

Stage 1 and 2 Archaeological Assessment: Proposed Ottawa Airport Pit

Part of Lots 23 and 24, Concession 3, Rideau Front, Geographic Township of Gloucester, former Carleton County, now City of Ottawa, Ontario

February 7, 2020

Prepared for:

Thomas Cavanagh Construction Ltd. 9094 Cavanagh Road Ashton, ON K0A 1B0

Prepared by:

Stantec Consulting Ltd. 400-1331 Clyde Avenue Ottawa, ON K2C 3G4

Licensee: Patrick Hoskins, MA License Number: P415 PIF Number: P415-0202-2019 Project Number: 160961321

ORIGINAL REPORT



Table of Contents

EXE	CUTIVE SUMMARY	
ACK	NOWLEDGEMENTS	IV
1.0	PROJECT CONTEXT	1.1
1.1	DEVELOPMENT CONTEXT	1.1
	1.1.1 Objectives	1.1
1.2	HISTORICAL CONTEXT	1.2
	1.2.1 Post-Contact Indigenous Resources	1.2
	1.2.2 Euro-Canadian Resources	1.4
1.3	ARCHAEOLOGICAL CONTEXT	
	1.3.1 The Natural Environment	
	1.3.2 Pre-Contact Indigenous Resources	
	1.3.3 Previously Identified Archaeological Sites and Surveys	
	1.3.4 Previous Archaeological Surveys	
1.4	ARCHAEOLOGICAL POTENTIAL	
1.5	EXISTING CONDITIONS	1.14
2.0	FIELD METHODS	2.1
3.0	RECORD OF FINDS	
3.1	EURO-CANADIAN ARTIFACT DESCRIPTIONS	3.1
	3.1.1 Ceramic Artifacts	3.1
	3.1.2 Non-ceramic Artifacts	3.3
3.2	OAP LOCATION 1 (BHFV-32)	
	3.2.1 Non-Ceramic Artifacts	
	3.2.2 Ceramic Artifacts	
	3.2.3 OAP Location 1 (BhFv-32) Artifact Catalogue	
3.3	OAP LOCATION 2 (BHFV-33)	
	3.3.1 Non-Ceramic Artifacts	
	3.3.2 Ceramic Artifacts	
	3.3.3 OAP Location 2 (BhFv-33) Artifact Catalogue	3.13
4.0	ANALYSIS AND CONCLUSIONS	4.1
4.1	OAP LOCATION 1 (BHFV-32)	4.1
4.2	OAP LOCATION 2 (BHFV-33)	4.2
5.0	RECOMMENDATIONS	
5.1	OAP LOCATION 1 (BHFV-32)	5.1
5.2	OAP LOCATION 2 (BHFV-33)	5.1
6.0	ADVICE ON COMPLIANCE WITH LEGISLATION	6.1
7 0	BIBLIOGRAPHY AND SOURCES	7 1



8.0	IMAGES	8.1
8.1	PHOTOGRAPHS	8.1
8.2	ARTIFACTS	8.7
9.0	MAPS	9.1
10.0	CLOSURE	10.1
LIST C	OF TABLES	
	1: Eastern Ontario Cultural Chronology, Years Before Present (BP)	
	2: Registered Sites within Eight Kilometres of Study Area	
	3: Weather and Field Conditions during the Stage 2 Survey	
	4: Documentary Records	
	5: OAP Location 1 (BhFv-32) Artifact Summary	
Table	6: Bottle Finishes at OAP Location 1 (BhFv-32)	3.4
Table	7: OAP Location 1 (BhFv-32) Ceramic Assemblage by Ware Type	3.5
	8: OAP Location 1 (BhFv-32) Ceramic Assemblage by Decorative Type	
	9: OAP Location 1 (BhFv-32) Ironstone Assemblage	
	10: OAP Location 1 (BhFv-32) Porcelain Assemblage	
	11: OAP Location 1 (BhFv-32) Ceramic Form	
	12: OAP Location 1 (BhFv-32) Ceramic Function	
	13: OAP Location 1 (BhFv-32) Artifact Catalogue	
	14: OAP Location 1 (BhFv-32) Artifact Summary	
	15: OAP Location 2 (BhFv-33) Ceramic Assemblage by Ware Type	
	16: OAP Location 2 (BhFv-33) Ceramic Assemblage by Decorative Type	
	17: OAP Location 2 (BhFv-33) Ironstone Assemblage	
	18: OAP Location 2 (BhFv-33) Ceramic Form	
	19: OAP Location 2 (BhFv-33) Ceramic Function	
Table :	20: OAP Location 2 (BhFv-33) Artifact Catalogue	3.13
LIST C	OF FIGURES	
Figure	1: Location of Study Area	9.2
	2: Study Area in Detail	
	3: Treaties and Purchases (Adapted from Morris 1943)	
	4: 1820 Survey of Gloucester Township	
	5: 1825 Coffin Map of Gloucester Township	
	6: 1863 Walling Map of Gloucester Township	
	7: 1879 Belden Map of Gloucester Township	
	8: 20 th Century Topographic Mapping	
Figure	9: City of Ottawa's Archaeological Potential Mapping	9.10
	10: Stage 2 Assessment Methodology	

Executive Summary

Stantec Consulting Ltd. (Stantec) was retained by Thomas Cavanagh Construction Ltd. (Cavanagh) to complete a Stage 1 and 2 archaeological assessment for the proposed Ottawa airport aggregate pit, located on part of Lots 23 and 24, Concession 3 from Rideau River, Geographic Township of Gloucester, former Carleton County, now City of Ottawa, Ontario.

The Stage 1 archaeological assessment determined that the study area retains potential for the recovery of archaeological resources and should be subject to a Stage 2 archaeological assessment. Stage 2 assessment by pedestrian and test pit survey was completed for the property on October 11, 2019 and October 21, 2019 and resulted in the recovery of archaeological resources at two locations, Ottawa Aggregate Pit (OAP) Location 1 (BhFv-32) and OAP Location 2 (BhFv-33).

OAP Location 1 (BhFv-32)

The Stage 2 assessment of OAP Location 1 (BhFv-32) was conducted using pedestrian and test pit survey methods and resulted in the recovery of 71 Euro-Canadian artifacts over an area of approximately 15 metres by 36 metres in the ploughed field and two positive test pits. The Euro-Canadian assemblage comprises 31 household artifacts, 24 ceramics, 13 structural artifacts, 2 pieces of miscellaneous metal and tools, and 1 miscellaneous artifact. The ceramic assemblage from OAP Location 1 (BhFv-32) is comprised of ironstone (45.83%), recent ceramics (41.67%), and porcelain (12.50%). The ironstone assemblage suggests a mid to late 19th century period of use. The recent ceramics and porcelain assemblages indicate that the site continued to be occupied into the 20th century. The presence of cut nails and wire drawn nails further suggests a mid to late 19th century occupation that continues into the 20th century. A period of use continuing into the 20th century is further supported by the majority of the bottle glass assemblage comprising colourless glass (62.5%). Colourless glass was common in the 20th century. Further to the above, three bottles depict the maker's mark for the Dominion Glass Company used from 1928 to 1976.

With the identification of less than 20 artifacts dating to a period of use prior to 1900, and the number of artifacts suggesting a period of use in the 20th century, it is determined that OAP Location 1 (BhFv-32) does not retain cultural heritage value or interest. Based on these considerations, OAP Location 1 (BhFv-32) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the MHSTCI' *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Furthermore, based on topographic mapping and land registry it is determined that OAP Location 1 (BhFv-32) is associated with the Spratt house constructed *circa* 1873-1879. Given the presumed date of construction, and thus a *terminus post quem* of 1873, the site would not meet criteria to move to Stage 4 mitigation of development impacts based on Section 3.4.2, Standard 1 of the MHSTCI's *Standards and Guidelines for Consultant Archaeologists*, as no portion of the time span of the site occupation predates 1870.

OAP Location 1 (BhFv-32) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the MHSTCl' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The cultural heritage value or interest of OAP Location 1 (BhFv-32) has been sufficiently



i

documented. Therefore, no further archaeological assessment is recommended for OAP Location 1 (BhFv-32).

OAP Location 2 (BhFv-33)

The Stage 2 assessment of OAP Location 2 (BhFv-33) was conducted using pedestrian and test pit survey methods and resulted in the recovery of 80 Euro-Canadian artifacts over an area approximately 55 metres by 23 metres and includes three positive test pits. The Euro-Canadian assemblage comprises 39 household artifacts, 26 ceramics, and 14 structural artifacts. The ceramic assemblage from OAP Location 2 (BhFv-33) is comprised of ironstone (65.38%), semi-porcelain (19.23%), porcelain (7.69%), stoneware (3.85%), and recent ceramics (3.85%). The ironstone assemblage suggests a mid to late 19th century period of use. The semi-porcelain assemblage suggests a late 19th century occupation that continues into the 20th century. The recent ceramics and porcelain assemblages also indicate that the site continued to be occupied into the 20th century. A period of use continuing into the 20th century is further supported by half of the bottle glass assemblage (50%) comprising colourless glass.

With the identification of less than 20 artifacts dating to a period of use prior to 1900, and the number of artifacts suggesting a period of use in the 20th century, it is determined that OAP Location 2 (BhFv-33) does not retain cultural heritage value or interest. Based on these considerations, OAP Location 2 (BhFv-33) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the MHSTCI' *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Furthermore, based on topographic mapping and land registry it is determined that OAP Location 2 (BhFv-33) is associated with the Campbell/Davidson house constructed between 1864 and 1879 and abandoned sometime around 1946. Given the presumed date of construction, and thus a *terminus post quem* of 1864, the site would not meet criteria to move to Stage 4 mitigation of development impacts based on Section 3.4.2, Standard 1 of the MHSTCI's *Standards and Guidelines for Consultant Archaeologists*, as less than 10% of the time span of the site occupation predates 1870.

OAP Location 2 (BhFv-33) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The cultural heritage value or interest of OAP Location 2 (BhFv-33) has been sufficiently documented. Therefore, **no further archaeological assessment is recommended for OAP Location 2 (BhFv-33).**

The MHSTCI is asked to review the results presented and accept this report into the Ontario Public Register of Archaeological Reports.

The Executive Summary highlights key points from the report only; for complete information and findings, the reader should examine the complete report.





Project Personnel

Licensed Archaeologist: Patrick Hoskins, MA (P415)

Project Manager: Colin Varley, MA, RPA (P002)

Licensed Field Director: Patrick Hoskins, MA (P415)

Field Technician: Lisa Sonnenburg, PH.D. (R262)

Colin Varley, MA, RPA

Report Writer: Patrick Hoskins, MA

GIS Analyst: Dan Harvey, BES (Hons.), CEAM

Quality Review: Colin Varley, MA, RPA (P002)

Independent Review: Tracie Carmichael, BA, B.Ed. (R140)

Acknowledgements

Ministry of Heritage, Sport, Tourism

and Culture Industries: Robert von Bitter



Project Context

1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Stantec Consulting Ltd. (Stantec) was retained by Thomas Cavanagh Construction Limited (Cavanagh) to complete a Stage 1 and 2 archaeological assessment for the proposed Ottawa Airport Aggregate Pit, located on part of Lots 23 and 24, Concession 3 from Rideau River, Geographic Township of Gloucester, former Carleton County, now City of Ottawa, Ontario (Figure 1).

The property is approximately 38 hectares (ha) in size and comprises agricultural field and sparsely wooded areas (Figure 2). Cavanagh is preparing an application to have the property licensed for aggregate extraction. The application is being filed under the *Aggregate Resources Act*.

1.1.1 Objectives

For the purposes of the Stage 1-2 archaeological assessment, the Ministry of Heritage, Sport, Tourism and Culture Industries' (MHSTCI) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) were followed. The objectives of the Stage 1 assessment are to:

- provide information about the study area's geography, history, previous archaeological fieldwork and current land conditions;
- evaluate in detail the study area's archaeological potential to support recommendations for Stage
 2 survey for all or parts of the property; and
- recommend appropriate strategies for Stage 2 survey.

To meet these objectives Stantec archaeologists employed the following research strategies:

- available relevant archaeological, historical and environmental literature pertaining to the study area was reviewed:
- the land use history of the study area, including pertinent available historic maps, was reviewed;
- the Ontario Archaeological Sites Database was reviewed to determine the presence of registered archaeological sites in and around the study area; and
- the Ontario Public Register of Archaeological Reports was searched to determine whether previous archaeological assessment had been done on or around the study area.

In compliance with the provincial standards and guidelines set out in the *Standards and Guidelines* for *Consultant Archaeologists* (Government of Ontario 2011), the objectives of the Stage 2 Property Assessment are to:

- document all archaeological resources within the study area;
- determine whether the study area contains archaeological resources requiring further assessment; and
- recommend appropriate Stage 3 assessment strategies for all archaeological sites identified with further cultural heritage value or interest.



Project Context

Permission to enter the property to conduct archaeological field assessment and remove artifacts, as necessary, was provided by Phil White of Cavanagh. Mr. White also arranged for the preparation of the property for pedestrian survey with guidance from Stantec archaeological staff.

1.2 HISTORICAL CONTEXT

1.2.1 Post-Contact Indigenous Resources

"Contact" is typically used as a chronological benchmark when discussing Indigenous archaeology in Canada and describes the contact between Indigenous and European cultures. The precise moment of contact is a constant matter of discussion. Contact in what is now the province of Ontario is broadly assigned to the 16th century (Loewen and Chapdelaine 2016).

The Ottawa River and most of its major drainage tributaries were controlled by the various Algonquin bands that occupied the Ottawa River Valley (Day and Trigger 1978; Whiteduck 2002). The Algonquin homeland is traditionally identified as the portion of the Ottawa River drainage between the Long Sault Rapids (or Point d'Orignal) at present day Hawkesbury in the south, and Lake Nipissing in the north (Holmes 1993). Major tributary rivers and their respective drainage basins were occupied and controlled by identified Algonquin bands (Morrison 2005). However, the Rideau and Gatineau rivers appear to have been major exceptions to that generality. While the study area is located closest to the Rideau River, it is situated in an area that provides headwaters for both the Rideau and South Nation rivers, the latter through the North Branch of the Castor River, the headwaters of which are located approximately 4 kilometres to the southeast of the study area. The South Nation River valley is the traditional homeland of the historical Algonquin Weskarini band (Hessel 1993). Also known by an Iroquoian name, the Onontchataronon, the Weskarini were also referred to by the French as the "People of Iroquet" (Hessel 1993; Day and Trigger 1978). They appear to have been an Algonquin band which had adopted and amalgamated a number of Iroquoians who had been driven from their home territory at the Island of Montréal (Trigger 1985; Fox and Pilon 2016). The Rideau River watershed was undoubtedly used in the early Contact period (Fox and Pilon 2016) as Champlain mentions Indigenous use of the river, even though he himself did not travel along it (Bourne and Bourne 2000).

Even before direct contact had been made with Europeans, the Algonquin had been active in the fur trade, acting as intermediaries between Indigenous procurers of furs in the north and west and those Indigenous groups that were in direct contact with European traders (Holmes 1993). This role was one that was already in place before the European fur trade was initiated, given their position along, and control over, a major water transportation route (Morrison 2005). The Huron traded corn, cornmeal, and fishing nets in exchange for dried fish and furs, the latter of which the Algonquin secured from Ojibway and Cree living further north (Morrison 2005). The growing fur trade and the designation of animal skins as money led to changes in economic and social organization patterns. After the initial excursions of Samuel de Champlain into the Algonquin territory in 1613 until 1615 the Algonquin played a major role in the trade between the Huron and the French, and actively worked against Champlain making a trip to the Huron territory (Day and Trigger 1978). When direct trade between the Huron and French eventually occurred, and the Huron and French were permitted to use the Ottawa River as a travel route, they were subject to tolls by the Kichesippirini, who occupied the region around present day Morrison Island and



Project Context

controlled water traffic up and down the river from their position at that narrows in the river (Hessel 1993; Morrison 2005).

Increased trade along the Ottawa River also brought attention from other Iroquois groups from south of the St. Lawrence River. However, the alliance of Algonquin, Huron, and French minimized Iroquois raiding, and various treaties were enacted between the Algonquin and the Mohawk during the 1620s and 1630s (Day and Trigger 1978). In the latter part of the 1630s, however, the Algonquin attempted to trade directly with the Dutch, who had been trading partners with the Mohawk, and this led to a new outbreak of hostilities between Mohawk and Algonquin (Day and Trigger 1978). After 1639, the Mohawk began accumulating English, and then Dutch, firearms that gave them considerable advantage over the Algonquin, whose French trade partners, who had initially determined to trade no firearms, as they would only provide firearms to those who had been baptized (Trigger 1985). Conflict continued to greater and lesser degrees throughout the 1640s, but by the early 1650s most of the Ottawa River Valley Algonquin had either sought refuge in Quebec, such as at Trois Rivières, or had removed themselves to the upper parts of their territory, in present day Algonquin Park (Hessel 1987).

In 1649, the Huron-French fur trade collapsed, and the Five Nations Iroquois raided and destroyed the French Mission at Ste. Marie and several Huron villages. Huronia was abandoned, with the surviving Huron destroying their own remaining villages and moving further inland, now located within the province of Quebec. The Algonkian-speaking communities were briefly dispersed from the Ottawa Valley from 1650 to 1675, and were replaced as middlemen by the Odawa people, who were later in turn replaced by the French *coureur de bois*. Further colonization of eastern Ontario and Quebec led to more changes in the fur trade. However, after the merger of the Northwest Company and Hudson's Bay Company in 1821, the fur trade routes were diverted north to Hudson's Bay (Kennedy 1961:6).

At the turn of the 18th century the French interests in the fur trade had been sufficiently disrupted to a level that a conclusion of a treaty with the Iroquois was required, and Algonquin and Nipissing representatives were on hand in Montreal when that treaty was made (Holmes 1993). While this should have allowed for the resumption of Algonquin occupation of the whole of the Ottawa River again, the protected hostilities with the Iroquois and the effects of the European based disease epidemics had resulted in a population decline that had caused significant changes to social organization (Morrison 2005). During the first part of the 1700s there were Algonquin settlements along the Gatineau River and there were seasonal occupants around Lake of Two Mountains, near Montreal (Holmes 1993). By 1740 a map of Indigenous peoples in the known Canada identified the Nipissings on their namesake lake, Algonquins on the Liéve River in present day Quebec and Algonquins, Nipissings and Mohawks at Lake of Two Mountains (Holmes 1993). No other Indigenous groups, Algonquin or otherwise, were identified as living in the Ottawa River valley (Holmes 1993).

At the conclusion of the Seven Years War in 1763 the sphere of European influence in the Algonquin homeland passed from the French to the British, and they imposed restrictions on travel along the Ottawa River above Carillon (Morrison 2005). Nevertheless, the Algonquin continued to consider the river their territory and claims and petitions to that regard were made to the British colonial government (Holmes 1993).



Project Context

The land within the current study areas is governed by the Crawford's Purchases, which were enacted on October 9, 1783 (marked "B" and "B1", and "B2": on Figure 3). The first treaty, identified as "B", was made between the Crown and the Iroquois. It included lands "reaching from Point Baudet on the north side of Lake St. Francis, up to the mouth of Gananoque River...includes the Counties of Leeds, Grenville, Dundas, Stormont, and Glengarry, Russell, Prescott, the eastern part of Carleton and the southern part of Lanark" (Morris 1943:16-17). The second treaty, identified as "B1", was made between the Crown and the Mississaugas. It included lands "from the mouth of the Gananoque River to the mouth of the Trent River...includes the southern portions of the Counties of Hastings, Lennox and Addington, and Frontenac" (Morris 1943:16-17). The third treaty, identified as "B2", was made between the Crown and the Mississaugas. It included lands "from the mouth of the Trent River to Toronto Purchase and back from Lake Ontario to Lake Simcoe and Rice Lake...included the County of Northumberland, excepting the northeast corner, Durham, the southern part of Ontario, and the east part of York" (Morris 1943:16-17).

However, there is an outstanding Algonquin land claim for the traditional Algonquin territory within those lands that remain unceded because the Algonquin were not consulted during the treaty negotiations (Anonymous n.d.).

1.2.2 Euro-Canadian Resources

Gloucester Township was first surveyed in 1792 and originally identified as "Township B" (McDonnell 1820b). It was renamed Gloucester Township in 1793 after William Frederick, second Duke of Gloucester and Edinburgh, and nephew of King George III. Originally, Gloucester was part of Dundas County in the Eastern District and did not become part of Carleton County until 1838. The first permanent settlers in Gloucester Township were Bradish Billings and his family, who settled near present-day Billings Bridge along the Rideau River.

Survey records obtained from the Ministry of Natural Resources (MNR) were examined for evidence of Indigenous and early Euro-Canadian settlements. An early survey of Gloucester Township by Duncan McDonnell in 1820 depicts early survey lines, as well as early settlers and Crown and clergy reserve lands (Figure 4) (McDonnell 1820a). When townships in Upper Canada (Ontario) were originally laid out the Crown and the Anglican clergy each received one-seventh of the lots to sell. Unlike Lower Canada (Quebec), where the set asides were typically found in large blocks, Lieutenant-Governor John Graves Simcoe directed that the Crown and clergy lots in Upper Canada be interspersed with other privatelyowned lots (Wilson, 1969). However, in the early 1800s the continuing practice of free land grants depressed the sale prices of these lots and a program to lease the lands was established. Originally, leases were for 21 years, renewable every 7 years on new rates (Wilson, 1969). The clergy set aside was a matter of much friction with other Protestant denominations, which also wished to benefit from these lots. By 1840 an act was passed such that one half of the revenues of clergy lot sales were distributed between the Church of England and the Church of Scotland and the remaining half was divided between the remaining denominations, including the Catholic church. Eventually the matter was resolved by secularizing the clergy lots in 1854 so that they reverted back to the Crown, from which they were subsequently distributed (Lee 2004).



Project Context

Lot 23 was listed as Crown property and Lot 24 listed Godfrey Warner as the landowner (Figure 4). There was no indication of Indigenous settlement on the map or in the notes (McDonnell 1820a, 1820b). The survey map depicts the Rideau and Ottawa rivers, with the majority of the landowners listed in lots adjacent to those rivers.

An 1825 map drawn by William Coffin (Coffin 1825) lists Godfrey Warner as the landowner for Lot 24. No landowner is depicted on Lot 23 (Figure 5). The Coffin map depicts additional watercourses such as the North Castor River and Ramsay Creek. The Coffin map also indicates those survey lines where ground conditions were poorly drained or swampy; the survey line along the east side of the lots have no such indication and would have been considered well drained, unlike many of the nearby lots.

The 1863 Walling map of Carleton County shows that settlement along the road front of present-day Albion Road was well established (Walling 1863). J. Spratt is listed as the landowner for Lot 23 and A. Dowe (north part) and R. Campbell (south part) are listed as the landowners for Lot 24 (Figure 6). Both lots have structures depicted adjacent to Albion Road. The Ottawa and Prescott Railway is shown traversing both lots to the west of the study area.

Between the publication of Walling's map in 1863, and the map of Gloucester Township in the 1879 *Illustrated Historical Atlas of the County of Carleton, Ont.* (Belden and Co. 1879) the settlement of Gloucester Township was for the most part complete (Figure 7). The Belden map shows that all lots within the township are owned. James Spratt is listed as the landowner for Lot 23 and Robert Spratt (north part) and Robert Campbell (south part) are listed as the landowners for Lot 24. One residence/farmstead is illustrated on Lot 23, outside of the study area, and two residences/farmsteads are illustrated on Lot 24, within the limits of the study area.

Topographic mapping from 1906 depicts two structures within the study area, in the same approximate location as those shown on the 1879 Belden map (Figure 8). The structures are depicted in the 1948 topographical map as well (Figure 8). On that map there are also driveways to each indicated on the map.

1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 The Natural Environment

The study area is within the Russell and Prescott Sand Plain physiographic region of southern Ontario (Chapman and Putnam 1984). The Prescott and Russell Sand Plain is a group of large sand plains separated by the clays of the lower Ottawa Valley. The sand plain consists of one belt from Ottawa to Hawkesbury and three large areas to the north of the belt and several small areas (Chapman and Putnam 1984:209). Sand plains are aquatic features and are deposited by higher energy, shallow waters, and are indicative of former bottoms of waterbodies (Karrow and Warner 1990:5).

The study area soils are comprised of Kars gravelly sandy loam. The soil is brown sandy loam over light brown sandy loam over roughly stratified sand and gravel. The soil is useful for farming, pasture, and portions are still within wood lot (Hills et al. 1944). The soils have good to excessive drainage. The topography of the study area is gently undulating with some knolls present along the north edge and in



Project Context

the central part of the property. The property slopes down in a long, steady decline to the west and east from the central high elevation.

The natural drainage of the area has been anthropogenically altered over the last 150 years. However, historical mapping indicates that the closest potable water source to the study area was an unnamed tributary of the Rideau River immediately west of the study area. The headwater of an unnamed tributary of the North Castor River is located 1.3 kilometres to the west. Several other tertiary and seasonal drainages are noted on historical mapping in the general vicinity of the study area.

1.3.2 Pre-Contact Indigenous Resources

Overall, archaeological research in many parts of Eastern Ontario has been fairly limited, at least compared to adjoining areas in Southern Ontario and northern New York State, resulting in only a limited understanding of the cultural processes that occurred in this part of the province. The following summary of the pre-contact occupation of Eastern Ontario (see Table 1 for chronological chart) is based on syntheses in Archaeologix Inc. (2008), Ellis and Ferris (1990), Jacques Whitford (2008), Pilon (1999), St-Pierre (2009), and Wright (1995).

Table 1: Eastern Ontario Cultural Chronology, Years Before Present (BP)

Archaeological Period	Time	Characteristics
Early Palaeo-Indian	11,000–10,400 BP	Caribou and extinct Pleistocene mammal hunters, small camps
Late Palaeo-Indian	10,400-10,000 BP	Smaller but more numerous sites
Early Archaic	10,000-8,000 BP	Slow population growth, emergence of woodworking industry, development of specialized tools
Middle Archaic	8,000–4,500 BP	Environment similar to present, fishing becomes important component of subsistence, wide trade networks for exotic goods
Late Archaic	4,500-3,100 BP	Increasing site size, large chipped lithic tools, introduction of bow hunting
Terminal Archaic	3,100-2,950 BP	Emergence of true cemeteries with inclusion of exotic trade goods
Early Woodland	2,950-2,400 BP	Introduction of pottery, continuation of Terminal Archaic settlement and subsistence patterns
Middle Woodland	2,400-1,400 BP	Increased sedentism, larger settlements in spring and summer, dispersed smaller settlement in fall and winter, some elaborate mortuary ceremonialism
Transitional Woodland	1,400-1,100 BP	Incipient agriculture in some locations, seasonal hunting & gathering
Early Late Woodland	1,100-700 BP	Limited agriculture, development of small village settlement, small communal longhouses
Middle Late Woodland	700-600 BP	Shift to agriculture as major component of subsistence, larger villages with large longhouses, increasing political complexity
Lale Late Woodland	600- 350 BP	Very large villages with smaller houses, politically allied regional populations, increasing trading network



Project Context

Identifiable human occupation of Ontario begins just after the end of the Wisconsin Glacial period. The first human settlement can be traced back 11,000 years, when this area was settled by Native groups that had been living to the south of the emerging Great Lakes. This initial occupation is referred to as the "Palaeo-Indian" archaeological culture.

Early Palaeo-Indian (EPI) (11,000-10,400 before present (BP)) settlement patterns suggest that small groups, or "bands", followed a pattern of seasonal mobility extending over large territories. Many (although by no means all) of the EPI sites were located on former beach ridges associated with Lake Algonquin and research/evidence indicates that the vegetative cover of these areas would have consisted of open spruce parkland, given the cool climatic conditions. Sites tend to be located on well-drained loamy soils, and on elevations in the landscape, such as knolls. The fact that assemblages of artifacts recovered from EPI sites are composed exclusively of stone skews our understanding of the general patterns of resource extraction and use. However, the taking of large game, such as caribou, mastodon and mammoth, appears to be of central importance to the sustenance of these early inhabitants.

Moreover, EPI site location often appears to be located in areas which would have intersected with migratory caribou herds. In the Ottawa Valley it appears that the palaeo-environment had not recovered sufficiently from the former glaciations to have allowed an EPI occupation. There is, however, some evidence of EPI incursion to the Rideau Lakes area.

The Late Palaeo-Indian (LPI) period (10,400-10,000 BP) is poorly understood compared to the EPI, the result of less research focus than the EPI. As the climate warmed the spruce parkland was gradually replaced and the vegetation of Southern Ontario began to be dominated by closed coniferous forests. As a result, many of the large game species that had been hunted in the EPI period moved north with the more open vegetation or became locally extinct. Like the EPI, LPI peoples covered large territories as they moved around to exploit different resources. Environmental conditions in Eastern Ontario and the Ottawa Valley were sufficient to allow for a Late Palaeo-Indian occupation, although the evidence of such is still very limited. There is some evidence of LPI occupation on Thompson Island, in the St. Lawrence River near the junction of Ontario, Québec and New York State.

The transition from the Palaeo-Indian period to the Archaic archaeological culture of Ontario prehistory is evidenced in the archaeological record by the development of new tool technologies, the result of utilizing an increasing number of resources as compared to peoples from earlier archaeological cultures and developing a broader based series of tools to more intensively exploit those resources. During the Early Archaic period (10,000-8,000 BP), the jack and red pine forests that characterized the LPI environment were replaced by forests dominated by white pine with some associated deciduous elements. Early Archaic projectile points differ from Palaeo-Indian forms most notably by the presence of side and corner notching on their bases. A ground stone tool industry, including celts and axes, also emerges, indicating that woodworking was an important component of the technological development of Archaic peoples. Although there may have been some reduction in the degree of seasonal mobility, it is still likely that population density during the Early Archaic was low, and band territories large.

The development of more diversified tool technology continued into the Middle Archaic period (8,000-4,500 BP). The presence of grooved stone net-sinkers suggests an increase in the importance of fishing in subsistence activities. Another new tool, the bannerstone, also made its first appearance during this



Project Context

period. Bannerstones are ground stone weights that served as counterbalance for "atlatls" or spear-throwers, again indicating the emergence of a new technology. The increased reliance on local, often poor-quality chert resources for chipped stone tools suggests that in the Middle Archaic groups inhabited smaller territories lacking high quality raw materials. In these instances, lower quality materials which had been glacially deposited in local tills and river gravels were used.

This reduction in territory size appears to have been the result of gradual region-wide population growth, which forced a reorganization of subsistence patterns, as a larger population had to be supported from the resources of a smaller area. Stone tools designed specifically for the preparation of wild plant foods suggest that subsistence catchment was being widened and new resources being more intensively exploited. A major development of the later part of the Middle Archaic period was the initiation of long-distance trade. In particular, native copper tools manufactured from sources near Lake Superior were being widely traded. Two of the most notable sites in Ontario are approximately 125 km northwest of the study area along the Ottawa River. What makes these sites notable is the large concentration of copper artifacts that have been recovered. The Morrison's Island and Allumette Island sites have produced over 1,000 copper artifacts. The copper artifacts consisted of fishhooks, awls, gorges, socketed axes, knives, and spear points. The source of the copper has been traced to Lake Superior, approximately 1,000 km away. In addition to the copper artifacts, other lithic sources from over 500 km to the south have been found indicating participation in a large interaction network.

During the late part of the Middle Archaic (5,500-4,500 BP) a distinctive occupation, or tradition, known as the Laurentian Archaic, appears in south-eastern Ontario, western Quebec, northern New York and Vermont. Laurentian Archaic sites are found only within the transitional zone between the deciduous forests to the south and coniferous forests to the north known as the Canadian Biotic Province and are identifiable through the association of certain diagnostic tool types, including ground slate semi-lunar knives (or "ulus"), plummets for use in fishing, ground slate points and knives, and ground stone gouges, adzes and grooved axes. It is thought that there was less reliance on plant foods and a greater reliance on hunting and fishing in this region than for Archaic peoples in southern and south-western Ontario. Laurentian Archaic sites have been found in the middle Ottawa River valley, along the Petawawa River and Trent River watersheds and at Brockville.

The trend towards decreased territory size and a broadening subsistence base continued during the Late Archaic (4,500-2,900 BP). Late Archaic sites are far more numerous than either Early or Middle Archaic sites. It appears that the increase in numbers of sites at least partly represents an increase in population. However, around 4,500 BP water levels in the Great Lakes began to rise, taking their modern form. It is likely that the relative paucity of earlier Archaic sites is due to their being inundated under the rising lake levels.

The appearance of the first true cemeteries occurs during the Late Archaic. Prior to this period, individuals were interred close to the location where they died. However, with the advent of the Late Archaic and local cemeteries individuals who died at a distance from the cemetery would be returned for final burial at the group cemetery often resulting in disarticulated skeletons, occasionally missing minor bone elements (e.g. finger bones). The emergence of local group cemeteries has been interpreted as being a response to both increased population densities and competition between local groups for access



Project Context

to resources, in that cemeteries would have provided symbolic claims over a local territory and its resources.

Increased territoriality and more limited movement are also consistent with the development of distinct local styles of projectile points. The trade networks which began in the Middle Archaic expand during this period and begin to include marine shell artifacts (such as beads and gorgets) from as far away as the Mid-Atlantic coast. These marine shell artifacts and native copper implements show up as grave goods, indicating the value of the items. Other artifacts such as polished stone pipes and slate gorgets also appear on Late Archaic sites. One of the more unusual of the Late Archaic artifacts is the "birdstone", small, bird-like effigies usually manufactured from green banded slate.

The Early Woodland period (2,900-2,200 BP) is distinguished from the Late Archaic period primarily by the addition of ceramic technology. While the introduction of pottery provides a useful demarcation point for archaeologists, it may have made less difference in the lives of the Early Woodland peoples. The first pots were very crudely constructed, thick walled, and friable. It has been suggested that they were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil. These vessels were not easily portable, and individual pots must not have enjoyed a long use life. There have also been numerous Early Woodland sites located at which no pottery was found, suggesting that these poorly constructed, undecorated vessels had yet to assume a central position in the day-to-day lives of Early Woodland peoples.

Other than the introduction of this rather limited ceramic technology, the life-ways of Early Woodland peoples show a great deal of continuity with the preceding Late Archaic period. For instance, birdstones continue to be manufactured, although the Early Woodland varieties have "pop-eyes" which protrude from the sides of their heads. Likewise, the thin, well-made projectile points which were produced during the terminal part of the Archaic period continue in use. However, the Early Woodland variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance. The trade networks which were established in the Middle and Late Archaic also continued to function, although there does not appear to have been as much traffic in marine shell during the Early Woodland period. These trade items were included in increasingly sophisticated burial ceremonies, some of which involved construction of burial mounds.

In terms of settlement and subsistence patterns, the Middle Woodland (2,200 B.C.-1,100 BP) provides a major point of departure from the Archaic and Early Woodland periods and includes an archaeological complex that has been identified as composed of a generalized Algonquin/Cree/Ojibway culture (Holmes 1993). While Middle Woodland peoples still relied on hunting and gathering to meet their subsistence requirements, fish were becoming an even more important part of the diet. Middle Woodland vessels are often heavily decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of Middle Woodland vessels are easily identifiable.

It is also at the beginning of the Middle Woodland period that rich, densely occupied sites appear along the margins of major rivers and lakes. While these areas had been utilized by earlier peoples, Middle Woodland sites are significantly different in that the same location was occupied off and on for as long as several hundred years. Because this is the case, rich deposits of artifacts often accumulated. Unlike



Project Context

earlier seasonally utilized locations, these Middle Woodland sites appear to have functioned as base camps, occupied off and on throughout the course of the year. There are also numerous small upland Middle Woodland sites, many of which can be interpreted as special purpose camps from which localized resource patches were exploited. This shift towards a greater degree of sedentism continues the trend witnessed from the Middle Archaic and provides a prelude to the developments that follow during the Late Woodland period.

There are three complexes of Middle Woodland culture in Ontario. The complex specific to eastern Ontario is known as "Point Peninsula" most notably represented by ceramics decorated with a stamped zigzag pattern applied at various angles to the exterior of the vessel, known as "pseudo scallop shell". Another common decorative style is the dentate stamp, a comb-like tool creating square impressions. Middle Woodland components have been identified in Vincent Massey Park along the Rideau River in the City of Ottawa, at the confluence of the Ottawa and Gatineau Rivers at Lac Leamy Park in Gatineau, Quebec and there is evidence for a widespread Woodland occupation along the Rideau River and Rideau Lakes system (Jacques Whitford 2004; Laliberté 1999; Watson 1991, 1992, 1999).

The relatively brief period of the Transitional Woodland period is marked by the acquisition of cultivar plants species, such as maize and squash, from communities living south of the Great Lakes. The appearance of these plants began a transition to food production, which consequently led to a much reduced need to acquire naturally occurring food resources. Sites were thus occupied for longer periods and by larger populations. Transitional Woodland sites have not been discovered in eastern Ontario.

The Late Woodland period in southern Ontario is traditionally associated with societies referred to as the Ontario Iroquois Tradition. This period is often divided into three temporal components; Early, Middle and Late (see Table 1). In eastern Ontario, especially in the Ottawa River Valley, there is considerable overlap of people continuing to practice a hunting and gathering economy and those using limited horticulture as a supplement to gathered plants. For the most part, however, classic Late Woodland sites in eastern Ontario are limited to an area at the east end of Lake Ontario and along the St. Lawrence River valley. Early Late Woodland components have been identified near Pembroke on the Muskrat River; however, there is evidence for only limited use of cultivated plants. Middle Late Woodland sites have not been identified east of the Kingston area.

During the Late Late Woodland period a distinctive material culture emerges at the east end of Lake Ontario and along the St. Lawrence River up to Québec City, known as the St. Lawrence Iroquois (SLI). SLI sites are characterized by large semi-permanent villages and associated satellite settlements. The inhabitants of these villages and satellites practiced horticulture of staple crops which made up the bulk of their diet. Other food resources were hunted, fished and gathered. SLI village sites can be extensive, up to 10 acres or more in size and composed of a number of longhouse structures. Special purpose satellite settlements, such as hunting and fishing camps, are smaller in area and in the number and size of structures within the settlement. While the early contact period descendants of the Late Woodland SLI and Huron used the Ottawa River and its tributaries as transportation routes between the St. Lawrence River and the interior, Late Woodland village sites have not been identified.

In the Late and Terminal Woodland (immediately prior to the early contact period) there are several instances of Late Woodland pottery types typically associated with Iroquoian groups (e.g. the Middle Late



Project Context

Woodland Middleport archaeological culture and Late Late Woodland/contact period Huron and Onondaga) on what would otherwise be considered Algonquian archaeological sites throughout the Ottawa River valley (cf. Mitchell 1975, 1990, 1996; Saint-Germain 1999; von Gernet 1992, 1993). There has been some debate about what the presence of these purportedly Iroquoian ceramic artifacts in an Algonquin context might indicate. Interpretations include: incursion of Iroquoian peoples into Algonquin territory; ceramics as trade items between Iroquoian and Algonquins; the presence of Iroquoian women in Algonquin societies, either as wives or captives, who continued to manufacture ceramics according to their ethnic traditions; or Algonquin manufacture of ceramics that simulate Iroquoian ceramic types (Pendergast 1999). Each of these possible interpretations suggests a close interaction sphere between Algonquin and Iroquoian peoples, which is further supported by evidence of Iroquoian and Algonquin trade relationships in the early contact period. It has also been suggested that Algonquin and Iroquoian peoples may have "shared in a common Late Woodland cultural stratum" which included common elements such as ceramics (von Gernet 1992). Taking the point further, Fox and Garrad (2004) suggest that Huron and Algonquin shared not only a territory in the southern Georgian Bay area (traditional "Huronia"), but also shared a material culture, and may have cohabited in settlements to a greater degree than as simply visitors.

1.3.3 Previously Identified Archaeological Sites and Surveys

The City of Ottawa maintains an Archaeological Potential GIS layer on its web-based GeoOttawa site (City of Ottawa n.d.). This layer is based on the 1999 Archaeological Resource Potential Mapping Study that was completed for the Regional Municipality of Ottawa-Carleton (now the City of Ottawa) in 1999 (Archaeological Services Inc. 1999). This potential model identifies the study area as having elevated potential for the presence of archaeological resources. As part of the City of Ottawa's Planning policy any proposed Project that contains even a portion of an archaeological potential zone requires the entire Project Area to be subject to archaeological assessment. The study area is located entirely within that archaeological potential layer (Figure 9). The City of Ottawa potential model evaluates archaeological potential for both pre-contact Indigenous and historic period resources.

The National Capital Commission (NCC) created an archaeological potential map for federal lands located in the City of Ottawa. The study area is federal land and is listed as having surficial geological features that have been demonstrated to be attractive for Palaeo-Indian occupation (Laliberté 1998). The area is also noted for having undergone anthropogenic surface disturbance (Laliberté 1998). However, overall the study area is designated as having low potential for the recovery of pre-contact Indigenous archaeological resources (Laliberté 1998). The NCC potential model does not evaluate for historic period archaeological potential.

In Canada, archaeological sites are registered within the Borden system, a national grid system designed by Charles Borden in 1952 (Borden 1952). The grid covers the entire surface area of Canada and is divided into major units containing an area that is two degrees in latitude by four degrees in longitude. Major units are designated by upper case letters. Each major unit is subdivided into 288 basic unit areas, each containing an area of 10 minutes in latitude by 10 minutes in longitude. The width of basic units reduces as one moves north due to the curvature of the earth. In southern Ontario, each basic unit measures approximately 13.5 kilometres east-west by 18.5 kilometres north-south. In northern Ontario,



Project Context

adjacent to Hudson Bay, each basic unit measures approximately 10.2 kilometres east-west by 18.5 kilometres north-south. Basic units are designated by lower case letters. Individual sites are assigned a unique, sequential number as they are registered. These sequential numbers are issued by the MHSTCI who maintain the *Ontario Archaeological Sites Database*. The study area is located within Borden block BhFv.

Information concerning specific site locations is protected by provincial policy and is not fully subject to the *Freedom of Information and Protection of Privacy* Act (Government of Ontario 1990a). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MHSTCI will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

An examination of the Archaeological Sites Database (ASDB) has shown that there seven registered archaeological sites within one kilometre of the study area (Government of Ontario 2019a) (see Table 2). Of these, BhFv-6 and BhFv-7 were identified to be within the study area. These sites are associated with the one previous archaeological report that documents work within the study area. The sites and report are detailed further in Section 1.3.4 (Government of Ontario 2019b).

Table 2: Registered Sites within Eight Kilometres of Study Area

Borden Number	Site Name	Cultural Affiliation	Site Type
BhFv-4	none given	Early Archaic	Beach; campsite
BhFv-5	none given	Early Archaic	Beach; campsite
BhFv-6	none given	Early Archaic	Beach; campsite
BhFv-7	none given	Early Archaic	Beach
BhFv-9	Murray Site	Euro-Canadian	Farmstead
BhFv-10	Finlan-Britt Site	Euro-Canadian	Agricultural; farmstead
BhFv-12	Hardy Farm Site	Euro-Canadian	Agricultural

1.3.4 Previous Archaeological Surveys

Kinickinick Heritage Consultants (Kinickinick) conducted a Stage 1- 2 archaeological assessment for the proposed Albion Road site of the Central Canada Exhibition on part of Lots 24 and 25, Concession 3 on Rideau River, Geographic Township of Gloucester, former Carleton County, now City of Ottawa, Ontario. A portion of the area assessed in that report is located within the current study area. The Stage 2 assessment resulted in the identification of four archaeological sites, BhFv-4, BhFv-5, BhFv-6, and BhFv-7 (Kinickinick 2004).

BhFv-4 was identified through a mix of pedestrian and test pit surveys and resulted in the recovery of 533 lithic artifacts over an area measuring 650 by 300 metres. The lithic assemblage was comprised primarily of banded quartzite sandstone (87.9%). Site BhFv-4 was recommended for Stage 3 archaeological assessment (Kinickinick 2004).



Project Context

BhFv-5 was identified through test pit survey and resulted in the recovery of seven lithic artifacts over a 50 metre area. The lithic assemblage was comprised of sandstone, banded quartzite sandstone, granite, and quartz. Site BhFv-5 was recommended for Stage 3 archaeological assessment (Kinickinick 2004).

BhFv-6 was identified through test pit survey and resulted in the recovery of 74 lithic artifacts from 24 test pits over a 120 metre by 180 metre area. The lithic assemblage was comprised primarily of sandstone, banded quartz sandstone, and quartzite. Site BhFv-6 was recommended for Stage 3 archaeological assessment (Kinickinick 2004).

BhFv-7 was identified through test pit survey and resulted I the recovery of 48 lithic artifacts from 35 positive test pits over a 160 metre by 220 metre. The lithic assemblage was comprised primarily of banded quartz sandstone, sandstone, quartzite, and quartz. Site BhFv-7 was recommended for Stage 3 archaeological assessment (Kinickinick 2004).

Following review by the MHSTCI, it was determined that the four sites did not retain further cultural heritage value or interest and Stage 3 was not required.

1.4 ARCHAEOLOGICAL POTENTIAL

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Stantec applied archaeological potential criteria commonly used by the MHSTCI (Government of Ontario 2011) to determine areas of archaeological potential within the region under study. These variables include proximity to previously identified archaeological sites; distance to various types of water sources; soil texture and drainage; glacial geomorphology; elevated topography; and the general topographic variability of the area. However, it is worth noting that extensive land disturbance can eradicate archaeological potential (Government of Ontario 2011).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southern Ontario have remained relatively stable over time, proximity to drinkable water is regarded as a useful index for the evaluation of archaeological site potential. In fact, distance to water is one of the most commonly used variables for predictive modeling of archaeological site location in Ontario. Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils or topographic variability, may also indicate archaeological potential.

As discussed above, distance to water is an essential factor in archaeological potential modeling. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site location and type to varying degrees. The MHSTCI categorizes water sources in the following manner:

- Primary water sources: lakes, rivers, streams, creeks;
- Secondary water sources: intermittent streams and creeks, springs, marshes and swamps;
- Past water sources: glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines
 of drained lakes or marshes; and



Project Context

 Accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As detailed in Section 1.3.1, the closest natural water sources to the study area were tributaries of the Rideau River, located immediately west of the study area, and the North Castor River, located over one kilometre to the southeast. The study area was formerly inundated by the Champlain Sea or the paleo-Ottawa River estuary at the Champlain Sea. The Algonquins of Ontario (AOO) relic shoreline model showed that no documented paleo-shorelines or mapped extents of any post-Champlain Sea recessional waterbodies were located within the study area (AOO 2017).

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as elevated topography. The study area soils are comprised of Kars gravelly sandy loam, which has good drainage. The study area has several knolls located across the property.

The map and notes from the 1820 survey by Duncan McDonnell were examined for any mention of Indigenous settlements in the township. None were identified in the survey (McDonnell 1820a).

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements, early transportation routes, and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government Ontario 1990b) or property that local histories or informants have identified with possible historical events. The 1820 survey and 1825 Coffin maps list Godfrey Warner as the landowner for Lot 24. The 1863 Walling and 1879 Belden maps show that the Spratt families were the landowners for Lots 23 and the north part of Lot 24, and that Robert Campbell was the landowner for the south part of Lot 24. The 1879 Belden atlas map shows two residences/farnsteads within the limits of the study area. Twentieth century topographic mapping shows these same structures present in 1906 and 1948.

The City of Ottawa Archaeological Potential GIS layer is based on the 1999 Archaeological Resource Potential Mapping Study that was completed for the Regional Municipality of Ottawa-Carleton (now the City of Ottawa) in 1999 (Archaeological Services Inc 1999). The potential model for pre-contact resources is based primarily on distance to water. The potential model for Euro-Canadian resources is based on the 1863 Walling and 1879 Belden maps of Carleton County. This potential model identifies the study area as having archaeological potential.

In summary, in accordance with Section 1.3 of the MHSTCl' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), the Stage 1 archaeological assessment determined that the study area retains potential for the recovery of archaeological resources and should be subject to a Stage 2 archaeological assessment.

1.5 EXISTING CONDITIONS

The study area is irregularly shaped and is approximately 38 hectares in size. The study area comprises ploughed agricultural field and sparsely wooded areas, likely remnants from the historic period occupation, and a number of building ruins.



Field Methods

2.0 FIELD METHODS

As discussed in Section 1.5, the study area is approximately 38 hectares in size and consists of ploughed agricultural field and sparse bush lot. The archaeological assessment was conducted under PIF P415-0202-2019 issued to Patrick Hoskins, MA, by the MHSTCI. The Stage 2 survey was carried out on October 11, 2019 and October 21, 2019. During the assessment weather conditions were sunny and cool and at no time were the field or weather conditions detrimental to the recovery of archaeological material. Figure 10 provides an illustration of the assessment methods, as well as photograph locations and directions.

Table 3: Weather and Field Conditions during the Stage 2 Survey

Date	Field Director	Activity	Weather	Ground Conditions
October 11, 2019	Patrick Hoskins (P415)	Pedestrian survey	Sunny, cool	Visibility > 80%
October 21, 2019	Patrick Hoskins (P415)	Pedestrian survey; test pit survey	Sunny, cool	Visibility > 80%; soils dry and friable

Approximately 98.5% of the study area consists of agricultural field which was ploughed and weathered and exhibited ground surface visibility of greater than 80%. The pedestrian survey was conducted in accordance with Section 2.1.1 of the MHSTCl' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). The pedestrian survey involved systematically walking the ploughed and weathered agricultural field at five-metre intervals (Photos 1 to 3). Soil in the pedestrian survey area was composed of medium brown sandy loam topsoil over a mix of grey and yellow sandy loam subsoil. When archaeological resources were encountered, the survey interval was reduced to 1 metre and an area of minimum 20 metres by 20 metres around the initial find was surveyed. Artifacts collected during the pedestrian survey included all formal artifact types and diagnostic categories, and all refined ceramic sherds identified as per Section 2.1.1, Standard 8 of the MHSTCl' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Some non-ceramic artifacts were left in situ at the identified archaeological locations to allow for relocation of the site if it was determined that further archaeological assessment was required, as per Section 2.1.1, Standard 9 of the MHSTCl' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

Approximately 1.5% of the study area was inaccessible for ploughing and was subject to test pit survey at a five metre interval (Photos 4 and 5) in accordance with Section 2.1.2 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011). Each test pit was approximately 30 centimetres in diameter and excavated five centimetres into sterile subsoil. The soils were then examined for stratigraphy, cultural features, or evidence of fill. Test pits were approximately 25 centimetres deep and soils consisted of brown sand over top of grey and brownish-yellow sand subsoil (Photo 6). All soil was screened through six millimetre hardware cloth to facilitate the recovery of small artifacts and then used to backfill the pit. All test pits were backfilled after excavation. Topsoil in the test pit survey area was composed of medium brown sandy loam and averaged between 19 and 26 cm in depth. Subsoil in the test pit survey area was also a mix of grey and yellow sandy-loam. Where positive test pits were encountered, they were associated with archaeological resources identified during pedestrian survey of adjacent



Field Methods

ploughed fields and no reduced interval testing occurred. All artifacts recovered from test pits were retained for further analysis as per Section 2.1.2, Standard 8 of the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).



3.0 RECORD OF FINDS

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0. An inventory of the documentary record generated by fieldwork is provided in Table 4 below. Two archaeological resources, Ottawa Aggregate Pit (OAP) OAP Location 1 (BhFv-32) and OAP Location 2 (BhFv-33), were identified during the Stage 2 survey of the study area. The artifacts recovered from Locations 1 and 2 are detailed below. Maps illustrating the exact site locations do not form part of this public report; they may be found in the Supplementary Documentation.

Table 4: Documentary Records

Document Type	Current Location of Document Type	Additional Comments
4 pages of field notes	Stantec office in Ottawa	In original field book and photocopied in project file
1 map provided by client	Stantec office in Ottawa	Hard and digital copies in project file
60 digital photographs	Stantec office in Ottawa	Stored digitally in project file

All the material culture collected during the Stage 2 archaeological survey of the study area is contained in two Bankers boxes, labeled by location number and Borden Number, as applicable. The boxes will be temporarily housed at the Stantec London office until formal arrangements can be made for a transfer to an MHSTCI collections facility. As per Section 5 of the MHSTCI's 2014 *The Archaeology of Rural Historical Farmsteads* bulletin laboratory analysis occurred on all artifacts collected during the field survey (Government of Ontario 2014).

3.1 EURO-CANADIAN ARTIFACT DESCRIPTIONS

3.1.1 Ceramic Artifacts

3.1.1.1 Ironstone

Ironstone, also known as white granite, stone china, and graniteware, is a variety of white earthenware introduced to Canada in the 1820s. It was widely available in the 1840s and became extremely popular in Upper Canada by the 1860s (Collard 1967; Kenyon 1985). Decorated ironstone, including hand painted, transfer printed, sponged, and stamped, generally dates to between 1805 and 1840; undecorated ironstone was most common after 1840 (Miller 1991). By 1897, ironstone was the cheapest dinnerware available and prices charged for moulded patterns were the same as those charged for plain, undecorated types (Sussman 1997).

Ironstone was often decorated with raised moulded designs. The wheat pattern, which resembled the heads of wheat moulded on the rim, was developed in 1858 and remained popular into the 20th century (Adams 1994).

Transfer printed ironstone was completed using tissue paper, which allowed for shading and finer line details, or oil and a sheet of glue were used to create a design with little dots (Stelle 2001). Transfer printing was popular throughout the 19th century. During the 1830s and 40s colours such as brown, black,



Record of Finds

red, green and purple became popular. Between 1850 and 1890 only blue, black and brown were popular, with a variety of colour becoming popular again in the late 19th century (Adams 1994).

Painted ironstone pieces are typically painted covering the majority of the vessel, with very little white showing through (Stelle 2011).

Flow transfer printing was popular in the late 1840s and 1850s and was later revived in the 1890s. The printing colour – usually blue, but sometimes black – was allowed to bleed into the glaze, giving it a misty appearance (Adams 1994).

3.1.1.2 Semi-Porcelain

Semi-porcelain wares were developed by English potters during the first half of the 19th century in an attempt to replicate imported porcelain. This refined earthenware was relatively thick-bodied, with a hard, opaque paste. In 1850, semi-porcelains were reintroduced, and this vitreous, hard-glazed white earthenware quickly became widespread throughout North America. Decoration with hand-painted lustrous gold overglazes, or "gilding", became popular in the 1880s and persisted until the 1940s (Hughes 1961).

3.1.1.3 Porcelain

Porcelain wares are produced with very high firing temperatures, which results in a partial vitrification of the paste. Vessel bodies tend to be translucent and can be very thin. Because of its prohibitive cost, porcelain is rare on 19th century sites in Ontario but becomes relatively common by the 20th century as less expensive production techniques were developed in Europe (Kenyon 1980b).

3.1.1.4 Stoneware

Stoneware has a vitrified stone-like paste due to the high temperatures used to fire the pottery. The paste colours vary between white, grey, and tan and are generally quite thick and durable. A common glaze on stoneware is salt-glazed, which is achieved by introducing salt to the kiln during the firing process (Maryland Archaeological Conservation Lab 2012). Stoneware was made in Ontario from 1849 onwards (Adams 1994).

3.1.1.5 Ceramic Form and Function

For Euro-Canadian sites, all ceramic sherds were examined in order to describe the function of the item from which the ceramic sherd originated. However, for those sherds that were too fragmentary for a functional assignment, an attempt was made to at least provide a formal description, such as to which portion of an item the sherd belonged. For example, what used to be a porcelain teacup but now found in an archaeological context could be classified archaeologically in the artifact catalogue in a descending order of specificity depending on preservation and artifact size: a teacup (function), a cup (function), a hollowware (form), or a rim fragment (form). Hollowwares and flatwares were differentiated based on the presence or absence, respectively, of curvature in the ceramic cross-section of each sherd.



Record of Finds

The classification system used here is based upon Beaudoin (2013), but teas were differentiated as teacups and tea saucers as necessary. If Beaudoin's classifications could not be applied, then the broader definitions of Voss (2008) were used. Ultimately, if sherds were small enough that even a general functional or formal ware type could not be determined, the sherd was simply classified as either a rim fragment, a non-rim fragment, a base fragment, or indeterminate. Ceramic functions, as many as were able to be determined, are provided in the artifact catalogue for each location.

3.1.2 Non-ceramic Artifacts

3.1.2.1 Household Artifacts

Some bottle glass colours can provide a tentative temporal range for Euro-Canadian domestic sites, although most are temporally non-diagnostic (Lindsey 2016). Sun-coloured amethyst glass occurs when manganese dioxide decolourized glass is exposed to the ultraviolet light in sunlight. Colourless, or clear, glass is relatively uncommon prior to the 1870s but becomes quite widespread in the 1910s after the development of automatic bottle manufacturing (Kendrick 1971; Lindsey 2016).

White glass, also known as milk glass, was produced primarily between the 1870s and the mid-20th century (Lindsey 2018). This type of glass was most commonly used for cosmetic and toiletry bottles, as well as ointments or creams (Lindsey 2018).

3.1.2.2 Structural Artifacts

Window glass can be temporally diagnostic. In the 1850s window glass thickness changed dramatically. This shift occurred as a result of the lifting of the English import tax on window glass in 1850, which taxed glass by weight and encouraged manufacturers to produce thin panes. Thus, most window glass manufactured before 1850 tends to be less than 1.6 mm thick, while later glass is thicker (Adams 1994; Kenyon 1980).

Machine cut nails were cut from a flat sheet of iron and as a result their shanks have a rectangular cross-section. The head is usually rectangular and was often welded into place. Invented in about 1790, cut nails saw common use from the 1830s until the 1890s (Adams 1994). Wire nails are still in widespread use today, with a round cross-section and round head. First developed in the 1850s, they began to replace the cut nail in the 1890s (Adams 1994).

3.2 OAP LOCATION 1 (BHFV-32)

OAP Location 1 (BhFv-32) was identified during a combination of pedestrian and test pit survey. The Stage 2 assemblage comprises 71 Euro-Canadian artifacts over an area approximately 15 metres by 36 metres and includes two positive test pits. The Euro-Canadian assemblage comprises 31 household artifacts, 24 ceramics, 13 structural artifacts, 2 pieces of miscellaneous metal and tools, and 1 miscellaneous artifact. Approximately 200 artifacts were identified on the surface and all formal artifact types and diagnostic categories, and all refined ceramic sherds were collected, as per Section 2.1.1, Standard 8 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).. Artifacts left in the field consisted largely of pieces of machinery, miscellaneous pieces



Record of Finds

of metal, small sherds of glass, later structural artifacts and recent material. An artifact summary for the Stage 2 archaeological assessment of OAP Location 1 (BhFv-32) is provided in Table 5. A sample of artifacts recovered is illustrated in Plates 1 to 4.

Table 5: OAP Location 1 (BhFv-32) Artifact Summary

Artifact Class	Frequency	%
Household	31	43.66
Ceramic	24	33.80
Structural	13	18.31
Miscellaneous metal and tools	2	2.82
Miscellaneous artifacts	1	1.41
Total	71	100.00

3.2.1 Non-Ceramic Artifacts

3.2.1.1 Household Artifacts

A total of 31 household artifacts were recovered from OAP Location 1 (BhFv-32), including 21 bottle glass fragments, 3 complete glass bottles, 2 chimney/lamp glass fragments, 1 dish glass fragment, 1 fragment of undetermined glass, 1 white glass fragment, 1 iron, and 1 metal container.

Bottle glass colours present at OAP Location 1 (BhFv-32) include: aqua, dark olive, and colourless. Of the bottle glass assemblage, 15 (62.5%) pieces are colourless. Three of the glass bottles depicted the maker's mark for the Dominion Glass Company. The mark was used from 1928 to 1976. One bottle depicted the maker's mark for Clark's ketchup. Clark's ketchup was sold in the 1920's to 1930's. Four bottle finishes were identified in the assemblage for OAP Location 1 (BhFv-32) (Table 6).

Table 6: Bottle Finishes at OAP Location 1 (BhFv-32)

Cat. #	Finish Type	Frequency	Approximate Dates	Comments
2	Small mouth external thread	1	1890s to present	Food storage jars
16	Small mouth external thread	1	1890s to present	Food storage jars
17	Collared ring	1	Early 20th century	Druggist and prescription bottles
18	Wide mouth external thread	1	1890s to present	Food storage jars

One piece of white glass was recovered from OAP Location 1 (BhFv-32). The glass assemblage dates from the late 19th century into the 20th century.

The remaining household artifacts, including 2 chimney/lamp glass fragments, 1 dish glass fragment, 1 fragment of undetermined glass, 1 iron, and 1 metal container are not narrowly temporally diagnostic.



Record of Finds

3.2.1.2 Structural Artifacts

A total of 13 structural artifacts were recovered from OAP Location 1 (BhFv-32), including 7 cut nails, 4 wire drawn nails, and 2 window glass fragments.

The nail assemblage suggests a mid-19th to 20th century period of use.

Both window glass fragments have a thickness greater than 1.6 mm, suggesting a period of manufacture and use post-1850.

3.2.1.3 Miscellaneous Metal and Tools

Two metal staples were recovered from OAP Location 1 (BhFv-32). These are not narrowly temporally diagnostic

3.2.1.4 Miscellaneous Artifacts

One piece of drainage tile was recovered from OAP Location 1 (BhFv-32). Drainage tile is not narrowly temporally diagnostic.

3.2.2 Ceramic Artifacts

A total of 24 ceramics were recovered from OAP Location 1 (BhFv-32). A sample of the ceramic artifacts from OAP Location 1 (BhFv-32) is illustrated in Plate 4. The ceramic assemblage is summarized in Table 7.

Table 7: OAP Location 1 (BhFv-32) Ceramic Assemblage by Ware Type

Ceramic Artifact	Frequency	%
Ironstone	11	45.83
Recent ceramic	10	41.67
Porcelain	3	12.50
Total	24	100.00

A breakdown of the ceramic assemblage by decorative type is provided in Table 8.

Table 8: OAP Location 1 (BhFv-32) Ceramic Assemblage by Decorative Type

Ceramic Artifact	Frequency	%
Recent ceramics	10	41.67
Ironstone, undecorated	7	29.17
Ironstone, transfer printed	2	8.33
Ironstone, moulded	2	8.33
Porcelain, undecorated	1	4.17
Porcelain, transfer printed	1	4.17
Porcelain, moulded	1	4.17
Total	24	100.00



Record of Finds

3.2.2.1 Ironstone

Of the 11 pieces of ironstone recovered from OAP Location 1 (BhFv-32), 7 (63.64%) are undecorated, 2 (18.18% are transfer printed (one each of blue and teal coloured decoration), and 2 (18.18%) are moulded (Table 9). Undecorated ironstone was most common after 1840 (Miller 1991) and moulded ironstone was manufactured post-1858 (Adams 1994). Blue transfer printing was popular throughout the 19th century; the teal coloured piece likely dates from the later part of the 19th century. Overall the ironstone assemblage is representative of a mid to late 19th century period of occupation.

Table 9: OAP Location 1 (BhFv-32) Ironstone Assemblage

Ceramic Artifact	Motif(s)	Frequency	%
Ironstone, undecorated	None	7	63.64
Ironstone, moulded	Rope band	2	18.18
Ironstone, transfer printed	Blue and teal	2	18.18
	Total	11	100.00

3.2.2.2 Recent Ceramics

A total of ten pieces of recent ceramics were recovered from OAP Location 1 (BhFv-32). Of the pieces, four had a polychrome glaze and three had a cream-coloured glaze. These ceramics date to the 20th century.

3.2.2.3 Porcelain

Three pieces of porcelain were recovered from OAP Location 1 (BhFv-32), one each of undecorated, transfer printed, and moulded (Table 10). Porcelain become common in the 20th century, suggesting a period of use in the 20th century.

Table 10: OAP Location 1 (BhFv-32) Porcelain Assemblage

Ceramic Artifact	Motif(s)	Frequency	%
Porcelain, undecorated	None	1	33.34
Porcelain, moulded	Scalloped edge	1	33.33
Porcelain, transfer printed	Polychrome floral decal	1	33.33
	3	100.00	

3.2.2.4 Ceramic Form and Function

While many of the ceramic pieces are too fragmentary to discern either form or function, the discernable form and function of the ceramic assemblage from OAP Location 1 (BhFv-32) is summarized in Table 11 and Table 12 respectively.



Record of Finds

Table 11: OAP Location 1 (BhFv-32) Ceramic Form

Ceramic	Flatware	Hollowware	Undetermined	Total
Ceramic, recent	2	6	2	10
Ironstone, moulded	1	1	0	2
Ironstone, transfer printed	0	2	0	2
Ironstone, undecorated	1	3	3	7
Porcelain, moulded	0	1	0	1
Porcelain, transfer printed	0	1	0	1
Porcelain, undecorated	1	0	0	1
Total	5	14	5	24

Table 12: OAP Location 1 (BhFv-32) Ceramic Function

Ceramic	Cup	Plate	Fragment	Total	
Ceramic, recent	3	1	6	10	
Ironstone, undecorated	0	0	7	7	
Ironstone, moulded	0	0	2	2	
Ironstone, transfer printed	0	0	2	2	
Porcelain, moulded	0	0	1	1	
Porcelain, transfer printed	0	0	1	1	
Porcelain, undecorated	0	0	1	1	
Total	3	1	20	24	

3.2.3 OAP Location 1 (BhFv-32) Artifact Catalogue

The complete catalogue of the Stage 2 artifact assemblage recovered from OAP Location 1 (BhFv-32) is provided in Table 13.

Table 13: OAP Location 1 (BhFv-32) Artifact Catalogue

Cat.	Subunit or Context	Artifact	Quantity	Form/ Function	Comments
1	test pit 1	metal, staple	1		fencing staple, complete, heavily corroded
2	test pit 1	glass, bottle	11		colourless; 1 small mouth external thread finish (seam to lip), 9 body fragments, 1 base fragment embossed "D" in diamond (Dominion Glass Company - mark first used by Dominion in 1928 and was used until circa 1976)
3	test pit 2	metal, staple	1		fencing staple, complete, heavily corroded
4	surface find	glass, window	2		greater than 1.6mm



Record of Finds

5	surface find	glass, undetermined	1		aqua, burnt, small fragment
6	surface find	glass, white	1		thick jar base/body fragment
7	surface find	glass, chimney/lamp	2		colourless; 1 beaded rim fragment, 1 body fragment
8	surface find	glass, dish	1		pink, etched foliage decoration
9	surface find	glass, bottle	7		aqua; 5 body fragments, 2 base fragments
10	surface find	nail, cut	7		Complete
11	surface find	nail, wire drawn	4		Complete
12	surface find	glass, bottle	2		dark olive, base fragments, mending
13	surface find	drainage tile	1		
14	surface find	iron	1		embossed "ASBESTOS SAD IRON", missing cover and handle
15	surface find	glass, bottle	1		colourless, base, embossed "CLARK'S" (Clark's brand ketchup bottle)
16	surface find	glass, bottle complete	1		colourless, small mouth external thread finish (seam to lip), base embossed "LEPAGE'S INC.", with "D" in diamond mark - (Dominion Glass Company - mark first used by Dominion in 1928 and was used until circa 1976)
17	surface find	glass, bottle complete	1		colourless, collared ring finish (seam over lip), embossed graduation markings on front and back, base embossed with "D" in diamond - (Dominion Glass Company - mark first used by Dominion in 1928 and was used until circa 1976)
18	surface find	glass, bottle complete	1		colourless, wide mouth external thread finish (seam to lip), with metal lid intact, printed label on top of lid, "DAIRY FRESH", "CARAMELs", "WHOLESOME", embossed "CANADA 8 FL.OZ. SIZE" above heel, embossing on base illegible
19	surface find	ironstone, undecorated	3	hollowware / unknown (1 rim, 2 non- rim)	Burnt
20	surface find	ironstone, undecorated	1	flatware / unknown (rim)	



Record of Finds

21	surface find	ironstone, undecorated	2	unidentifiable / unknown (1 non-rim, 1 base/body)	
22	surface find	ironstone, undecorated	1	unidentifiable / unknown (non-rim)	partial black transfer printed makers mark, "CHINA", "KIN." (likely Aflred Meakin)
23	surface find	ironstone, moulded	1	hollowware / unknown (base/body)	moulded rope band above base
24	surface find	ironstone, moulded	1	flatware / unknown (rim)	small fragment, indeterminate moulded design
25	surface find	ironstone, transfer printed	1	hollowware / unknown (non-rim)	teal, floral and foliage
26	surface find	ironstone, transfer printed	1	hollowware / unknown (rim)	blue, indeterminate scenic view with building and trees on interior
27	surface find	porcelain, undecorated	1	flatware / unknown (non-rim)	
28	surface find	porcelain, transfer printed	1	hollowware / unknown (non-rim)	polychrome floral decal
29	surface find	porcelain, moulded	1	hollowware / unknown (rim)	moulded design below scalloped edge, silver/blue and gold painted bands along rim
30	surface find	ceramic, recent	2	unidentifiable / unknown (non-rim)	cream-coloured glaze, one with partial decal printed makers mark, "OTT", "TAFFORDSHIRE", "ENGLAND" (Myott Staffordshire)
31	surface find	ceramic, recent	1	flatware / plate (rim)	cream-coloured/yellow glaze, faded painted band along rim
32	surface find	ceramic, recent	1	hollowware / unknown (lid)	polychrome decal, floral and geometric band
33	surface find	ceramic, recent	2	hollowware / unknown (rim)	polychrome decal, floral and geometric band
34	surface find	ceramic, recent	3	hollowware / cup (2 rim, 1 non-rim)	Undecorated
35	surface find	ceramic, recent	1	flatware / unknown (rim)	polychrome floral decal below rim
36	surface find	metal, container	1		small rim fragment, heavily corroded



3.3 OAP LOCATION 2 (BHFV-33)

OAP Location 2 (BhFv-33) was identified during a combination of pedestrian and test pit survey. The Stage 2 assemblage comprises 80 Euro-Canadian artifacts over an area approximately 55 metres by 23 metres and includes three positive test pits. The Euro-Canadian assemblage comprises 39 household artifacts, 26 ceramics, and 14 structural artifacts. Approximately 200 artifacts were identified on the surface and all formal artifact types and diagnostic categories, and all refined ceramic sherds were collected, as per Section 2.1.1, Standard 8 of the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Artifacts left in the field consisted largely of pieces of machinery, miscellaneous pieces of metal, small sherds of glass, later structural artifacts and recent material.. An artifact summary for the Stage 2 archaeological assessment of OAP Location 2 (BhFv-33) is provided in Table 14. A sample of artifacts recovered is illustrated in Plates 5 to 7.

Table 14: OAP Location 1 (BhFv-32) Artifact Summary

Artifact Class	Frequency	%
Household	39	48.75
Ceramic	26	32.50
Structural	15	18.75
Total	80	100.00

3.3.1 Non-Ceramic Artifacts

3.3.1.1 Household Artifacts

A total of 39 household artifacts were recovered from OAP Location 2 (BhFv-33), including 18 pieces of metal container, 14 glass bottle fragments, 3 dish glass fragments, 2 fragments of undetermined glass, 1 faunal remain, and 1 white glass fragment.

Bottle glass colours present at OAP Location 2 (BhFv-33) include: amber, aqua, dark olive, grey-tinted, sun-coloured amethyst, and colourless. Of the bottle glass assemblage, seven (50%) pieces are colourless. One piece of white glass was recovered from OAP Location 2 (BhFv-33). The glass assemblage dates from the late 19th century into the 20th century.

The remaining household artifacts, including 18 pieces of metal container, 3 dish glass fragments, 2 fragments of undetermined glass, and 1 faunal remain. These artifacts are not narrowly temporally diagnostic.

3.3.1.2 Structural Artifacts

A total of 15 structural artifacts were recovered from OAP Location 2 (BhFv-33), including 11 window glass fragments, 3 wire drawn nails, and 1 doorknob.

The nail assemblage, composed entirely of wire drawn nails, suggests a very late 19th or 20th century period of use.



Record of Finds

The 11 window glass fragments have a thickness greater than 1.6 mm, indicating a period of manufacture and use post-1850.

The doorknob is not narrowly temporally diagnostic.

3.3.2 Ceramic Artifacts

A total of 26 ceramics were recovered from OAP Location 2 (BhFv-33). A sample of the ceramic artifacts from OAP Location 2 (BhFv-33) is illustrated in Plate 7. The ceramic assemblage is summarized in Table 15.

Table 15: OAP Location 2 (BhFv-33) Ceramic Assemblage by Ware Type

Ceramic Artifact	Frequency	%
Ironstone	17	65.38
Semi-porcelain	5	19.23
Porcelain	2	7.69
Stoneware	1	3.85
Recent ceramic	1	3.85
Total	26	100.00

A breakdown of the ceramic assemblage by decorative type is provided in Table 16

Table 16: OAP Location 2 (BhFv-33) Ceramic Assemblage by Decorative Type

Ceramic Artifact	Frequency	%
Ironstone, undecorated	7	26.92
Semi-porcelain	5	19.23
Ironstone, transfer printed	4	15.38
Ironstone, moulded	4	15.38
Porcelain, moulded	2	7.69
Ironstone, painted	1	3.85
Ironstone, flow transfer printed	1	3.85
Stoneware	1	3.85
Ceramic, recent	1	3.85
Total	26	100.00

3.3.2.1 Ironstone

Of the 17 pieces of ironstone recovered from OAP Location 2 (BhFv-33), 7 (41.18%) are undecorated, 4 (23.53%) are transfer printed, 4 (23.53%) are moulded, 1 (5.88%) is painted, and 1 (5.88%) is flow transfer printed (Table 17). Undecorated ironstone was most common after 1840 (Miller 1991) and moulded ironstone was manufactured post-1858 (Adams 1994). Transfer printed decoration was popular



Record of Finds

throughout the 19th century and flow transfer printed decoration was popular in two periods; in the 1840s and 1850s and in the 1890s. The ironstone assemblage is representative of a mid to late19th century period of occupation.

Table 17: OAP Location 2 (BhFv-33) Ironstone Assemblage

Ceramic Artifact	Motif(s)	Frequency	%
Ironstone, undecorated	None	7	41.18
Ironstone, transfer printed	Blue "Willow" pattern, brown floral pattern, red knot work band	4	23.53
Ironstone, moulded	Foliage band, wheat pattern, scalloped body panels	4	23.53
Ironstone, painted	Black and gold painted band	1	5.88
Ironstone, flow transfer printed	Black	1	5.88
	17	100.00	

3.3.2.2 Semi-Porcelain

A total of five semi-porcelain ceramics were recovered from OAP Location 2 (BhFv-33). Four pieces were decorated with a moulded linear design and gold banding below a scalloped edge, and also included a green floral transfer print. The other piece of semi-porcelain had a moulded linear and dot decoration below a scalloped edge. The semi-porcelain assemblage is indicative of an occupation between 1880-1940.

3.3.2.3 Porcelain

Two pieces of porcelain were recovered from OAP Location 2 (BhFv-33), both moulded with scalloped edges. Porcelain became common in the 20th century, and these artifacts indicate a period of use in the 20th century.

3.3.2.4 Stoneware

One piece of stoneware was recovered from OAP Location 2 (BhFv-33). The one piece has a dark brown interior and exterior glaze. Stoneware is indicative of a late 19th century period of use.

3.3.2.5 Recent Ceramics

One piece of recent ceramic was recovered from OAP Location 2 (BhFv-33). The piece has a cream-coloured glaze. These ceramics date to the 20th century.

3.3.2.6 Ceramic Form and Function

While many of the ceramic pieces are too fragmentary to discern either form or function, the discernable form and function of the ceramic assemblage from OAP Location 2 (BhFv-33) is summarized in Table 18 and Table 19 respectively.



Record of Finds

Table 18: OAP Location 2 (BhFv-33) Ceramic Form

Ceramic	Flatware	Hollowware	Undetermined	Total
Ironstone, undecorated	4	1	2	7
Semi-porcelain	5	0	0	5
Ironstone, moulded	2	1	1	4
Ironstone, transfer printed	3	1	0	4
Porcelain, moulded	1	1	0	2
Ceramic, recent	1	0	0	1
Ironstone, flow transfer printed	1	0	0	1
Ironstone, painted	1	0	0	1
Stoneware	0	1	0	1
Total	18	5	3	26

Table 19: OAP Location 2 (BhFv-33) Ceramic Function

Ceramic	Saucer	Plate	Fragment	Total
Ironstone, undecorated	0	0	7	7
Semi-porcelain	0	4	1	5
Ironstone, moulded	0	2	2	4
Ironstone, transfer printed	0	0	4	4
Porcelain, moulded	1	0	1	2
Ceramic, recent	0	1	0	1
Ironstone, flow transfer printed	0	0	1	1
Ironstone, painted	0	1	0	1
Stoneware	0	0	1	1
Total	1	8	17	26

3.3.3 OAP Location 2 (BhFv-33) Artifact Catalogue

The complete catalogue of the Stage 2 artifact assemblage recovered from OAP Location 2 (BhFv-33) is provided in Table 20.

Table 20: OAP Location 2 (BhFv-33) Artifact Catalogue

Cat.	Subunit or Context	Artifact	Quantity	Form/ Function	Comments
1	test pit 1	glass, window	6		greater than 1.6mm
2	test pit 1	nail, wire drawn	1		Complete



Record of Finds

3	test pit 1	glass, bottle	5		colourless; 1 large mouth external thread finish fragment, 4 body fragments
4	test pit 1	glass, bottle	2		amber; 1 body fragment, 1 base fragment
5	test pit 1	ironstone, undecorated	2	flatware / unknown (rim)	Mending
6	test pit 2	glass, window	2		greater than 1.6mm
7	test pit 2	glass, bottle	1		colourless, body fragment
8	test pit 2	glass, undetermined	1		colourless, small fragment
9	test pit 2	nail, wire drawn	1		Complete
10	test pit 2	faunal remains	1		indeterminate medium to large mammal, small fragment
11	test pit 3	metal, container	18		7 rim/seam and body fragments, 11 body fragments
12	surface find	glass, window	3		greater than 1.6mm
13	surface find	nail, wire drawn	1		Complete
14	surface find	glass, bottle	1		aqua, post bottom mould produced bottle base, embossed "T" with "x" through vertical line
15	surface find	glass, bottle	1		grey-tinted, cup bottom mould produced bottle base, embossed "T", "5", embossed "OHIO above heel
16	surface find	glass, bottle	1		sun coloured amethyst, body fragment
17	surface find	glass, white	1		hollowware rim fragment
18	surface find	glass, bottle	2		dark olive; 1 oil finish (applied), 1 base fragment
19	surface find	glass, dish	1		light green base/body fragment, ribbed exterior surface, base embossed "OVEN"
20	surface find	glass, bottle	1		colourless, body fragment
21	surface find	glass, dish	1		sun coloured amethyst, body fragment, moulded geometric design
22	surface find	glass, undetermined	1		dark red amber, small, thick, flat fragment
23	surface find	door knob	1		porcelain, complete
24	surface find	glass, dish	1		light brown and cream-coloured exterior surface with cream-coloured interior



Record of Finds

					surface, lid fragment with moulded design along edge
25	surface find	stoneware	1	hollowware / unknown (non-rim)	dark brown interior and exterior glaze
26	surface find	ironstone, undecorated	2	flatware / unknown (1 rim, 1 non- rim)	
27	surface find	ironstone, undecorated	1	hollowware / unknown (non-rim)	
28	surface find	ironstone, undecorated	2	unidentifiable / unknown (non-rim)	
29	surface find	ironstone, transfer printed	2	flatware / unknown (non-rim)	blue, Willow pattern
30	surface find	ironstone, flow transfer printed	1	flatware / unknown (non-rim)	black, small fragment, indeterminate design
31	surface find	ironstone, transfer printed	1	flatware / unknown (rim)	brown, floral
32	surface find	ironstone, transfer printed	1	hollowware / unknown (rim)	red, knot work band on exterior
33	surface find	ironstone, painted	1	flatware / plate (rim)	thin black and gold painted band below rim
34	surface find	ironstone, moulded	1	unidentifiable / unknown (non-rim)	small fragment, indeterminate design
35	surface find	ironstone, moulded	1	flatware / plate (rim)	foliage band below rim
36	surface find	ironstone, moulded	1	hollowware / unknown (rim)	wheat pattern
37	surface find	ironstone, moulded	1	flatware / plate (rim)	wheat pattern with scalloped body panels
38	surface find	porcelain, moulded	1	flatware / saucer (rim)	moulded design below scalloped edge with polychrome floral decal and gold painted lines
39	surface find	porcelain, moulded	1	hollowware / unknown (lid)	indeterminate moulded design, small lid fragment with finial missing
40	surface find	semi-porcelain	4	flatware / plate (3 rim, 1 non-rim)	moulded linear design below scalloped edge with gold painted line and green transfer printed floral decoration

Record of Finds

41	surface find	semi-porcelain	1	flatware / unknown (rim)	moulded linear and dot row below scalloped edge
42	surface find	ceramic, recent	1	flatware / plate (rim)	cream-coloured glaze, moulded rope decoration along scalloped edge, painted orange and green flower

Analysis and Conclusions

4.0 ANALYSIS AND CONCLUSIONS

The Stage 2 archaeological assessment of the study area identified two new archaeological locations, OAP Location 1 (BhFv-32) and OAP Location 2 (BhFv-33). Maps identifying exact site locations do not form part of this public report; they may be found in the Supplementary Documentation.

4.1 OAP LOCATION 1 (BHFV-32)

The Stage 2 assessment of OAP Location 1 (BhFv-32) was conducted using pedestrian and test pit survey methods and resulted in the recovery of 71 Euro-Canadian artifacts over an area of approximately 15 metres by 36 metres in the ploughed field and two positive test pits. The Euro-Canadian assemblage comprises 31 household artifacts, 24 ceramics, 13 structural artifacts, 2 pieces of miscellaneous metal and tools, and 1 miscellaneous artifact. The ceramic assemblage from OAP Location 1 (BhFv-32) is comprised of ironstone (45.83%), recent ceramics (41.67%), and porcelain (12.50%). The ironstone assemblage suggests a mid to late 19th century period of use. The recent ceramics and porcelain assemblages indicate that the site continued to be occupied into the 20th century. The presence of cut nails and wire drawn nails further suggests a mid to late 19th century occupation that continues into the 20th century. A period of use continuing into the 20th century is further supported by the majority of the bottle glass assemblage comprising colourless glass (62.5%). Colourless glass was common in the 20th century. Further to the above, three bottles depict the maker's mark for the Dominion Glass Company used from 1928 to 1976.

Land registry data indicate that the north half of Lot 24. Concession 3, Rideau Front was patented from the Crown to Henry Mitchell on November 2, 1861, although Mitchell had already sold the property to Alexander Dowie (sic) in November of 1853 (ONLand n.d.:269). This would be the A. Dowe indicated on the 1863 Walling map and on whose property a structure is indicated on that map (Figure 6). Dowe and his family remained on the property until 1873, when they sold their property to Robert Spratt (ONLand n.d.:269)., the landowner shown on the 1879 Belden map (Figure 7). The property remained in the Spratt family, passing though the hands of several Spratt family members and eventually being consolidated by Robert G. Spratt in February 1926, until it was sold to Howard Davidson in November of 1926 (ONLand n.d.:269). Davidson retained most of the property, selling off easements to the Hydro Electric Power Commission (in 1934) and Department of Transportation (in 1950) and smaller portions of the property until they sold their remaining interests in the lot to Unicorn Properties Limited in 1962 (ONLand n.d.:269-271). Based on the land registry data we can assume that the structure indicated on the 1879 Belden map was occupied until approximately 1962.

OAP Location 1 (BhFv-32) is located in part of Lot 24, Concession 3 from the Rideau River, Geographic Township of Gloucester, former Carleton County, now City of Ottawa, Ontario. The 1863 lists A. Dowe and R. Campbell as the landowners of the lot. The 1879 map lists Robert Spratt and Robert Campbell as the landowners of the lot. Both maps illustrate two structures along Albion Road. Topographic maps from the 20th century depict structures set back from Albion Road, these structures appear on maps into the late 1940s. OAP Location 1 (BhFv-32) was identified next to a structure with a poured concrete foundation. A large pile of recent refuse was deposited within and surrounding the structure.



Analysis and Conclusions

With the identification of less than 20 artifacts dating to a period of use prior to 1900, and the number of artifacts suggesting a period of use in the 20th century, it is determined that OAP Location 1 (BhFv-32) does not retain cultural heritage value or interest. Based on these considerations, OAP Location 1 (BhFv-32) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the MHSTCI' *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Furthermore, based on topographic mapping and land registry it is determined that OAP Location 1 (BhFv-32) is associated with the Spratt house constructed *circa* 1873-1879. Given the presumed date of construction, and thus a *terminus post quem* of 1873, the site would not meet criteria to move to Stage 4 mitigation of development impacts based on Section 3.4.2, Standard 1 of the MHSTCI' *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), as no portion of the time span of the site occupation predates 1870.

4.2 OAP LOCATION 2 (BHFV-33)

The Stage 2 assessment of OAP Location 2 (BhFv-33) was conducted using pedestrian and test pit survey methods and resulted in the recovery of 80 Euro-Canadian artifacts over an area approximately 55 metres by 23 metres and includes three positive test pits. The Euro-Canadian assemblage comprises 39 household artifacts, 26 ceramics, and 14 structural artifacts. The ceramic assemblage from OAP Location 2 (BhFv-33) is comprised of ironstone (65.38%), semi-porcelain (19.23%), porcelain (7.69%), stoneware (3.85%), and recent ceramics (3.85%). The ironstone assemblage suggests a mid to late 19th century period of use. The semi-porcelain assemblage suggests a late 19th century occupation that continues into the 20th century. The recent ceramics and porcelain assemblages also indicate that the site continued to be occupied into the 20th century. A period of use continuing into the 20th century is further supported by half of the bottle glass assemblage (50%) comprising colourless glass.

Land registry data indicate that the south half of Lot 24 to have been patented from the Crown to Robert Campbell, although that instrument was only registered in August of 1884 (ONLand n.d.:276). Prior to that date Campbell had provided the B&P Railway with a quit claim deed to a portion of his property in 1853 (ONLand n.d.:276). Campbell is noted as the landowner of the lot on the 1863 Walling map (Figure 6), although there is no indication that he had a home on the property yet. A homestead belonging to Campbell is indicated on the 1879 Belden map (Figure7). Campbell maintained his interest in the lot until 1884, when he sold his property to Robert Davidson (ONLand n.d.:276). Davidson sold the land in 1946 to the Director of the Veterans' Land Act (ONLand n.d.:276). The Veterans' Land Act was a piece of legislation passed in 1942 to provide veterans returning from the Second World War the opportunity to purchase lands with small down payments (The Canadian Encyclopedia n.d.).

OAP Location 2 (BhFv-33) is located in part of Lot 24, Concession 3 from the Rideau River, Geographic Township of Gloucester, former Carleton County, now City of Ottawa, Ontario. The 1863 lists A. Dowe and R. Campbell as the landowners of the lot. The 1879 map lists Robert Spratt and Robert Campbell as the landowners of the lot. Both maps illustrate two structures along Albion Road. Topographic maps from the 20th century depict structures set back from Albion Road, these structures appear on maps into the 1940s. OAP Location 2 (BhFv-33) was identified within 30 metres of a barn foundation comprised of poured concrete.



Analysis and Conclusions

With the identification of less than 20 artifacts dating to a period of use prior to 1900, and the number of artifacts suggesting a period of use in the 20th century, it is determined that OAP Location 2 (BhFv-33) does not retain cultural heritage value or interest. Based on these considerations, OAP Location 2 (BhFv-33) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 Standard 1c of the MHSTCl' *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Furthermore, based on topographic mapping and land registry it is determined that OAP Location 2 (BhFv-33) is associated with the Campbell/Davidson house constructed between 1864 and 1879 and abandoned sometime around 1946. Given the presumed date of construction, and thus a *terminus post quem* of 1864, the site would not meet criteria to move to Stage 4 mitigation of development impacts based on Section 3.4.2, Standard 1 of the MHSTCl' *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), as less than 10% of the time span of the site occupation predates 1870.



Recommendations

5.0 RECOMMENDATIONS

5.1 OAP LOCATION 1 (BHFV-32)

OAP Location 1 (BhFv-32) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The cultural heritage value or interest of OAP Location 1 (BhFv-32) has been sufficiently documented. Therefore, **no further archaeological assessment is recommended for OAP Location 1 (BhFv-32).**

5.2 OAP LOCATION 2 (BHFV-33)

OAP Location 2 (BhFv-33) does not fulfill the criteria for a Stage 3 archaeological investigation as per Section 2.2 of the MHSTCl' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). The cultural heritage value or interest of OAP Location 2 (BhFv-33) has been sufficiently documented. Therefore, **no further archaeological assessment is recommended for OAP Location 2 (BhFv-33).**

Please note that as per Section 48(3) of the *Ontario Heritage Act* (Government of Ontario 1990b), no alteration of OAP Location 1 (BhFv-32) or OAP Location 2 (BhFv-33) is permitted by an unlicensed person until the MHSTCI has entered this archaeological assessment report into the *Ontario Public Register of Archaeological Reports*.

The MHSTCI is asked to review the results presented and accept this report into the Ontario Public Register of Archaeological Reports.



Advice on Compliance with Legislation

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c. O.18 (Government of Ontario 1990b). 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 Ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* (Government of Ontario 1990b) for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed 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* (Government of Ontario 1990b).

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* (Government of Ontario 1990b). 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* (Government of Ontario 1990b).

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



7.0 BIBLIOGRAPHY AND SOURCES

- Adams, N. 1994. *Field Manual for Avocational Archaeologists in Ontario*. Ontario Archaeological Society Inc., Archaeological Stewardship Project.
- Algonquins of Ontario. 2017. *Relic Shorelines in Algonquin Traditional Territory in Ontario*. Report on file, Algonquins of Ontario Consultation Office, Pembroke, Ontario.
- Algonquins of Ontario. 2018. Conducting Archaeology within the Unceded Algonquins of Ontario Settlement Area: Algonquins of Ontario Enhanced Archaeology Standards and Guidelines for Approval Authorities, Development Proponents and Consultant Archaeologists. Algonquins of Ontario Consultation Office: Pembroke, Ontario.
- Anonymous. N.d. *History of the Algonquins*. Electronic Document: www.tanakiwin.com. Last Accessed: May 24, 2018.
- Archaeologix Inc. 2008. Archaeological Assessment (Stage 1) Shell Proposed Refinery Project, St. Clair Township, Lambton County, Ontario. Report prepared for Jacques Whitford Limited, Markham, Ontario. (PIF # P084-109-2007).
- Archaeological Services Inc. 1999. *The Archaeological Resource Potential Mapping Study of the Regional Municipality of Ottawa-Carleton*. Planning Report submitted to the Regional Municipality of Ottawa-Carleton.
- Beaudoin, M. 2013. *De-Essentializing the Past: Deconstructing Colonial Categories in 19th-Century Ontario.* Ph.D. thesis submitted to the University of Western Ontario, London.
- Belden, H. & Co. 1879. Illustrated Historical Atlas of the County of Carleton (including the City of Ottawa), Ont. Toronto: H. Belden & Co.
- Borden, Charles E. 1952. A Uniform Site Designation Scheme for Canada. *Anthropology in British Columbia*, No. 3, 44-48.
- Bourne, Annie N. (Translator) and Edward G. Bourne (editor). 2000. *Algonquians, Hurons and Iroquois: Champlain Explores America, 1603-1616.* Dartmouth, NS: Brook House Press.
- Chapman, Lyman John and Donald F. Putnam 1984. *The Physiography of Southern Ontario*. 3rd ed. Ontario Geological Survey Special Volume 2. Toronto: Ontario Ministry of Natural Resources.
- City of Ottawa. n.d.. GeoOttawa. http://maps.ottawa.ca/geoottawa/. Accessed September 26, 2019.
- Coffin, William, 1825. *Plan of the township of Gloucester*. Library and Archives Canada, National Map Collection, H12/430/Gloucester/1825.
- Collard, E. 1967. Nineteenth-century Pottery and Porcelain in Canada. McGill University Press, Montreal.



- Day, Gordon M., and Bruce Trigger. 1978. Algonquin. *Handbook of North American Indians: Volume 15 Northeast.* Washington: Smithsonian Institution, pp. 792-797.
- Department of Militia and Defence. 1906. Ottawa, Ontario. Electronic Document: https://ocul.on.ca/topomaps/map-images/HTDP63360K031G05_1906TIFF.jpg. Last Accessed December 13, 2019
- Department of National Defence. 1948. *Ottawa, Ontario*. Electronic Document: https://ocul.on.ca/topomaps/map-images/HTDP63360K031G05 1948 UTMTIFF.jpg. Last Accessed December 13, 2019.
- Ellis, Chris J., and Neal Ferris (eds.), 1990. *The Archaeology of Southern Ontario to A.D. 1650*.

 Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.
- Fox, William, and Charles Garrad. 2004. Hurons in an Algonquian Land. *Ontario Archaeology*. 77/78:121-134.
- Fox, William, and Jean-Luc Pilon. 2016. Evidence for Sixteenth-Century Exchange: The Ottawa and Upper Saint Lawrence Waterways. In *Contact in the 16th Century: Networks among Fishers, Foragers and Farmers*, Brad Loewen and Claude Chapdelaine (eds.), Mercury Series, Archaeology Paper 176. Ottawa: Canadian Museum of History and University of Ottawa Press, pp.199-215.
- Government of Ontario. 1990a. Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c. F.31. Electronic document: https://www.ontario.ca/laws/statute/90f31. Last accessed January 30, 2018.
- Government of Ontario. 1990b. *Ontario Heritage Act, R.S.O. 1990, CHAPTER 0.18.* Last amendment: 2009, c. 33, Sched. 11, s. 6. Electronic document: http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90018_e.htm. Last accessed January 30, 2018.
- Government of Ontario. 2002. Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33. Electronic document: https://www.ontario.ca/laws/statute/02f33. Last accessed January 30, 2018.
- Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: Ministry of Heritage, Sport, Tourism and Culture Industries.
- Government of Ontario. 2012. *Ministry of Infrastructure Public Work Class Environmental Assessment,* 2012 Office Consolidation. Toronto: Ministry of Infrastructure.
- Government of Ontario. 2014. The Archaeology of Rural Historical Farmsteads: A DRAFT Technical Bulletin for Consultant Archaeologists in Ontario. Toronto: Ministry of Heritage, Sport, Tourism and Culture Industries.
- Government of Ontario. 2019a. Sites within a one Kilometre Radius of the Study Area Provided from the Ontario Archaeological Sites Database.



- Government of Ontario. 2019b. Archaeological Assessments Completed with the Study Area or within 50 Metres of the Study Area Provided from the Ontario Public Register of Archaeological Reports.
- Hessel, Peter. 1987. *The Algonkin Tribe, The Algonkins of the Ottawa Valley: An Historical Outline.*Arnprior, ON: Kichesippi Books.
- Hills, G.A., N.R. Richards and F.F. Morwick, 1944. *Soil Survey of Carleton County. Report No. 7 of the Ontario Soil Survey*. Ottawa: Department of Agriculture.
- Holmes, Joan. 1993. Indigenous Use and Occupation of the Ottawa River Watershed. *Algonquins of Golden Lake Claim, Volume 2.* Report on file with the Ontario Native Affairs Secretariat, Ottawa, Ontario.
- Hughes, G. B. 1961. English and Scottish Earthenware 1660-1860. Abbey Fine Arts, London.
- Jacques Whitford. 2004. Stages 2 and 3 Archaeological Assessment, Proposed Greenbelt Pathway Trailhead Phase 1, Victory Hill, Ottawa, Ontario. Report prepared for the National Capital Commission, Ottawa, ON. (PIF # P002-007-2005 and P002-013-2005).
- Jacques Whitford, 2008. Stage 1 Archaeological Impact Assessment Interconnecting and Third Party Pipelines. Report prepared for Shell Canada Products, Sarnia, ON. (PIF # P002-128-2007).
- Karrow, P.F. and B.G. Warner. 1990. The Geological and Biological Environment for Human Occupation in Southern Ontario. In: Chris J. Ellis and Neal Ferris (eds.) 1990. The Archaeology of Southern Ontario to A.D. 1650. Occasional Publication of the London Chapter, OAS Number 5, pp 5-36. London, Ontario: Ontario Archaeological Society
- Kendrick, G. 1971. The Antique Bottle Collector. Pyramid Books, New York.
- Kennedy, William. 1961. North Bay: Past-Present-Prospective. Toronto: T.H. Best Printing Company, Ltd.
- Kenyon, Ian. 1980a. 19th Century Notes: Window Glass Thickness. KEWA (80-2).
- Kenyon, Ian. 1980b. 19th Century Notes: Some General Notes on 19th Century Ceramics. KEWA (80-3).
- Kenyon, I. 1985. A History of Ceramic Tableware in Ontario, 1840-1870. Arch Notes 85-5:13-28.
- Kinickinick Heritage Consultants. 2004. Stage 1&2 Archaeological Assessment of Proposed Central Canada Exhibition, Albion Road Site, Part s Lots 24 and 25, Concession 3, Gloucester Township (GEO), City of Ottawa. CIF P039-34. Report on file with the Ministry of Heritage, Sport, Tourism and Culture Industries.
- Konrad, Victor. 1981. An Iroquois Frontier: the North Shore of Lake Ontario During the Late Seventeenth Century. *Journal of Historical Geography*, 7(2):129-144.
- Laliberté, Marcel. 1998. Archaeological Resource Potential, Federal Lands in the National Capital Region.

 Report prepared for the National Capital Commission.



- Laliberté, Marcel. 1999. The Middle Woodland in the Ottawa Valley. In Pilon 1999, pp. 69-82.
- Lee, Robert C., 2004. *The Canada Company and the Huron Tract, 1826-1853.* Toronto: Natural Heritage Books.
- Lindsey, B. 2016. Historic Glass Bottle Identification and Information Website. Last accessed on December 15, 2016. Available online at: http://www.sha.org/bottle/index.htm.
- Loewen, Brad and Claude Chapdelaine (editors). 2016. Contact in the 16th Century: Networks among Fishers, Foragers and Farmers. Mercury Series Archaeology Paper 176. Ottawa: University of Ottawa Press.
- Maryland Archaeological Conservation Lab. 2012. Colonial Ceramics. Last accessed December 15, 2016. Available online at:

 http://www.jefpat.org/diagnostic/Historic Ceramic Web Page/Historic Main.htm.
- McDonnell, Duncan. 1820a. *Plan of Township of Gloucester*. Original township survey map held at Crown Land Surveys, Office of the Surveyor General, Ministry of Natural Resources and Forestry, Peterborough, Ontario.
- McDonnell, Duncan. 1820b. Field Notes of the Township of Goloucester in the Ottawa District, Commencing June 29th 1820. Original township survey notes held at Crown Land Surveys, Office of the Surveyor General, Ministry of Natural Resources and Forestry, Peterborough, Ontario.
- Miller, G. 1991. Thoughts Towards a User's Guide to Ceramic Assemblages, Part I: Lumping Sites into Mega-assemblages by Those That Cannot Tell Time. Council for Northeast Historical Archaeology Newsletter, No. 18.
- Mitchell, Barry. 1975. Iroquois or Algonkin Ceramics? Ontario Archaeology 25:61-78.
- Mitchell, Barry. 1990. Excavation and Reassessment of the Kant Site, Renfrew County. *Annual Archaeological Report Ontario, New Series* 1: 44-45.
- Mitchell, Barry. 1996. Archaeology of the Bonnechere River: Wilber Lake Operations, Renfrew County, Ontario: 1995 Field Season. *Annual Archaeological Report Ontario, New Series* 7:107-108.
- Morris, J.L. 1943. *Indians of Ontario*. 1964 reprint. Toronto: Department of Lands and Forests, Government of Ontario.
- Morrison, James. 2005. Algonquin History in the Ottawa River Watershed. *Background Study for Nomination of the Ottawa River Under the Canadian Heritage River System.* L. Hopkins (ed.). Ipswich, MA: Quebec-Labrador Foundation, pp. 17-32.
- ONLand. n.d. Abstract/Parcel Register Book: Ottawa-Carleton (04), Gloucester, Book 24, Concession 3; Rideau Front; Lot 7 To 30. Available online at: https://www.onland.ca/ui/4/books/80401/viewer/422642216



- Pendergast, James F. 1999. The Ottawa River Algonquin Bands in a St. Lawrence Iroquoian Context. Canadian Journal of Archaeology, Volume 23 (1 and 2):63-136.
- Pilon, Jean-Luc (editor). 1999. *La préhistoire de l'Outaouis* = *Ottawa Valley Prehistory*. Hull: Institut d'histoire et de recherches sur l'Outaouis.
- Saint-Germain, Claire. 1999. The End of the Pre-Contact Period in the Ottawa Valley A Look at the Zooarchaeology of the Leamy Lake Park Sites. In Pilon (ed.), 1999, pp. 83-92.
- St-Pierre, Christian Gates. 2009. A Critical Revew of the Last Decade of Prehistoric Archaeology in Southern Quebec. In *Painting the Past with a Broad Brush: Papers in Honour of James Valliere Wright*, D. L. Keenlyside and J-L Pilon (eds.). Mercury Series, Archaeology Paper 170. Ottawa: Canadian Museum of Civilization.
- Stelle, L. J. 2001. An Archaeological Guide to Historic Artifacts of the Upper Sangamon Basin, Central Illinois, U.S.A. Last accessed on August 17, 2018. Available online at: http://virtual.parkland.edu/lstelle1/len/archguide/documents/arcguide.htm.
- Sussman, Lynne. 1997. *Mocha, Banded, Cat's Eye, and Other Factory-Made Slipwear*. Studies in Northeast Historical Archaeology. Number 1. Boston: Boston University.
- The Canadian Encyclopedia. n.d.. *Veterans' Land Act.* Available online at: https://www.thecanadianencyclopedia.ca/en/article/veterans-land-act
- Trigger, Bruce. 1985. *Natives and Newcomers: Canada's "Heroic Age" Reconsidered.* Kingston and Montreal: McGill-Queen's University Press.
- Von Gernet, Alexander. 1992. A Possible Matouweskarini Hunting Camp: Excavations at the Highland Lake Site, Renfrew County. Annual Archaeological Report Ontario, New Series 2: 120-124.
- Von Gernet, Alexander. 1993. Archaeological Investigations at Highland Lake: 1991 Field Season. Annual Archaeological Report Ontario, New Series 3: 74-79.
- Voss, B. L. 2008. *The Archaeology of Ethnogenesis: Race and Sexuality in Colonial San Francisco*. University of California Press, Berkeley.
- Walker, Harry, and Olive Walker. 1968. *Carleton Saga*. Ottawa: Carleton County Council and The Runge Press Limited.
- Walling, Henry F. 1863. *Map of the County of Carleton, Canada West.* Library and Archives Canada. National Map Collection, H2/420/Carleton/1863.
- Watson, Gordon D. 1991. Dating the Woodland Occupations of Sand Island, Lower Rideau Lakes, Leeds County, Ontario. Annual Archaeological Report, Ontario, New Series 2. Toronto: Ontario Heritage Foundation.



- Watson, Gordon D. 1992. Dating Eastern Ontario Woodland Ceramics. Annual Archaeological Report, Ontario, New Series 3. Toronto: Ontario Heritage Foundation.
- Watson, Gordon D. 1999. The Early Woodland of the Ottawa Valley. In Pilon 1999, pp. 55-68.
- Whiteduck, Kirby. 2002. *Algonquin Traditional Culture*. Pikwekanagan, ON: Council of the Algonquins of Pikwekanagan.
- Wilson, Alan, 1969. The Clergy Reserves of Upper Canada. Ottawa: The Canadian Historical Association Booklets, No 23.
- Wright, J.V. 1995. *A History of the Native People of Canada Volume 1 (10,000 1,000 B.C.).* Museum of Civilization, Mercury Series, Archaeology Paper 152. Gatineau: Canadian Museum of Civilization.

8.0 IMAGES

8.1 PHOTOGRAPHS

Photo 1: Ground conditions, facing southwest



Photo 2: Pedestrian survey at five metre intervals, facing southwest





Photo 3: Pedestrian survey at five metre intervals, facing southwest

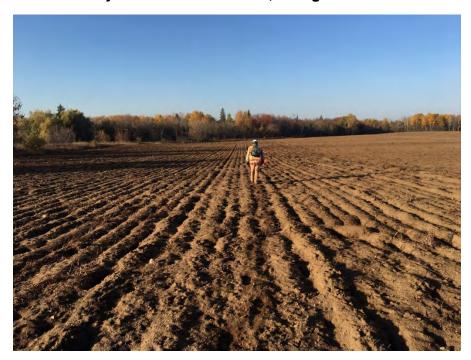


Photo 4: Intensified survey at OAP Location 1 (BhFv-32), facing northeast





Photo 5: View of OAP Location 1 (BhFv-32), facing south



Photo 6: View of OAP Location 2 (BhFv-33), facing east





Photo 7: Test pit survey at five metre intervals, facing east



Photo 8: Test pit survey at five metre intervals, facing north





Photo 9: Concrete foundation and rubble pile, facing southeast



Photo 10: Concrete barn foundation, facing southeast





Photo 11: Concrete foundation, facing northwest



Photo 12: Concrete foundation, facing northwest





8.2 ARTIFACTS

Plate 1: Sample of household artifacts recovered from OAP Location 1 (BhFv-32)



Plate 2: Complete glass bottles recovered from OAP Location 1 (BhFv-32)

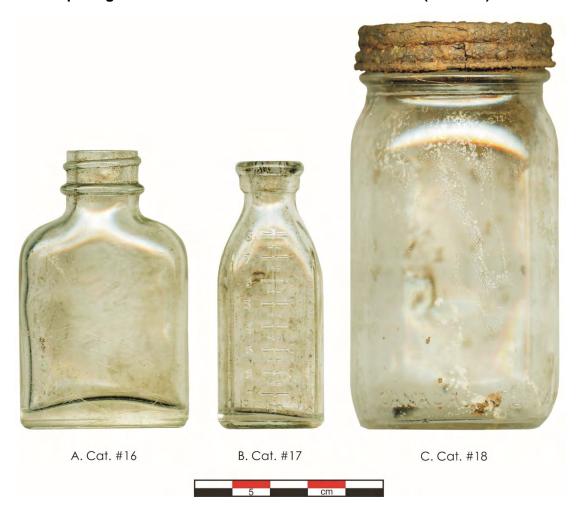


Plate 3: Sample of structural artifacts recovered from OAP Location 1 (BhFv-32)



Plate 4: Sample of ceramics recovered from OAP Location 1 (BhFv-32)



Plate 5: Sample of household artifacts recovered from OAP Location 2 (BhFv-33)



Plate 6: Sample of structural artifacts recovered from OAP Location 2 (BhFv-33)

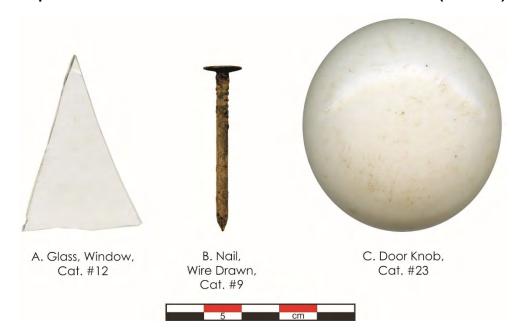


Plate 7: Sample of ceramics recovered from OAP Location 2 (BhFv-33)



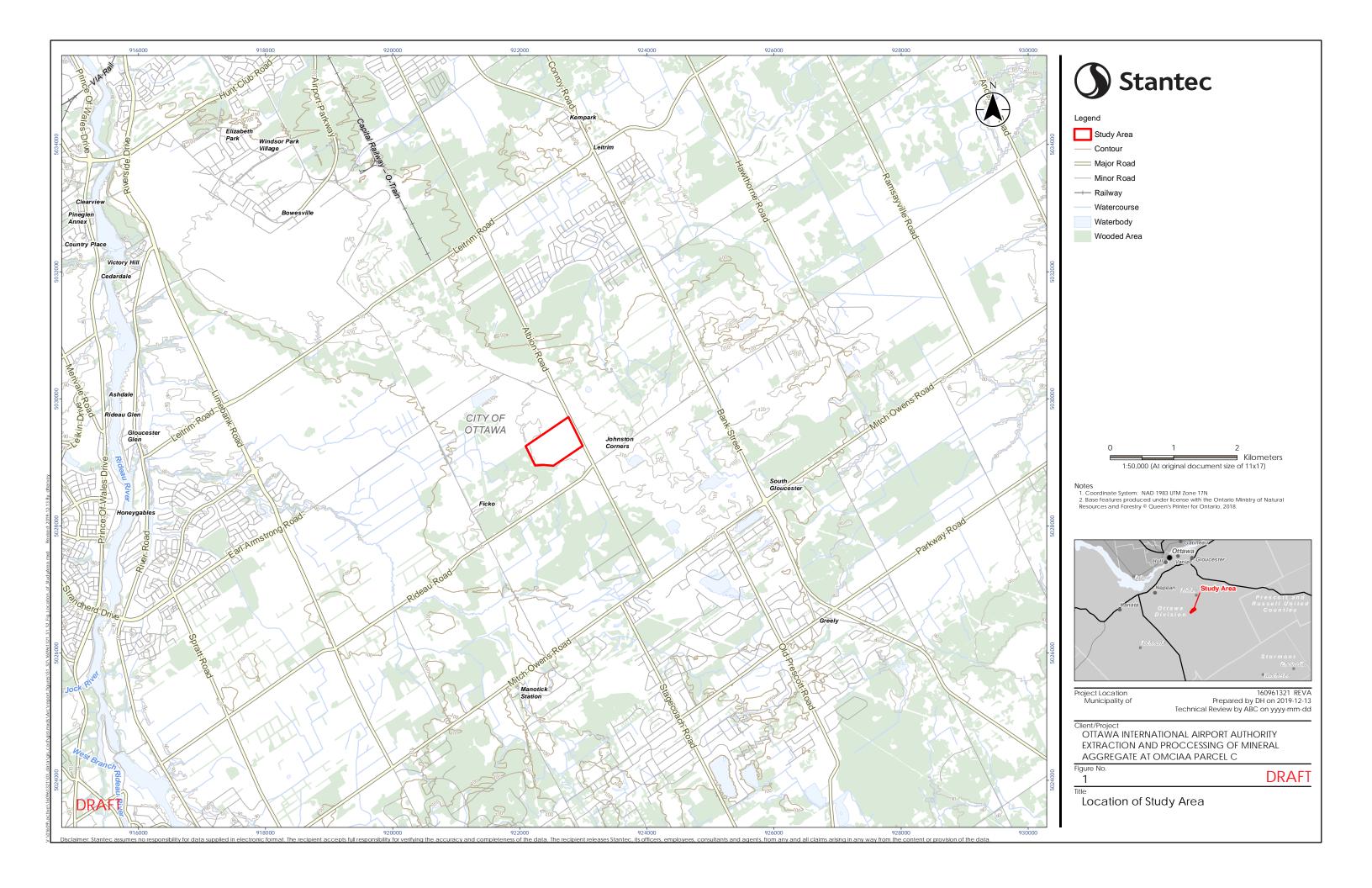


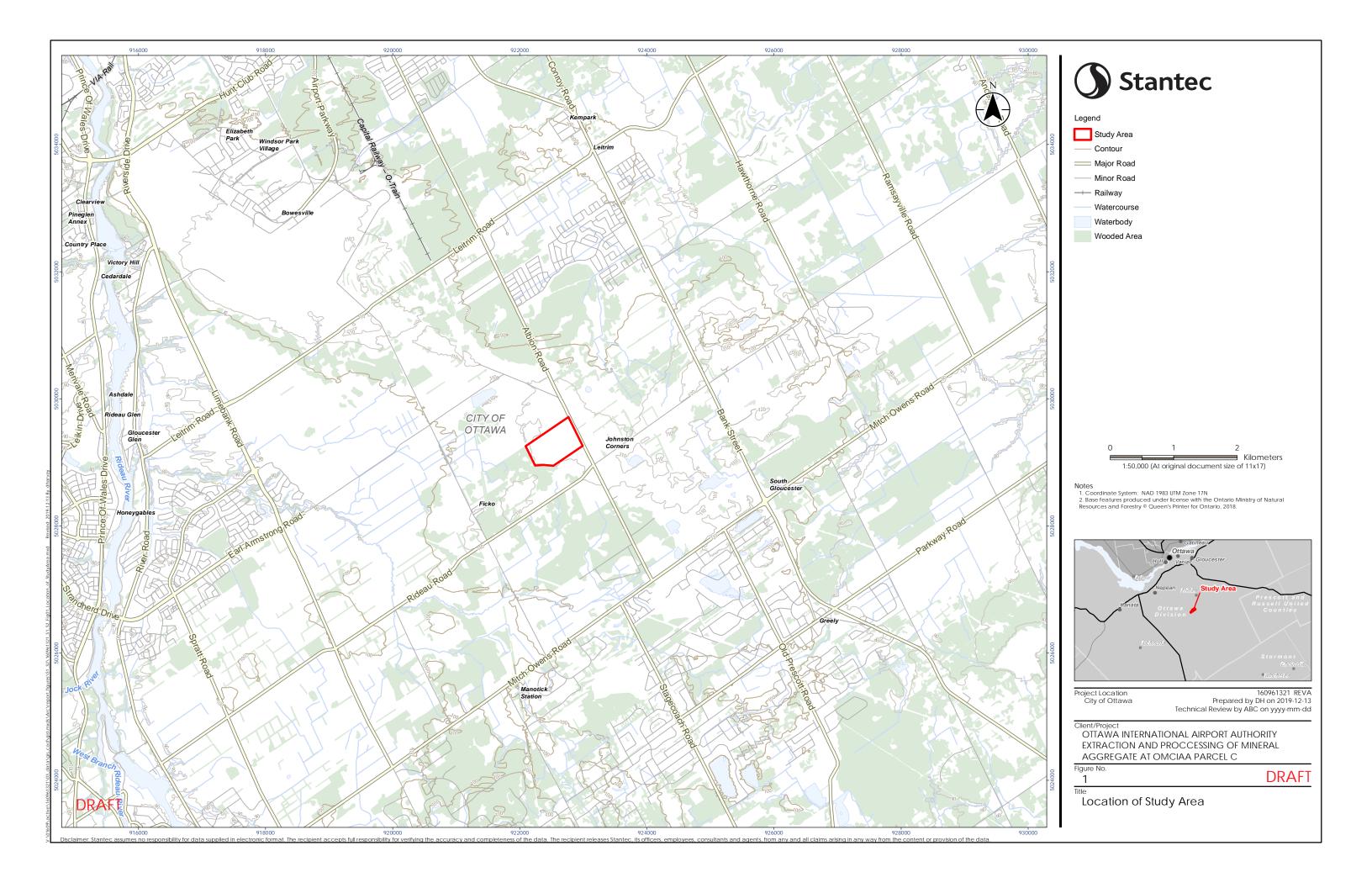
Maps

9.0 MAPS

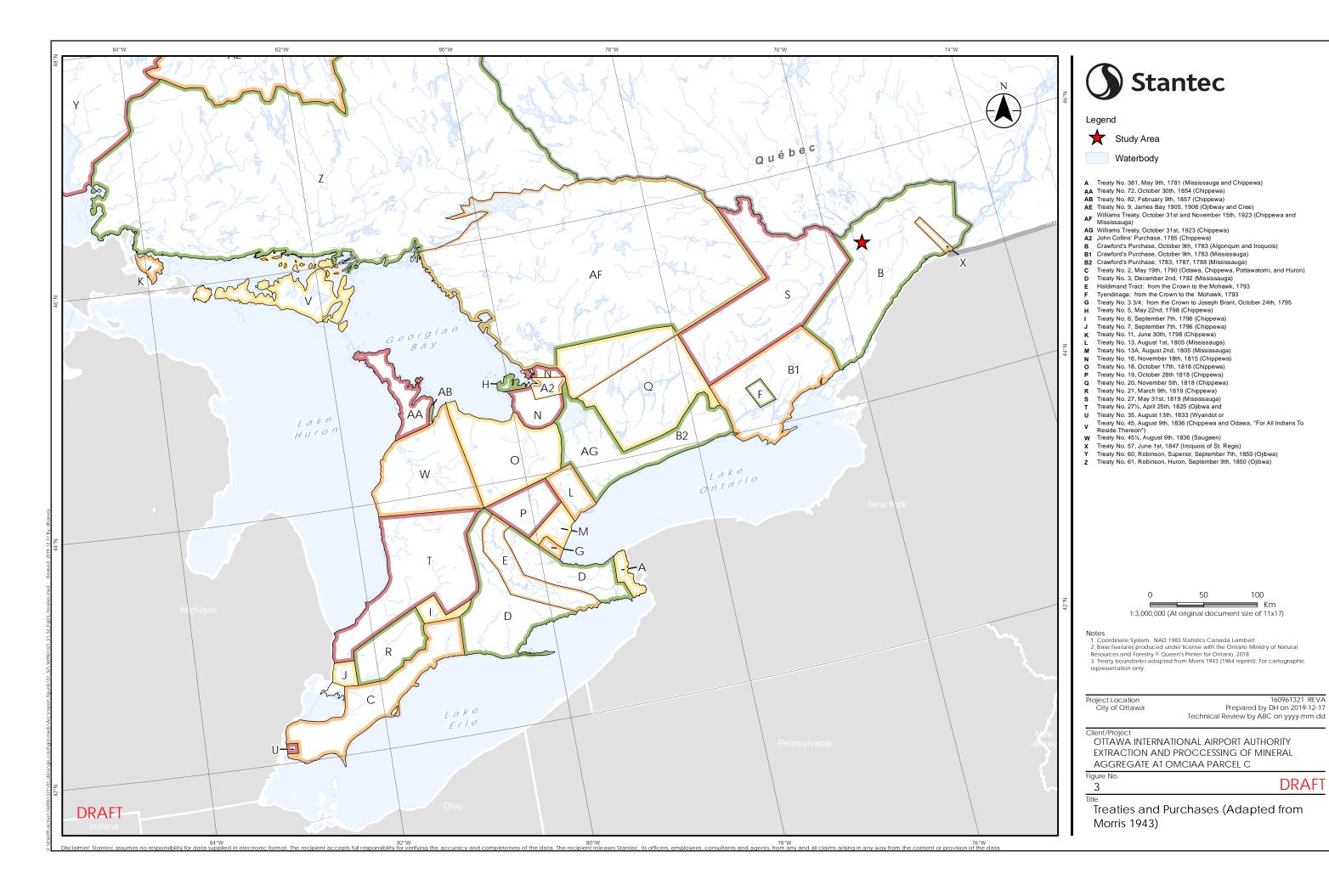
All maps will follow on succeeding pages.

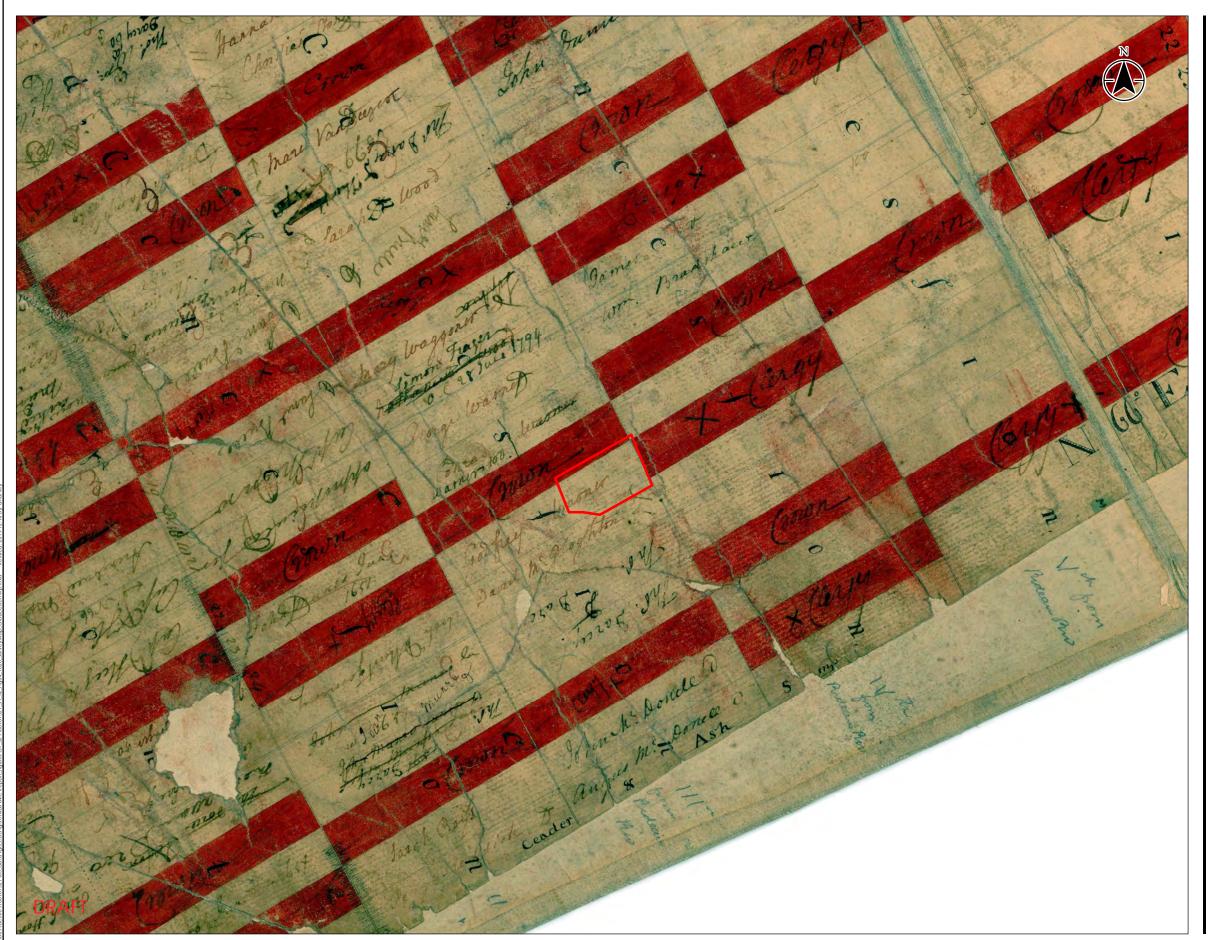














Study Area

Figure Not to Scale

Notes

1. Historical Map Source: McDonnell, Duncan. 1820a. Plan of Township of Gloucester.
Original township survey map held at Crown Land Surveys, Office of the Surveyor
General, Ministry of Natural Resources and Forestry, Peterborough, Ontario.



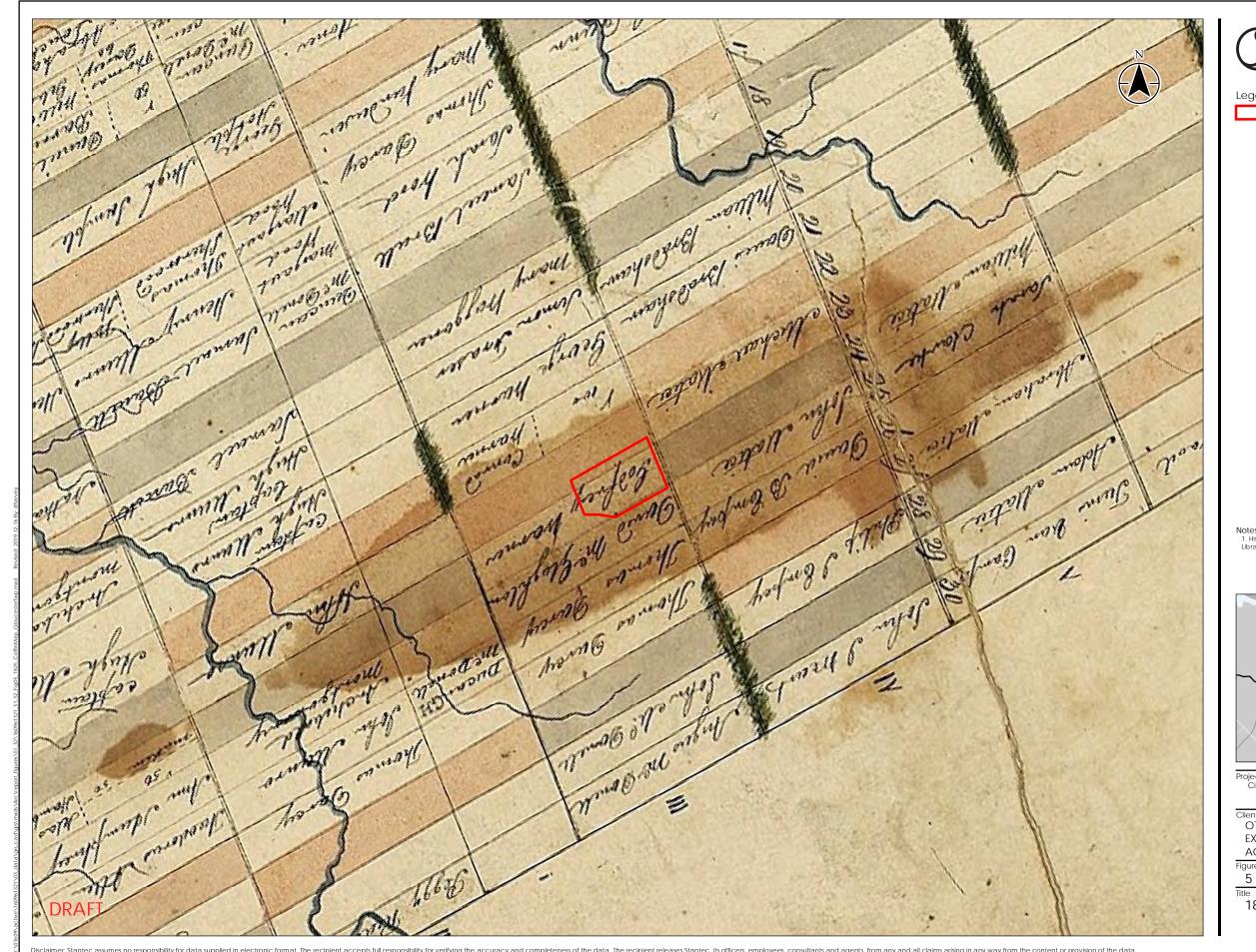
Project Location City of Ottawa

160961321 REVA Prepared by DH on 2019-12-16 Technical Review by ABC on yyyy-mm-dd

Client/Project
OTTAWA INTERNATIONAL AIRPORT AUTHORITY
EXTRACTION AND PROCCESSING OF MINERAL
AGGREGATE AT OMCIAA PARCEL C

DRAFT

1820 Survey Map of Gloucester Township





Study Area

Figure Not to Scale

Notes

1. Historical Map Source: Coffin, William, 1825. Plan of the township of Gloucester.

Library and Archives Canada, National Map Collection, H12/430/Gloucester/1825



Project Location City of Ottawa

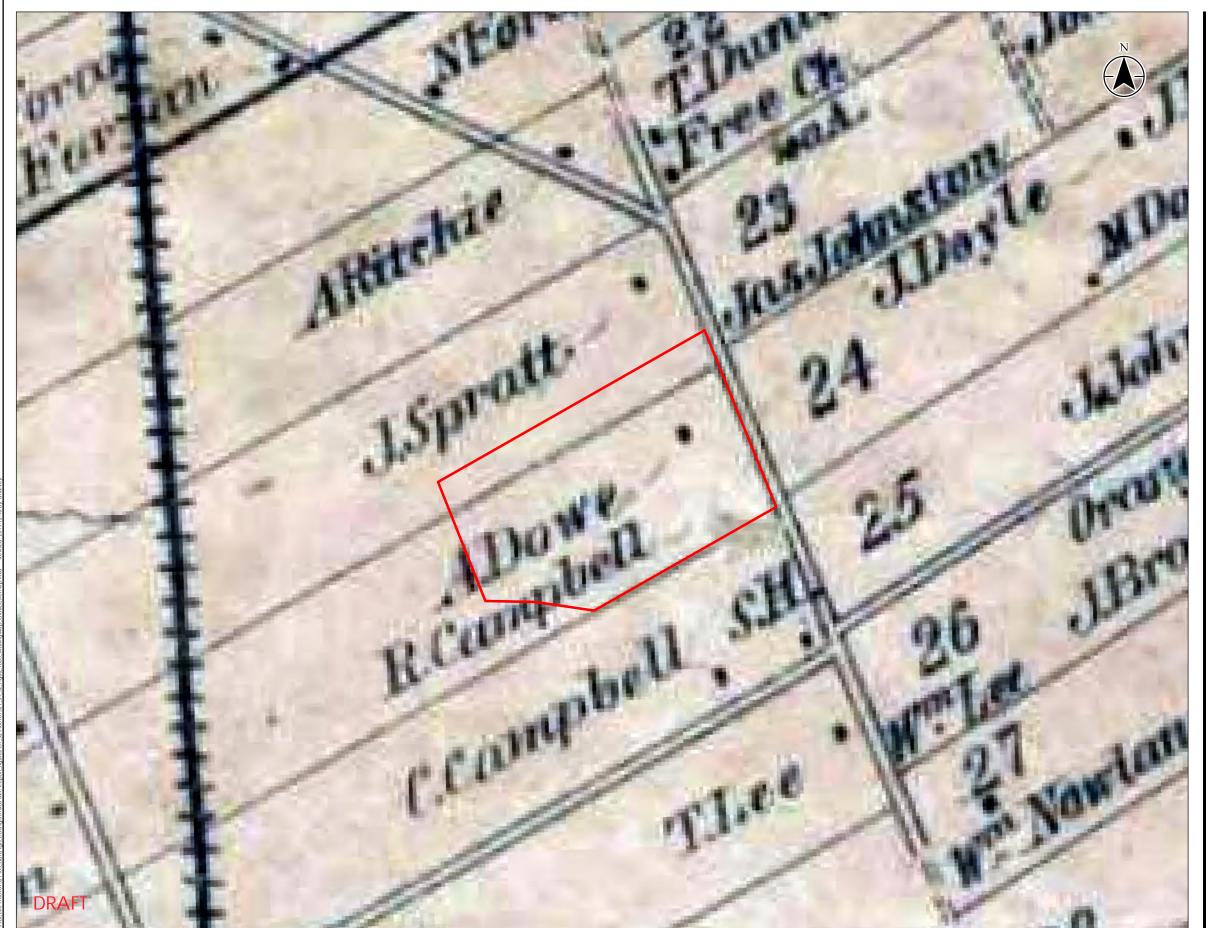
160961321 REVA Prepared by DH on 2019-12-16 Technical Review by ABC on yyyy-mm-dd

OTTAWA INTERNATIONAL AIRPORT AUTHORITY EXTRACTION AND PROCCESSING OF MINERAL AGGREGATE AT OMCIAA PARCEL C

Figure No.

DRAFT

1825 Coffin Map of Gloucester Township





Study Area

Figure Not to Scale

lotes

Historical Map Source: Walling, Henry F. 1863. Map of the County of Carleton, Canada West. Library and Archives Canada. National Map Collection, H2/420/Carleton/1863.



Project Location City of Ottawa

160961321 REVA Prepared by DH on 2019-12-16 Technical Review by ABC on yyyy-mm-dd

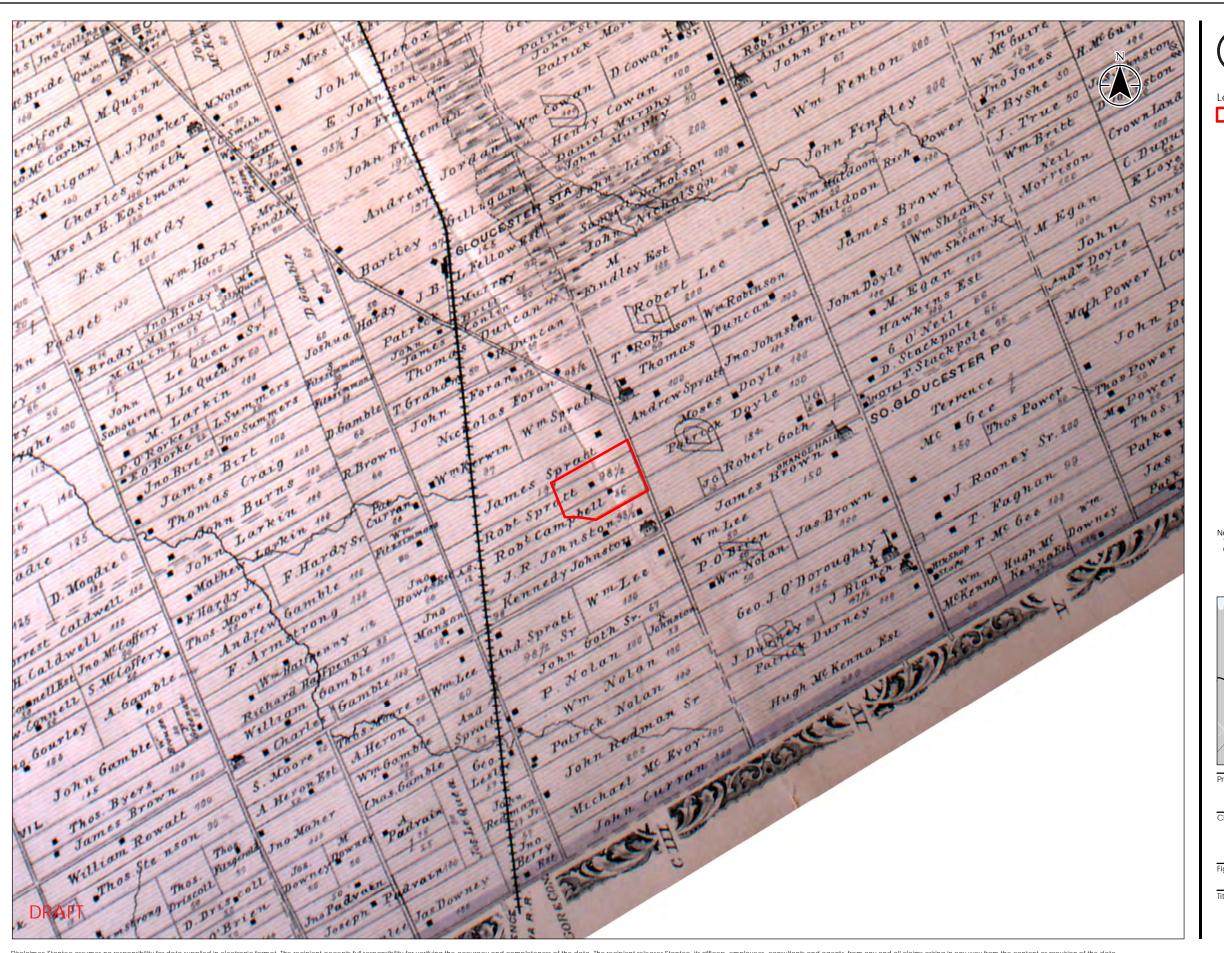
Client/Project

OTTAWA INTERNATIONAL AIRPORT AUTHORITY EXTRACTION AND PROCCESSING OF MINERAL AGGREGATE AT OMCIAA PARCEL C

Figure No.

DRAFT

1863 Walling Map of Gloucester Township





Study Area

Figure Not to Scale

Notes

Historical Map Source: Belden, H. & Co. 1879. Illustrated Historical Atlas of the County of Carleton (including the City of Ottawa), Ont. Toronto: H. Belden & Co.



Project Location City of Ottawa 160961321 REVA Prepared by DH on 2019-12-16 Technical Review by ABC on yyyy-mm-dd

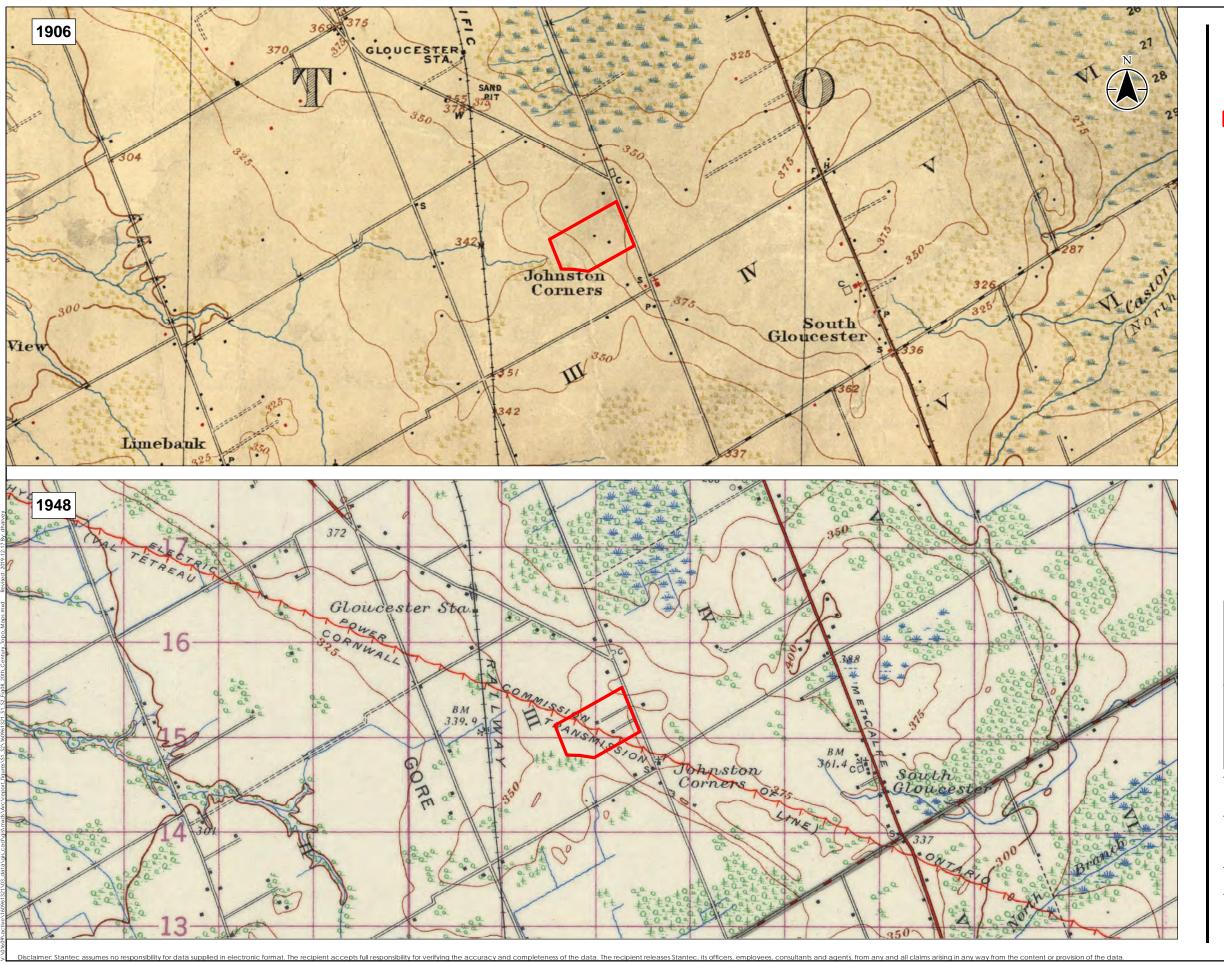
Client/Project

OTTAWA INTERNATIONAL AIRPORT AUTHORITY EXTRACTION AND PROCCESSING OF MINERAL AGGREGATE AT OMCIAA PARCEL C

Figure No.

DRAFT

1879 Belden Map of Gloucester Township



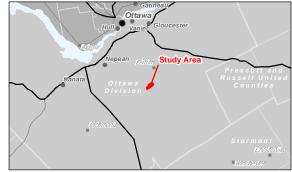


Study Area

Figure Not to Scale

Notes

1. Topographic Map Source: Department of Militia and Defence. 1906. Ottawa, Ontario. Electronic Document: https://ocul.on.ca/topomaps/map-images/HTDP63360K031G05_19061IFF.jpg. Last Accessed December 13, 2019
Department of National Defence. 1948. Ottawa, Ontario. Electronic Document: https://ocul.on.ca/lopomaps/map-images/HTDP63360K031G05_1948_UTMTFF.jpg. Last Accessed December 13, 2019.



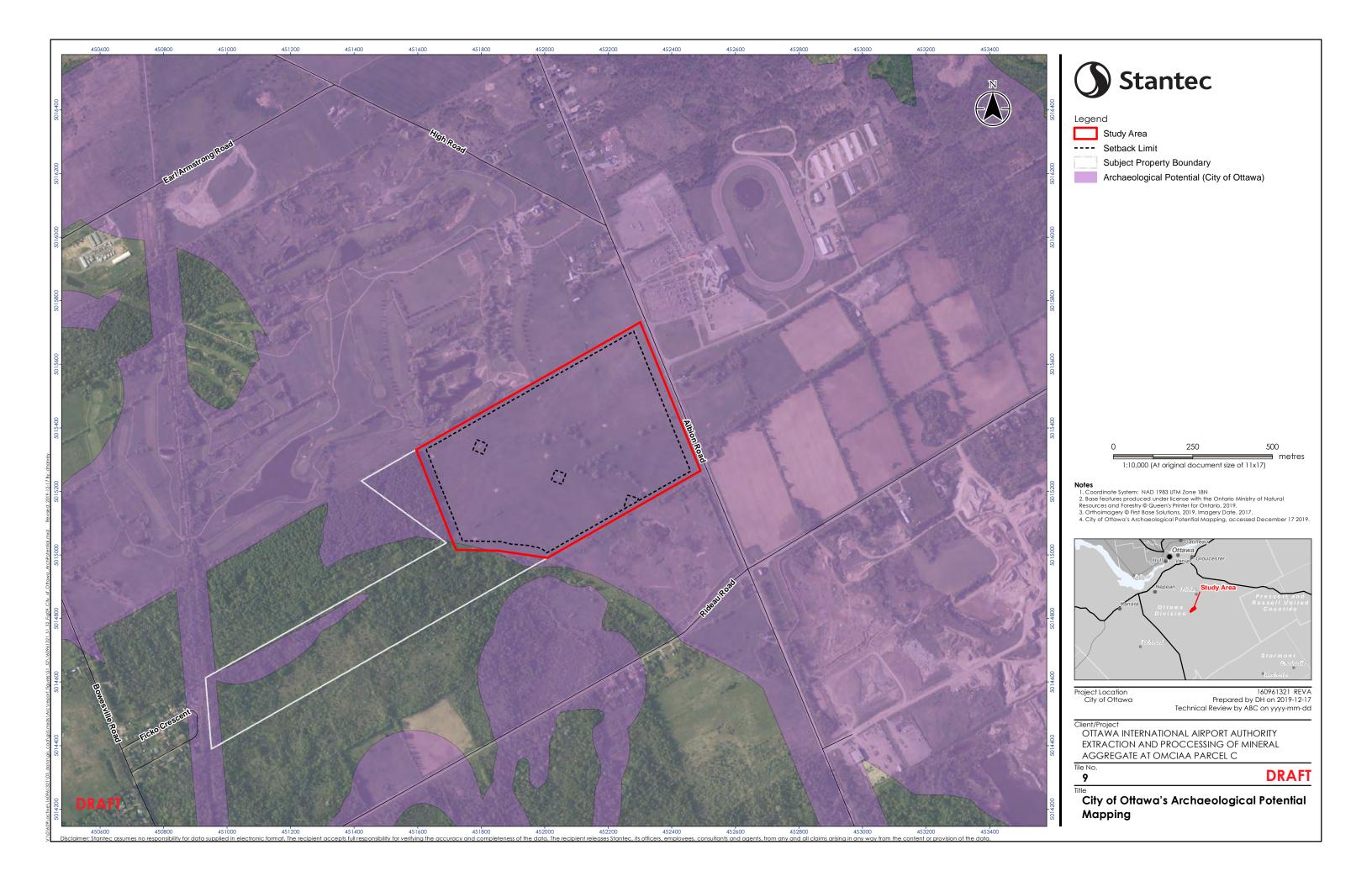
Project Location City of Ottawa

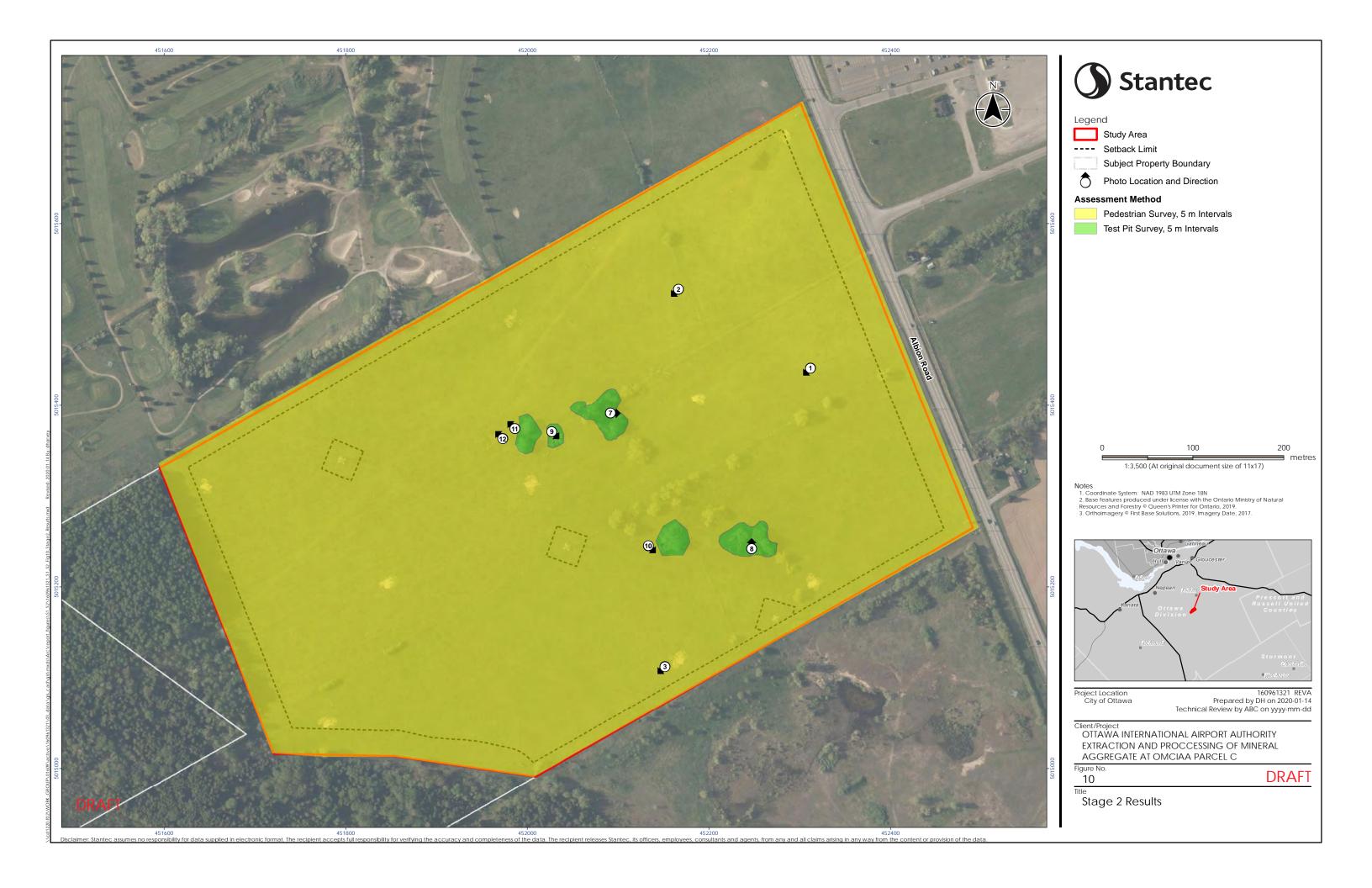
160961321 REVA Prepared by DH on 2019-12-17 Technical Review by ABC on yyyy-mm-dd

Client/Project
OTTAWA INTERNATIONAL AIRPORT AUTHORITY EXTRACTION AND PROCCESSING OF MINERAL AGGREGATE AT OMCIAA PARCEL C

DRAFT

Title 20th Century Topographic Maps





Closure

10.0 CLOSURE

This report documents work that was performed in accordance with generally accepted professional standards at the time and location in which the services were provided. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report, including no assurance that this work has uncovered all potential archaeological resources associated with the identified property.

All information received from the client or third parties in the preparation of this report has been assumed by Stantec to be correct. Stantec assumes no responsibility for any deficiency or inaccuracy in information received from others.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the writing of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. The conclusions are based on the conditions encountered by Stantec at the time the work was performed. Due to the nature of archaeological assessment, which consists of systematic sampling, Stantec does not warrant against undiscovered environmental liabilities nor that the sampling results are indicative of the condition of the entire property.

This report has been prepared for the exclusive use of the client identified herein and any use by any third party is prohibited. Stantec assumes no responsibility for losses, damages, liabilities or claims, howsoever arising, from third party use of this report. We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Quality Review ______(signature)

Colin Varley, Senior Associate, Senior Archaeologist

Tracie Carmichael, Managing Principal, Environmental Services

