating agricultural fields in the northwest portion of the study area, and a residential lot with a house, shed, barn and gravel driveway. A ravine containing a tributary of Kettle Creek cuts across the western edge of the property, another ravine along the north edge, and one more ravine along the southern edge.

15 percent of the study area (4.6 hectares) is made up of steeply sloping ravines that were not assessed due to low archaeological potential. Steeply sloping areas include a ravine along the southern edge of the property, a ravine that transects the west-central portion and a ravine in the northwest corner of the subject property (Appendix B: Photographs 7 to 9, 15)].

1.5 percent (0.2 hectares) of the property was not assessed due to previous disturbance. Within the residential lot there is an existing house, shed and barn as well as a U-shaped gravel driveways with a gravel parking areas adjacent to the house and barn (Appendix B: Photographs 10 & 11)].

The remainder of the study area has archaeological potential and warrants Stage 2 assessment (Appendix A: Figure 6). Areas with archaeological potential include 23.6 hectares of actively cultivated agricultural field (Appendix B: Photographs 1 to 5), and 1.0 hectares of unploughable land, including an urban lawn, woodlot areas, and a treeline separating agricultural fields (Appendix B: Photographs 10, 11, 13, 14). An area with a house, outbuildings and a driveway, and two wooded areas of the property could not be ploughed because of damage to existing landscaping and infrastructure or because they could not be accessed by plough, meeting the requirements of Section 2.1.2 Standard 1e, that ploughing or cultivation is not viable.

2.4 Stage 1 Analysis and Conclusions

The Stage 1 background study indicated that undisturbed portions of the subject property have archaeological potential and warrant Stage 2 property assessment due to the presence of: 1) a natural water source within the study area; 2) 14 previously registered archaeological sites within a one-kilometre radius; 3) historical transportation routes within 100 metres; and 4) an original one-storey log house and other documented historic Euro-Canadian buildings within or near the study area.

On the basis of the Stage 1 property inspection and a review of recent land use history, Amec Foster Wheeler has identified that: 1) 15% (4.6 hectares) of the study area does not require Stage 2 assessment as it has low potential due to steeply sloping topography; 2) 1.5% (0.2 hectares) does not require Stage 2 assessment as archaeological potential has been removed during the recent construction of a house, shed, barn and gravel driveway;

and 3) the balance of the property (83.5%/25.39 hectares) has archaeological potential and warrants Stage 2 assessment (Appendix A: Figure 6). Areas of archaeological potential include 24.39 hectares of ploughed agricultural field and 1.0 hectare of unploughable land, including landscaped land in an urban setting residential lot and woodlot areas. Because there is a house, outbuildings and a driveway on the residential lot, the property could not be ploughed because of damage to existing landscaping and infrastructure and the wooded areas could not be accessed by plough, meeting the requirements of Section 2.1.2 Standard 1e, that ploughing or cultivation is not viable.

3.0 STAGE 2 PROPERTY ASSESSMENT

3.1 Field Methodology

The Stage 2 property assessment of the 29.4-hectare study area was carried out primarily by means of pedestrian survey, supplement by shovel test pit survey. The assessment was conducted on 26 May 2017, 29 May 2017 and 2 June 2017 with advance permission-to-enter obtained from Doug Tarry Limited. The Stage 2 assessment was conducted under the field direction of Kristy O'Neal (P066), with the assistance of Amanda Black (R375). The weather did not impede the assessment in any way. The following table presents the weather conditions for each day archaeologists were out in the field for both the Stage 1 property inspection and Stage 2 property assessment.

Table 3: Weather Conditions for Each Field Day

26 May 2017	overcast, warm, 17°C
29 May 2017	sunny, warm, 22°C
2 June 2017	sunny, warm, 26°C

83.5 percent of the study area had archaeological potential and was recommended for Stage 2 property assessment. 80 percent of the study area (24.39 hectares) is an actively cultivated agricultural field, currently planted with a corn crop. Therefore, it was subjected to Stage 2 property assessment by means of pedestrian survey, as per Section 2.1.1 Standard 1 of the *Standards and Guidelines for Consultant Archaeologists* (2011). This technique involves walking across the entire field in parallel rows at five-metre intervals, surveying the ground surface for artifacts. The agricultural land was prepared for the pedestrian survey by ploughing and disk harrowing to the depth of previous ploughing. The fields were allowed to weather through one heavy rainfall and one light rain to improve surface visibility. Visibility conditions were excellent, with little to no field debris, and at least 90% of the ploughed ground surface was visible.

As per Section 2.1.3 Standard 1 and 2a of the *Standards and Guidelines for Consultant Archaeologists,* any artifacts recovered triggered an intensified survey. When archaeological resources were found, the survey transects were decreased to 1-m intervals for a minimum 20-m radius around the find to determine if it was an isolated find, or until the full extent of the scatter had been delineated. All diagnostic artifacts were collected and bagged according to provenience. The locations of surface finds were recorded by means of Global Positioning System ("GPS") waypoints. GPS coordinates for each artifact and for fixed reference landmarks were recorded using a GarminTM GPSMAP 62s GPS set to the North American Datum 83 ("NAD 83") with an accuracy of plus or minus three metres. GPS information is provided in the supplementary document accompanying this report.

3.5 percent of the property (1 hectare) has archaeological potential but could not be accessed by plough. Three parcels of land were assessed by means of hand shovel test pitting at five-metre grid intervals. One of these was a long-established residential house lot along Southdale Line. Because there is a house, outbuildings and a driveway on the lot, the property could not be ploughed because of damage to existing landscaping and infrastructure, meeting the requirements of Section 2.1.2 Standard 1e, that ploughing or cultivation is not viable. The remaining areas subjected to test pit survey are woodlot or former woodlot. In the wooded areas many of the trees have been chopped down and trunks and branches are present on lying over the ground surface, but stumps are still present in the ground. These formerly treed areas are inaccessible by plough.

As per Amec Foster Wheeler's safety standards, test-pits were not advanced within one metre of any buried utility services; however, the Amec Foster Wheeler's crew was able to conform to a five-metre interval grid within all areas of archaeological potential. All test pits were a minimum of 30 cm in diameter and dug to a minimum of five centimetres into the subsoil. Soil fills were screened through six-millimetre ("mm") mesh screens in order to facilitate artifact recovery. Test pitting was conducted to within one metre of all existing buildings and the driveway. Test pit profiles were examined for cultural deposits prior to being backfilled. Test pitting was conducted to within one metre of the disturbed areas and all structures. All test pits were completely backfilled.

The Amec Foster Wheeler field crew photo-documented the assessment (Appendix A: Figure 6; and Appendix B: Photographs 1 to 14).

3.2 Documentary Record

The following table provides the inventory of documentary records accumulated as part of this assessment:

Table 4: Inventory of Documentary Record			
Study Area	**Map and Photo(s)**	**Number of Standard Banker Boxes**	**Field Notes**
42537 Southdale Line Part Lots 2 & 3, Concession 6 Municipality of Central Elgin, Elgin County	Copies of 2 historical maps, 90 Stage 1 & 2 photographs	1 Standard Banker Box containing 1 artifact from A/Location 1, 9 artifacts from Location 2, 3 artifacts from Location 3, and 1 artifact from Location 4	Stage 1 & 2 photo logs and field notes

All artifacts and documentation related to the archaeological assessment of this project will be curated by Amec Foster Wheeler until such time that arrangements for their ultimate transfer to Her Majesty the Queen in right of Ontario, or other public institution, can be made to the satisfaction of the project owner, the MTCS and any other legitimate interest groups.

Amec Foster Wheeler identified artifacts in four separate locations, referred to in the field as Locations 1 to 4. These include two Euro-Canadian domestic debris scatters and two Aboriginal findspots. As one of the two Aboriginal findspots (Location 1) consisted of a diagnostic artifact, it was registered as an archaeological site (AeHh-151).

A summary of all Stage 2 finds is presented in Table 5. Please refer to Sections 3.2.1 to 3.2.4 of this report for further details.

Table 5: Summary of Finds During the Stage 2 Survey				
Location	**Site Type**	**Size**	**Artifacts**	**CHVI Determination**
1	Middle Archaic Site	n/a	1	No further CHVI
2	Euro-Canadian Scatter	15 x 11 m with 1 outlier 30 m to north	9	No further CHVI
3	Euro-Canadian Scatter	3 x 8 m	3	No further CHVI
4	Aboriginal Findspot	n/a	1	No further CHVI

Newly Discovered Archaeological Site – Location 1, AeHh-151

This newly recorded archaeological site refers to an isolated findspot recovered from a ploughed field. One Middle Archaic projectile point was found at Location 1, which was later registered in the Ontario Archaeological Sites Database as Site AeHh-151. The site is located within the eastern portion of the agricultural field in an area of level topography. Site AeHh-151 was identified through the completion of a pedestrian survey at 5-m intervals. A 20-m radius around this find was carefully inspected at 1-m intervals and no additional artifacts were encountered.

Site AeHh-151 consists of a Brewerton corner-notched type point of Onondaga chert (Appendix B: Photograph 15). Such points are typical of the Middle Archaic period, circa 5,000 and to 4,500 years before present (Table 2; Kenyon 1987: 3). The specimen from Site AuHh-151 measures 56 millimetres in length and five millimetres in thickness. The shoulder width is 33 millimetres, the width at the notches is 15 millimetres, and the base width is 19 millimetres. There is no evidence of thermal alteration.

Figure 1 identifies the location Site AeHh-151 (see Supplementary Documentation). In addition, Section 2 of the Supplementary Documentation provides GPS readings for the artifact location. The elevation of Site AeHh-151 is 227 metres above sea level.

Location 2

Location 2 refers to a Euro-Canadian domestic artifact scatter observed within the eastern portion of the agricultural field in an area of gently sloping topography. Location 2 was identified as a result of pedestrian survey at 5-m intervals. Upon the discovery of the first artifact, the survey transect was decreased to 1 m intervals until the full extent of the scatter had been identified. The scatter was observed to be approximately 15 metres by 11 metres, with an outlier 30 metres to the north of the main scatter. All artifacts encountered during pedestrian survey were collected and bagged according to provenience.

Nine artifacts were found, including a fragment of porcelain, a fragment of brown transfer printed white earthenware, four shards of window glass, and three shards of bottle glass (Appendix B: Photograph 15). The bottle glass includes one aqua fragment, one olive fragment and one clear fragment.

Figure 1 identifies where Location 2 was found (see Supplementary Documentation). In addition, Section 2 of the Supplementary Documentation provides GPS readings for the artifact locations. The elevation of Location 2 is 229 metres above mean sea level.

Location 3

Location 3 refers to a Euro-Canadian domestic artifact scatter observed within the northern portion of the agricultural field in an area of level topography. Location 3 was identified through the completion of a pedestrian survey at 5-m intervals. Upon the discovery of the first artifact, the survey transect was decreased to 1-m intervals until the full extent of the scatter had been identified. The scatter was observed to be approximately 3 metres by 8 metres. All cultural artifacts encountered during pedestrian survey were collected and bagged according to provenience.

Three artifacts were found at Location 3, including an ironstone plate fragment, a purple bottle glass fragment and an aqua bottle glass fragment (Appendix B: Photograph 15).

Figure 1 identifies where Location 3 was found (see Supplementary Documentation). In addition, Section 2 of the Supplementary Documentation provides GPS readings for the artifact locations. The elevation of Location 3 is 230 metres above mean sea level.

Location 4

Location 4 refers to an isolated undiagnostic biface tip of Onondaga chert (Appendix B: Photograph 15) found within the northern portion of the agricultural field in an area of level topography. This undiagnostic findspot was identified through the completion of a pedestrian survey at 5-m intervals. A 20-m radius around this find was carefully inspected at 1-m intervals and no additional artifacts were encountered.

This specimen measures 22 millimetres in length, 23 millimetres in width and 4 millimetres in thickness. It was not thermally altered.

Figure 1 identifies where Location 4 was found (see Supplementary Documentation). In addition, Section 2 of the Supplementary Documentation provides GPS readings for the artifact location. The elevation of Location 4 is 230 metres above mean sea level.

3.3 Analysis and Conclusions

One archaeological site and three findspots were identified during the Stage 2 property assessment. An evaluation of the cultural heritage value or interest of each is presented below.

Newly Discovered Archaeological Site – Location 1, AeHh-151

Location 1 represents an isolated Aboriginal findspot where one projectile point was recovered. The projectile point is a Brewerton corner-notched type point dating to the Middle Archaic period, 5000 to 4500 years before present (Table 2; Kenyon 1987).

Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* identifies criteria for requiring Stage 3 assessment at sites found during Stage 2 property assessment. In this case, Location 1 represents an Aboriginal site found during pedestrian survey; therefore, Standard 1a..i and Standard 1b are applicable to this type of site.

Standard 1a.i states that that artifacts, groups of artifacts, or archaeological sites that are found within a 10 metre by 10 metre pedestrian survey area must be subjected to Stage 3 site-specific assessment if the following have been recorded: 1) at least one diagnostic artifact or fire-cracked rock in addition to two or more non-diagnostic artifacts; or 2) in areas east or north of the Niagara Escarpment, at least five non-diagnostic artifacts; or 3) in areas on or west of the Niagara Escarpment, at least 10 non-diagnostic artifacts. Standard 1b details single examples of special interest. A recommendation for Stage 3 assessment is required if any of the following are found: 1) Aboriginal ceramics; 2) exotic or period specific cherts; or 3) Paleoindian or Early Archaic diagnostic artifacts.

As only a single projectile point was found, and it is manufactured on Onondaga chert, a locally common chert, Location 1/Site AeHh-151 does not meet any of the above criteria for requiring a Stage 3 assessment at pre-contact sites. Location 1/Site AeHh-151 is deemed to have little cultural heritage value or interest and is considered to have been

sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended.

Location 2

Location 2 represents a 15 metre by 11 metre Euro-Canadian domestic artifact scatter that has one outlying artifact located 30 metres to the north. Nine artifacts were found at Location 2: three bottle glass fragments, two ceramic fragments, and four window pane glass fragments.

Bottle glass fragments include clear, aqua, and olive colours. None of these colours of glass are temporally sensitive (Canada Parks Service 1989).

The ceramic artifacts include one fragment of brown transfer printed white earthenware and one fragment of a porcelain teacup. Porcelain was an expensive ware and is rare on sites pre-dating 1900 (Kenyon 1986). Refined white earthenware is commonly found on sites from 1820s onward, especially between 1830 and 1870 (Kenyon 1985)

Kenyon (1980) has observed that through time there is a trend toward thicker window glass and that window pane glass thicker than 1.6 millimetres generally indicates a post-1850 date. All the window pane glass recovered from Location 2 is greater than 1.6 millimetres thick.

Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* identifies criteria for requiring Stage 3 assessment for finds encountered during Stage 2 property assessments. Twentieth century archaeological sites where background documentation or archaeological features indicate possible cultural heritage value or interest also warrant further Stage 3 assessment [Section 2.2, Standard 1d]. Specifically, at least 20 artifacts that date the period of use to before 1900 are required on a site [Section 2.2, Standard 1c]. In this case, Location 2 represents a post-contact component dating from the mid-nineteenth century to the twentieth century. According to the *Standards and Guidelines for Consultant Archaeologists*, Location 2 does not meet the criteria for requiring a Stage 3 assessment at post-contact sites.

Only nine artifacts were recovered from Location 2, and only the white earthenware can be reasonably dated to before 1900. The remainder of the artifacts are not temporally sensitive, or in the case of the porcelain fragment, date to the twentieth century. Furthermore, background documentation and archaeological features do not indicate cultural heritage value for Location 2.

Therefore, Location 2 does not meet the criteria for requiring a Stage 3 assessment at post-contact sites. Location 2 is deemed to have little cultural heritage value or interest and is considered to have been sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 2.

Location 3

Location 3 represents a 3 metre by 8 metre Euro-Canadian domestic artifact scatter where three artifacts were found: two bottle glass fragments and a fragment of ironstone plate. One fragment of bottle glass is aqua and the other is purple.

Ironstone was most commonly produced in the late 1800's and is typical of an archaeological assemblage dating to between 1875 and 1900 (Kenyon 1986). Purple bottle glass was produced between 1885 and 1920 and aqua bottle glass was commonly produced between 1800 and 1920 (Horn 2005).

Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* identifies criteria for requiring Stage 3 assessment at sites found during Stage 2 property assessment. Twentieth century archaeological sites where background documentation or archaeological features indicate possible cultural heritage value or interest at this site also warrant further Stage 3 assessment [Section 2.2, Standard 1d]. Specifically, at least 20 artifacts that date the period of use to before 1900 are required on a site [Section 2.2, Standard 1c]. In this case, Location 3 represents a post-contact component dating from the late-nineteenth century to the early twentieth century. According to the *Standards and Guidelines for Consultant Archaeologists*, Location 3 does not meet the criteria for requiring a Stage 3 assessment at post-contact sites.

Only three artifacts were recovered from Location 3, and only the ironstone fragment can be securely dated to before 1900. Background documentation and archaeological features do not indicate cultural heritage value for this site.

Therefore, Location 3 does not meet the criteria for requiring Stage 3 assessment at post-contact sites. Location 3 is deemed to have little cultural heritage value or interest and is considered to have been sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 3.

Location 4

Location 4 represents an isolated Aboriginal findspot where one biface tip fragment was recovered. The biface is not temporally or culturally diagnostic. The artifact recovered from Location 4 represents a common Aboriginal findspot.

Section 2.2 of the *Standards and Guidelines for Consultant Archaeologists* identifies criteria for requiring Stage 3 assessment at sites found during Stage 2 property assessment. In this case, Location 4 represents an Aboriginal component found during pedestrian survey; therefore, Standard 1a.i and Standard 1b are applicable to this type of site.

Standard 1a.i states that that artifacts, groups of artifacts, or archaeological sites that are found within a 10 metre by 10 metre pedestrian survey area must be subject to a Stage 3

site-specific assessment if the following are found: 1) at least one diagnostic artifact or fire-cracked rock in addition to two or more non-diagnostic artifacts; or 2) in areas east or north of the Niagara Escarpment, at least five non-diagnostic artifacts; or 3) in areas on or west of the Niagara Escarpment, at least 10 non-diagnostic artifacts. Standard 1b details single examples of special interest. A recommendation for Stage 3 assessment is required if any of the following are found: 1) Aboriginal ceramics; 2i) exotic or period specific cherts; or 3) isolated Paleoindian or Early Archaic artifacts.

As only a single biface tip was found, and it is manufactured on local Onondaga chert, Location 4 does not meet any of the above criteria for requiring a Stage 3 assessment at pre-contact sites. Location 4 is deemed to have little cultural heritage value or interest and is considered to have been sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 4.

The remainder of the study area was devoid of cultural remains and no additional archaeological sites or other archaeological resources were encountered.

4.0 RECOMMENDATIONS

In light of the results presented above, the following recommendations are made, subject to the conditions outlined below and in Section 5.0:

1) The Middle Archaic Aboriginal site identified as Location 1, AeHh-151, does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Site AeHh-151 is constituted by an isolated diagnostic artifact that is considered to have been sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Site AeHh-151.

2) The Euro-Canadian artifact scatter identified as Location 2 does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 2 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 2.

3) The Euro-Canadian artifact scatter identified as Location 3 does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 3 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 3.

4) The Aboriginal findspot identified as Location 4 does not meet the criteria for requiring Stage 3 assessment as listed in Section 2.2. Standard 1 of the Ontario Ministry of Tourism, Culture and Sport's *2011 Standards and Guidelines for Consultant Archaeologists*. Location 4 is an isolated non-diagnostic artifact that is deemed to have little cultural heritage value or interest. It is considered sufficiently assessed at Stage 2 and no additional fieldwork or assessment is recommended.

5) The balance of the study area likewise does not require further archaeological assessment.

The above recommendations are subject to Ministry of Tourism, Culture and Sport approval, and it is an offence to alter any of the Study Area without Ministry of Tourism, Culture, and Sport concurrence.

No grading or other activities that may result in the destruction or disturbance of the Study Area is permitted until notice of Ministry of Tourism, Culture, and Sport approval has been received.

5.0 ADVICE WITH COMPLIANCE WITH LEGISLATION

a) This report is submitted to the Minister of Tourism, Culture and Sport as a condition of licensing in accordance with Part IV of the *Ontario Heritage Act, R.S.O. 1990, c 0.18.* The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological 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 Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

b) 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 a time as a licensed archaeologist has completed 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 Archaeological Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

c) 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 Section 48 (1) of the *Ontario Heritage Act*.

d) The *Funeral, Burial and Cremation Services Act,* 2002, S.O. 2002, c.33 requires that any person discovering human remains must notify the police or corner and the Registrar of Cemeteries at the Ministry of Consumer Services.

6.0 ASSESSOR QUALIFICATIONS

This report was prepared and reviewed by the undersigned, employees of Amec Foster Wheeler. Amec Foster Wheeler is one of North America's leading engineering firms, with more than 50 years of experience in the earth and environmental consulting industry. The qualifications of the assessors involved in the preparation of this report are provided in Appendix D.

7.0 CLOSURE

This report was prepared for the exclusive use of Doug Tarry Limited and is intended to provide a Stage 1 & 2 archaeological assessment of the Study Area. The property is located at 42357 Southdale Line, St. Thomas, Ontario. The property is legally described as Part of Lots 2 and 3, Concession 6, Former Geographic Township of Yarmouth, Municipality of Central Elgin, Elgin County, Ontario.

Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of the third party. Should additional parties require reliance on this report, written authorization from Amec Foster Wheeler will be required. With respect to third parties, Amec Foster Wheeler has no liability or responsibility for losses of any kind whatsoever, including direct or consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The report is based on data and information collected during the Stage 1 background study and Stage 2 property assessment conducted by Amec Foster Wheeler. It is based solely a review of historical information, a property reconnaissance conducted on 26 May, 29 May and 2 June, 2017 and data obtained by Amec Foster Wheeler as described in this report. Except as otherwise maybe specified, Amec Foster Wheeler disclaims any obligation to update this report for events taking place, or with respect to information that becomes available to Amec Foster Wheeler after the time during which Amec Foster Wheeler conducted the archaeological assessment. In evaluating the property, Amec Foster Wheeler has relied in good faith on information provided by other individuals noted in this report. Amec Foster Wheeler has assumed that the information provided is factual and accurate. In addition, the findings in this report are based, to a large degree, upon information provided by the current owner/occupant. Amec Foster Wheeler accepts no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Amec Foster Wheeler makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and change. Such interpretations and regulatory changes should be reviewed with legal counsel.

This report is also subject to the further Standard Limitations contained in Appendix E.

We trust that the information presented in this report meets your current requirements. Should you have any questions, or concerns, please do not hesitate to contact the undersigned.

Respectfully Submitted,

Amec Foster Wheeler Environment & Infrastructure
a division of Amec Foster Wheeler Americas Limited

Prepared by,

Kristy O'Neal, M.A. (P066)
Senior Archaeologist
SS

Reviewed by,

Shaun Austin, Ph.D. (P141)
Associate Archaeologist

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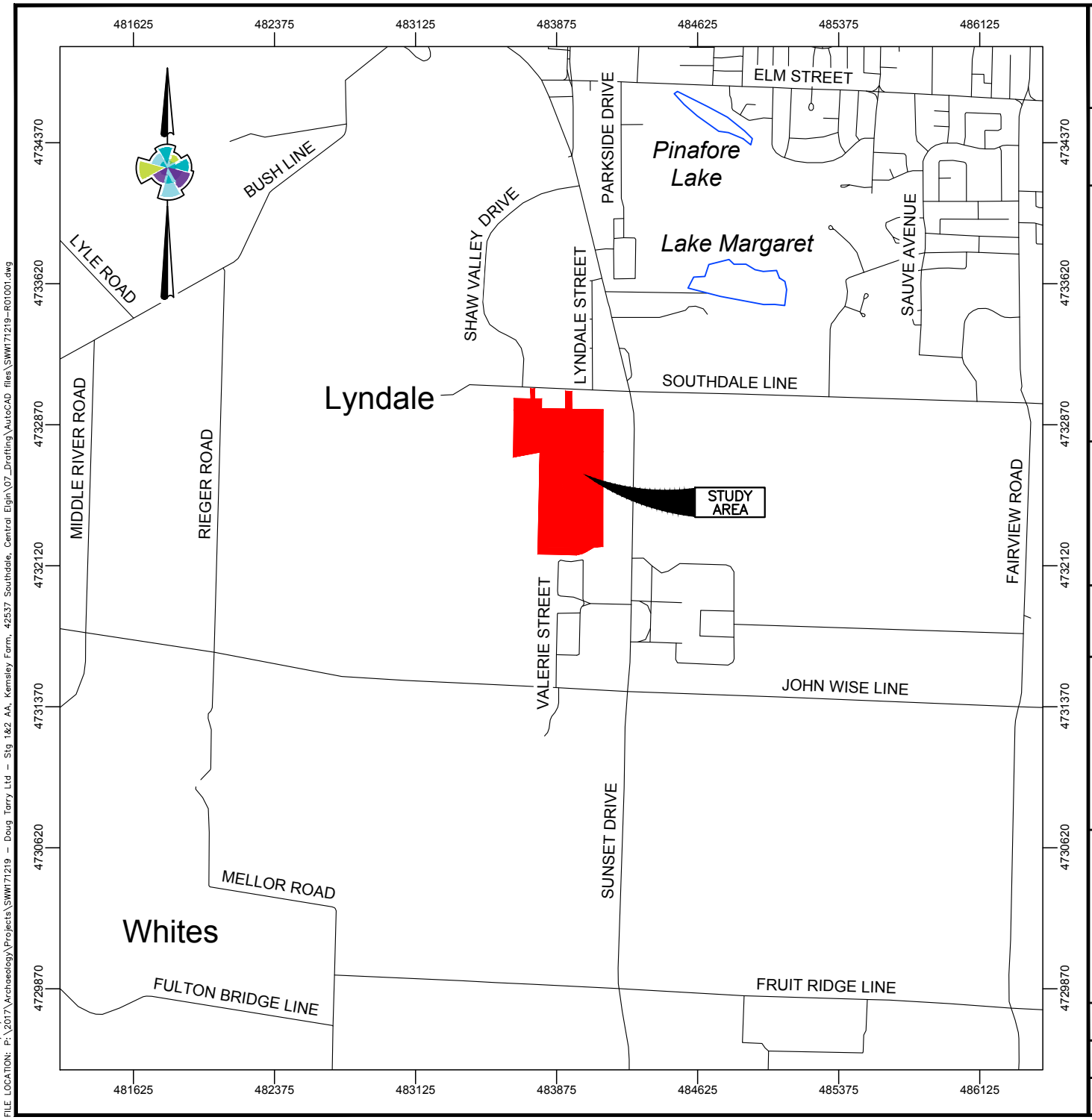
APPENDIX A

FIGURES



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PROJECT:
STAGE 1 & 2
ARCHAEOLOGICAL ASSESSMENT
KEMSLEY FARM SUBDIVISION
42537 SOUTHDALE LINE, PART LOTS 2 & 3, CONCESSION 6,
TOWNSHIP OF YARMOUTH, MUNICIPALITY OF CENTRAL ELGIN
ELGIN COUNTY, ONTARIO

TITLE:
LOCATION OF STUDY AREA

LEGEND:
STUDY AREA

NOTES:
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ALL LOCATIONS ARE APPROXIMATE.
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N8N 2M1
519-735-2499

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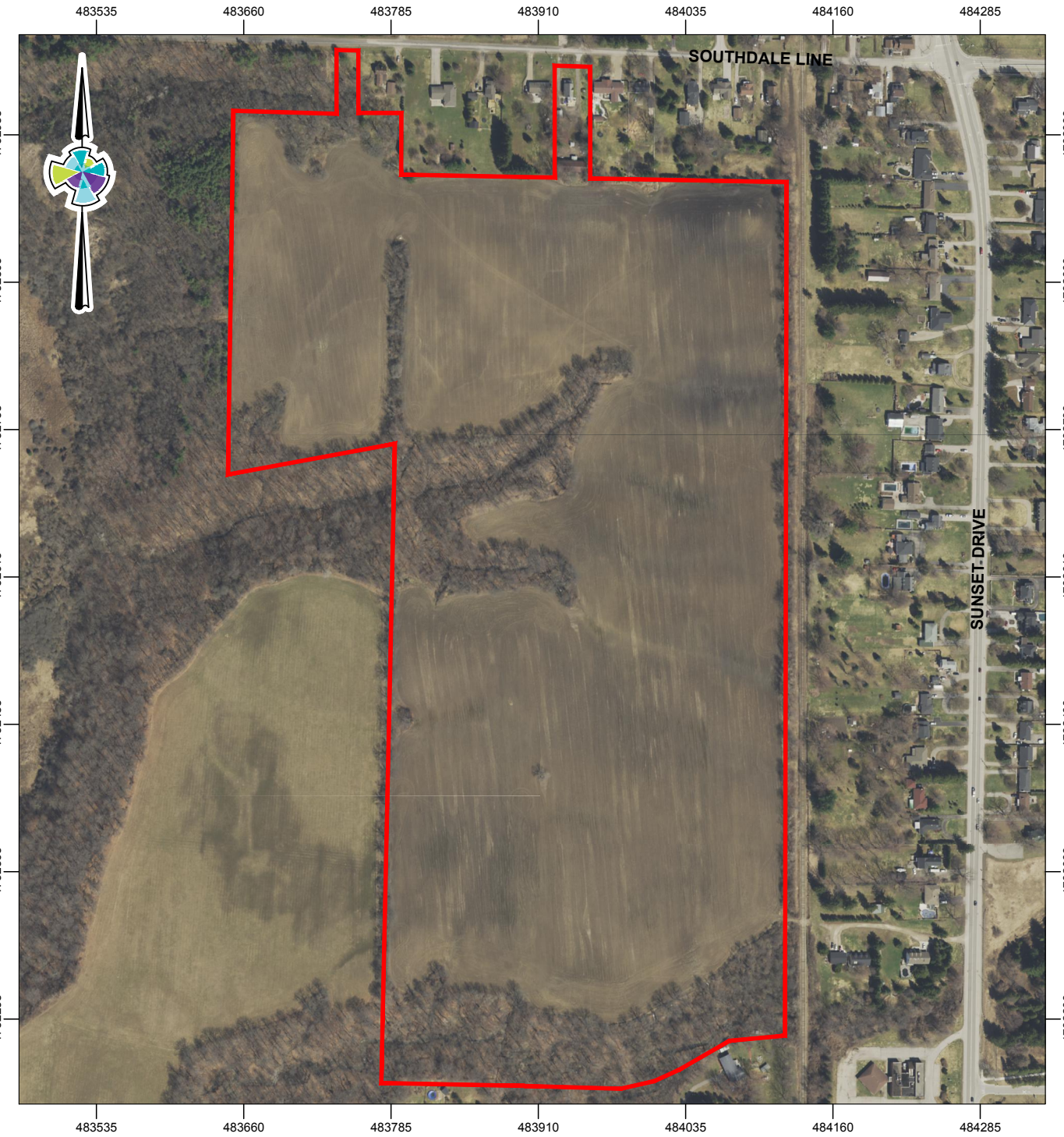

PROJECT:
STAGE 1 & 2
ARCHAEOLOGICAL ASSESSMENT
KEMSLEY FARM SUBDIVISION
42537 SOUTHDALE LINE, PART LOTS 2 & 3, CONCESSION 6,
TOWNSHIP OF YARMOUTH, MUNICIPALITY OF CENTRAL ELGIN
ELGIN COUNTY, ONTARIO

TITLE:
AERIAL PHOTOGRAPH SHOWING
LOCATION OF STUDY AREA

LEGEND:
STUDY AREA

NOTES:
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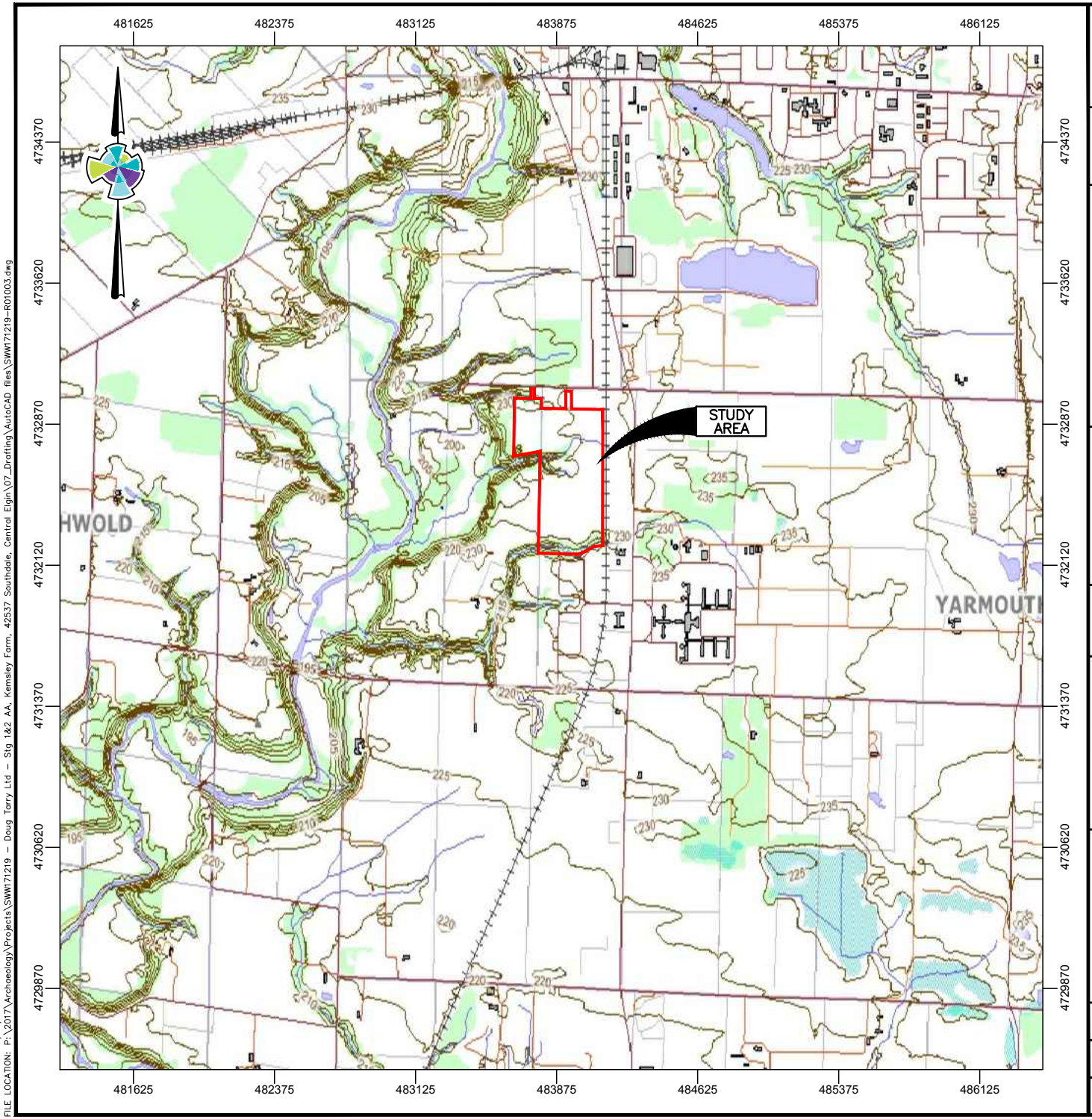

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STAGE 1 & 2
ARCHAEOLOGICAL ASSESSMENT
KEMSLEY FARM SUBDIVISION
42537 SOUTHDALE LINE, PART LOTS 2 & 3, CONCESSION 6,
TOWNSHIP OF YARMOUTH, MUNICIPALITY OF CENTRAL ELGIN
ELGIN COUNTY, ONTARIO

TITLE:
TOPOGRAPHIC MAP SHOWING
LOCATION OF STUDY AREA

LEGEND:
STUDY AREA

NOTES:
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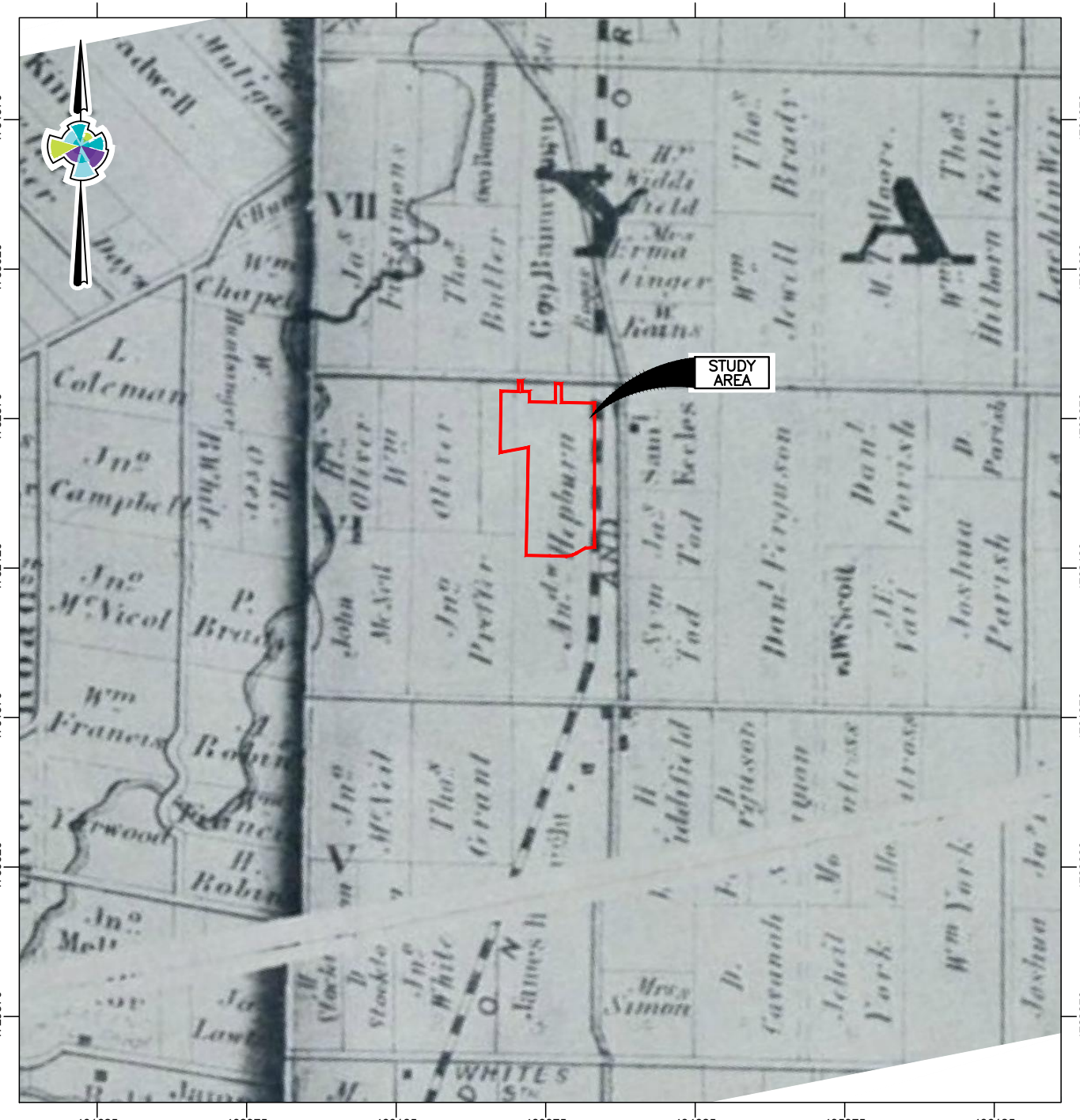

PROJECT:
STAGE 1 & 2
ARCHAEOLOGICAL ASSESSMENT
KEMSLEY FARM SUBDIVISION
42537 SOUTHDALE LINE, PART LOTS 2 & 3, CONCESSION 6,
TOWNSHIP OF YARMOUTH, MUNICIPALITY OF CENTRAL ELGIN
ELGIN COUNTY, ONTARIO

TITLE:
1864 TREMAINE'S MAP OF THE COUNTY OF ELGIN
SHOWING LOCATION OF STUDY AREA

LEGEND:
STUDY AREA

NOTES:
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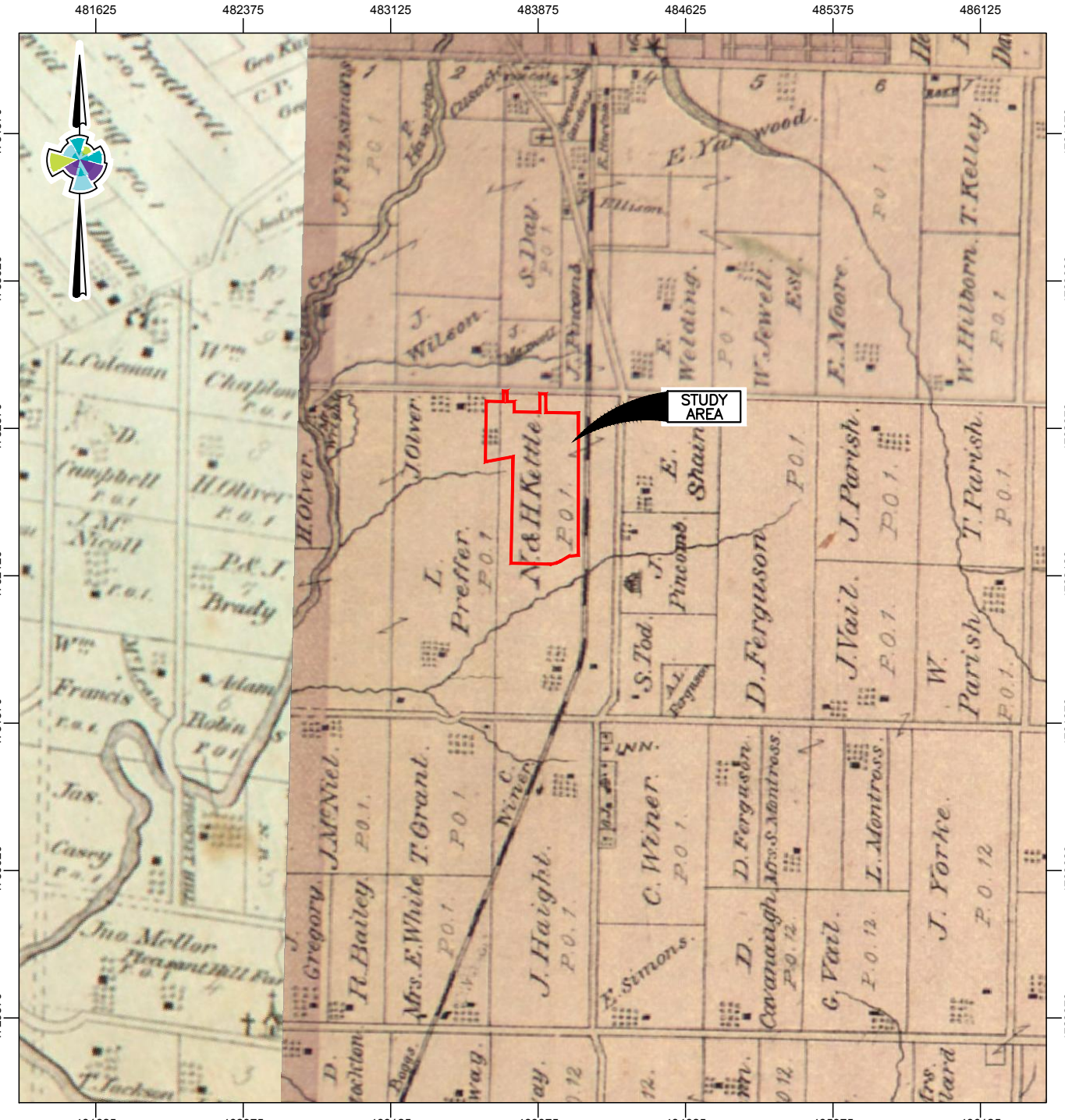

PROJECT:
STAGE 1 & 2
ARCHAEOLOGICAL ASSESSMENT
KEMSLEY FARM SUBDIVISION
42537 SOUTHDALE LINE, PART LOTS 2 & 3, CONCESSION 6,
TOWNSHIP OF YARMOUTH, MUNICIPALITY OF CENTRAL ELGIN
ELGIN COUNTY, ONTARIO

TITLE:
1877 HISTORICAL MAP OF
YARMOUTH TOWNSHIP, ELGIN COUNTY
SHOWING LOCATION OF STUDY AREA

LEGEND:
STUDY AREA

NOTES:
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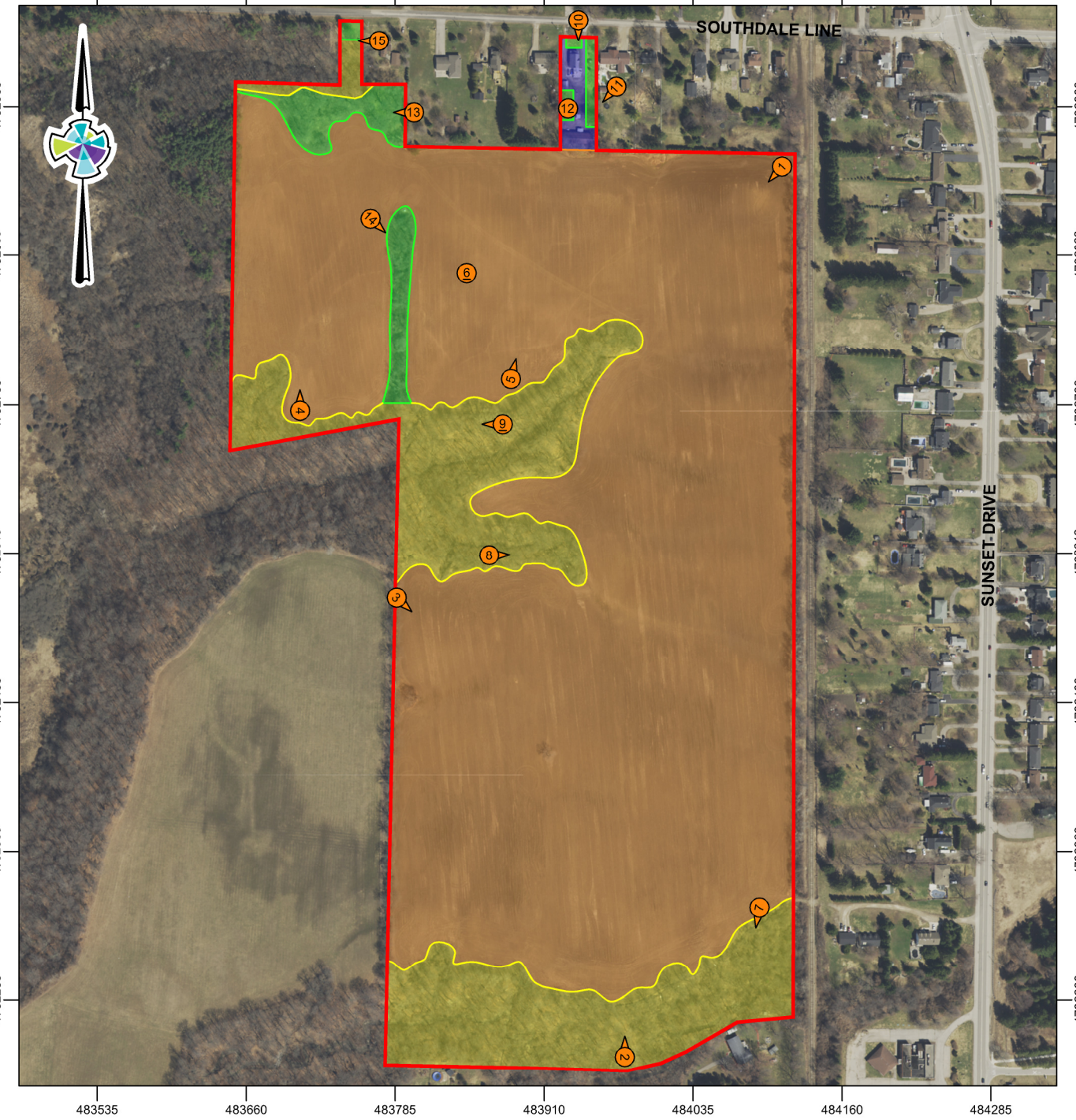

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STAGE 1 & 2
ARCHAEOLOGICAL ASSESSMENT
KEMSLEY FARM SUBDIVISION
42537 SOUTHDALE LINE, PART LOTS 2 & 3, CONCESSION 6,
TOWNSHIP OF YARMOUTH, MUNICIPALITY OF CENTRAL ELGIN
ELGIN COUNTY, ONTARIO

TITLE:
STAGE 1 RESULTS WITH PHOTOGRAPH LOCATIONS AND DIRECTIONS

LEGEND:
- STUDY AREA
- PHOTOGRAPH IDENTIFICATION, LOCATION, AND DIRECTION

AREA OF ARCHAEOLOGICAL POTENTIAL
- NON-PLOUGHABLE AREA TO BE TEST PITTED AT 5m INTERVALS
- PLOUGHABLE AREA TO BE PEDESTRIAN SURVEYED AT 5m INTERVALS

AREA OF NO ARCHAEOLOGICAL POTENTIAL
- DISTURBED
- STEEPLY SLOPING TOPOGRAPHY

NOTES:
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ALL LOCATIONS ARE APPROXIMATE.

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APPENDIX B

PHOTOGRAPHS

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	1

Description
View of ploughed agricultural field, facing southwest.

PHOTOGRAPH	2

Description
View of ploughed agricultural field, facing north.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	3

Description
View of ploughed agricultural field, facing southeast.

PHOTOGRAPH	4

Description
View of ploughed agricultural field, facing north.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	5

Description
Crew at work, pedestrian survey.

PHOTOGRAPH	6

Description
Ground surface visibility conditions for pedestrian survey.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	7

Description
Ravine at south end of property, facing south.

PHOTOGRAPH	8

Description
Ravine, facing east.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	9

Description
Ravine, facing west.

PHOTOGRAPH	10

Description
Crew at work, test pit survey in residential lot, facing south. Note gravel driveway, existing house and shed.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	11

Description
Driveway and barn, residential area, facing southwest.

PHOTOGRAPH	12

Description
Typical test pit.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	13

Description
Crew at work, test pit survey of wooded area, facing west.

PHOTOGRAPH	14

Description
Treerow between fields, subject to test pit survey, facing southeast.

APPENDIX B - PHOTOGRAPHIC RECORD

PROJECT NO. SWW171219

PROJECT Stage 1 & 2 Archaeological Assessement

LOCATION 42537 Southdale Line, Part Lots 2 & 3, Concession 6, Yarmouth Township
Municipality of Central Elgin, Elgin County, Ontario

PHOTOGRAPH	15

Description
Ravine and woodlot, northwest corner of study area, facing west.

Photograph 16: Select Artifacts Recovered During Stage 2 Assessment

Location 1, AeHh-151
CSC 1
Middle Archaic
projectile point
Onondaga chert
cat. no. 1000

Location 2
CSC 1
aqua bottle glass
fragment
cat. no. 1001

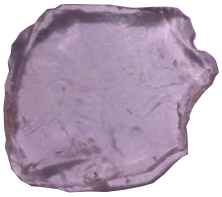
Location 2
CSC 2
porcelain teacup
fragment
cat. no. 1002

Location 2
CSC 4
glass window pane
fragment
cat. no. 1004

Location 2
CSC 6
brown transfer printed
white earthenware fragment
cat. no. 1006

Location 2
CSC 7
green bottle glass
fragment
cat. no. 1007

Location 3
CSC 1
ironstone
plate fragment
cat. no. 1008



Location 3
CSC 2
purple bottle glass
fragment
cat. no. 1009

Location 4
CSC 1
biface tip fragment
Onondaga chert
cat. no. 1011

APPENDIX C

ARTIFACT CATALOGUE

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ARTIFACT CATALOGUE

CAT.#	LOCATION	PROVENIENCE	DEPTH	DESCRIPTION	TYPE/FUNCTION	FREQ.	COMMENTS
1000	1	CSC 1	surface	projectile point	Brewerton, Middle Archaic	1	Onondaga chert, not thermally altered. Max length 56mm, thickness 5mm, shoulder width 33mm, neck width 15mm, base width 19mm
1001	2	CSC 1	surface	glass, bottle	Indeterminate	1	aqua fragment, not thermally altered
1002	2	CSC 2	surface	porcelain	teacup	1	undecorated, not thermally altered
1003a	2	CSC 3	surface	glass, bottle	Indeterminate	1	clear fragment, not thermally altered
1003b	2	CSC 3	surface	window pane glass	>1.6 mm thick	1	fragment, not thermally altered
1004	2	CSC 4	surface	window pane glass	>1.6 mm thick	1	fragment, not thermally altered
1005	2	CSC 5	surface	window pane glass	>1.6 mm thick	2	fragments, not thermally altered
1006	2	CSC 6	surface	white earthenware, transfer printed	Indeterminate	1	brown, not thermally altered
1007	2	CSC 7	surface	glass, bottle	Indeterminate	1	olive fragment, not thermally altered
1008	3	CSC 1	surface	ironstone	plate	1	undecorated, not thermally altered
1009	3	CSC 2	surface	glass, bottle	Indeterminate	1	purple fragment, not thermally altered
1010	3	CSC 3	surface	glass, bottle	Indeterminate	1	aqua fragment, not thermally altered
1011	4	CSC 1	surface	biface	tip fragment	1	Onondaga chert, not thermally altered. Max length 22mm (incomplete), width 23mm, thickness 4mm

APPENDIX D

ASSESSOR QUALIFICATIONS

ASSESSOR QUALIFICATIONS

Shaun Austin, Ph.D., Associate Archaeologist, Cultural Heritage Group Lead Dr. Austin is the Senior Advisor to Amec Foster Wheeler's Cultural Heritage Resources group in Ontario and is based in the Hamilton Office. He has been working in Canadian archaeology and heritage since 1976 and as an archaeological and heritage consultant in Ontario since 1987. He is a dedicated consultant with repeated success guiding projects through to completion to the satisfaction of the development proponent, First Nations communities and cultural heritage stakeholder groups. His areas of interest and expertise include pre-contact Aboriginal lithics and ceramics. Dr. Austin holds a **Professional Archaeology Licence** (**P141**) issued by the Ontario Ministry of Tourism, Culture and Sport, is **MTO RAQs certified in Archaeology/Heritage** and is a member of the Ontario Association of Professional Archaeologists.

Barbara Slim, M.A. Southwest Ontario Archaeology Group Lead Ms. Slim is a professionally licensed archaeologist with over 12 years of experience in the archaeology and environmental consulting industry. Ms. Slim has conducted all aspects of Stage 1 to 4 archaeological assessments for provincial agencies, municipalities, and land developers in support of infrastructure developments, financial real estate transactions, environmental remediation and private developments. As a founding member of the Amec Foster Wheeler Ontario archaeology team, Ms. Slim has performed every aspect of project execution, from client relations, project design to MTCS clearance. Through her project experience, Ms. Slim has gained an in-depth understanding of the Heritage Act and legislations & standards associated with cultural heritage management. Ms. Slim holds a Master's Degree in Anthropology from Trent University and an Honours Bachelor's Degree in Environmental Studies and Anthropology from Trent University. Ms. Slim currently holds a **Professional Archaeology Licence (P348)** issued by the Ministry of Tourism, Culture and Sport and is a member of the Ontario Association of Professional Archaeologists.

Kristy O'Neal, M.A., Senior Archaeologist Ms. O'Neal is a Senior Archaeologist at Amec Foster Wheeler with nearly 20 years of archaeology consulting experience in Ontario. Ms. O'Neal has supervised a wide variety of Stage 1 through 4 archaeological assessments throughout Ontario, with a focus on both pre-contact and Euro-Canadian settlements. Pre-Contact projects have involved First Nations consultation. Ms. O'Neal has a strong background in cultural material analysis and has extensive experience with large complex stratified Aboriginal sites situated within often compromised urban context. She holds a Master's Degree in Bioarchaeology and a Bachelor of Arts Degree in Anthropology from the University of Western Ontario, where she received a Gold Medal Award for graduating at the top of her class. Ms. O'Neal's areas of interest and

expertise include the archaeological prehistory and history of southwestern Ontario, with focus on the Middle Woodland period and changes Aboriginal weapon technology. Ms. O'Neal holds a **Professional Archaeology License** (**P066**) issued by the Ontario Ministry of Tourism, Culture and Sport, and is a member of the Ontario Archaeology Society.

Amanda Black, B.A. – Staff Archaeologist Ms. Black is a Project Archaeological with eight years of experience working in Cultural Resource Management. She has conducted all aspects of stage 1 to 4 archaeological assessments including construction monitoring. Ms. Black has experience with faunal analysis and is interested multi-component sites. Ms. Black holds an **Applied Research License (R375)** issued by the Ontario Ministry of Tourism, Culture and Sport and is a member of the Ontario Archaeological Society and is currently the President for the Windsor Chapter of the Ontario Archaeological Society.

APPENDIX E

LIMITATIONS

LIMITATIONS

1. The work performed in the preparation of this report and the conclusions presented are subject to the following:
   (a) The Standard Terms and Conditions which form a part of our Professional Services Contract;
   (b) The Scope of Services;
   (c) Time and Budgetary limitations as described in our Contract; and,
   (d) The Limitations stated herein.
2. No other warranties or representations, either expressed or implied, are made as to the professional services provided under the terms of our Contract, or the conclusions presented.
3. The conclusions presented in this report were based, in part, on visual observations of the Study Area. Our conclusions cannot and are not extended to include those portions of the Study Area which were not reasonably available, in Amec Foster Wheeler Environment & Infrastructure's opinion, for direct observation.
4. The potential for archaeological resources, and any actual archaeological resources encountered, at the Study Area were assessed, within the limitations set out above, having due regard for applicable heritage regulations as of the date of the inspection.
5. Services including a background study and fieldwork were performed. Amec Foster Wheeler Environment & Infrastructure's work, including archival studies and fieldwork, were completed in a professional manner and in accordance with the Ministry of Tourism, Culture and Sport's guidelines. It is possible that unforeseen and undiscovered archaeological resources may be present at the Study Area.
6. The utilization of Amec Foster Wheeler Environment & Infrastructure's services during the implementation of any further archaeological work recommended will allow Amec Foster Wheeler Environment & Infrastructure to observe compliance with the conclusions and recommendations contained in the report. Amec Foster Wheeler Environment & Infrastructure's involvement will also allow for changes to be made as necessary to suit field conditions as they are encountered.
7. This report is for the sole use of the parties to whom it is addressed unless expressly stated otherwise in the report or contract. Any use which any third party makes of the report, in whole or in part, or any reliance thereon, or decisions made based on any information of conclusions in the report, is the sole responsibility of such third party. Amec Foster Wheeler Environment & Infrastructure accepts no responsibility whatsoever for damages or loss of any nature or kind suffered by any such third party as a result of actions taken or not taken or decisions made in reliance on the report or anything set out therein.
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