

Stage 3 Archaeological Assessment AkHi-1, 61 Corbett Drive, Belgrave

Part of Lot 2, Concession 5,
Municipality of Morris-Turnberry,
Geographic Township of Morris,
County of Huron

Submitted to:
GSP Group Inc.
c/o Steve Wever

and

The Township of Morris-Turnberry

Ontario's Ministry of Heritage, Sport, Tourism and Culture
Industries

Submitted by:



Detritus
CONSULTING LTD.
archaeology · heritage

69 Claremont Avenue, Kitchener Ontario, N2M 2P5
Mobile/Office: 519-744-7018
e-mail: garth@golden.net www.detcon.net

Licensee: Dr. Walter McCall
License Number: P389
PIF Numbers: P389-0447-2019
CP Number: 2019-097

ORIGINAL REPORT

April 27, 2021

Executive Summary

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Steve Wever of GSP Group Inc. on behalf of the Township of Morris-Turnberry ('the Proponent') to conduct a Stage 3 archaeological assessment at archaeological site AkHi-1, located on part of Lot 2, Concession 5, within the Municipality of Morris-Turnberry, Geographic Township of Morris, County of Huron, Ontario (Figure 1). This investigation was conducted in advance of a proposed severance at 61 Corbett Drive, Belgrave (the 'Study Area'; Figure 5); the severance is taking place prior to a residential development along the southeastern edge of the Village of Belgrave.

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet the conditions of this legislation, a Stage 3 assessment was conducted at AkHi-2 under archaeological consulting license P389 issued to Dr. Walter McCall by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011a).

AkHi-1 was identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus in between May 2019 and September 2020 (PIF# P017-0701-2019; Detritus 2020a; Figure 3). The Study Area is irregular in shape, measures 32.08 hectares and covers the entire assessment property. At the time of the assessment, most of the Study Area comprised mature woodlots and overgrown grass with mature trees and shrubs throughout on either side of Belgrave Creek. The Creek transects the centre of the Study Area from northeast to southwest; it branches off to the southwest from the centre of the Study Area. Various ponds associated with the Belgrave Creek are visible in the southern half of the Study Area. Additionally, agricultural fields are located in the northern portion of the Study Area, south of Brandon Road and east of Jane Street. A house, a garage, two sheds, a gravel laneway and parking area, a concrete patio, and a vegetable garden surrounded by manicured grass with trees throughout as well as agricultural fields were observed in the western portion of the Study Area, southwest of Corbett Drive. The Study Area is bound by Brandon Road to the northeast, the former railway line and agricultural fields to the east and southeast, a woodlot to the southwest, agricultural fields to the west, and residential properties to the northwest. Additionally, the Study Area surrounds the McCrea Cemetery. This cemetery, established in the 1870s and in use until 1941 has boundaries that are not clearly defined. The laneway leading to the McCrea Cemetery extends southeast from Jane Street and turns south at a large tree line towards the cemetery entrance.

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 field assessment was recommended for the woodlots, agricultural fields as well as the manicured and overgrown grass areas with trees and shrubs throughout, and the garden. The houses, the garage, the shed, the concrete patio, the gravel laneway and parking area were identified as areas of previous disturbance; both branches of Belgrave Creek and their associated ponds, as permanently wet areas.

The Stage 2 field assessment of the Study Area consisted of typical pedestrian and test pit surveys at five-metre ('m') intervals and resulted in the documentation of four pre-contact Aboriginal findspots (AkHi-1, AkHi-2, AkHi-3 and Findspot 4). AkHi-1 consisted of four pieces of Onondaga chert chipping detritus scattered across an area measuring approximately 5m northwest-southeast by 8m northeast-southwest. Morphological analysis of the chipping detritus suggested that late stages of lithic reduction occurred at the site. Given the small sample of chipping detritus recovered, however, it was difficult to draw any useful conclusions regarding site function. The exclusive use of Kettle Point chert, meanwhile, indicates that the people at AkHi-1 were largely relying on single source of raw material. Outcrops of Kettle Point chert are found between the

Kettle Point and the Ipperwash Formations and extends into Lake Huron, which is approximately 87km to the southwest of the Study Area.

Based on the results of the Stage 2 assessment, AkHi-1 did not fulfill any of the criteria for further assessment listed in Section 2.2, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a). Nevertheless, in consultation with the Saugeen Ojibwa Nation ('SON'), Detritus concluded that additional investigation was required to ensure there were no unaddressed Aboriginal archaeological interests connected with the land surveyed or sites identified. Therefore, AkHi-1 was determined to retain cultural heritage value or interest ('CHVI') and was recommended for a Stage 3 archaeological assessment as per Section 2.2, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a).

The Stage 3 assessment of AkHi-1 was conducted on July 22, 2019 and July 7, 2020 under archaeological consulting license P389 issued to Dr. Walter McCall by the MHSTCI. This investigation resulted in the recovery of five pieces of chipping detritus from the excavation of eight 1m Stage 3 test units covering an area of 10m east to west by 5m north to south. Three of the flakes were manufactured from Onondaga chert; the other two were of Kettle Point chert. No subsurface cultural features, Aboriginal ceramics, or fire cracked rock were observed in any of the test units.

In consultation with Dr. William Fitzgerald, Onondaga chert observed at AkHi-1 was considered exotic to the region. Therefore, despite the low artifact yields among the Stage 3 test units, **AkHi-1 fulfills the criteria for a Stage 4 mitigation of developmental impacts** as per Section 3.4, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011a) and retains CHVI.

The MHSTCI prefers that sites recommended for Stage 4 mitigation of impacts be avoided and protected rather than excavated, as per Section 7.9.4, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a). Options to reduce or eliminate impacts to archaeological sites include redesigning the Study Area, excluding the archaeological site area from the Study Area, or incorporating the area of the archaeological site into the Study Area but without alteration, as outlined in Section 3.5 of the *Standards and Guidelines* (Government of Ontario 2011a). If these options are not feasible, Stage 4 archaeological mitigation by hand excavation is an alternative.

In consultation with the Proponent, avoidance and protection is a viable option at AkHi-1, as outlined in Section 4.1 of the *Standards and Guidelines* (Government of Ontario 2011a), including Section 4.1.1 for avoidance and Section 4.1.4 for long term protection.

To meet the requirements for avoidance during future development activities, **it is recommended that a temporary fence be installed around AkHi-1 and its protective buffer, and that construction activities in this vicinity be monitored by a licensed archaeological consultant in order to prevent any impacts to the site, as per Section 4.1.1, Standard 1a of the Standards and Guidelines (Government of Ontario 2011a).** If AkHi-1 will be impacted by development, and no additional archaeological investigation has been planned, the archaeological site and its protective buffer will be protected and no construction impacts will be allowed. This protective buffer will extend 10m past the limits of the Stage 2 site boundaries per Section 4.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011; **Tile 4 of the Supplementary Documentation**). 'No-go' instructions will be issued to all on-site construction crews, engineers, architects and any others involved in day-to-day decisions during construction, as per Section 4.1.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011a). The location of the area to be avoided will be marked on all contract drawings, where applicable, and will include explicit instructions to avoid the area, as per Section 4.1.1, Standard 1c of the *Standards and Guidelines* (Government of Ontario 2011a).

As per Section 7.9.9, Standard 1e of the *Standards and Guidelines* (Government of Ontario 2011a), a **development map outlining the extent of AkHi-1 and its protective buffer will be provided as part of this report package, in addition to written confirmation of the proponent's commitment to implementing the avoidance strategy outlined above, as per Section 7.9.9, Standard 1a and 1b of the Standards and Guidelines (Government of Ontario 2011a).** This letter will also include a construction monitoring schedule for all ground disturbance activity in the

vicinity of the site as per Section 7.9.9, Standard 1c of the *Standards and Guidelines* (Government of Ontario 2011a).

According to Section 4.1.4, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a), the avoidance and protection strategy for AkHi-1 must also include mechanisms to ensure the effective implementation of long-term protection of the site. Typically, such mechanisms include restrictive covenants on title, zoning by-law amendments, and transfer of ownership to a municipality or other public land-holding body.

To meet the requirements for long term protection of the site, the Proponent has agreed to have a registered restrictive covenant placed on the property that will prohibit any activities that might alter AkHi-1 and its protective buffer in any way, either temporarily or permanently. As per Section 4.1.4, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a), such activities include, but are not limited to, tree removal, minor landscaping, or utilities installation. **A copy of this restrictive covenant is included in the Supplementary Documentation that accompanies this report.** Furthermore, included within the letter provided by the Proponent is confirmation that he is aware of the archaeological site on the retained portion of the property, that he will not alter or cause any soil disturbance within the protected area other than normal agricultural work, and that he will implement the recommended long-term protection strategy.

If, in the future, it is decided to conduct a Stage 4 mitigation by hand excavation at the site, this investigation will be conducted as per Sections 4.2.1 and 4.2.2 of the *Standards and Guidelines* (Government of Ontario 2011a). The Stage 4 excavation will consist of a hand excavated block of 1m units surrounding the highest yielding Stage 3 test units at the site. The extent of the excavation blocks will be determined according to Section 4.3, Table 4.1 of the *Standards and Guidelines* (Government of Ontario 2011a).

Soil from all units will be screened through 6mm hardware cloth to facilitate the recovery of any artifacts that may be present. All artifacts will be bagged and tagged by provenience. The exposed subsoil surface will be cleaned by shovel or trowel and will be examined for cultural features. If any subsurface cultural features are encountered, they will be recorded and excavated by hand in accordance with Section 4.2.2, Standard 7 of the *Standards and Guidelines* (Government of Ontario 2011a). Block excavation will continue to 2m beyond any cultural feature identified in accordance with Section 4.2.2, Standard 7c of the *Standards and Guidelines* (Government of Ontario 2011a).

In accordance with Section 3.5, Standard 1f of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a) and Section 1.1, Standard 2f of the *Engaging Aboriginal Communities in Archaeology* draft technical bulletin (Government of Ontario 2011b), Detritus requested input from the SON while formulating Stage 4 mitigation strategies for AkHi-1. The recommendations outlined above have incorporated input provided by Dr. William Fitzgerald, on behalf of the SON. Additional information on the Aboriginal engagement practices conducted as part of the current Stage 3 assessments is provided in the Supplementary Documentation to this report.

The Executive Summary highlights key points from the report only; for more detailed information and findings, as well as a complete set of recommendations, the reader should examine the complete report.

Table of Contents

1.0	Project Context	7
1.1	Development Context	7
1.2	Historical Context.....	7
1.2.1	Post-Contact Aboriginal Resources	7
1.2.2	Euro-Canadian Resources	8
1.2.3	Recent Reports	9
1.3	Archaeological Context.....	10
1.3.1	Property Description and Physical Setting	10
1.3.2	Pre-Contact Aboriginal Land Use	10
1.3.3	Previous Identified Archaeological Work.....	11
1.3.4	Summary of Previous Investigations	12
1.3.5	Archaeological Potential	14
2.0	Field Methods	16
3.0	Record of Finds	18
3.1	Introduction	18
3.2	AkHi-1	18
3.3	Artifact Distribution and Settlement Pattern	19
3.4	Artifact Catalogue.....	19
4.0	Analysis and Conclusions	21
5.0	Recommendations.....	22
6.0	Advice on Compliance with Legislation	24
7.0	Bibliography and Sources	25
8.0	Maps.....	27
9.0	Images.....	32
9.1	Photos.....	32
9.2	Artifacts	33

Project Personnel

Project Manager:	Garth Grimes, P017
Field Director:	Mathew Gibson, R1160
Field Technicians:	Aaron Burden; Jon Cousins, R296; Eric Cousins, Ryan Eden; Chris Sladic
Artifact Analysis:	Mathew Gibson, R1160
Report Preparation:	Amanda McCall, R470
Mapping and GIS:	Amanda McCall, R470
Licensee Review:	Walter McCall, P389

Acknowledgments

Generous contributions by the following individuals and agencies made this report possible.

- Mr. Steve Wever, GSP Group Inc.
- Mr. Trevor Hallam, Municipality of Morris-Turnberry

1.0 Project Context

1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Steve Wever of GSP Group Inc. on behalf of the Township of Morris-Turnberry ('the Proponent') to conduct a Stage 3 archaeological assessment at archaeological site AkHi-1, located on part of Lot 2, Concession 5, within the Municipality of Morris-Turnberry, Geographic Township of Morris, County of Huron, Ontario (Figure 1). This investigation was conducted in advance of a proposed severance at 61 Corbett Drive, Belgrave (the 'Study Area'; Figure 5); the severance is taking place prior to a residential development within the limits of the Village of Belgrave.

This assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet the conditions of this legislation, a Stage 3 assessment was conducted at AkHi-2 under archaeological consulting license P389 issued to Dr. Walter McCall by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* ('Standards and Guidelines'; Government of Ontario 2011a).

The purpose of a Stage 3 Site Specific Assessment is to assess the cultural heritage value or interest ('CHVI') of a site through a controlled collection of material. This information is used to support a determination of whether the site has been sufficiently documented or if further measures are required to protect or document it fully. In compliance with the *Standards and Guidelines* (Government of Ontario 2011a), the objectives of the Stage 3 assessment at AkHi-1 are:

- To collect a representative sample of artifacts;
- to determine the extent of each archaeological site and the characteristics of the artifacts;
- to assess the CHVI of each archaeological site; and
- to determine the need for mitigation of development impacts and recommend appropriate strategies for mitigation and future conservation.

The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

1.2 Historical Context

1.2.1 Post-Contact Aboriginal Resources

The Study Area is located within Huron County, which was occupied by Algonkian-speaking groups who also exhibited cultural influence from Iroquoian-speaking groups, both before and after European contact. Generally, the pre-contact Aboriginal presence in much of Southern Ontario reflects occupation by Northern Iroquoian speakers. During and following the Iroquois Wars of the mid-17th century and the dispersal of the Iroquoian-speaking Huron-Petun and Neutral, a considerable reduction in the extent of territory occupied by Iroquoian speakers occurred in Southern Ontario. Beginning about 1690, Algonkian speakers from Northern Ontario began to move southwards (Ferris 2009; Rogers 1978; Schmalz 1991). It has been presumed that occupation of Huron County before about 1690 would have been by Iroquoians, but the Middle Woodland Saugeen Complex, known best from locations just north of Huron County in the Saugeen River valley such as the Donaldson site, is most often interpreted as Algonkian (Fiedel 1999), arguing for an occupation of Huron County by Algonkian speakers for millennia.

Dating somewhat later than the Donaldson site, Wright (Wright 1974; Fox 1990) believed that the isolated occurrence of a palisaded village in neighbouring Bruce County at the Middle Ontario

Iroquoian-like (Middleport substage) Nodwell site established a case for immigration by the Iroquoian-speaking Huron. More recently however, Rankin (Rankin 2000) has argued that the Nodwell village represents a short-lived sedentary farming experiment by hunter-gatherers, probably indigenous Algonkian speakers, who may have been ancestral to the Odawa (see also Warrick 2008).

French missionaries indicated relatively close ties between the Odawa and the Huron-Petun (Fox 1990; Feest and Feest 1978). Ferris (Ferris 1999) has also pointed out the potential misuse in the literature of the designation “Huron” to describe sites in Huron and Bruce Counties. As Koenig (Koenig 2005) indicates, there are some who argue that the ancestors of those Algonkian speaking First Nations now occupying the shores of Lake Huron and Bruce Peninsula only arrived in the mid-1800s, relating to known relocations from the United States and the establishment of reserves (Surtees 1971). In Southwestern Ontario, however, members of the Three Fires Confederacy (Chippewa, Ottawa and Potawatomi) were immigrating from Ohio and Michigan in the late 1700s (Feest and Feest 1978). Still, archaeological sites in Huron County point to much earlier settlement, probably by at least some of their ancestors. Therefore, during the Late Woodland period, there is evidence that the Study Area could have been inhabited by Algonkian- or Iroquoian-speaking groups, or a combination of groups.

While it is difficult to trace ethnic affiliation during the period of initial contact between Aboriginal and European groups, Koenig states that “there is no doubt that some native groups regularly occupied sites on the [Bruce] peninsula at the end of [the early historic] period” (Koenig 2005:62). Feest and Feest (Feest and Feest 1978) imply that the Bruce Peninsula was Odawa territory from 1616; early 17th century French glass trade beads at the Glen and Cripps sites on the northern tip of the Bruce Peninsula appear to attest to this (Fox 1990). Fox not only points to Odawa (or Ottawa) settlement on the Bruce Peninsula during the mid-1600s at Hunter’s Point, but also to sites in the southern Bruce County littoral such as the Hunter site on the Saugeen Reserve, dating about 1600, as well as the Inverhuron-Lucas site. Abandonment of this area by the Odawa seems to have occurred, at least briefly, in the mid-1600s due to the Iroquois Wars.

By 1690, Algonkian speakers from the north began to repopulate the Counties of Huron and Bruce (Rogers 1978). During this same period, the Mississaugas are known to have moved into Southern Ontario and the Lower Great Lakes watersheds (Konrad 1981). Although noted as “MIS” (i.e. Mississauga), Tanner (1987) shows First Nation occupation at the mouth of the Saugeen River in the late 1700s. Villages, sometimes temporary fishing camps and portage trails were documented by surveyors and other Euro-Canadian visitors and settlers (Koenig 2005).

1.2.2 Euro-Canadian Resources

AkHi-1 is located within the Municipality of Morris-Turnberry, Geographic Township of Morris, County of Huron, Ontario.

The history of this area began on July 24, 1788, when Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg and Lunenburg (Archives of Ontario 2012-2015). Further change came in December 1791 when the former Province of Québec was rearranged into Upper Canada and Lower Canada under the *Constitutional Act*. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada. He initiated several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne 1895).

In July 1792, Simcoe divided Upper Canada into 19 counties stretching from Essex in the west to Glengarry in the east. Later that year, the four districts originally established in 1788 were renamed as the Western, Home, Midland and Eastern Districts. The AkHi-2 is situated in the historic Western District (Archives of Ontario 2012-2015).

As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study

Area became part of Indian Land, north of the western and London Districts. In 1838, the Study Area became part of the Huron District (Archives of Ontario 2012-2015).

The Euro-Canadian creation and settlement of Huron County was largely a result of the Canada Company (itself formed in 1824) purchasing a large parcel of land known as the Huron Tract and preparing it for settlement by British settlers. The Huron Tract was mostly surveyed by Deputy Provincial Surveyor John McDonald in 1835 on behalf of the Canada Company. It was in 1841 that the County of Huron became an official county (Scott 1966). By mid-19th century Huron County was an active agricultural area within the province.

Early settlers of Morris Township, Kenneth McBean and William McConnell, first started clearing land between 1849 and 1850. Both settled near the Village of Blyth. Other settlers of the area include, John McCrea (also known as McRae), Christopher Corbett, John Brandon, and Robert Armstrong, who were Irishmen from County Fermanagh (Scott 1966). These men cleared land and settled near the Village of Belgrave between 1851 and 1852. John McCrea settled on Lot 1, Concession 5, the lot to the west of the Study Area.

The London, Huron, and Bruce Railway Company was incorporated in 1871 and was open or operation by January 4, 1876 (Latham 1993). This railway ran through Stephen, Hay, Stanley, Goderich, Hullet, Morris and Turnberry townships to join up with the southern extension of the Wellington, Grey, Bruce Division at Wingham. This railway ran east of the Village of Belgrave adjacent to the east of the Study Area (Figure 2).

The 1879 *Illustrated Historical Atlas of the County of Huron, Ont.* ('*Historical Atlas*'; Belden, H. & Co. 1879) demonstrates the extent to which Morris Township had been settled by 1879 (Figure 2). Structures and landowners are scattered throughout the township, almost all of which front early roads, or watercourses. It is also apparent that the road system in place in the late 19th century is still recognizable today. According to the *Historical Atlas* map of Morris Township, the Study Area is located in the northern half of Lot 2 and Lot 3, Concession 5. AkHi-1 itself is located in the northwestern quadrant of Lot 2, Concession 5.

The northern half of Lot 2 was owned by Robert McRae, two structures and a cemetery, now known as the McCrea Cemetery, are illustrated along the northern edge of the McRae property. As mentioned above, the London, Huron, and Bruce Railway runs through Lot 2, Concession 5, adjacent to the east of the Study Area, approximately 359 metres ('m') from AkHi-1. The Village of Belgrave is located to the northwest of AkHi-1 on Lot 1, Concession 4 and Lot 1, Concession 5. Additionally, Belgrave Station is located to the southeast of the Village of Belgrave and to the north of the Study Area on Lot 2, Concession 4.

Although significant and detailed landowner information is available on the current *Historical Atlas*, it should be recognized that historical county atlases were funded by subscription fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston 1997). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

1.2.3 Recent Reports

AkHi-1 was discovered during a Stage 1-2 assessment of the Study Area, conducted by Detritus between May 2019 and September 2020 (PIF# P017-0701-2019) and documented in the following assessment report;

Stage 1-2 Archaeological Assessment 61 Corbett Drive, Belgrave Part of Lots 2 and 3, Concession 5, Municipality of Morris-Turnberry, Geographic Township of Morris, County of Huron (Detritus 2020a).

The results of this investigation will be discussed in greater detail below in Section 1.3.4.

1.3 Archaeological Context

1.3.1 Property Description and Physical Setting

AkHi-1 was documented during a Stage 2 assessment of an agricultural and residential property located at 61 Corbett Drive in the Village of Belgrave. The Study Area is irregular in shape, measures 32.08 hectares ('ha') and covers the entire assessment property. At the time of the assessment, most of the Study Area comprised mature woodlots and overgrown grass with mature trees and shrubs throughout on either side of Belgrave Creek. The Creek transects the centre of the Study Area from northeast to southwest, the creek branches off to the southeast from the centre of the Study Area. Various ponds associated with the Belgrave Creek are visible in the southern half of the Study Area. Additionally, agricultural fields are located in the northern portion of the Study Area, south of Brandon Road and east of Jane Street. A house, a garage, two sheds, a gravel laneway and parking area, a concrete patio, and a vegetable garden surrounded by manicured grass with trees throughout as well as agricultural fields were observed in the western portion of the Study Area, southwest of Corbett Drive.

Prior to the 20th century development of the Village of Belgrave, the majority of the region surrounding AkHi-1 has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the late 18th century. Much of the region today continues to be used for agricultural purposes.

The site is located within the Teeswater Drumlin Field, which occupies approximately 1400 square kilometres of Bruce, Grey, Huron, Perth and Wellington Counties. It is located in front (south) of the Horseshoe moraine system and in many respects, is similar to the Guelph drumlin field with drumlins becoming weaker and more indistinct along the outer margin of the field where they fade into the surrounding till plain. The orientation of the drumlins varies from due south near Wingham and Teeswater to southeast near Palmerston and Harriston. Drumlins in this region are composed of moderately compact loamy till, with fewer boulders than in the Guelph drumlin field since the Teeswater region overlies softer calcareous limestone as rather than dolostone. This region was crossed by several large meltwater streams draining the glacial ice front north and west of 'Ontario Island'. Rivers such as the Saugeen and Maitland are remnants of these and these rivers and they and their forerunners are associated with broad, flat, gravel and sand terraces. Kames and their associated outwash break up the drumlin field in several areas including Carrick Township south of Mildmay. North of Mildmay the Study Area is contained within in one of the several large drumlinized till plains that make up this region. Soils in the region belong predominantly to the Harriston catena characterized silty buff coloured soils with high till content (Chapman and Putnam 1984).

The closest source of potable water is Belgrave Creek, which transects the centre of the Study Area from northeast to southwest, the creek branches off to the southeast from the centre of the Study Area. AkHi-1 itself is located approximately 261m to the northwest of the creek.

1.3.2 Pre-Contact Aboriginal Land Use

This portion of Southwestern Ontario was occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Huron County, based on Ellis and Ferris (1990).

Table 1: Cultural Chronology for Huron County

Period	Characteristics	Time	Comments
Early Paleo-Indian	Fluted Projectiles	9000-8400 B.C.	spruce parkland/caribou hunters
Late Paleo-Indian	Hi-Lo Projectiles	8400-8000 B.C.	smaller but more numerous sites
Early Archaic	Kirk and Bifurcate Base Points	8000-6000 B.C.	slow population growth
Middle Archaic	Brewerton-like points	6000-2500 B.C.	environment similar to present

Period	Characteristics	Time	Comments
Late Archaic	Lamoka (narrow points)	2000-1800 B.C.	increasing site size
	Broadpoints	1800-1500 B.C.	large chipped lithic tools
	Small points	1500-1100 B.C.	introduction of bow hunting
Terminal Archaic	Hind Points	1100-950 B.C.	emergence of true cemeteries
Early Woodland	Meadowood Points	950-400 B.C.	introduction of pottery
Middle Woodland	Dentate/Pseudo-Scallop Pottery	400 B.C. - A.D. 500	increased sedentism
	Princess Point	A.D. 550-900	introduction of corn
Late Woodland	Early Ontario Iroquoian	A.D. 900-1300	emergence of agricultural villages
	Middle Ontario Iroquois	A.D. 1300-1400	long longhouses (100m+)
	Late Ontario Iroquois	A.D. 1400-1650	tribal warfare and displacement
Contact Aboriginal	Various Algonkian Speaking Groups	A.D. 1700-1875	early written records and treaties
Historic	Euro-Canadian	A.D. 1796-present	European Settlement

1.3.3 Previous Identified Archaeological Work

In order to compile an inventory of archaeological resources, the registered archaeological site records were consulted. In Ontario, information concerning archaeological sites stored in the ASDB (Government of Ontario n.d.) is maintained by the MHSTCI. This database contains archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13km east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. According to this system, AkHi-1 represents the first site to be registered within Borden Block AkHi.

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 1990c). 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.

According to the ASDB, no other archaeological sites have been registered within a 1km radius of the Study Area. Additionally, no sites had been registered within the Borden Block AkHi prior to the Stage 1-2 assessment conducted by Detritus, discussed in Section 1.3.4 below (Detritus 2020a).

A Stage 1-2 archaeological assessment was conducted by Detritus in advance of a proposed severance at 84976 London Road, Belgrave (Detritus 2020b; P017-0707-2019), which is adjacent to the west of the southern portion of the Study Area. The severance was taking place prior to a residential development within the limits of the Village of Belgrave. The Stage 2 field assessment was conducted in May of 2019 and consisted of a pedestrian survey at a five-metre interval of the portion of the property to be severed. No archaeological resources were documented during the Stage 2 assessment; therefore, no further archaeological assessment was required for the assessment area. Following advise from the Approval Authority the retained portion of the property was not subject to assessment.

Additionally, a Stage 1-2 archaeological assessment was conducted by Golder Associates Ltd. ('Golder') as part of the Pletch Severance (Golder 2016; P362-0100-2015), adjacent to the west of the north-central portion of the Study Area, on the northeast corner of the intersection of McCrea

Street and Corbett Drive. The Stage 2 assessment comprised both a pedestrian and test pit survey. No archaeological resources were recovered; therefore, no further work was recommended.

To the best of Detritus' knowledge, no other assessments have been conducted adjacent to the Study Area, nor are any sites registered within 50m.

1.3.4 Summary of Previous Investigations

AkHi-1 was identified during a Stage 1-2 assessment of the Study Area, conducted by Detritus in between May 2019 and September 2020 (PIF# P017-0701-2019; Detritus 2020a; Figure 3).

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. A Stage 2 field assessment was recommended for the woodlots, agricultural fields as well as the manicured and overgrown grass areas with trees and shrubs throughout, and the garden. The houses, the garage, the shed, the concrete patio, and the gravel laneway and parking area were identified as areas of previous disturbance; both branches of Belgrave Creek and their associated ponds, permanently wet areas.

The Stage 2 field assessment of the Study Area consisted of typical pedestrian and test pit surveys at 5m intervals and resulted in the documentation of four pre-contact Aboriginal findspots (AkHi-1, AkHi-2, AkHi-3 and Findspot 4).

AkHi-1 was identified during the pedestrian assessment of the agricultural field located to the northwest of the house and barn, in the western portion of the Study Area. The Stage 2 assessment of the site resulted in the documentation of four pieces of Onondaga chert chipping detritus scattered across an area measuring approximately 5m northwest-southeast by 8m northeast-southwest. Morphological analysis of the chipping detritus suggested that late stages of lithic reduction occurred at the site; given the small sample size, however, it was difficult to draw any useful conclusions regarding site function. The exclusive use of Kettle Point chert, meanwhile, indicates that the people at AkHi-1 were largely relying on single source of raw material. Outcrops of Kettle Point chert are found between the Kettle Point and the Ipperwash Formations and extends into Lake Huron, which is approximately 87km to the southwest of the Study Area.

The Stage 2 assessment of AkHi-2 resulted in the documentation of a single piece of chipping detritus recovered from a single test pit in wooded area to the southwest of the house and barn in the western portion of the Study Area, approximately 95m northwest of AkHi-3. The specimen was identified as a secondary flake manufactured from Onondaga chert.

The Stage 2 assessment of AkHi-3 resulted in the documentation of a single piece of chipping detritus recovered from a single test pit in the wooded area to the southeast of the house and barn in the western portion of the Study Area, approximately 95m southeast of AkHi-2. The specimen was identified as a secondary flake manufactured from Onondaga chert. Despite an intensified test pit survey in the form of cardinals surrounding each test pit at AkHi-2 and AkHi-3, no other archaeological materials were identified. These artifacts were considered to be temporally non-diagnostic, other than being produced by Aboriginal peoples during the pre-contact period.

The Stage 2 assessment of Findspot 4 resulted in the documentation of a single Onondaga chert piece of chipping detritus. The flake was discovered in the agricultural field located to the northwest of the house and barn, in the western portion of the Study Area, approximately 21m southwest of AkHi-1. Despite an intensified pedestrian survey of all agricultural lands within 20m of the artifact, no other archaeological materials were identified. This artifact was considered to be temporally non-diagnostic, other than being produced by Aboriginal peoples during the pre-contact period.

Based on the results of the Stage 2 assessment, none of AkHi-1, AkHi-2, AkHi-3 or Location 4 fulfilled any of the criteria for further assessment as per Section 2.2, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a). Nevertheless, in consultation with the Saugeen Ojibwa Nation ('SON'), Detritus concluded that additional investigation was required at AkHi-1, AkHi-2, and AkHi-3 to ensure there were no unaddressed Aboriginal archaeological interests connected with the land surveyed or sites identified. Therefore, AkHi-1, AkHi-2, and AkHi-3 were determined to retain cultural heritage value or interest ('CHVI') and were recommended for a

Stage 3 archaeological assessment as per Section 2.2, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a). Given its isolated nature, Findspot 4 was judged to be sufficiently documented, and no further assessment was recommended.

According per the Stage 1-2 report recommendations, the Stage 3 assessments of AkHi-1, AkHi-2, and AkHi-3 will be conducted according to Section 3.2.2 of the *Standards and Guidelines* (Government of Ontario 2011a). Typically, a Stage 3 assessment for sites documented during a pedestrian survey of ploughed agricultural land begins with an intensive controlled surface pickup ('CSP') across the Stage 2 limits of site, conducted as per Section 3.2.1 of the *Standards and Guidelines* (Government of Ontario 2011a). At AkHi-1, however, the Stage 2 pedestrian survey consisted of an intensive surface collection across the entire site limits within the agricultural field; all artifacts were mapped digitally and collected for laboratory analysis. Thus, the conditions for a Stage 3 CSP for AkHi-1 were met during the Stage 2 assessment. AkHi-2 and AkHi-3, meanwhile, were discovered during a test pit assessment. Therefore, no CSP is required at any of the three sites.

Because it is not yet evident that the level of CHVI at AkHi-1, AkHi-2, and AkHi-3 will result in a recommendation to proceed to Stage 4 (see Section 4.3 below), it was recommended that the Stage 3 assessments of the three sites consist of the hand excavation of 1m square test units every 5m in systematic levels and into the first 5cm of subsoil, as per Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a). Additional 1m test units, amounting to 20% of the grid total, were recommended in areas of interest within the site extent as per Table 3.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a). All excavated soil must be screened through six-millimetre mesh; all recovered artifacts will be recorded by their corresponding grid unit designation and collected for laboratory analysis. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded and geotextile fabric will be placed over the unit before backfilling the unit.

Despite the fact that no archaeological resources were documented in the northern half of the Study Area during the current assessment, Section 2.2, Guideline 4 of the *Standards and Guidelines* (Government of Ontario 2011a) states that where a cemetery or an archaeological site with CHVI is known to be located immediately adjacent to the limits of the property that has been surveyed, Stage 3 assessment to confirm whether that cemetery or archeological site extends into the property under assessment may be recommended. The Stage 3 archaeological assessment may be recommended regardless of whether artifacts were recovered by the Stage 2 survey in the part of the Study Area adjacent to that cemetery or archaeological site.

Given that no artifacts were recovered in the vicinity of the cemetery property during the Stage 2 assessment, this Stage 3 assessment will consist solely of the mechanical removal of all overburden within the northern portion of the Study Area adjacent to McCrea Cemetery, in order to reveal any associated subsurface graves as per Section 2.1.7, Standard 3 of the *Standards and Guidelines* (Government of Ontario 2011a). According to Section 4.3, Standard 1, Table 4.1 of the *Standards and Guidelines* (Government of Ontario 2011a), mechanical topsoil removal must extend a minimum of 10m beyond uncovered cultural features. According to the MTCS's FAQ#12 for Stage 3 assessments, this standard applies also to mechanical topsoil removal adjacent to cemetery limits. As a result, a 10m buffer along the northern and eastern boundaries of the Study Area will be subject to mechanical overburden removal as part of the Stage 3 assessment.

This mechanical excavation will be conducted in accordance with Section 4.2.3, Section 4.2.7, and Table 4.1 of the *Standards and Guidelines* (Government of Ontario 2011a). All portions of the Study Area adjacent to the cemetery and recommended for Stage 3 assessment will be subjected to mechanical excavation down to the overburden/subsoil interface, employing a straight-edged ditching bucket that pulls the soil away from the exposed surface. The subsoil surface will then be immediately shovel shined and examined for any evidence of graves. If features identified as graves begin to appear within the Study Area, all field work will cease.

Given the proximity of McCrea Cemetery to the Study Area, there is the possibility of encountering interred human remains. The *FBCSA* (Government of Ontario 2002) and the *Cemeteries Act* (Government of Ontario 1990d), when proclaimed in force, require anyone who uncovers a burial site containing human remains to cease fieldwork or construction activities and

report the discovery to the appropriate authorities (police or coroner). If the police and coroner decide that the site has no forensic interest, the Registrar of Cemeteries will be notified of the discovery. The site then comes under the jurisdiction of the Registrar, who will notify the site's landowners of their obligations under the FBCSA. The terms and conditions of an archaeological license require licensees to comply with all relevant provisions of the *Cemeteries Act* and Ontario Regulation 133/92 (Burial Sites).

1.3.5 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MHSTCI to determine areas of archaeological potential within Study Area. According to Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011a), 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.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, when 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. 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 sites locations and types to varying degrees. As per Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011a), water sources may be categorized 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
- accessible or inaccessible shorelines: high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As was discussed above, the closest source of potable water is Belgrave Creek, which transects the centre of the Study Area from northeast to southwest, the creek branches off to the southeast from the centre of the Study Area.

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Teeswater Drumlin Field physiographic region. The primary soils within the Study Area, meanwhile, have been documented as being suitable for Aboriginal agricultural practices. Overall, the potential for pre-contact Aboriginal, post-contact Aboriginal material culture within the Study Area is deemed to be moderate to high.

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 of Ontario 1990b) or property that local histories or informants have identified with possible historical events.

The *Historical Atlas* demonstrates the extent to which Morris Township had been settled by 1879 (Belden, H. & Co 1879; Figure 2). Landowners are listed for all of the lots within the township, many of which had been subdivided multiple times into smaller parcels to accommodate an increasing population throughout the late 19th century. Structures are prevalent throughout the township, almost all of which front early roads. Also depicted on the *Historical Atlas* are the early Village of Belgrave and Belgrave Station. Much of the established road system and agricultural systems throughout the township is still visible today. AkHi-1 is located in the southwestern quadrant of the McRae property. The London, Huron, and Bruce Railway runs through Lot 2, Concession 5, adjacent to the east of the Study Area, approximately 359m from AkHi-1.

Considering also the proximity of the site to the early community of Belgrave, the archaeological potential for Euro-Canadian material culture is deemed to be moderate to high.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as outlined in Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario 2011a). A number of disturbance areas were documented within the Study Area during the Stage 1-2 assessment, including the house, the garage, two sheds, the concrete patio, and the gravel laneway and parking area. AkHi-1 was documented in an agricultural field to the northwest of the house and barn in the western portion of the Study Area. Given the absence of any additional disturbance areas within the limits of AkHi-1, the potential for pre-contact Aboriginal, post-contact Aboriginal material culture, and Euro-Canadian material culture at the site is deemed to be moderate to high.

2.0 Field Methods

The Stage 3 assessment of AkHi-1 was conducted on July 7, 2020 under archaeological consulting license P389 issued to Dr. Walter McCall by the MHSTCI. This investigation began with a review of all relevant reports of previous fieldwork on the property as per Section 3.2, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a).

During the assessment, the weather was sunny with a high of 32° Celsius; the soil was dry and screened easily. At no time during the investigation were field or weather conditions detrimental to the recovery of archaeological material, as per Section 3.2, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a). Lighting and soil conditions were suitable and visibility was excellent, as per Section 7.11.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011a). Figure 4 and Tile 4 of the Supplementary Documentation provides the Stage 3 results for AkHi-1. The Tiles in the Supplementary Documentation indicate where AkHi-1 is located with the Study Area and within the proposed Future Development of the Study Area; Photos 1 to 4 illustrate field conditions.

Upon arrival at the site, geographic reference markers that were established during the Stage 2 archaeological assessment were relocated using a Garmin eTrex 10 handheld GPS unit, with a minimum accuracy 1-2.5m (North American Datum 1983 and Universal Transverse Mercator ('UTM') Zone 17T) in tandem with an optical theodolite. Two permanent datum stakes were placed in the ground and a 5m by 5m grid was established across the Stage 2 site limits, as per Section 3.2.2, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a). It should be noted that grid north was established in the field parallel to the woodlot, which is located to the southwest of the Study Area. All coordinates taken during the Stage 3 assessment are listed in the Supplementary Documentation that accompanies this report.

For archaeological sites documented through a pedestrian survey of open ploughed fields, a Stage 3 field investigation typically begins with a controlled surface pick-up ('CSP'), conducted as per Section 3.2.1 of the *Standards and Guidelines* (Government of Ontario 2011a). The Stage 2 pedestrian survey of AkHi-1, however, consisted of an intensive surface collection across the entire site limits within the agricultural field; all artifacts were mapped digitally and collected for laboratory analysis (Detritus 2020a). Thus, the conditions for a Stage 3 CSP for AkHi-1 were met during the Stage 2 assessment. Instead, the Stage 3 assessment of the site consisted of test unit excavation only, conducted as per Section 3.2.2 of the *Standards and Guidelines* (Government of Ontario 2011a). Photographs of the Stage 3 test unit excavation are provided in Section 9.1 of this report.

The Stage 3 assessment at AkHi-1 included the hand excavation of eight test units strategically positioned to test the nature and density of the subsurface artifact distribution at the site. Given that it was not evident that the level of CHVI at AkHi-1 would result in a recommendation to proceed to Stage 4, the Stage 3 assessment consisted of the hand excavation of 1m square test units every 5m across the site limits, as determined by the Stage 2 test-pit survey, as per Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a). An additional two 1m test units amounting to over 20% of the grid total were planned and excavated for areas of interest within the site extent as per Table 3.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a).

All test units were excavated in systematic levels, into the first five centimetres (cm) of subsoil as per Section 3.2.2, Standards 4 and 5 of the *Standards and Guidelines* (Government of Ontario 2011a). Each test unit contained a single stratigraphic layer (the 'topsoil') and ranged in depth from 24cm to 35cm; considering that each test unit was excavated 5cm into subsoil, the plough zone ranged in depth from 19cm to 30cm. All excavated soil from the Stage 3 test units was screened through six-millimetre (mm) hardware cloth to facilitate the recovery of small artifacts, as per Section 3.2.2, Standard 7 of the *Standards and Guidelines* (Government of Ontario 2011a).

The artifact recovered during the Stage 3 excavation was recorded and catalogued with reference to its corresponding 1m unit number and retained for laboratory analysis and description, as per Section 3.2.3, Standard 8 of the *Standards and Guidelines* (Government of Ontario 2011a). The

subsoil surface of each excavated unit was shovel shined and examined for any evidence of subsurface cultural features, none of which were observed.

3.0 Record of Finds

3.1 Introduction

The Stage 3 archaeological assessment of AkHi-1 was conducted employing the methods described in Section 2.0 above. Figure 4 provides the results of this investigation. Maps indicating the exact site location of the site, and all UTM coordinates recorded during the assessment, are included in the Supplementary Documentation to this report. An inventory of the documentary record generated by the fieldwork is provided in Table 2 below.

Table 2: Inventory of Document Record

Document Type	Current Location of Document Type	Additional Comments
1 Page of Field Notes	Detritus office	stored digitally in project file
1 Map provided by the Proponent	Detritus office	stored digitally in project file
1 Field Map	Detritus office	stored digitally in project file
8 Digital Photographs	Detritus office	stored digitally in project file

All of the material culture collected during the Stage 3 archaeological assessment of AkHi-1 is contained in one box and will be temporarily housed in a Detritus office until formal arrangements can be made for its transfer to Her Majesty the Queen in right of the Province of Ontario or another suitable public institution acceptable to the MHSTCI and the site's owners.

3.2 Cultural Material

The Stage 3 assessment of AkHi-1 resulted in the documentation of five pieces of chipping detritus from the excavation of eight Stage 3 test units, surrounding the Stage 2 surface finds, in the agricultural field northwest of the house and barn in the western portion of the Study Area. Overall, the site measures 5m by 10m.

The artifacts from AkHi-1 are manufactured from Onondaga and Kettle Point chert. Chert type identifications were accomplished visually using reference materials located online or in personal collections.

Onondaga formation chert is from the Middle Devonian age, with outcrops occurring along the north shore of Lake Erie between Long Point and the Niagara River (Eley and von Bitter 1989). Primary outcrops have also been reported along the banks of the Grand River (Ellis and Ferris 1990). It is a high-quality raw material frequently utilized by pre-contact people and often found at archaeological sites in southern Ontario. Onondaga chert occurs in nodules or irregular thin beds. It is a dense non-porous rock that may be light to dark grey, bluish grey, brown or black and can be mottled with a dull to vitreous or waxy lustre (Eley and von Bitter 1989).

Kettle Point formation chert is from the Late Devonian age and is situated between the Kettle Point (Late Devonian shales) and the Ipperwash Formations (Middle Devonian Limestone). It occurs as submerged outcrops that extend approximately 1,350 meters into Lake Huron (Janusas 1984). Secondary deposits have been reported in Essex County (Janusas 1984) and in the Ausable Basin (Kenyon 1980; Eley and von Bitter 1989). Kettle Point chert can be identified by the presence of a waxy lustre and occurs in a wide range of colours including brown, grey and greenish colours as well as reddish purple and dark blue varieties (Eley and von Bitter 1989). A rusty staining on the surface of artifacts is frequently noted (Fisher 1997).

Furthermore, all pieces of chipping detritus were subject to morphological analysis following the classification scheme described by Lennox *et al* (1986:79-81) and expanded upon by Fisher (1997: 41-49) (Table 3 on the following page).

Table 3: Chipped Stone Debitage Analysis for site AkHi-1

Chert Type	Primary		Secondary		Thinning		Total	
	n	%	n	%	n	%	n	%
Onondaga	1	20	1	20	1	20	3	60
Kettle Point	0	0	2	40	0	0	2	40
Total	1	20	3	60	1	20	5	100

According to the morphological analysis presented above, secondary flakes were encountered most often during the Stage 3 assessment. A single primary flake and a tool thinning flake were also represented within the assemblage.

Cortical removal, primary and secondary flakes are produced during the initial reduction phases of raw material blanks and tend to exhibit minimal dorsal flake scarring. These flakes are also characterized by the presence of cortex, or original unflaked area, on their dorsal surfaces and proximal ends. For cortical removal flakes, cortex makes up over half of the dorsal surface. For primary flakes, cortex makes up less than half of the dorsal surface, while secondary flakes may not contain any. Thinning flakes are produced during the latter stages of reduction when raw material blanks are shaped into preforms and formal tools. They are the result of precise flake removal through pressure flaking, where the maker applies direct pressure onto a specific part of the tool in order to facilitate flake removal. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking. Thinning flakes also exhibit more flake scars on their dorsal surface than do primary or secondary flakes.

Given the small sample size from AkHi-1, it is difficult to draw any useful conclusions regarding site function.

3.3 Artifact Distribution and Settlement Pattern

The Stage 3 assessment at AkHi-1 involved the hand excavation of eight test units around the Stage 2 surface finds, covering an area of 10m by 5m. Each 1m unit contained a single stratigraphic layer.

Artifact yields ranged from 0 to 2, although four of the eight units yielded one or two artifacts; four of these were sterile. The single highest yielding unit occurred along the western edge of the site. No artifact patterning was identified anywhere on site.

No subsurface cultural features, Aboriginal ceramics, or fire cracked rock were observed in any of the test units. Given the small sample size, it is difficult to draw any useful conclusions regarding site function.

3.4 Artifact Catalogue

Table 4 below provides a complete catalogue of the Stage 3 artifact assemblage recovered from AkHi-1.

Table 4: AkHi-1 Stage 3 Artifact Catalogue

Cat #	Eastin g	Northing	Depth (cm)	Artifacts	Morphology	Count	Chert Type	Notes
1	210	505	33	chipping detritus	secondary	1	Kettle Point	
2	202	502	35	chipping detritus	secondary	1	Onondaga	
3	207	502	30	chipping detritus	secondary	1	Kettle Point	heavily patinated
4	205	505	24	chipping detritus	tool thinning	1	Onondaga	
5	205	505	24	chipping detritus	primary	1	Onondaga	

4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 3 archaeological assessment at AkHi-1 in advance of a proposed severance at 61 Corbett Drive, Belgrave; the severance is taking place prior to a residential development within the limits of the Village of Belgrave.

The Stage 3 assessment of AkHi-1 was conducted on July 7, 2020 under archaeological consulting license P389 issued to Dr. Walter McCall by the MHSTCI. This investigation resulted in the recovery of five pieces of chipping detritus from the excavation of eight 1m Stage 3 test units. Three of the flakes were manufactured from Onondaga chert and the other two of Kettle Point chert. In consultation with Dr. William Fitzgerald, Onondaga chert observed at AkHi-1 was considered exotic to the region. No subsurface cultural features, Aboriginal ceramics, or fire cracked rock were observed in any of the test units.

Based on the results of the Stage 3 assessment, AkHi-1 has been interpreted as a small activity area occupied briefly during the pre-contact period. Given the small artifact sample size, it is difficult to draw any useful conclusions regarding site function.

5.0 Recommendations

Given the identification of three pieces of exotic chert within the Stage 3 assemblage, **AkHi-1 fulfills the criteria for a Stage 4 mitigation of developmental impacts** as per Section 3.4, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011a) and retains CHVI.

The MHSTCI prefers that sites recommended for Stage 4 mitigation of impacts be avoided and protected rather than excavated, as per Section 7.9.4, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a). Options to reduce or eliminate impacts to archaeological sites include redesigning the Study Area, excluding the archaeological site area from the Study Area, or incorporating the area of the archaeological site into the Study Area but without alteration, as outlined in Section 3.5 of the *Standards and Guidelines* (Government of Ontario 2011a). If these options are not feasible, Stage 4 archaeological mitigation by hand excavation is an alternative.

In consultation with the Proponent, avoidance and protection is a viable option at AkHi-1, as outlined in Section 4.1 of the *Standards and Guidelines* (Government of Ontario 2011a), including Section 4.1.1 for avoidance and Section 4.1.4 for long term protection.

To meet the requirements for avoidance during future development activities, **it is recommended that a temporary fence be installed around AkHi-1 and its protective buffer, and that construction activities in this vicinity be monitored by a licensed archaeological consultant in order to prevent any impacts to the site, as per Section 4.1.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011a).** If AkHi-1 will be impacted by development, and no additional archaeological investigation has been planned, the archaeological site and its protective buffer will be protected and no construction impacts will be allowed. This protective buffer will extend 10m past the limits of the Stage 2 site boundaries per Section 4.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011; **Tile 4 of the Supplementary Documentation**). 'No-go' instructions will be issued to all on-site construction crews, engineers, architects and any others involved in day-to-day decisions during construction, as per Section 4.1.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011a). The location of the area to be avoided will be marked on all contract drawings, where applicable, and will include explicit instructions to avoid the area, as per Section 4.1.1, Standard 1c of the *Standards and Guidelines* (Government of Ontario 2011a).

As per Section 7.9.9, Standard 1e of the *Standards and Guidelines* (Government of Ontario 2011a), a **development map outlining the extent of AkHi-1 and its protective buffer will be provided as part of this report package, in addition to written confirmation of the proponent's** commitment to implementing the avoidance strategy outlined above, as per Section 7.9.9, Standard 1a and 1b of the *Standards and Guidelines* (Government of Ontario 2011a). This letter will also include a construction monitoring schedule for all ground disturbance activity in the vicinity of the site as per Section 7.9.9, Standard 1c of the *Standards and Guidelines* (Government of Ontario 2011a).

According to Section 4.1.4, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011a), the avoidance and protection strategy for AkHi-1 must also include mechanisms to ensure the effective implementation of long-term protection of the site. Typically, such mechanisms include restrictive covenants on title, zoning by-law amendments, and transfer of ownership to a municipality or other public land-holding body.

To meet the requirements for long term protection of the site, the Proponent has agreed to have a registered restrictive covenant placed on the property that will prohibit any activities that might alter AkHi-1 and its protective buffer in any way, either temporarily or permanently. As per Section 4.1.4, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011a), such activities include, but are not limited to, tree removal, minor landscaping, or utilities installation. **A copy of this restrictive covenant is included in the Supplementary Documentation that accompanies this report.** Furthermore, included within the letter provided by the Proponent is confirmation that he is aware of the archaeological site on the retained portion of the property, that he will not alter or cause any soil disturbance within the protected area other than normal agricultural work, and that he will implement the recommended long-term protection strategy.

If, in the future, it is decided to conduct a Stage 4 mitigation by hand excavation at the site, this investigation will be conducted as per Sections 4.2.1 and 4.2.2 of the *Standards and Guidelines* (Government of Ontario 2011a). The Stage 4 excavation will consist of a hand excavated block of 1m units surrounding the highest yielding Stage 3 test units at the site. The extent of the excavation blocks will be determined according to Section 4.3, Table 4.1 of the *Standards and Guidelines* (Government of Ontario 2011a).

Soil from all units will be screened through 6mm hardware cloth to facilitate the recovery of any artifacts that may be present. All artifacts will be bagged and tagged by provenience. The exposed subsoil surface will be cleaned by shovel or trowel and will be examined for cultural features. If any subsurface cultural features are encountered, they will be recorded and excavated by hand in accordance with Section 4.2.2, Standard 7 of the *Standards and Guidelines* (Government of Ontario 2011a). Block excavation will continue to 2m beyond any cultural feature identified in accordance with Section 4.2.2, Standard 7c of the *Standards and Guidelines* (Government of Ontario 2011a).

In accordance with Section 3.5, Standard 1f of the *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011a) and Section 1.1, Standard 2f of the *Engaging Aboriginal Communities in Archaeology* draft technical bulletin (Government of Ontario 2011b), Detritus requested input from the SON while formulating Stage 4 mitigation strategies for AkHi-1. The recommendations outlined above have incorporated input provided by Dr. William Fitzgerald, on behalf of the SON. Additional information on the Aboriginal engagement practices conducted as part of the current Stage 3 assessments is provided in the Supplementary Documentation to this report.

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. 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of 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.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

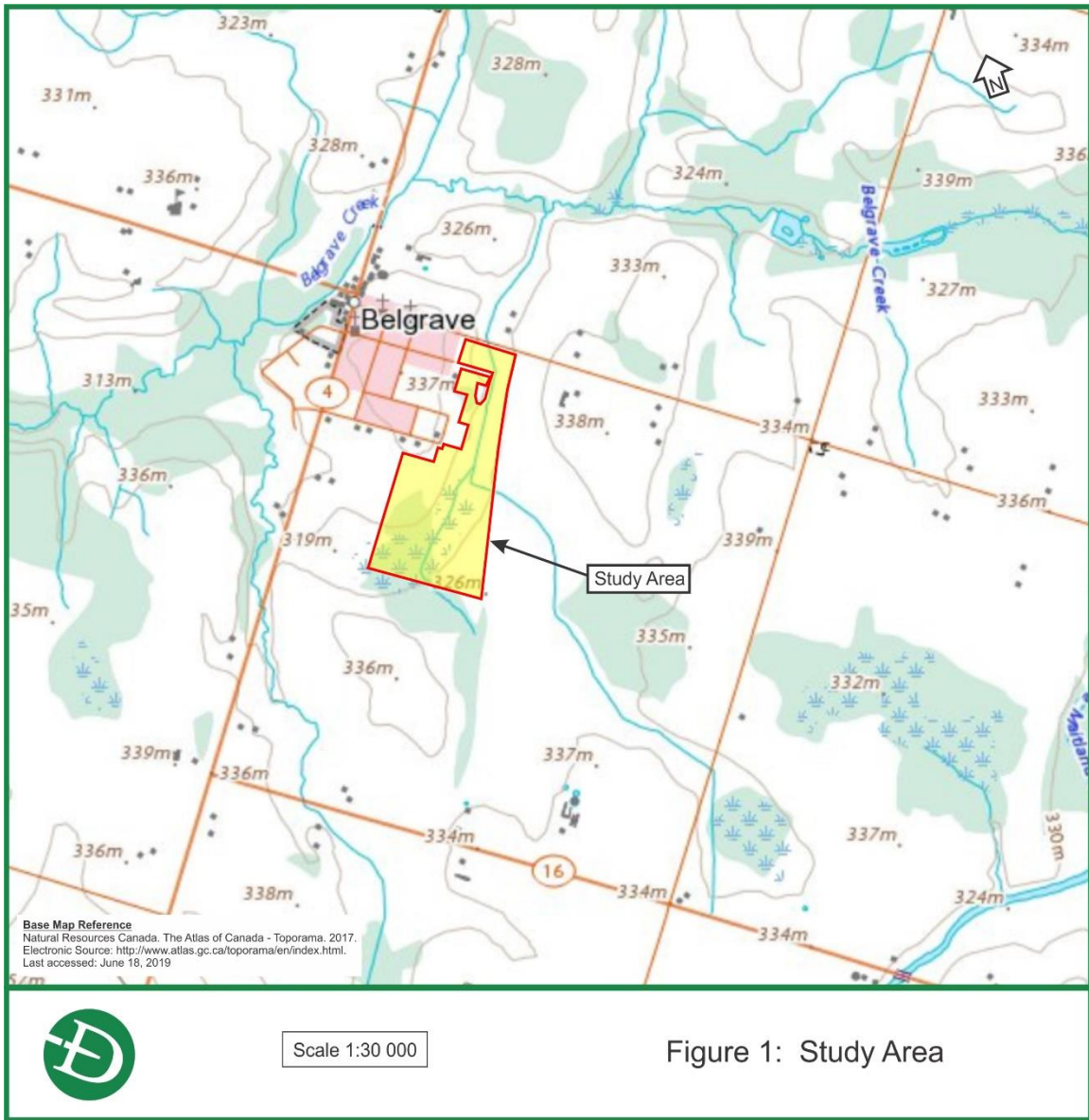
Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

7.0 Bibliography and Sources

- Archives of Ontario. 2012-2015. *The Evolution of the District and County System, 1788-1899*. Electronic document: <http://www.archives.gov.on.ca/en/maps/ontario-districts.aspx>. Last accessed, October 09, 2020.
- Belden, H. & Co. 1879. *Illustrated Historical Atlas of the County of Huron Ontario*. Toronto.
- Caston, Wayne A. 1997. Evolution in the Mapping of Southern Ontario and Wellington County. *Wellington County History* 10:91-106.
- Chapman, L.J. and D.F. Putnam. 1984. *The Physiography of Southern Ontario*. Third Edition. Ontario Geological Survey. Special Volume 2. Toronto: Ontario Ministry of Natural Resources.
- Coyne, J. H. 1895. *The Country of the Neutrals (As Far as Comprised in the County of Elgin): From Champlain to Talbot*. St. Thomas: Times Print.
- Detritus. 2020a. *Stage 1-2 Archaeological Assessment 61 Corbett Drive, Belgrave Part of Lots 2 and 3, Concession 5, Municipality of Morris-Turnberry, Geographic Township of Morris, County of Huron*. Report on file with the MHSTCI.
- Detritus. 2020b. *Stage 1-2 Archaeological Assessment Weber Property Part of Lot 1, Concession 5, Municipality of Morris-Turnberry, Geographic Township of Morris, County of Huron*. Report on file with the MHSTCI.
- Eley, Betty, and Peter H. von Bitter, 1989. *Cherts of Southern Ontario*. Toronto: Royal Ontario Museum.
- Ellis, Chris J. and Neal Ferris (editors). 1990. *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.
- Feest, Johanna E. and Christian F. Feest 1978. "The Ottawa." In *Handbook of North American Indians. Vol.15 Northeast*, Trigger, B.G. (editor), 772-786. Washington: Smithsonian Institute.
- Ferris, Neal. 2009. *The Archaeology of Native-Lived Colonialism: Challenging History in the Great Lakes*. Tucson: University of Arizona Press.
- Ferris, Neal. 1999. What's in a Name? the Implications of Archaeological Terminology Used in Nonarchaeological Contexts. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, edited by Ronald Williamson and Christopher Watts, pp. 111-121. Eastendbooks, Toronto.
- Fiedel, Stuart. 1999. Algonkians and Iroquoians: Taxonomy, Chronology and Archaeological Implications. In *Taming the Taxonomy: Toward a New Understanding of Great Lakes Archaeology*, Williamson, Ronald and Christopher Watts (editors), pp. 193-204. Eastendbooks, Toronto.
- Fisher, Jacqueline A. 1997. *The Adder Orchard Site: Lithic Technology and Spatial Organization in the Broadpoint Late Archaic*. Occasional Publications of the London Chapter, OAS, Number 3, 1997.
- Fox, William. 1990. The Odawa. In *The Archaeology of Southern Ontario to A.D. 1650*, Chris Ellis and Neal Ferris (editors), pp. 457-473. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.
- Gentilcore, R. Louis and C. Grant Head. 1984. *Ontario's History in Maps*. Toronto: University of Toronto Press.
- Golder. 2016. *The Stage 1-2 Archaeological Assessment Pletch Severance, Part of Lot 2, Concession 5, formerly Morris Township, now Municipality of Morris-Turnberry, Huron County, Ontario*. Report on file with the MTCS.

- Government of Ontario. 1990a. *Ontario Planning Act*, R.S.O. 1990, CHAPTER P.13. Last amendment: 2019, c. 15, Sched. 13. Electronic documents <https://www.ontario.ca/laws/statute/90p13>. Last accessed March 31, 2020.
- Government of Ontario. 1990b. *Ontario Heritage Act*, R.S.O. 1990, CHAPTER O.18. Last amendment: 2019, c.9, Sched.11. Electronic document: <https://www.ontario.ca/laws/statute/90o18>. Last accessed March 31, 2020.
- Government of Ontario. 1990c. *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, CHAPTER F.31. Last amendment: 2020, c.5, Sched. 2. Electronic document: <https://www.ontario.ca/laws/statute/90f31>. Last accessed March 31, 2020.
- Government of Ontario. 2002. *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33. Last amendment: 2002, S.O. 2002, c.33. Electronic Source: <https://www.ontario.ca/laws/statute/02f33/v12>. Last accessed October 9, 2020.
- Government of Ontario. 2011. *Standards and Guidelines for Consultant Archaeologists*. Toronto: MHSTCI.
- Government of Ontario. n.d. *Archaeological Sites Database Files*. Toronto: Culture Services Unit, MHSTCI.
- Janusas, Scarlett E. 1984. A Petrological Analysis of Kettle Point Chert and its Spatial and Temporal Distribution in Regional Prehistory. National Museums of Canada, Mercury Series.
- Kenyon, Ian. 1980. The Satchell Complex in Ontario: A Perspective from the Ausable Valley. In *Ontario Archaeology* 34:17-43.
- Koenig, Edwin. 2005. *Cultures and Ecologies: A Native Fishing Conflict on the Saugeen-Bruce Peninsula*. University of Toronto, Toronto.
- 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.
- Latham, R. 1993. The London Huron & Bruce Railway Company. *Huron Historical Notes* 24:24-28.
- Lennox, P., C. Dodd and C. Murphy. 1986. The Wiacek Site: A Late Middleport Component, Simcoe County. London: Ontario Ministry of Transportation and Communications.
- Rankin, Lisa. 2000. *Interpreting Long-term Trends in the Transition to Farming: Reconsidering the Nodwell Site, Ontario, Canada*. British Archaeological Reports International Series 830. British Archaeological Reports, Oxford.
- Rogers, E. S. 1978. Southeast Ojibway. In *Handbook of North American Indians. Volume 15, Northeast*, Trigger, Bruce (editor), pp. 760-771. Smithsonian Institution Press, Washington, D.C.
- Schmalz, Peter S. 1991. *The Ojibwa of Southern Ontario*. University of Toronto Press, Toronto.
- Scott, James. 1966. *The Settlement of Huron County*. Ryerson Press, Toronto.
- Surtees, Robert. 1971. *The Original People*. Holt, Rinehart and Winston, Toronto.
- Tanner, Helen (editor). 1987. *Atlas of Great Lakes Indian History*. Norman: University of Oklahoma Press.
- Warrick, Gary. 2008. *A Population History of the Huron-Petun, A.D. 500-1650*. Cambridge University Press, Cambridge.
- Wright, J.V. 1974. *The Nodwell Site*. Archaeological Survey of Canada Paper No. 22. National Museums of Canada, Ottawa.

8.0 Maps



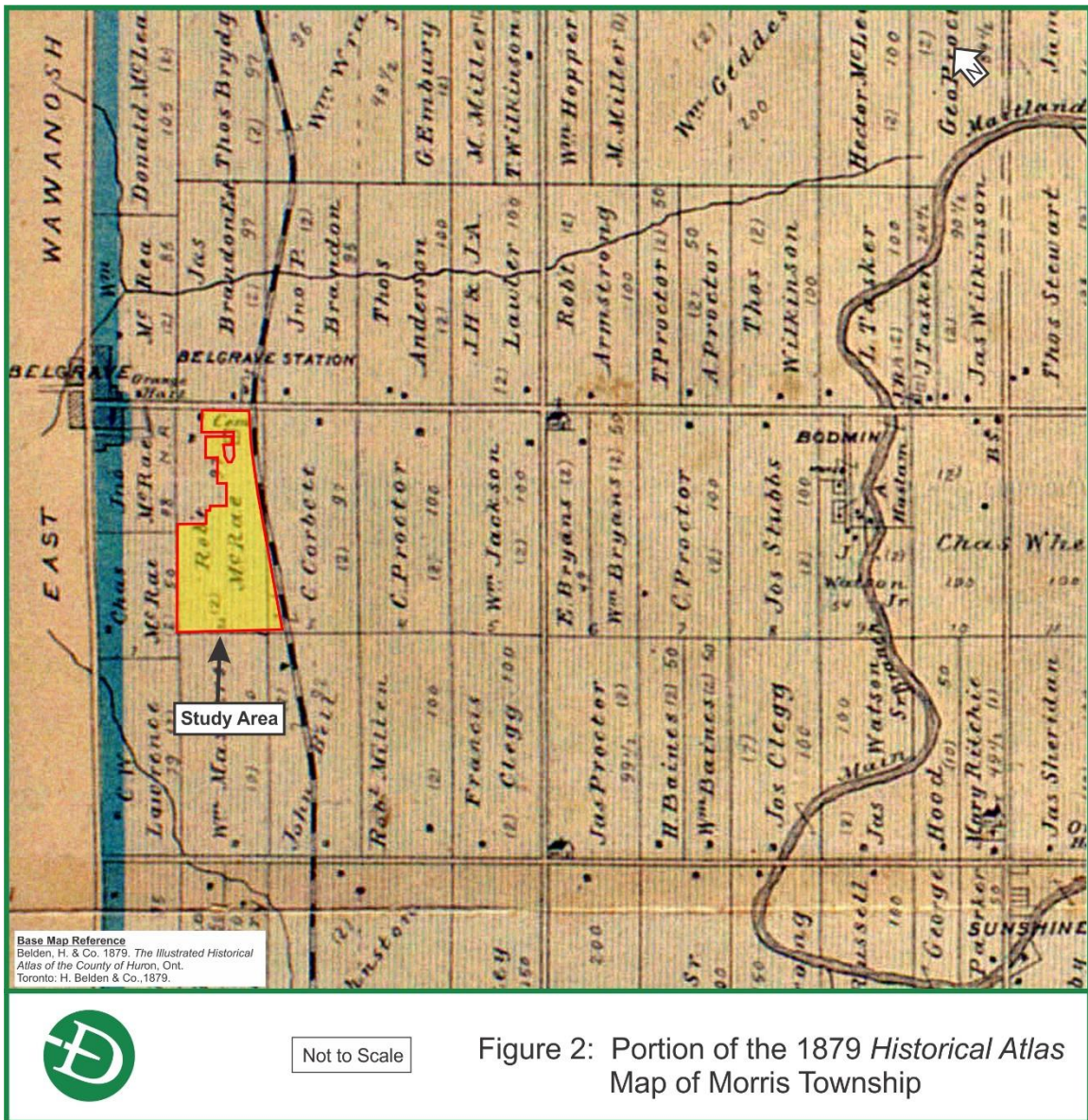
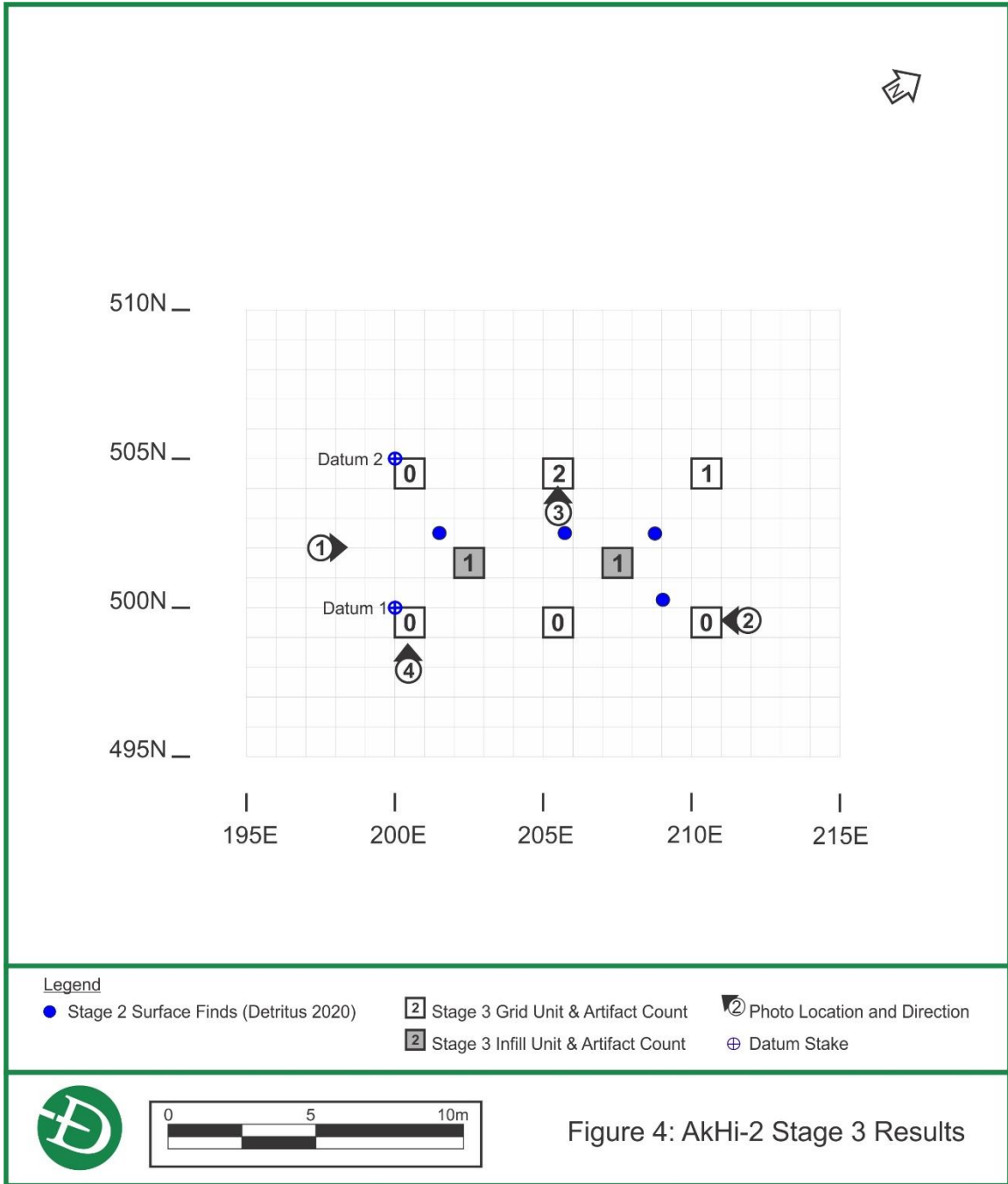




Figure 3: Previous Assessment



Legend
 ● Stage 2 Surface Finds (Detritus 2020) □ Stage 3 Grid Unit & Artifact Count ↻ Photo Location and Direction
 □ Stage 3 Infill Unit & Artifact Count ⊕ Datum Stake



Figure 4: AkHi-2 Stage 3 Results

Figure 5 Development Plan



SEVERANCE SKETCH
 61 CORBETT DRIVE, BELGRAVE
 MUNICIPALITY OF MORRIS-TURNBERRY

Retained Area: 3.96ha.
 Severed Area: 28.12ha.

Existing Watercourse
 Existing Vegetation

0 25 50 100 200
 Meters



NOTE: This concept has been prepared for general feasibility purposes only. Building code requirements and technical / architectural design have not been addressed.
 Scale 1:5000 | May 22, 2019 | Project No.: 19032 | Drawn By: MN



9.0 Images

9.1 Photos

Photo 1: Stage 3 Unit Excavation at AkHi-1, facing northeast



Photo 2: Stage 3 Unit Excavation at AkHi-2, facing southwest



Photo 3: Typical Stratigraphy of the Stage 3 Test Units, looking grid north



Photo 4: Typical Stratigraphy of the Stage 3 Test Units, looking grid north



9.2 Artifacts

Plate 1: Chipping Detritus Recovered from Test Unit 202E, 502N

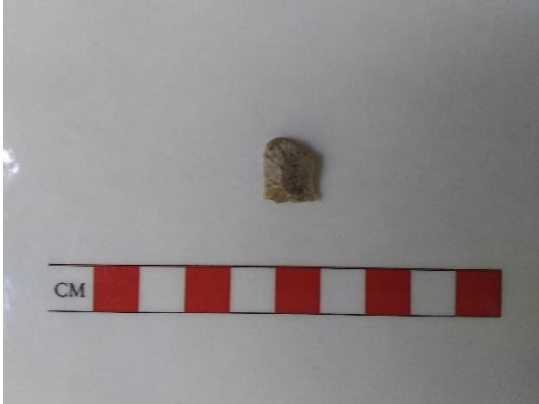


Plate 2: Chipping Detritus Recovered from Test Unit 207E, 502N



Plate 3: Chipping Detritus Recovered from Test Unit 205E, 505N



Plate 4: Chipping Detritus Recovered from Test Unit 210E, 505N



MUNICIPALITY OF MORRIS-TURNBERRY

P.O. Box 310, 41342 Morris Road, Brussels, Ontario N0G 1H0
Tel: 519-887-6137 Fax: 519-887-6424 Email: mail@morristoryberry.ca



Ministry of Heritage, Sport, Tourism and Culture Industries
C/O Garth Grimes
Detritus Consulting LTD.
69 Claremont Avenue
Kitchener, Ontario
N2M 2P5

August 16, 2021

RE: Avoidance Measures – AkHi-1

To Whom It May Concern,

Please accept this as confirmation that as the legal owner of Part of Lots 2 and 3, Concession 5, Municipality of Morris-Turnberry, Geographic Township of Morris, County of Huron, PIN 41331-0265 (LT) also known as 61 Corbett Drive, confirmation of which is included with this letter, the Council of the Corporation of the Municipality of Morris-Turnberry will implement the avoidance measures outlined in the Stage 3 Archeological Assessment of AkHi-1 prepared by Detritus Consulting LTD during any future construction. The avoidance measures are as follows:

- If AkHi-1 will be impacted by development, and no additional archaeological investigation has been planned, the archaeological site and its protective buffer will be protected and no construction impacts will be allowed. This protective buffer will extend 10m past the limits of the Stage 2 site boundaries per Section 4.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011; Tile 4 of the Supplementary Documentation).
- A temporary fence be installed around AkHi-1 and its protective buffer, construction activities in this vicinity will be monitored by a licensed archaeological consultant in order to prevent any impacts to the site, as per Section 4.1.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011a).
- 'No-go' instructions will be issued to all on-site construction crews, engineers, architects, and any others involved in day-to-day decisions during construction, as per Section 4.1.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).
- The location of the area to be avoided will be marked on all contract drawings, where applicable, and will include explicit instructions to avoid the area, as per Section 4.1.1, Standard 1c of the *Standards and Guidelines* (Government of Ontario 2011).

Thank you,

Trevor Hallam
CAO/Clerk
Municipality of Morris-Turnberry

Encl.:
Parcel Register for 41331-0265 (LT)