Stage 3 Site Specific Assessment of P1 (BdHb-6) in Part of Lot 21, Concession 2, Formerly Collingwood Township, Town of the Blue Mountains, Grey County, Ontario

Submitted to

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and

The Ontario Ministry of Tourism, Culture, and Sport

Prepared by

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STAGE 3 SITE SPECIFIC ASSESSMENT: P1 (BDHB-6)

Project Context
December, 2016

Executive Summary

Bluestone Research Inc. (Bluestone) was retained by Parkbridge Lifestyle Communities (Parkbridge) to conduct a Stage 3 site specific assessment of P1 (BdHb-6), an Aboriginal archaeological site with both middle woodland and contact period components. The assessment was undertaken in advance of a draft Plan approval for a housing development on Lakeshore Drive, legally described as part of Lot 21, Concession 2, formerly Collingwood Township, Town of the Blue Mountains, Grey County, Ontario.

This assessment was triggered by the Provincial Policy Statement 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 (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.”

P1 (BdHb-6) was identified during a Stage 1-2 archaeological assessment conducted by Archaeological Services Incorporated (ASI) for a 25.5 hectare parcel of land in the fall of 2015. The Plater-Fleming site (BdHb-2) was known to exist in the western part of the study area, while a further 3 sites were identified in the eastern portion, including P1 (BdHb-6), P2 (BdHb-7), and P6 (BdHb-8). The Plater-Fleming Site (BdHb-2) was recommended for full protection and avoidance, while the 3 newly identified archaeological sites were recommended for Stage 3 site specific assessments. P1 (BdHb-6) was discovered during both pedestrian and test pit survey and interpreted as a shoreline camp, with possible multiple occupations, over an area of 400 square meters. The Stage 2 artifact assemblage consists of 6 pieces of chipping detritus, 3 fragmentary ceramic vessel sherds, a fragmentary piece of faunal remains, and a very large adze preform, and a knapped flake of glass. P1 (BdHb-6) was recommended for a Stage 3 site specific assessment to determine the limits of the site, with the original intention of delineating buffers to inform protection and avoidance strategies. However, upon commencing the Stage 3 assessment, consisting of a controlled surface pick-up (CSP), the site size increased from the original Stage 2, encroaching on a potential entrance road to the development, and protection became an unviable mitigation strategy. As such, and in agreement with Parkbridge and First Nation communities, conventional Stage 3 methodologies were employed. Since it was evident that the site would need Stage 4 mitigation of development impacts, hand excavation consisted of one meter by one meter test units being placed at ten meter intervals across the extent of the site, including an additional 40% in areas of interest.

The Stage 3 site specific assessment conducted by Bluestone consisted of a controlled surface pick-up and the hand excavation of 27 one meter by one meter test units, resulting in the recovery of 159 artifacts. Three of the stage 3 hand excavated test units yielded more than 10 artifacts, most of which (64.78%) were very small pottery fragments. One projectile point dating to the middle woodland period was also found. Therefore P1 (BdHb-6) is deemed to have further cultural heritage value or interest according to Section 3.4 of the *2011 Standards and Guidelines for Consultant Archaeologists*

(Government of Ontario 2011) and further archaeological assessment is recommended for P1 (BdHb-6) in the form of Stage 4 mitigation of development impacts.

P1 (BdHb-6) fulfils Section 3.4.1 Standard 1a and 1b of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and retains cultural heritage value or interest which requires mitigation of development impacts. The MTCS prefers, for sites recommended for Stage 4 mitigation of impacts, that the site be avoided and protected rather than excavated, as per Section 7.9.4 Standard 2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Options to reduce or eliminate impacts to archaeological sites include redesigning the Project, excluding the archaeological site area from the Project, or incorporating the area of the archaeological site into the Project but without alteration, as outlined in Section 3.5 of the 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). If these options are not feasible, Stage 4 archaeological mitigation by excavation is an alternative.

In consultation with the client and the Saugeen Ojibway Nation (SON), the Stage 4 mitigation of P1 (BdHb-6) by avoidance and protection is not a viable option. Thus, P1 (BdHb-6) requires Stage 4 mitigation of development impacts by excavation prior to any construction activities. The Stage 4 mitigative excavation strategy of P1 (BdHb-6) will be determined in accordance with Section 4.2.2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011), and in consultation with First Nation communities.

The Stage 4 mitigation of development impacts will include block hand excavation and the hand excavation of any cultural features identified. The Stage 4 block hand excavation will be undertaken around all high yielding Stage 3 units as well as Stage 3 units yielding temporally diagnostic artifacts. Block excavation will also continue to a minimum of 2 meters beyond any identified cultural feature.

The Ministry of Tourism, Culture, and Sport is asked to review the information presented herein, issue comment and offer written confirmation of their acceptance of this report into the provincial registry.

Project Personnel

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Project Manager:	Derek Lincoln, (P344) Bill Fitzgerald, PhD
Licensed Field Director:	Derek Lincoln, (P344)
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Acknowledgements

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Ministry of Tourism, Culture and Sport:	Robert von Bitter
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1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Bluestone Research Inc. (Bluestone) was retained by Parkbridge Lifestyle Communities (Parkbridge) to conduct a Stage 3 site specific assessment of P1 (BdHb-6), an Aboriginal archaeological site with both middle woodland and contact period components. The assessment was undertaken in advance of a draft Plan approval for a housing development on Lakeshore Drive, legally described as part of Lot 21, Concession 2, formerly Collingwood Township, Town of the Blue Mountains, Grey County, Ontario.

This assessment was triggered by the Provincial Policy Statement 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 (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.”

Permission to enter the study area and document archaeological resources was provided by Rob Wagner of Parkbridge Lifestyle Communities.

1.1.1 Objectives

The objective of the Stage 3 archaeological assessment at P1 (BdHb-6) is to assess the cultural heritage value or interest of the site through controlled collection of material. This information will be used to support the determination of whether the site has been sufficiently documented or if further measures are required to protect or document the site fully. The objectives of a Stage 3 site-specific assessment are:

- To determine the extent of the archaeological site and the characteristics of the artifacts;
- To collect a representative sample of artifacts;
- To assess the cultural heritage value or interest of the archaeological site; and
- To determine the need for mitigation of development impacts and recommend appropriate strategies for mitigation and future conservation.

Stage 3 assessments typically consist of detailed documentary research of the land use and occupation history, controlled surface pick-up (CSP) of material on ploughed fields, and test unit excavation. The Stage 3 assessment has been conducted to meet the requirements of the Ministry of Tourism, Culture and Sport’s (MTCS) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

1.2 HISTORICAL CONTEXT

P1 (BdHb-6) is located within the proposed housing development located on Lakeshore Drive, legally described as part of Lot 21, Concession 2, formerly Collingwood Township, Town of the Blue Mountains, Grey County, Ontario.

1.2.1 Pre and early Post-Contact Aboriginal Resources

Our knowledge of past First Peoples settlement and land use in Grey County is incomplete. Nonetheless, using province-wide (MCCR 1997) and region-specific archaeological data, a generalized cultural chronology for native settlement in the area can be proposed. The following paragraphs provide a basic textual summary of the known general cultural trends and a tabular summary appears in Table 1.

The Paleoindian Period

The first human populations to inhabit Ontario came to the region between 12,000 and 10,000 years ago, coincident with the end of the last period of glaciation. Climate and environmental conditions were significantly different than they are today; local environs would not have been welcoming to anything but short-term settlement. Termed Paleoindians by archaeologists, Ontario first peoples would have crossed the landscape in small groups (i.e., bands or family units) searching for food, particularly migratory game species. In the area, caribou may have provided the staple of the Paleoindian diet, supplemented by wild plants, small game, birds and fish. Given the low density of populations on the landscape at this time and their mobile nature, Paleoindian sites are small and ephemeral. They are usually identified by the presence of fluted projectile points and other finely made stone tools.

Table 1: Cultural Chronology for Native Settlement within Grey County

Period			Time Range (circa)	Diagnostic Features	Complexes
Paleoindian	Early		9000 – 8400 B.C.	fluted projectile points	Gainey, Barnes, Crowfield
	Late		8400 – 8000 B.C.	non-fluted and lanceolate points	Holcombe, Hi-Lo, Lanceolate
Archaic	Early		8000 – 6000 B.C.	serrated, notched, bifurcate base points	Nettling, Bifurcate Base Horizon
	Middle		6000 – 2500 B.C.	stemmed, side & corner notched points	Brewerton, Otter Creek, Stanly/Neville
	Late		2000 – 1800 B.C.	narrow points	Lamoka
			1800 – 1500 B.C.	broad points	Genesee, Adder Orchard, Perkiomen
			1500 – 1100 B.C.	small points	Crawford Knoll
	Terminal		1100 – 850 B.C.	first true cemeteries	Hind
Woodland	Early		800 – 400 B.C.	expanding stemmed points, Vinette pottery	Meadowwood
	Middle		400 B.C. – A.D. 600	thick coiled pottery, notched rims; cord marked	Couture
	Late	Western Basin	A.D. 600 – 900	Wayne ware, vertical cord marked ceramics	Riviere au Vase-Algonquin
			A.D. 900 –	first corn; ceramics with multiple band	Young- Algonquin

			1200	impressions	
			A.D. 1200 – 1400	longhouses; bag shaped pots, ribbed paddle	Springwells-Algonquin
			A.D 1400-1600	villages with earthworks; Parker Festoon pots	Wolf- Algonquin
Contact		Aboriginal	A.D. 1600 – 1700	early historic native settlements	Neutral Huron, Odawa, Wenro
		Euro-Canadian	A.D. 1700-1760	fur trade, missionization, early military establishments	French
			A.D. 1760-1900	Military establishments, pioneer settlement	British colonials, UELs

Archaic

The archaeological record of early native life in Southern Ontario indicates a change in lifeways beginning circa 10,000 years ago at the start of what archaeologists call the Archaic Period. The Archaic populations are better known than their Paleoindian predecessors, with numerous sites found throughout the area. The characteristic projectile points of early Archaic populations appear similar in some respects to early varieties and are likely a continuation of early trends. Archaic populations continued to rely heavily on game, particularly caribou, but diversified their diet and exploitation patterns with changing environmental conditions. A seasonal pattern of warm season riverine or lakeshore settlements and interior cold weather occupations has been documented in the archaeological record. Since the large cold weather mammal species that formed the basis of the Paleoindian subsistence pattern became extinct or moved northward with the onset of a warmer climate, Archaic populations had a more varied diet, exploiting a range of plant, bird, mammal and fish species. Reliance on specific food resources like fish, deer and nuts becomes more pronounced through time and the presence of more hospitable environs and resource abundance led to the expansion of band and family sizes. In the archaeological record, this is evident in the presence of larger sites and aggregation camps, where several families or bands would come together in times of resource abundance. The change to more preferable environmental circumstances led to a rise in population density. As a result, Archaic sites are more abundant than those from the earlier period. Artifacts typical of these occupations include a variety of stemmed and notched projectile points, chipped stone scrapers, ground stone tools (e.g. celts, adzes) and ornaments (e.g. bannerstones, gorgets), bifaces or tool blanks, animal bone and waste flakes, a by-product of the tool making process.

Woodland Period

Significant changes in cultural and environmental patterns are witnessed in the Woodland Period (circa 950 B.C to historic times). The coniferous forests of earlier times were replaced by stands of mixed and deciduous species. Occupations became increasingly more permanent in this period, culminating in major semi-permanent villages by 1,000 years ago. Archaeologically, the most significant changes by Woodland times are the appearance of artifacts manufactured from modeled clay and the construction of house structures. The Woodland Period is often defined by the occurrence of pottery, storage facilities and residential areas similar to those that define the incipient agricultural or Neolithic period in Europe. The earliest pottery was rather crudely made by the coiling method and house structures were simple enclosures.

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Contact Period

P1 (BdHb-6) lies within the traditional territory of the Tianantate and the Saugeen Ojibway Nation. The Plater-Flemming site, a 17th century Odawa village lies several hundred meters to the west of P1 (HdHb-6). The Odawa were an Algonkian-speaking people who occupied portions of the Southern Canadian Shield and the Western and Upper Great Lakes areas (Feest and Feest 1978:772). The Tianantate are better known as the Petun (tobacco people), a name given to them by 17th century French explorers for the large amounts of tobacco they grew. The Stage 1-2 report produced by ASI in 2016 provides a full description of the Tianantate and Odawa people.

1.3 ARCHAEOLOGICAL CONTEXT

P1 (BdHb-6) is located within the proposed housing development located on Lakeshore Drive, legally described as part of Lot 21, Concession 2, formerly Collingwood Township, Town of the Blue Mountains, Grey County, Ontario.

1.3.1 Existing Conditions

The entire Stage 2 study area consisted of approximately 25.5 hectares of mixed woodlot and overgrown meadow, with a series of sandy swales between shallow shale depressions, with the landscape rising steadily from Lake Huron in the North, until a steep ridge rises in the south where the blue mountains begin.

P1 (BdHb-6) is contained within a grassed meadow occupying a sandy swale in the northeast corner of the study area, between two shale depressions with very little soil formation and overgrown with hawthorns and other brush. The overgrown areas were test pitted during the Stage 2 assessment, while the meadow area was ploughed.

1.3.2 The Natural Environment

The study area is situated within the Niagara Escarpment physiographic region as defined by Chapman and Putnam (1984 114-122). The Niagara Escarpment is described by Chapman and Putnam (1984) as being an escarpment that effectively divides Southern Ontario into its eastern and western halves along a roughly north-south aligned axis. The Niagara Escarpment in the area near Craigleith is characterized as being one of the steepest sections of relief, with cliffs and “mountainous terrain” facing northeast towards Georgian Bay (Chapman and Putnam (1984:117).

Potable water is the single most important resource for any extended human occupation or settlement and since water sources in southwestern 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. The study area contains a small northeasterly flowing stream contained with a small valley bisecting the property. There is also a stream draining north to Lake Huron along the western edge of the study area.

1.3.3 Previously Known Archaeological Sites and Surveys

To compile an inventory of archaeological resources, the registered archaeological site records kept by the MTCS were consulted. In Ontario, information concerning archaeological sites stored in the ASDB is maintained by the MTCS. This database contains archaeological sites registered per the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometers east to west and approximately 18.5 kilometers north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area under review is within Borden Block BdHb.

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*. 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 MTCS 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 ASDB has shown that there are 5 archaeological sites registered within a one-kilometer radius of the study area (Site Data Search, July 28th; Government Ontario n.d.). These include the 2 other sites identified during the Stage 1-2 assessment of this study area, and the previously known Plater-Martin and Plater-Fleming sites. The fifth site, the Goodchild site, lies outside the Stage 2 study area to the north-east. Table 2 summarizes the registered archaeological sites within one-kilometer of the study area.

Table 2: Registered Archaeological Sites within One Kilometer of the Study Area

Borden #	Site Name	Site Type	Cultural Affiliation
BdHb-8	P6	campsite	Woodland, Late
BdHb-7	P2	campsite	Petun
BdHb-3	Goodchild	cemetery	Middle-Late Archaic, Early Woodland
BdHb-2	Plater-Fleming	House, settlement, village	Huron Wendat, Petun
BdHb-1	Plater-Martin	village	Odawa

1.3.4 Summary of Previous Investigations

P1 (BdHb-6) was discovered during the Stage 1-2 archaeological assessment conducted by ASI in the fall of 2015. During the Stage 2 property assessment, 3 other locations were identified within the study area, including the previously registered Plater-Fleming site (BdHb-2). The Plater-Fleming site (BdHb-2) will be fully protected and avoided on a long-term basis and no further field work will be undertaken. Explicit instructions regarding the protection of the Plater-Fleming site are laid out in detail in the Stage 1-2 report titled *Stage 1-2 Archaeological Assessment of Part of Lot 21, Concession 2, Formerly Collingwood Township, Town of the Blue Mountains, Grey County, Ontario* submitted to the Ministry of Tourism, Culture, and Sport by ASI in 2016.

The 3 newly identified sites, P1 (BdHb-6), P2 (BdHb-7) and P6 (BdHb-8) are all aboriginal sites. All 3 sites were located through a combination of test pit and pedestrian survey and were recommended for Stage 3 site specific assessments. It was also clear that Stage 4 mitigation of development impacts would be required for each, whether mitigation by excavation or avoidance and protection would be the ultimate strategy.

The Stage 2 artifact assemblage consists of 6 pieces of chipping detritus, 3 fragmentary ceramic vessel sherds, a fragmentary piece of faunal remains, a very large adze preform, and a knapped flake of glass. P1 (BdHb-6) was recommended for a Stage 3 site specific assessment to determine the limits of the site, with the original intention of delineating buffers to inform protection and avoidance strategies. However, upon commencing the Stage 3 assessment, consisting of a controlled surface pick-up (CSP), the site size increased from the original Stage 2, encroaching on a potential entrance road to the development, and protection became an unviable mitigation strategy. As such, and in agreement with Parkbridge and First Nation communities, conventional Stage 3 methodologies were employed. Since it was evident that the site would need Stage 4 mitigation of development impacts, hand excavation consisted of one meter by one meter test units being placed at ten meter intervals across the extent of the site, including an additional 40% in areas of interest.

1.3.5 Summary of Past Archaeological Investigations within 50m

Other than the Stage 2 assessment done before the current undertaking, numerous studies have been carried out at the adjacent Plater-Fleming site. The site was first identified by Andrew Hunter in 1904 and investigated further by Charles Garrad and J. Allan Blair from 1961-1963. These investigations consisted of the excavation of a 65 by 5 foot test trench through a slope midden at the north end of the trench (Garrad 1989:9). In 1988 the Museum of Indian Archaeology began investigations whereupon they identified a sizeable village, including 4 longhouses, a three-row palisade and 5 ritual dog burials.

In 2009, This Land Archaeology Inc. carried out a Stage 1-3 archaeological assessment for the Plater-Fleming site to better test the limits of the site and formulate Stage 4 salvage excavation plan for the site. These investigations consisted of minimal field work, and only 25 artifacts were yielded from 8 one meter by one meter test units.

Archaeological assessments to the immediate east and southeast of the property were undertaken by AMICK Consultants in 2011, and ASI in 2015 for properties that include part of the Plater-Martin site, however neither assessment resulted in any archaeological resources unrelated to the already identified Plater-Martin site. For a complete and detailed description of investigations conducted with 50 meters, please refer to the Stage 1-2 assessment report by ASI (ASI 2015).

2.0 FIELD METHODS

The P1 (BdHb-6) site is defined by the physiography of the area, being contained within a sandy swale between shale depressions that are part of a series of Nipissing recessional beach ridges that characterize the property. In consultation with the SON, the study area underwent shallow disking prior to assessment, to not reduce the visibility by ploughing the shallow shale deposits up into the plough zone. Upon allowing the field to weather, surface visibility was good, however due to the very high shale content a reduced interval was recommended for the CSP. In agreement with the SON a total of three consecutive CSP's were undertaken at a 0.5 meter intervals. Upon arrival at the site, geographic reference markers that were documented during the Stage 2 archaeological assessment were relocated using a Top Con FC-5000 Network Rover using the North American Datum 1983 (NAD83). Datum stakes were then placed in the ground and the Stage 3 CSP was conducted. The CSP consisted of accurately mapping the location of all artifacts on the field surface with a Top Con FC-5000 Network Rover, using NAD83, tying the data to the overall site. All coordinates taken during the Stage 3 assessment are listed in the Supplementary Documentation to this report.

The Stage 3 CSP resulted in the identification and documentation of 13 pre-contact Aboriginal lithic artifacts, consisting of 5 fragmentary ceramic vessel sherds, 4 fragmentary faunal remains, and 4 pieces of chipping detritus. As site limits and surface finds were well-defined and documented with the aid of a Top Con FC-5000 Network Rover (accuracy of five millimeters), all artifacts were retained for laboratory analysis and processing as per Section 3.2.1 Standard 6 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

Following the Stage 3 CSP, a five-meter by five-meter grid of one-meter square test units was established across the P1 (BdHb-6) surface scatter as defined by the Stage 2 polygon (ASI 2016) and the Stage 3 CSP data as per Section 3.2.3 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). This grid was established using a Top Con Fc-5000 Network Rover, using the NAD83.

In total, the Stage 3 assessment included the hand excavation of 27 one-meter units strategically positioned to test the nature and density of the subsurface artifact distribution at the site. The Stage 2 assessment of P1 (BdHb-6) yielded a small scatter of Aboriginal material from the woodland period and it was evident that the level of cultural heritage value or interest would result in a recommendation to proceed to Stage 4. Thus, the test unit placement strategy outlined in Standards 3 and 4 of Table 3.1 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) was followed and a series of 14 one-meter square test units were positioned at ten-meter intervals across the site to encompass the scatter area identified through Stage 2 surface collection and the Stage 3 CSP. Units were excavated over the extent of the sandy swale within which the site was contained. The Stage 3 site limits were defined based upon sterile units around the entire the periphery of the site, within the shale depressions which were natural boundaries to the site. Following this, thirteen additional units amounting to more than 40% of the grid unit total, were placed in areas of higher artifact concentration

within the surface artifact scatter and adjacent to relatively high-yielding test units, including filling most of the grid in at 5 meters to better determine Stage 4 strategies.

The five-meter units in the grid are referred to by the intersection coordinates of their southwest corner. Each five-meter square was divided into 25 one-meter units, with sub-square number one located in the southwest corner of the five-meter unit, number five in the southeast corner, number six located immediately north of number one, and so on (Figure 6). All test units were excavated in systematic levels. Each one-meter unit within the sandy swale contained a single stratigraphic layer (plough zone), which included a lot of broken shale and cobbles and was excavated into the first five centimeters of subsoil, where present, or more frequently, into the top of the underlying shale. In the north east of P1 (BdHb-6) a sterile layer of shale and cobbles existed below top soil and plough zone. This was found north of the 1060 and east of the 560 grid lines. Likely the shale and cobbles existed in a separate layer since the plough didn't go as deep in this area as it was too rocky. All soil from the units was screened through six-millimeter hardware cloth. All artifacts recovered during Stage 3 archaeological assessment were retained for laboratory analysis and description. Artifacts recovered during Stage 3 excavation were recorded and catalogued regarding their corresponding one meter sub-square unit number.

The subsoil surface of each unit was shovel shined, troweled and examined for any evidence of subsurface cultural features prior to backfilling, none of which were identified. The test units ranged in depth from 20 centimeters to 38 centimeters, and considering that each test unit had been excavated 5 centimeters into subsoil, the plough zone ranged in depth from 15 centimeters to 33 centimeters.

During the Stage 3 archaeological assessment of P1 (BdHb-6), the weather was hot and sunny. At no time were field or weather conditions detrimental to the recovery of archaeological material. Lighting and soil conditions were suitable and visibility was excellent. Photos 1-2 illustrates field conditions during the CSP and Photos 3-6 illustrate conditions during the Stage 3 test unit excavation. Table 3 provides a summary of the weather and field conditions.

Table 3: Weather and Field Conditions

Date	Activity	Weather	Field Conditions
July 18, 2016	Controlled Surface Pick-Up	Sunny, hot	Dry soils; varying visibility 70-80%
July 25, 2016	Test Unit Excavation	Sunny, hot	Dry friable soils; screens well
July 26, 2016	Test Unit Excavation	Sunny, warm	Dry friable soils; screens well
July 27, 2016	Test Unit Excavation	Sunny, hot	Dry friable soils; screens well
July 28, 2016	Test Unit Excavation	Sunny, warm	Dry friable soils; screens well

In accordance with Section 3.4 Standard 2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011b), Aboriginal engagement should be undertaken while conducting the Stage 3 archaeological assessment of an Aboriginal archaeological site. Additional information on the Aboriginal engagement practices conducted during the Stage 3 assessment of P1 (BdHb-6) is provided in the Supplementary Documentation.

3.0 RECORD OF FINDS

The Stage 3 site specific assessment was conducted employing the methods described in Section 2.0 of this report. An inventory of the documentary record generated by fieldwork is provided in Table 4 and the results of the Stage 3 assessment of P1 (BdHb-6) are discussed in greater detail below. Maps indicating the exact site location and all UTM coordinates recorded during the assessment are included in the Supplementary Documentation to this report.

Table 4: Inventory of Documentary Record

Document Type	Current Location of Document Type	Additional Comments
7 Pages of Field Notes	Bluestone office in London	Photocopied and stored digitally in project file
1 Map Provided by Client	Bluestone office in London	In original field book and photocopied in project file
44 Digital Photographs	Bluestone office in London	Stored digitally in project file
1 hand drawn map	Bluestone office in London	In original field book and photocopied in project file
159 Artifacts	Bluestone office in London	Stored in individual bags in 1 bankers box
Artifact Catalogue	Bluestone office in London	Stored digitally in project file

All the material culture collected during the Stage 3 site specific assessment of P1 (BdHb-6) is contained in one Bankers box. It will be temporarily housed at the Bluestone London office until formal arrangements can be made for a transfer to an MTCS collections facility.

3.1 CULTURAL MATERIAL

The Stage 3 archaeological assessment of P1 (BdHb-6) was conducted from July 18th to July 28th 2016. A total of 9 pre-contact Aboriginal artifacts were identified during the CSP as well as 4 fragmentary faunal remains. The test unit excavation consisted of hand excavations of 27 one-meter units strategically placed across the site in accordance with Table 3.1 from the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and resulted in the recovery of 131 additional pre-contact Aboriginal artifacts, 13 fragmentary faunal remains, and 2 pieces of modern glass. Figure 4 (and Figure 4 of the Supplementary Documentation) provides the results of the Stage 3 assessment. No subsurface features were observed during Stage 3 investigations.

In total, the Stage 3 archaeological assessment of P1 (BdHb-6) resulted in the recovery of 159 artifacts, including 103 fragmentary sherds, 11 decorated sherds, 22 pieces of chipping detritus, 17 fragmentary faunal remains, 3 retouched flakes, 2 pieces of glass, and a projectile point. A sample of the artifacts recovered from the Stage 3 assessment of P1 (BdHb-6) is depicted in Section 8.2. Table 5 summarizes the pre-contact Aboriginal artifacts recovered during the Stage 3 assessment of P1 (BdHb-6). The 2 glass fragments are modern dish glass and not considered relevant.

Table 5: P1 (BdHb-6) Artifact Summary

Artifact	Frequency	%
Chipping Detritus	22	13.84
Fragmentary Sherd	103	64.78
Decorated Sherd	11	6.92
Faunal	17	10.69
Retouched Flake	3	1.89
Projectile Point	1	0.62
Glass	2	1.26
Total	**359**	**100**

Most recovered lithic artifacts (20) are manufactured from Kettle Point chert (76.92%), with only 6 manufactured from Fossil Hill chert (23.08%). Chert type identifications were accomplished visually using reference materials located in the Bluestone London office and in consultation with the SON.

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 1984:3). 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).

Fossil Hill formation chert is from the Middle Silurian Age and is situated between the Dolomite and underlying Head Formation shale. It occurs on Manitoulin Island and the Bruce Peninsula and has a distinct assemblage of microfossils. Fossil Hill chert can be identified by the presence of an earthy luster and occurs in a white to off white colour, in blue, yellow, green and pink hues. Fossil Hill chert is also known as Collingwood chert, white and Bruce chert. (Eley & von Bitter 1989).

Primary reduction activities, from which primary flakes and shatter would be created, were largely restricted to an off-site location. The predominant use of Fossil Hill and Kettle Point chert indicates that the people at P1 (BdHb-6) were, for the most part, relying on two sources of raw material. Primary outcrops of Kettle Point chert are found along the shores of Lake Huron while outcrops of Fossil Hill chert are found in the Bruce Peninsula, a few kilometers to the west of the site. Thus, lithic procurement strategies at P1 (BdHb-6) mainly involved local sourcing.

3.1.1 Chipping Detritus

A total of 25 pieces of chipping detritus were recovered, including 3 retouched flakes. All pieces of chipping detritus were subject to morphological analysis following the classification scheme described by

Lennox *et al.* (1986) and expanded upon by Fisher (1997). Table 6 outlines the results of the detailed morphological analysis of the chipping detritus. A sample of the chipping detritus recovered from P1 (BdHb-6) is presented in Plate 1.

Table 6: Chipped Stone Debitage Analysis

Material	Primary		Secondary		Tertiary		Broken		Shatter		Total Analyzed	
	n	%	n	%	n	%	n	%	n	%	n	%
Kettle Point	0	0	1	4.00	19	76.00	0	0.00	1	4.00	**21**	**84**
Fossil Hill	0	0	0	0	4	16.00	0	0.00	0	0	**4**	**16**
Total	**0**	**0**	**1**	**4.00**	**23**	**92.00**	**0**	**0.00**	**1**	**4.00**	**25**	**100**

The morphological analysis of the chipped stone debitage indicates that Tertiary flakes comprise the large majority (92%) of the assemblage with a very small amount of shatter (4%) and secondary 4%) flakes.

Tertiary 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. Tertiary flakes also exhibit more flake scars on their dorsal surface than do primary or secondary flakes. 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 un-flaked area, on their dorsal surfaces and proximal ends.

This morphological analysis suggests that the lithic practices at the site consisted mainly of the re-sharpening and maintenance of expedient tools from existing inventory or debitage.

3.1.2 Expedient Tools

Utilized flakes, retouched flakes, and notched flakes are fragments of chipping detritus that show evidence of use and are considered informal expedient tools that were discarded after use; they cannot be used to determine the cultural affiliation or period of occupation of a site. Four retouched flakes were recovered from P1 (BdHb-6). A sample of expedient tools is presented in Plate 2.

3.1.3 Faunal

A total of 17 faunal remains were recovered from P1 (BdHb-6). The faunal remains were extremely fragmentary and many were calcined or burnt. Only one tooth fragment was identifiable by species and the faunal material is of little use for determining site age. A sample of the faunal material recovered from P1 (BdHb-6) is depicted in Plate 3.

3.1.4 Projectile Points

One projectile point dating to the Middle Woodland period was recovered from P1 (BdHb-6). It was identified as a Vanport point of Kettle Point chert (400 BC-600AD). The point is depicted in Plate 4 while a summary of its metrics and attributes is presented in Table 8.

Table 7: Projectile Point Metrics and Attributes

Cat. #	Length	Width	Thickness	Material	Type	Comments
13	22mm*	20mm	5mm	Kettle Point	Vanport (Middle Woodland)	missing tip and one lateral

*Denotes Broken Measurement

3.1.5 Pottery

A total of 114 pieces of native pottery were recovered from the Stage 3 site specific assessment of P1 (BdHb-6), including 103 (90.35%) very fragmentary sherds and 11 decorated sherds (6.92%) that were too small to determine vessel shape or function, or even context within the vessel. Though too small to identify specific patterns, all the decorated fragmentary sherds had dentate stamping which was a decoration method employed in the Middle Woodland period where a tool was impressed into the wet clay. None of the sherds recovered were large enough to deduce vessel form or function. The large majority of them were less than 1cm in diameter and had no surface treatment. A breakdown of sherd types recovered is represented in table 14 while a sample is depicted in Plates 5 and 6. The artifact catalogue presents pottery amounts in gram weight as well as total counts.

Table 8: Native Pottery Sherd Types

Material	Fragmentary Sherd		Body Sherd		Neck Sherd		Rim Sherd		Total Analyzed	
	n	%	n	%	n	%	n	%	n	%
Undecorated	103	90.35	0	0	0	0	0	0	**103**	**90.35**
Decorated	11	6.92	0	0	0	0	0	0	**11**	**6.92**
Total	114	100	0	0	0	0	0	0	**114**	**100**

3.2 ARTIFACT DISTRIBUTION AND SETTLEMENT PATTERN

The Stage 2 artifact assemblage consists of 6 pieces of chipping detritus, 3 fragmentary ceramic vessel sherds, a fragmentary piece of faunal remains, and a very large adze preform, and a knapped flake of glass. The artifacts recovered from the Stage 3 site specific assessment of P1 (BdHb-6) are distributed over an area slightly larger that extends to the east. The site is contained within the sandy swale between the shale depressions. The highest artifact yield in any unit was 52 (550E 1060N:1), which consisted of 51 fragmentary sherds (10 decorated) less than 1cm in diameter. Fifteen units around the periphery yielded 0 artifacts, most of these units existed within the shale depressions around the site, which are firm delineations of site boundaries.

In total, the Stage 3 archaeological assessment of P1 (BdHb-6) resulted in the recovery of 159 artifacts, including 103 fragmentary sherds, 11 decorated sherds, 22 pieces of chipping detritus, 17 fragmentary faunal remains, 3 retouched flakes, 2 pieces of glass, and a projectile point. All pieces of chipping detritus recovered from the Stage 2 and over 90% of the chipping detritus from the Stage 3 assessment are tertiary flakes, indicating that the lithic practices at this site consisted mainly of tool maintenance. The fragmentary nature of the pottery leaves little to be garnished regarding specific site function, though decoration techniques date components to the middle woodland. The lone projectile point recovered, identified as a Vanport, also dates to the middle woodland period (400BC-600AD). P1 (BdHb-6) likely represents multiple shoreline campsites occupied throughout the middle woodland period. The natural physiography of the area left little choice for camp location and the same area would have been used repeatedly.

3.3 ARTIFACT CATALOGUE

A complete artifact catalogue is presented in Appendix A.

4.0 ANALYSIS AND CONCLUSIONS

The Stage 3 archaeological assessment of P1 (BdHb-6), conducted between July 18^{h} and July 28th, 2016, resulted in the recovery of a total of 159 artifacts, including 103 fragmentary sherds, 11 decorated sherds, 22 pieces of chipping detritus, 17 fragmentary faunal remains, 3 retouched flakes, 2 pieces of glass, and a projectile point.

The Stage 3 assessment resulted in the identification of one projectile point that is temporally diagnostic and can be used to determine the period of occupation. The projectile point dates to the Middle Woodland period and has been identified as a Vanport (400BC-600AD). The cultural material analyzed suggests that the site represents a series of shoreline campsites occupied throughout the middle woodland period. The natural physiography of the area left little choice for camp location and the same area would have been used repeatedly. A small amount of lithic reduction and tool maintenance was being carried out, that involved expedient tools being manufactured from debitage and existing inventory undergoing maintenance or retouching.

An examination of the ASDB indicates that there are 5 previously registered archaeological sites within a one kilometer radius of P1 (BdHb-6) including 2 other sites identified during the Stage 2 property assessment. Both other sites identified during the Stage 2 assessment are contact period sites with middle and late woodland components, and were recommended for Stage 3 site specific assessments.

Based on the above, including the fact that 3 Stage 3 test units yielded 10 or more pre-contact Aboriginal artifacts, and due to the paucity of sites in the area, P1 (BdHb-6) fulfills Section 3.4.1 Standard 1a of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and retains further cultural heritage value or interest.

5.0 RECOMMENDATIONS

The Stage 3 archaeological assessment of P1 (BdHb-6) resulted in the delineation of a pre-contact Aboriginal site, which represents a series of shoreline campsites occupied throughout the middle woodland period. A total of 159 artifacts were recovered, including 103 fragmentary sherds, 11 decorated sherds, 22 pieces of chipping detritus, 17 fragmentary faunal remains, 3 retouched flakes, 2 pieces of glass, and a projectile point. Based on the Stage 3 assessment, wherein three test units yielded 10 or more artifacts, as well as the paucity of these types of sites in the area, P1 (BdHb-6) fulfills the criteria for a Stage 4 archaeological investigation as per Section 3.4.1 Standard 1a of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011). Thus, **P1 (BdHb-6) retains cultural heritage value or interest and a Stage 4 archaeological mitigation of impacts of the site is recommended.**

The Stage 4 mitigation of development impacts should consist of block excavation by hand around all high yielding Stage 3 units (more than 1 artifact), as well as around unit 535E 1035N:1 where the sole artifact was a projectile point. In consultation with the SON, based on Stage 3 unit excavation, it was determined that top soil stripping is not suitable for this site. The large number of cobbles and shale throughout the entire site area would not allow for clean surfaces to be exposed, with the potential of any subsurface cultural features being destroyed by debris being dragged through them. As such, the conventional 10 count should not be used to determine site limits. Block excavation should be undertaken throughout the entire core of the site area as defined by the shale depressions surrounding the deposit. Block excavations should continue around all diagnostic artifacts and 2 meters beyond any cultural features identified and all subsoil surfaces should be shined and examined for cultural features. Once fully exposed, cultural features should be mapped, top plans drawn, and excavated by hand.

The MTCS is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports. Additional archaeological assessment is still required and so the archaeological site recommended for further archaeological fieldwork remains subject to Section 48(1) of the *Ontario Heritage Act* and may not be altered, or have artifacts removed, except by a person holding an archaeological license.

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Minister of Tourism, Culture and Sport 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 Tourism, Culture and Sport, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

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 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 Government and Consumer Services.

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

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8.0 IMAGES

8.1 PHOTOS

Photo 1: High-Precision Mapping of CSP at P1 (BdHb-6), Facing Southwest

Photo 2: CSP Distribution at P1 (BdHb-6), Facing Southwest

Photo 3: 545E 1040N:1 Typical Stage 3 Test Unit at P1 (BdHb-6), Facing North

Photo 4: 545E 1045N:1 Typical Stage 3 Test Unit at P1 (BdHb-6), Facing North

Photo 5: Unit Excavation at P1 (BdHb-6), Facing Southwest

Photo 6: Unit Excavation at P1 (BdHb-6), Facing West

8.2 ARTIFACTS

Plate 1: Sample of Chipping Detritus from P1 (BdHb-6)

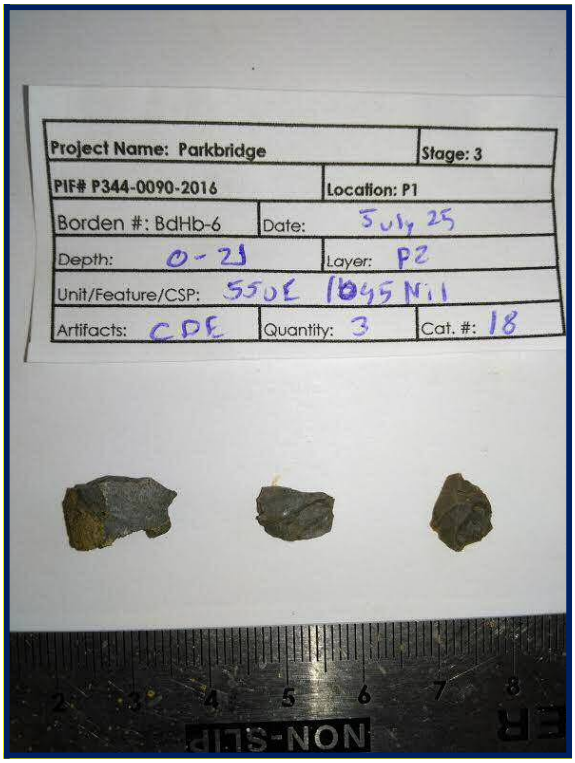


Plate 2: Sample of Retouched Flakes from P1 (BdHb-6)

Plate 3: Sample of Faunal Remains from P1 (BdHb-6)

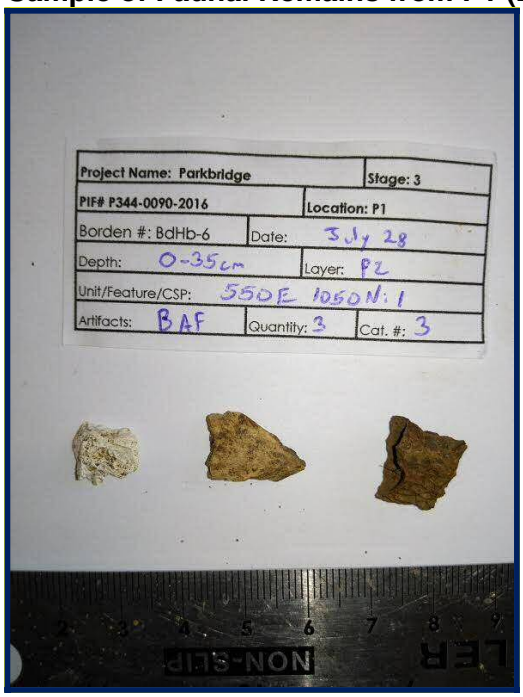
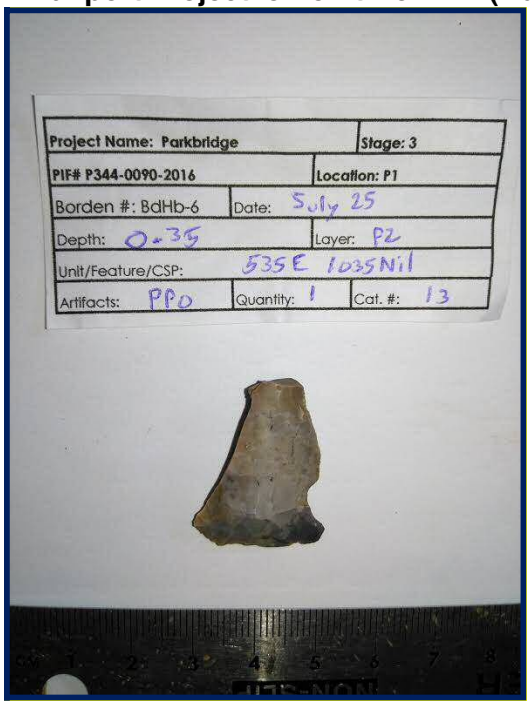


Plate 4: Vanport Projectile Point from P1 (BdHb-6)



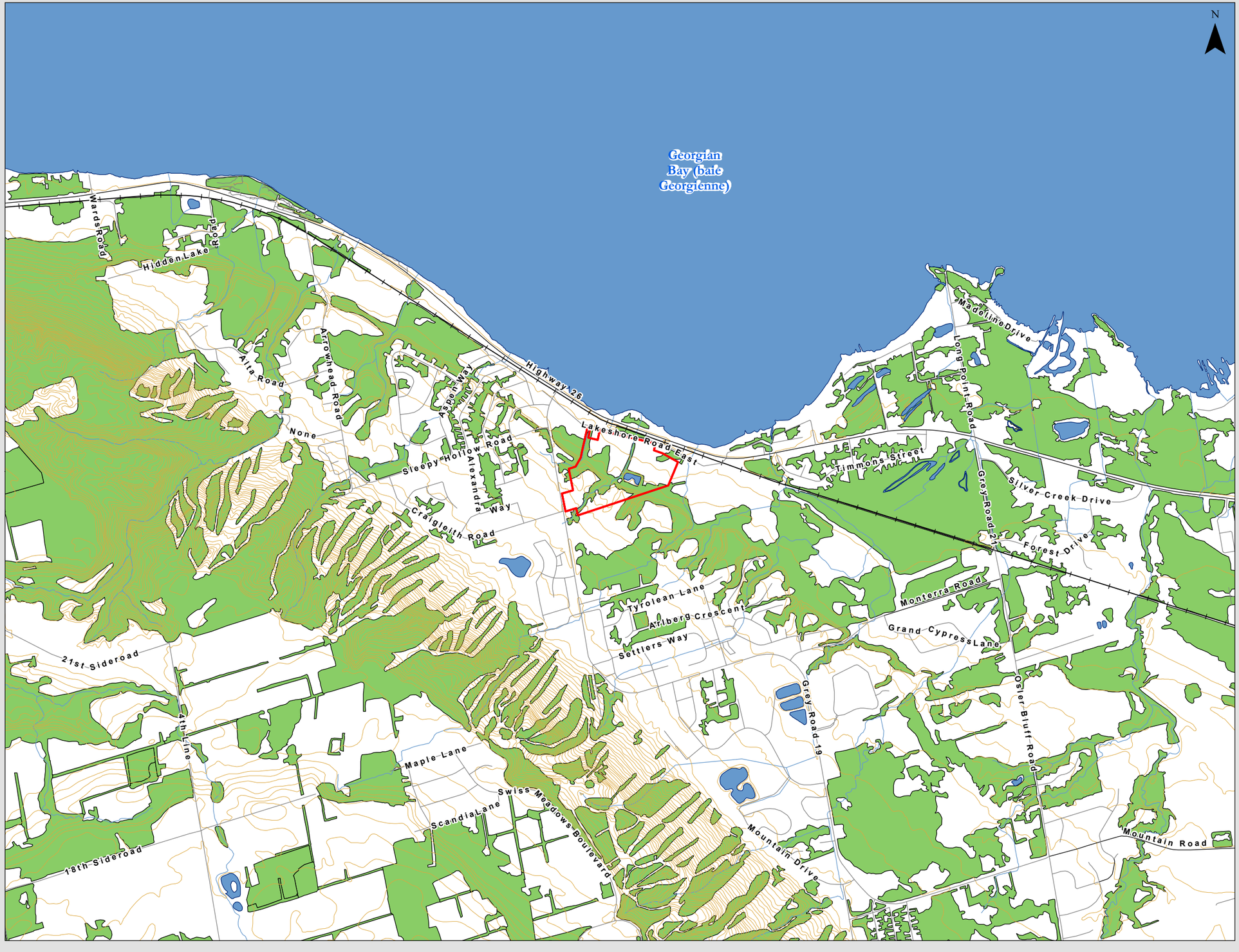
Images
December, 2016

Plate 5: Sample of Fragmentary Sherds P1 (BdHb-6)

Plate 6: Sample of Decorated Sherds from P1 (BdHb-6)

9.0 MAPS

All maps will follow on succeeding pages. Maps identifying exact site locations do not form part of this public report; they may be found in the Supplementary Documentation.



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Stage 3 Site Specific Archaeological Assessment of Site P1 (BdHb-6)

Figure 1: Topographic Map of Study Area

Date: December, 2016

Source: OBM
http://www.geographynetwork.ca/website/obm/viewer.htm

Scale 1:25,000

Datum: NAD 1983 UTM Zone 17N

Legend

- Study Area
- Local Road
- Major Road
- Highway
- Railroad
- Contour Lines
- Waterbody
- Water
- Wooded Area

Metres
0 500 1,000

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Stage 3 Site Specific Archaeological Assessment of Site P1 (BdHb-6)

Figure 2: Aerial Map of Study Area

Date: December, 2016

Source:Bing Maps

Scale 1:2,500

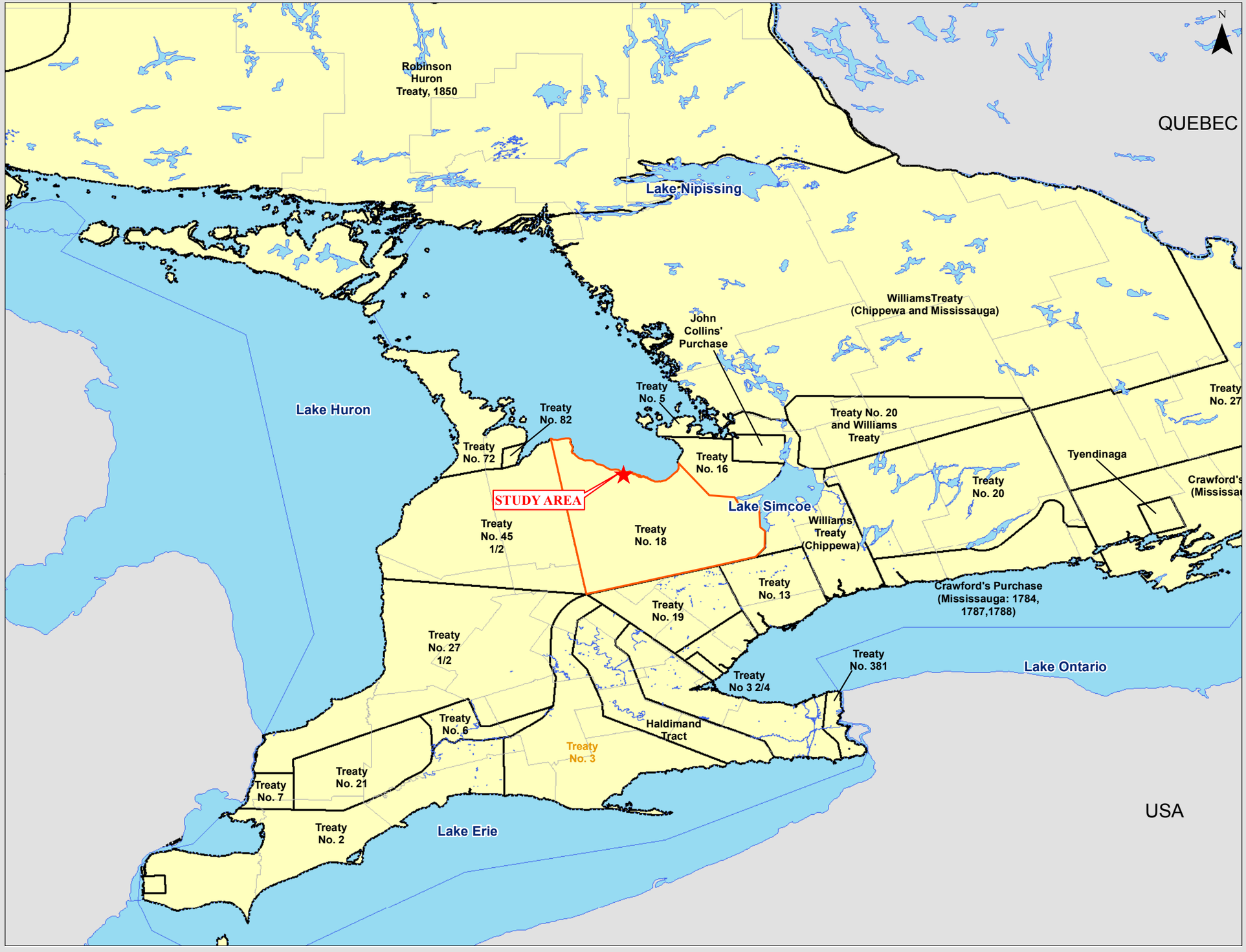
Datum: NAD 1983 UTM Zone 17N

Legend

Study Area

Metres

0 50 100



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Stage 3 Site Specific Archaeological Assessment of Site P1 (BdHb-6)

Figure 3: Treaties and Purchases (Adapted from Morris 1943)

Date: December, 2016

Source: Morris (1943)

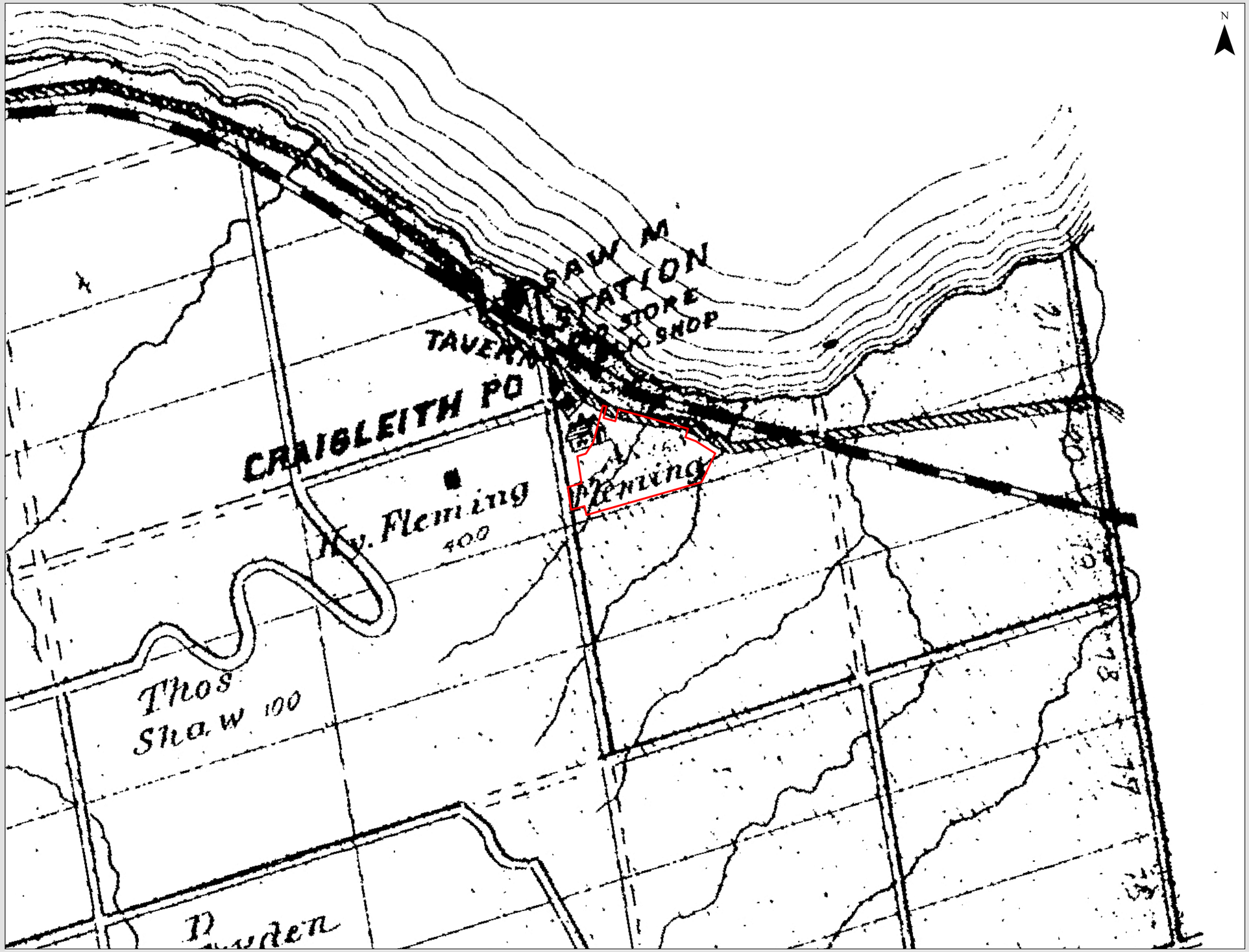
Scale 1:2,500,000

Datum:
GCS North American 1983 CSRS

Legend

- Study Area
- Treaty Boundaries
- Provincal Boundary
- County Boundary
- Water Body

Kilometres
0 50 100



BLUESTONE RESEARCH INC

Stage 3 Site Specific Archaeological Assessment of Site P1 (BdHb-6)

Figure 4: Portion of the Illustrated Historical Atlas of the County of Grey,1880 - Collingwood Township

Date: December, 2016

Source: Illustrated Historical Atlas of the County of Grey, Ont.,Toronto: Page and Smith.,1880.

Scale 1:20,000

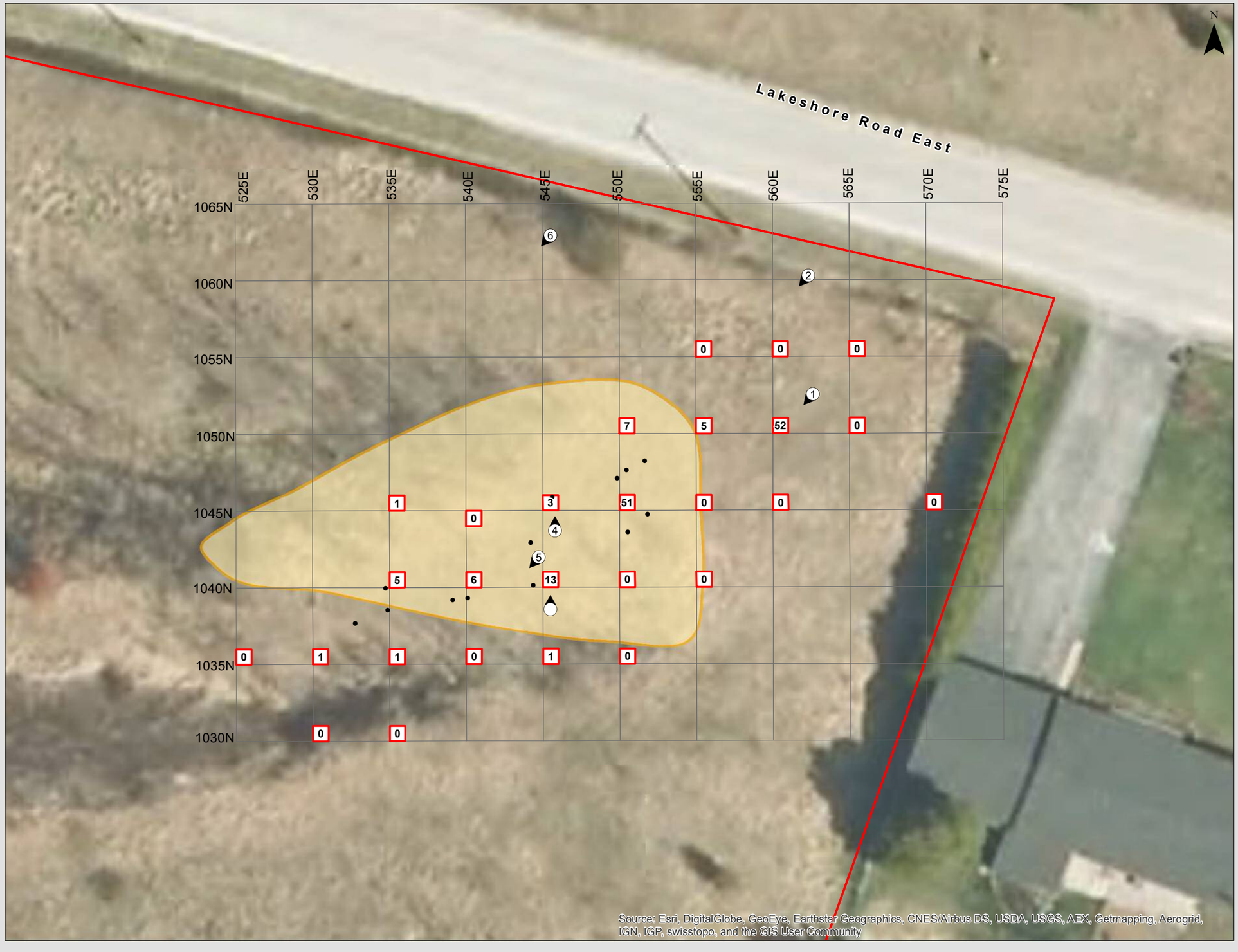
Datum: NAD 1983 UTM Zone 17N

Legend

Study Area

Metres

0 500 1,000



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Supplementary Documentation of Site P1 (BdHb-6)

Figure 3: Stage 3 Results

Date: December, 2016

Source:Bing Maps

Scale 1:250

Datum: NAD 1983 UTM Zone 17N

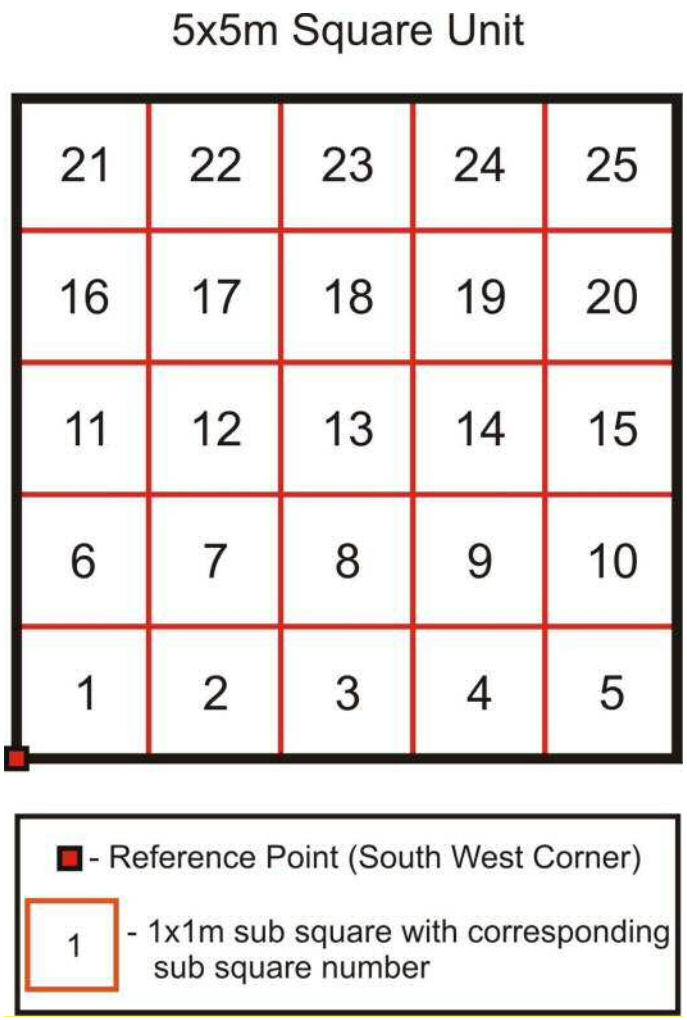
Legend

- Photo Location
- CSP Surface Find
- Stage 3 Test Unit (1m)
- Excavation Grid (5m)
- Study Area
- Stage 2 Site

Metres

0 4 8 12

Figure 6: Grid Orientation



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APPENDIX A: P1 (BDHB-6) ARTIFACT CATALOGUE

Cat. #	East	North	SS	Depth	Artifact	Qty	Chert Type	Morphology	Comments
1	550	1050	1	0-35	chipping detritus	3	kettle point	tertiary	
2	550	1050	1	0-35	fragmentary sherd	1			very small fragment
3	550	1050	1	0-35	faunal	3			small calcined fragment, small cortical fragment, small indeterminate fragment
4	535	1040	1	0-35	chipping detritus	4	kettle point	tertiary	
5	535	1040	1	0-35	chipping detritus	1	fossil hill	tertiary	
6	540	1040	1	0-20	chipping detritus	1	fossil hill	tertiary	
7	540	1040	1	0-20	chipping detritus	1	kettle point	tertiary	
8	540	1040	1	0-20	retouched flake	1	fossil hill		retouched along ventral left lateral, scraping edge
9	540	1040	1	0-20	faunal	1			worn deer tooth, broken roots
10	540	1040	1	0-20	glass, dish	2			colourless glass dish fragments
11	530	1035	1	0-26	chipping detritus	1	kettle point	tertiary	
12	535	1045	1	0-26	fragmentary sherd	1			very small fragments
13	535	1035	1	0-35	projectile point	1	kettle point		base and one lateral, missing tip, Vanport
14	545	1040	1	0-25	fragmentary sherd	9			very small fragments
15	545	1040	1	0-25	faunal	2			small indeterminate fragments
16	545	1040	1	0-25	chipping detritus	2	kettle point	tertiary	
17	550	1045	1	0-21	fragmentary sherd	41			very small fragments
18	550	1045	1	0-21	chipping detritus	3	kettle point	tertiary	
19	550	1045	1	0-21	faunal	6			tiny calcined fragments, indeterminate
20	550	1045	1	0-21	decorated fragmentary sherd	1			dentate stamped
21	555	1050	1	0-25	chipping detritus	1	kettle point	shatter	
22	555	1050	1	0-25	retouched flake	1	kettle point	tertiary	retouching along 2 dorsal laterals, broken end
23	555	1050	1	0-25	retouched flake	1	kettle point	secondary	entire dorsal edge retouched, expedient scraper
24	555	1050	1	0-25	faunal	1			indeterminate burnt fragment
25	555	1050	1	0-25	fragmentary sherd	1			very small fragment
26	545	1045	1	0-25	fragmentary sherd	3			very small fragments
27	560	1050	1	0-38	fragmentary sherd	41			very small fragments
28	560	1050	1	0-38	decorated fragmentary sherd	10			dentate stamped
29	560	1050	1	0-38	chipping detritus	1	kettle point	tertiary	
30	545	1035	1	0-35	fragmentary sherd	1			very small fragment
31			CSP 100	surface	faunal	1			very small fragment
32			CSP 101	surface	fragmentary sherd	1			very small fragment
33			CSP 102	surface	fragmentary sherd	1			very small fragment
34			CSP 103	surface	fragmentary sherd	1			very small fragment
35			CSP 104	surface	chipping detritus	1	fossil hill	tertiary	
36			CSP 105	surface	fragmentary sherd	1			very small fragment
37			CSP 106	surface	faunal	1			very small fragment
38			CSP 107	surface	faunal	1			very small fragment
39			CSP 108	surface	chipping detritus	1	kettle point	tertiary	
40			CSP 109	surface	fragmentary sherd	1			very small fragment
41			CSP 110	surface	chipping detritus	1	kettle point	tertiary	
42			CSP 111	surface	chipping detritus	1	kettle point	tertiary	
43			CSP 112	surface	faunal	1			very small fragment