Stage 3 Archaeological Assessment of Location 16 (AfHg-18) at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, Geographic Township of North Dorchester, Middlesex County, Ontario

Submitted to

Doug Tarry Homes Ltd. 358 Elm Street St. Thomas, ON N5R 1K1

and

The Ontario Ministry of Heritage, Sport, Tourism, and Culture Industries

Prepared by

Lincoln Environmental Consulting Corp.

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Archaeological License Number P1289, Kara Adams, MSc.
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Executive Summary

Lincoln Environmental Consulting Corp. (LEC) was retained by Doug Tarry Homes Ltd. to conduct a Stage 3 site specific assessment for an Indigenous archaeological site known as Location 16 (AfHg-18). The assessment was undertaken to meet the requirements of the *Planning Act* (Government of Ontario 2014) in advance of site plan approval. The study area is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex 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."

The Stage 2 assessment was conducted from November 26th, 2019, to January 15th, 2020, under PIF number P348-0074-2019. The Stage 2 consisted of a test pit survey at 5 meter intervals and pedestrian survey at 5m intervals. A total of 17 archaeological locations were identified during the Stage 2 survey, including 5 previously registered archaeological sites.

Locations 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, and 14, do not meet provincial criteria for requiring Stage 3 assessments, as listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011). These locations were deemed to have little cultural heritage value or interest and were considered sufficiently assessed during Stage 2. As such, no additional fieldwork or assessments were recommended for these Locations.

Location 1 (AfHg-377) was identified as a multi-component site, with a pre-contact Aboriginal component and a Euro-Canadian domestic component. Location 1 was found to consist of 75 artifacts in a 41m by 42m area. The assemblage consisted of 74 Euro-Canadian artifacts and on pre-contact Onondaga flake. The Euro-Canadian assemblage was comprised mainly of ceramic fragments (54), and also included 10 bottle glass fragments, 5 window glass fragments, 4 clay pipe fragments and a button. The assemblage was said to indicate a mid-19th through late 19th century occupation. No additional fieldwork or assessment is recommended for the Aboriginal component of Location 1. The Euro-Canadian component of Location 1 (AfGh-2) was recommended for a Stage 3 site specific assessment.

Location 5 (AfHg-2) was identified as a Late Woodland Glen Meyer Village Site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and 1.b.i(1) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 5 (AfHg-2) was found to consist of 53 pre-contact artifacts distributed over a 55m by 95m area



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and was confirmed to be the previously registered Mustus site (AfHg-2). The assemblage consisted of 35 pieces of chipping detritus, 10 pottery sherds, 5 pieces of fire cracked rock, 2 ground stone fragments, and a projectile point. Location 5 (AfHg-2) was recommended for a Stage 3 site specific assessment.

Location 10 (AfHg-375) was identified as a Woodland Period Aboriginal site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 10 (AfHg-375) was recommended for a Stage 3 site specific assessment followed by Stage 4 mitigation of development impacts.

Location 15 (AfHg-17) was identified as a Late Woodland Campsite with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 15 (AfHg-17) was recommended for a Stage 3 site specific assessment followed by Stage 4 mitigation of development impacts.

Location 16 (AfHg-18) was identified as a multi-component site with a pre-contact aboriginal component and a Euro-Canadian domestic component. The Euro-Canadian component was found to not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). As such the Euro-Canadian component was deemed to have little cultural heritage value or interest and were considered sufficiently assessed during Stage 2. As such, no additional fieldwork or assessments were recommended for the Euro-Canadian component.

The pre-contact component was identified as a Late Archaic site that meets the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' *Standards and Guidelines for Consultant Archaeologists* (2011). Location 16 (AfGh-18) was recommended for a Stage 3 site specific assessment.

Location 17 (AfHg-376) was identified as a Woodland Period Aboriginal site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 17 (AfHg-376) was recommended for a Stage 3 site specific assessment followed by Stage 4 mitigation of development impacts.

The Stage 3 site specific assessment of Location 16 (AfHg-18) conducted by LEC consisted of the excavation of 87one-meter by one-meter test units across the extent of the site. A total of 188 Indigenous artifacts from the CSP and test unit excavation, distributed over roughly the same area as the Stage 2 site, although the Stage 2 only identified and recovered four artifacts. The assemblage consists mainly of chipping detritus (146), with 40 aboriginal ceramic sherds also recovered, as well as two projectile points. No cultural features were identified during the Stage 3 site specific assessment. Location 16 (AfHhg-18) has been interpreted as a Late Woodland campsite and due to the presence of numerous stage 3 test



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units yielding aboriginal ceramics and the assigned Late Woodland date, it requires further work in the form of a Stage 4 archaeological mitigation of development impact.

In consultation with the proponent and the Oneida of the Thames First Nation (OOTTFN), the Stage 4 mitigation of Location 16 (AfHg-18) by avoidance and protection is not a viable option. Thus, Location 16 (AfHg-18) requires Stage 4 mitigation of development impacts by excavation prior to any construction activities or impacts to the archaeological site. The Stage 4 mitigative excavation strategy of Location 16 (AfHg-18) 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.

Location 16 (AfHg-18) is deemed to retain cultural heritage value or interest according to section 3.4 of the 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), and a Stage 4 mitigation of development impacts is recommended.

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



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Project Personnel

Licensed Archaeologist: Kara Adams, MSc (P1289)

Project Manager: Derek Lincoln, (P344)

Licensed Field Director: Matthew Haruta, MA (P1131)

Field Technicians: Brandon Donkers, Ryan Yott, Brian Easton, Eric Gaskin, Ryan

Philipps, Scott Philipps, Maddie Musio, Melanie Ikeno, Sean Patrick, Carley Adams MSc, Zach Haygarth, Logan Schlinderer, Jacob Chrisjohn, Christian Drasovean, Claire Banks, Michael

Bagnall

Office Assistants: Philippa Aukett, MSc.

Laboratory Technicians: Matthew Haruta MA (P1131), Zack Hamm MA (R1233)

GIS Technician: Adam Prong

First Nations: Bear John, Archaeological Field Monitor; Adrian Chrisjohn, Chief

Band Council, Al Day, Chief

Report Writer: Derek Lincoln (P344), Carley Adams MSc

Acknowledgements

Proponent Contact: Martha Saucier, Doug Tarry Homes Ltd.



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1.0 PROJECT CONTEXT

1.1 DEVELOPMENT CONTEXT

Lincoln Environmental Consulting Corp. (LEC) was retained by Doug Tarry Homes Ltd. to conduct a Stage 3 site specific assessment for an Indigenous archaeological site known as Location 16 (AfHg-18). The assessment was undertaken to meet the requirements of the *Planning Act* (Government of Ontario 2014) in advance of site plan approval. The study area is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex 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 Martha Saucier of Doug Tarry Homes Ltd.

1.1.1 Objectives

The objectives of the Stage 3 archaeological assessments are to assess the cultural heritage value or interest of the sites 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 this Stage 3 site-specific assessment are:

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

The Stage 3 assessments have been conducted to meet the requirements of the Ministry of Heritage, Sport, Tourism, and Culture Industries' (MHSTCI) 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).



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1.2 HISTORICAL CONTEXT

The entire Stage 2 study area comprises 42.56 hectares, consisting mainly of agricultural field, with small meadow and Woodlots in the east, and a residential structure with associated barn complex. Location 16 (AfHg-18) exists in the Northeastern portion of the study area, west of a modern subdivision development. Location 16 (AfHg-18) is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

1.2.1 Pre and early Post-Contact Aboriginal Resources

Our knowledge of past First Peoples settlement and land use in Middlesex 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 Middlesex 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 seri		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	expanding stemmed points, Vinette	Meadowood	



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			B.C.	pottery	
	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 – 1200	first corn; ceramics with multiple band impressions	Young- Algonquin
			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



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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.

Iroquoian Period

The primary Late Woodland occupants of the area were the Neutral Nation, an Iroquoian speaking population described by European missionaries. Like other known Iroquoian groups including the Huron (Wendat) and Petun, the Neutral practiced a system of intensive horticulture based on three primary subsistence crops (corn, beans and squash). Neutral villages incorporated a number of longhouses, multi-family dwellings that contained several families related through the female line. The Jesuit Relations describe several Neutral centers in existence in the 17th century, including a number of sites where missions were later established. While pre-contact Neutral sites may be identified by a predominance of well-made pottery decorated with various simple and geometric motifs, triangular stone projectile points, clay pipes and ground stone implements, sites post-dating European contact are recognized through the appearance of various items of European manufacture. The latter include materials acquired by trade (e.g., glass beads, copper/brass kettles, iron axes, knives and other metal implements) in addition to the personal items of European visitors and Jesuit priests (e.g., finger rings, stoneware, rosaries, glassware). The Neutral were dispersed and their population decimated by the arrival of epidemic European diseases and inter-tribal warfare.

1.2.2 Euro-Canadian Resources

The study area historically existed in the Township of North Dorchester, County of Middlesex. Like much of Southwestern Ontario, mostly European immigrants arrived throughout the nineteenth century and cleared Dorchester's coniferous and deciduous mixed forests for settlement and agriculture. The agriculturally fertile and rich Middlesex similarly shares a history with places like London and Woodstock: it was settled in the wake of John Graves Simcoe's visits and surveys of the region in 1793, when he also indicated his thoughts of making the Thames River the site of the capital of Upper Canada (Wood, 2020). The study area retained the primary purpose of agriculture from then on.

Middlesex incorporated in 1849, united with Elgin County in 1852, and split in 1853, with the earliest Euro-Canadian settlement being the village of Delaware (Carter, 1984). Middlesex County hosts some historically salient locations, such as Longwoods Road, which connects Delaware to Chatham and acted as a key supply route in the War of 1812.

North Dorchester Township's namesake is Sir Guy Carleton, Lord Dorchester, who acted as Canada's Governor General throughout the late eighteenth century (Wood, 2020). In 1794, William Reynolds built Middlesex County's first log cabin near what is now Dorchester. As a Township, Dorchester owes its development to Colonel Thomas Talbot, an early land speculator from whom the majority of the area's early Euro-Canadian settlers acquired their property. Dorchester Township's first road was Hamilton



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Road, formed in 1831, while the village came into existence around James Lane's smithy and Joseph Hardy's lumber mill in 1844 (Wood, 2020). Hardy was also the village's first postmaster after the first post office was sanctioned in 1856. A few years earlier (1852), the Great Western Railway invested in North Dorchester's first rail line – often a precondition of a post office at the time (Mika & Mika, 1983).

Use of the study area on Part of Lots 19 and 20, Concession A, and Part of Lots 19 and 20, Concession B, South of the River Thames, Geographic Township of North Dorchester, County of Middlesex, Ontario in the nineteenth century is determinable through historical records. According to the 1861 Census, Mrs. Orlow Mabee occupied the western parcel of Lot 20, Concession A (Library and Archives Canada, 2019a). James Cartwright, a 21-year-old bachelor farmer born in Upper Canada, occupied Lot 19 of Concession A with his family. The Cartwright family entailed James' father William (aged 56), his mother Caroline (aged 53), and their three children all under 18 together living in a single-story frame house (Library and Archives Canada, 2019a). On the Northern parcel of Lot 20, Concession B, 38-year-old England-born farmer Peter Smith lived with his wife Elisia (aged 38) and their six children in a single-story frame house (Library and Archives Canada, 2019a). Hugh Madole held the eastern side of that same Concession, while James Eagen held the western parcel.

Ten years later in 1871, the Census indicates Mrs. Mabee still held her property, though a W.T. Cartwright possessed the Cartwright family land on Lot 19, Concession A (Library and Archives Canada, 2019b). Peter Smith continued to hold land on the northwest parcel of Lot 20 Concession B, while R. Smith held the northeast section. The Smiths held other parcels in the study area – S. Smith held Lot 19, Concession B's northwest parcel, while M. Smith held the northeast portion (Library and Archives Canada, 2019b).

Also extant is the Illustrated Historical Atlas of the County of Middlesex, which shows the study area's occupation in 1878 (H.R. Page & Co., 1878). Corroborating the early census, Mabee still held her parcel, W.T. Cartwright held the same, and Peter Smith, R. Smith, S. Smith, and M. continued to own their respective parcels from the 1871 census. Fortunately, the map also details some structures/features, including: a homestead and agricultural field on lot 20, Concession B, and a homestead and agricultural field on Lot 19, Concession B (Figure 3). Around 60 metres east and northeast of the study area, the map also indicates two homesteads and more fields belonging to Mrs. Mabee. There was one homestead and field 120 metres to the east, a cemetery roughly 300 metres to the northeast, and an east-west roadway transecting the centre of the study area between Concessions A and B. Finally, the Atlas indicates a roadway running north-south just west of the study area, in addition to the Great Western Railway line 1 kilometre north of it.

1.3 ARCHAEOLOGICAL CONTEXT

1.3.1 Existing Conditions

The entire Stage 2 study area comprises 42.56 hectares, consisting mainly of agricultural field, with small meadow and Woodlots in the east, and a residential structure with associated barn complex. Location 16



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(AfHg-18) exists in the Northeastern portion of the study area, west of a modern subdivision development. Location 16 (AfHg-18) is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

1.3.2 The Natural Environment

The project area is located in the Mount Elgin Ridges physiographic region as identified by Chapman and Putnam (1984:144).

The Mount Elgin Ridges region spans an area of approximately 145,686 hectares (360,000 acres) between the Thames Valley and the Norfolk Sand Plain. Geologically, this area consists of a succession of vales and ridges with elevations ranging from 245 m to 300 m asl. The ridges are moraines that consist mostly of a brown silty clay, while the vales are mostly alluvial gravel or silty sand (Chapman and Putnam 198:145). The ridges are well drained due to their soil composition while the vales are often poorly drained, resulting in the formation of a number of undrained basins that contain peat and muck soils.

(Chapman and Putnam 1984:144-145)

The soils here are comprised of sandy loam, ideal for agricultural practices and aboriginal settlement.

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 Thames River flows less than a kilometre to the North of the study area, while a tributary flows 490metres to the East.

1.3.3 Previously Known Archaeological Sites and Surveys

In order to compile an inventory of archaeological resources, the registered archaeological site records kept by the MHSTCI were consulted. In Ontario, information concerning archaeological sites stored in the ASDB 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 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 AfHg.

An examination of the ASDB has shown that there are 35 archaeological sites registered within a one-kilometer radius of the study area, including seven which lie within 250m of the Stage 2 study area, five of which, including Location 16 (AfHg-18), lie within in (Sites Data Search, Government of Ontario, April 30th, 2021); Table 2 summarizes the registered archaeological sites within one-kilometer of the study area.



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

Borden #	Site Name	Site Type	Cultural Affiliation	
AfHg-30	Puff	-	-	
AfHg-1	Calvert	Village	Late Woodland (Iroquoian)	
AfHg-142	James O'Brien	Homestead	Euro-Canadian	
AfHg-143	-	Findspot	Pre-Contact	
AfHg-144	-	Scatter	Pre-Contact	
AfHg-145	-	Scatter	Pre-Contact	
AfHg-146	Dorchester Mill Pond Dam	Dam, Mill	Euro-Canadian	
AfHg-17	Larch Lookout	Camp/Campsite/Hamlet	Archaic/Late Woodland/Euro-Canadian	
AfHg-170	Szucs 1	Camp/Campsite	Pre-Contact	
AfHg-171	Szucs 2	Findspot	Pre-Contact	
AfHg-172	Szucs 4	Homestead	Euro-Canadian	
AfHg-173	Szucs 5	Scatter	Pre-Contact	
AfHg-174	Szucs 6	Scatter	Pre-Contact	
AfHg-175	Szucs 7	Scatter	Pre-Contact	
AfHg-176	Szucs 9	Camp/Campsite	Pre-Contact	
AfHg-177	Szucs 11	Camp/Campsite	Pre-Contact	
AfHg-178	Szucs 12	Scatter	Pre-Contact	
AfHg-179	Szucs 13	Camp/Campsite	Pre-Contact	
AfHg-18	Andrew	Homestead	Euro-Canadian/Late Woodland (Iroquoian)	
AfHg-180	Szucs 14	Camp/Campsite	Pre-Contact	
AfHg-181	Szucs 15	Camp/Campsite	Pre-Contact	
AfHg-182	Szucs 16	House	Euro-Canadian	
AfHg-183	Szucs 17	House	Euro-Canadian	
AfHg-184	Szucs 18	Camp/Campsite	Pre-Contact	
AfHg-19	Kieth	Homestead	Euro-Canadian/Late Woodland (Iroquoian)	
AfHg-2	Mustus	Hamlet, Village	Late Woodland (Iroquoian)	
AfHg-206	Cromarty Site	Camp/Campsite	Late Woodland (Iroquoian)	
AfHg-25	Thinly	-	-	
AfHg-26	Creek Bend	Camp/Campsite	Pre-Contact	
AfHg-27	Jackle	-	-	
AfHg-28	Northmuck	-	-	
AfHg-29	Gunk	Cabin	Euro-Canadian	
AfHg-32	Cedar Ravine	-	Archaic	
AfHg-36	Celery	Cabin/Dump	Euro-Canadian	
AfHg-99	AfHg-99	Findspot	Pre-Contact	

1.3.4 Summary of Past Archaeological Investigations within 50m

Prior to Woods stage 2 assessment of the study area, three previous studies had been conducted within 50m of the study area.

In 2008, Archaeologix conducted a Stage 1 & 2 archaeological assessment on lands directly south and east of the current study area. The work was documented in a report titled *Archaeological Assessment* (Stages 1 & 2) Szucs Property Part of Lots 18 and 19, Concession B, Geographic Township of North Dorchester, Municipality of Thames Centre, Middlesex County, Ontario and conducted under PIF P001-448-2008.

Nineteen locations were recorded during this survey, including 16 Aboriginal sites and three Euro-Canadian sites. Nine of the Aboriginal sites and all three Euro-Canadian sites were recommended for Stage 3 site-specific assessment (Archaeologix 2008: 34).



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Of note is the Szucs 18 Site (AfHg-184), which according to the OASD is located within the current study area. Mapping within the report itself, however, indicates that the site is 70 m to the south (Archaeologix 2008: Figure 3). Fifty-nine precontact artifacts were collected within a 50m x 40m scatter, and further Stage 3 assessment was recommended.

None of the remaining 18 sites are located within 50 m of the current study area, and there is no overlap between Archaeologix' study area and the current study area, so it appears likely that AfHg-184 is not actually within the current study area boundary.

In 1983, James Keron conducted a pedestrian survey on lands throughout Westminster and North Dorchester Townships, including a portion of the present study area. The work was documented in a report titled *Archaeological Survey of the Townships of Westminster and North Dorchester*.

The Gunk Site (AfHg-29), located within the current study area, was discovered during this assessment. The Euro-Canadian artifacts collected at the Gunk Site were found within a light scatter measuring 60 m in diameter. The surface collection was completed on a 10-m transect. Keron interpreted this site as a short duration occupation, likely around the 1860's (Keron 1983: 76).

Between 1981 and 1982 William Fox conducted an excavation on the previously identified Calvert Site (AfHg-1), an Early Iroquoian Glen Meyer Village occupied between the 12th and 13th centuries (Timmins 1997: 1). The excavation was conducted prior to the development of a subdivision immediately east of the current study area. Between 1981 and 1982, Fox and his team excavated 70% of the 0.28-ha village. Their excavation documented some 5,000 post moulds and 333 features. The total assemblage includes 31,847 artifacts and an additional 655,779 ecofacts. The total artifact assemblage was narrowed down to the following categories: ceramic, lithic and bone, antler and shell (Timmins 1997: 32–33). Of the 46 bone artifacts recovered from the 1981–82 excavation, a single human bone was recovered in one of the refuse pits. The Calvert Site village consisted of 14 house structures and four rows of palisades. The overlapping features indicated that the village had been in use over the course of 50 to 60 years with four primary phases of occupation (Timmins 1997: 35).

William Fox also documented three other registered sites within the current study area: AfHg-17, AfHg-18, and AfHg-2. These three sites are likely associated with the Calvert Village Site (Fox personal communication).

There have been no other documented archaeological investigations within 50 meters of the subject property. However, it should be noted that the Ministry of Heritage, Sport, Tourism, and Culture Industries currently does not provide an inventory of archaeological assessments carried out within 50 meters of a property, so a complete inventory of assessments on lands adjacent to the subject property cannot be provided.



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1.3.5 Summary of Previous Investigations

The Stage 2 assessment was conducted from November 26th 2019, to January 15th, 2020 under PIF number P348-0074-2019. The Stage 2 consisted of a test pit survey at 5 meter intervals and pedestrian survey at 5m intervals. A total of 17 archaeological locations were identified during the Stage 2 survey. Four of the identified sites, four sites had been previously registered in the OASD, and an additional four sites were newly registered. Recommendations were made as follows below (Wood 2020).

- 1) The archaeological site identified as Location 1 (AfHg-377) in this report is a multicomponent site, with a pre-contact Aboriginal component and a Euro-Canadian domestic component.
- a. The pre-contact Aboriginal component at Location 1 represents a single findspot that is not temporally diagnostic. This component of Location 1 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Therefore, the Aboriginal component of Location 1 has no further cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. No additional fieldwork or assessment is recommended for the Aboriginal component of Location 1.
- b. Stage 3 Investigations are warranted for the Euro-Canadian component of Location 1. This site represents a Euro-Canadian domestic site with cultural heritage value or interest according to the criteria listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Specifically, 20 artifacts that date the period of use to before 1900 were found at the site. Location 1 (AfHg-377) is a small post-contact site where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. Therefore, Stage 3 fieldwork will involve the hand excavation of 1-m square units in a 5-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 20% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.
- 2) The Euro-Canadian findspot identified in this report as Location 2 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 2 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 2.
- 3) The Euro-Canadian scatter identified in this report as Location 3 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 3 is



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deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 3.

- 4) The Late Archaic Aboriginal findspot identified in this report as Location 4 (AfHg-373) does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 4 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 4.
- 5) Stage 3 investigations are warranted for the site identified in this report as Location 5 (AfHg-2). This site represents a Late Woodland Glen Meyer village site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.
- 6) The Aboriginal findspot identified in this report as Location 6 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 6 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 6.
- 7) The Late Archaic findspot identified in this report as Location 7 (AfHg-374) does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 7 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 7.
- 8) The Aboriginal findspot identified in this report as Location 8 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 8 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 8.



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- 9) The Aboriginal findspot identified in this report as Location 9 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 9 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 9.
- 10) Stage 3 investigations are warranted for the site identified in this report as Location 10 (AfHg-375). This site represents a Woodland period Aboriginal site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.
- 11) The Aboriginal findspot identified in this report as Location 11 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant

Archaeologists (2011). Location 11 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 11.

- 12) The Aboriginal findspot identified in this report as Location 12 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 12 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 12.
- 13) The Aboriginal lithic scatter identified in this report as Location 13 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 13 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 13.



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- 14) The Aboriginal findspot identified in this report as Location 14 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 14 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 14.
- 15) Stage 3 Investigations are warranted for the site identified in this report as Location 15 (AfHg-17). This site represents a Late Woodland campsite with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.
- 16) The archaeological site identified as Location 16 (AfHg-18) in this report is a multicomponent site, with a pre-contact Aboriginal component and a Euro-Canadian domestic

component.

- a. The pre-contact Late Archaic component of Location 16 meets the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location 16 (AfHg-18) is a pre-contact site where it is not yet evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. Therefore, Stage 3 fieldwork will involve the hand excavation of 1-m square units in a 5-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 20% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.
- b. The Euro-Canadian scatter identified in this report as Location 16 does not meet the criteria for requiring Stage 3 assessment listed in Section 2.2. Standard 1 of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). Location



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16 is deemed to have little cultural heritage value or interest and it is considered sufficiently assessed at Stage 2. As such, no additional fieldwork or assessment is recommended for Location 16.

17) Stage 3 investigations are warranted for the site identified in this report as Location 17 (AfHg-376). This site represents a Woodland period Aboriginal site with cultural heritage value or interest according to Section 2.2 Standard 1.a.i(1) and (3) of the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries' Standards and Guidelines for Consultant Archaeologists (2011). It is evident that the level of cultural heritage value or interest will result in a recommendation to proceed to Stage 4 excavations. This site is in an agricultural field. Therefore, Stage 3 fieldwork will involve a controlled surface artifact collection after the field on which it is located has been ploughed and allowed to appropriately weather as per Section 3.2.1. This will be followed by the hand-excavation of 1-m square units in a 10-m grid across the site. Grid unit excavation should be followed by excavation of additional test units, amounting to 40% of the grid unit total, focusing on areas of interest within the site extent (such as distinct areas of higher concentrations of artifacts or adjacent to high-yield units) as per Section 3.2.2 and Table 3.2.1 of the Standards and Guidelines for Consultant Archaeologists. If any features are encountered, they will be addressed as per Section 3.2.2 Standard 6 where their profile will be recorded, be covered in geotextiles and backfilled.

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

(Wood 2020:4-9)



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2.0 FIELD METHODS

The entire Stage 2 study area comprises 42.56 hectares, consisting mainly of agricultural field, with small meadow and Woodlots in the east, and a residential structure with associated barn complex. Location 16 (AfHg-18) exists in the Northeastern portion of the study area, west of a modern subdivision development. Location 16 (AfHg-18) is located at 83 Christie Drive, in Part of Lot 19, Concession A South of Thames River, in the Geographic Township of North Dorchester, Middlesex County, Ontario.

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). A CSP was conducted according to section 3.2.1 of the MHSTCl' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). Visibility conditions during the CSP were 90% and the CSP consisted of accurately mapping the location of all artifacts on the surface with a Top Con FC-5000 Network Rover, using NAD83. All coordinates taken during the Stage 2 property assessment are listed in the Supplementary Documentation to this report. The CSP was conducted six weeks prior to the test unit excavation due to prior commitments, and in order to conduct it during suitable visibility. There was no issues with relocating the site six weeks later since the Top Con FC-5000 Network Rover has sub-centimeter accuracy and the grid was established at the time of the CSP and the area was marked off while the rest of the field was planted by the farmer.

A five-meter by five-meter grid was established across the extent of the sites according to the Stage 1-2 property assessment and current CSP's as per Section 3.2.3 of the MHSTCI' 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.

Stage 3 testing was undertaken starting at 10-meter intervals across the extent of the site with an additional 40% infill in areas of interest. Test unit placement followed Section 3.2.3 and Table 3.1 Numbers 3 and 4 of MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

In total, the Stage 3 site specific assessment of Location 16 (AfHg-18) conducted by LEC consisted of the excavation of 87 one-meter by one-meter test units across the extent of the site. A total of 188 artifacts were recovered from test unit excavation and the CSP. 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 19 centimeters to 66 centimeters. Each test unit contained a single stratigraphic layer (ploughzone) and was excavated into the first five centimeters of subsoil.

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



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immediately north of number one, and so on. All test units were excavated in systematic levels. Each one-meter unit contained a single stratigraphic layer (topsoil) and was excavated into the first five centimeters of subsoil. 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.

During the Stage 3 archaeological assessment of Location 16 (AfHg-18) the weather was warm and sunny during all feidlwork. 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 1-6 illustrate field conditions during the Stage 3 test unit excavations. Tables 3 provides a summary of the weather and field conditions.

Table 3: Location 16 (AfHg-18) Weather and Field Conditions

Date	Activity	Weather	Field Conditions
May 5 th , 2021	CSP	Sunny, warm	90% visibility
June 19 th 2021	Test Unit Excavation	Sunny, warm	Dry friable soils; screens well
June 20th 2021	Test Unit Excavation	Sunny, hot	Dry friable soils; screens well
June 21st 2021	Test Unit Excavation	Sunny, hot	Dry friable soils; screens well
June 22 nd 2021	Test Unit Excavation	Sunny, warm	Dry friable soils; screens well
June 23 rd 2021	Test Unit Excavation	Sunny, hot	Dry friable soils; screens well
June 24 th 2022	Test Unit Excavation	Sunny, hot	Dry friable soils; screens well



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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 assessments 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: Stage 3 Assessment of Location 16 (AfHg-18)

Document Type	Current Location of Document Type	Additional Comments
3 Pages of Field Notes	LEC office in London	Photocopied and stored digitally in project file
1 Map Provided by Client	LEC office in London	In original field book and photocopied in project file
32 Digital Photographs	LEC office in London	Stored digitally in project file
1 hand drawn map	LEC office in London	In original field book and photocopied in project file
188 Pre-Contact Artifacts	LEC office in London	Stored in individual bags in 1 banker's box
Artifact Catalogue	LEC office in London	Stored digitally in project file

All the material culture collected during the Stage 3 site specific assessment of Location 16 (AfHg-18) is contained in one Bankers boxes. It will be temporarily housed at the LEC London office until formal arrangements can be made for a transfer to an MHSTCI collections facility.

3.1 CULTURAL MATERIAL

The Stage 3 archaeological assessment of Location 16 (AfHg-18) consisted of a Controlled Surface Pickup in accordance with the MHSTCl' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011), followed by the hand excavation of 87 one-meter by one-meter test units strategically placed across the site in accordance with Table 3.1 from the MHSTCl' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011). The CSP resulted in the recovery of 29 pieces of chipping detritus and 8 fragmentary aboriginal ceramics, with a further 151 Indigenous artifacts recovered from block excavation, consisting of 117 pieces of chipping detritus, two projectile points, and 32 fragmentary ceramic sherds. Figure 4 (and Figure 4 of the Supplementary Documentation) provide the results of the Stage 3 assessment. No cultural features were identified during the Stage 3 site specific assessment. A sample of artifacts recovered from the Stage 3 assessment of Location 16 (AfHg-18) is depicted in Section 8.2. Table 5 summarizes the artifacts recovered during the Stage 3 assessment of Location 16 (AfHg-18) and a full catalogue is provided in Appendix A.



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Table 5: Location 16 (AfHg-18) Artifact Breakdown

Artifact Class	Frequency	%
Chipping Detritus	138	78.34
Fragmentary Sherd	40	21.62
Projectile Point	2	1.06
Utilized Flake	6	3.19
Retouched Flake	2	1.06
Total	188	100

3.1.1 Chipping Detritus

A total of 146 pieces of chipping detritus were recovered, including 6 utilized flakes and 2 retouched flakes. All pieces of chipping detritus were subject to morphological analysis following the classification scheme described by Andrefsky (1998), Thomas (1992), and Odell (2004). Table 6 outlines the results of the detailed morphological analysis of the chipping detritus.

Table 6: Chipped Stone Debitage Analysis

Material	Primary Thinning Flake		Secondary Retouch Flake		Secondary Knapping Flake		Biface Thinning Flake		Flake Fragment		Shatter		Total Analyzed	
	n	%	n	%	n	%	n	%	n	%	n	%	N	%
Onondaga	0	0	10	6.85	39	26.71	0	0	92	63.01	0	0	141	
Kettle Point	0	0	0	0	1	<1	0	0	4	2.74	0	0	5	
Total	0	0	10	6.85	40	27.39	0	0	96	65.65	0	0	146	100

The morphological analysis of the chipped stone debitage indicates that flake fragments (96) comprise the majority of the assemblage while 40 secondary knapping flakes and 10 secondary retouch flakes were also recovered.

Primary 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. Secondary knapping flakes are long and thin and have three or more flake scars on the dorsal face and little or no cortex (Thomas 1992). Secondary Reduction flakes are the result of precise flake removal through pressure flaking, where the maker applies direct pressure onto a specific part of the tool to facilitate flake removal. Pressure flaking generally produces smaller, thinner flakes than does percussion flaking.



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The morphological analysis of the flake assemblage from Location 16 (AfHg-18) suggests that the lithic practices at this site consisted mainly of the re-sharpening and maintenance of expedient tools from existing inventory or debitage.

All of the recovered flakes are manufactured from Onondaga chert while the remainder are a local till chert and likely represent natural occurrences rather than cultural material. Chert type identifications were accomplished visually using reference materials located in the LEC London office.

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). 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).

The use of mainly Onondaga cherts indicates that the people at the site were relying on one source of raw material. Primary outcrops of Onondaga chert are found along Lake Erie. Thus, lithic procurement strategies at Location 16 (AfHg-18) mainly involved some long-distance travel or trade.

3.1.2 Expedient Tools

A total of two retouched flakes and utilized flakes were recovered from the Stage 3 excavations. These expedient cutting and scraping tools are common for these types of lithic sites and do little with regards to determining site age or affiliation. A sample of expedient tools is depicted in Plate 1.

3.1.3 Projectile Points

A total of two projectile point fragments were recovered during the Stage 3 excavations. One was identified as a Glen Meyer Tanged type, dating to the Late Woodland period, while the other was a crude, corner notched point with a missing tip and thus undiagnostic. The Glen Meyer tanged point measured Nanticoke Triangular dating to the Late Woodland period, while the other was identified as a Glen Meyer tanged type, also dating to the Late Woodland. A sample of the projectile points is depicted in Plate 1.

3.1.4 Aboriginal Ceramics

A total of 40 fragmentary aboriginal ceramic sherds were recovered from the Stage 3 assessment of Location 16 (AfHg-18). All were very fragmentary (<2cm in diameter), with no identifiable surface treatments. The sherds are too small to determine vessel type or function. The sherds had a fine to medium grit temper, but beyond that there is little to determine from the ceramic assemblage. The sherds have been assigned the broad date of Woodland Period.



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Summary

Location 16 (AfHg-18) is thought to represent a Late Woodland campsite, or perhaps a more substantial settlement based on the size of the site. It is concurrent with the Andrew Site, identified by William Fox (personal communication between Wood and Bill Fox). It may be also associated with the nearby Location 15 (AfHg-17). Lithic material procurement relied on some long-distance trade and manufacturing activities involved tool maintenance. A total of two test units yielded over 10 artifacts and 40 fragmentary aboriginal ceramic sherds were recovered. Location 16 (AfHg-18) fulfills Section 3.4 of the 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011) and meets provincial standards requiring a Stage 4 mitigation. Location 16 (AfHg-18) retains CHVI and is recommended for a Stage 4 archaeological mitigation.

3.2 ARTIFACT CATALOGUE

A complete artifact catalogue for Location 16 (AfHg-18) is presented in Appendix A.



Analysis and Conclusions August 2023

4.0 ANALYSIS AND CONCLUSIONS

The Stage 3 archaeological assessment of Location 16 (AfHg-18) consisted of a CSP followed the hand excavation of 87 one-meter by one-meter test units strategically placed across the site in accordance with Table 3.1 from the MHSTCI' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and resulted in the recovery of 188 Indigenous artifacts, including 146 pieces of chipping detritus, 40 fragmentary sherds, and two projectile points. Figure 4 (and Figure 4 of the Supplementary Documentation) provide the results of the Stage 3 assessment. No cultural features were identified during the Stage 3 site specific assessment.

Location 16 (AfHg-18) is thought to represent a Late Woodland campsite, or perhaps a more substantial settlement based on the size of the site. It is concurrent with the Andrew Site, identified by William Fox (personal communication between Wood and Bill Fox). It may also be associated with the nearby Location 15 (AfHg-17). Lithic material procurement relied on some long-distance trade and manufacturing activities involved tool maintenance. A total of two test units yielded over 10 artifacts and 40 fragmentary aboriginal ceramic sherds were recovered. Location 16 (AfHg-18) fulfills Section 3.4 of the 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011) and meets provincial standards requiring a Stage 4 mitigation. Location 16 (AfHg-18) retains CHVI and is recommended for a Stage 4 archaeological mitigation.

Location 16 (AfHg-18) is deemed to retain 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 a stage 4 mitigation of development impacts is recommended.



Recommendations
June 2022

5.0 RECOMMENDATIONS

The Stage 3 site specific assessments were carried out from May 5th, 2020, to June 24th, 2021 in accordance with the Ministry of Tourism, Culture, and Sport's *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011).

Location 16 (AfHg-18) is a Late Woodland lithic campsite with 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 a stage 4 mitigation of development impacts is recommended.

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 proponent and the Oneida of the Thames First Nation, the Stage 4 mitigation of Location 16 (AfHg-18) by protection and avoidance was not a viable option. Thus, the site is recommended for Stage 4 mitigation of development impacts by excavation prior to any construction activities. The Stage 4 mitigative excavation strategy for Location 16 (AfHg-18) should be determined in accordance with Section 4.2.2 and 4.2.4 of the MTCS' 2011 Standards and Guidelines for Consultant Archaeologists (Government of Ontario 2011).

The Stage 4 mitigation of Location 16 (AfHg-18) will include block hand excavation according to section 4.2.2 of the MTCS' 2011 *Standards and Guidelines for Consultant Archaeologists* (Government of Ontario 2011) and according to Table 4.1 of the same document.

Location 16 (AfHg-18) has eleven test units which yielded aboriginal ceramics and will require Stage 4 block excavation around each, continuing until yields drop below 10. Block excavation will also continue if any two artifact types as listed in Table 4.1 are recovered; formal or diagnostic tools, fire cracked rock, burnt artifacts, or faunal elements.

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.



Advice on Compliance with Legislation June 2022

6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

This report is submitted to the Ministry 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.

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 LOCATION 16 (AFHG-18) SITE SPECIFIC ASSESSMENT



Image 1: Ground Conditions during the CSP at Location 16 (AfHg-18) Facing East



Image 2: CSP in Progress as Location 16 (AfHg-18) Facing East



Image 3: Test Unit Excavation in Progress as Location 16 (AfHg-18) Facing North



Image 4: Test Unit Excavation in Progress as Location 16 (AfHg-18) Facing East



Image 5: Test Unit 660E 370N:1 Facing North



Image 6: Test Unit 725E 430N:1 Facing North

8.2 ARTIFACTS

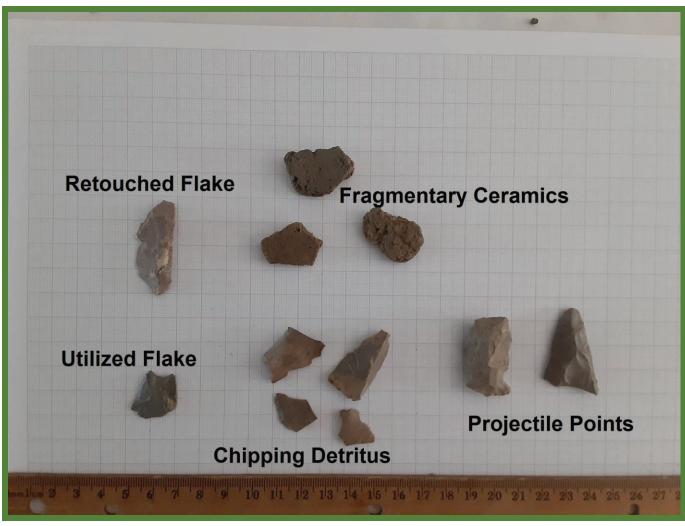
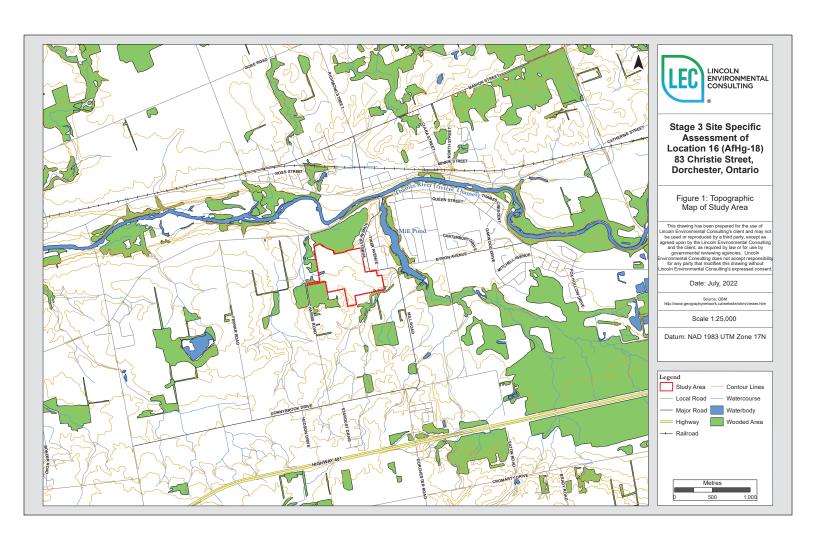


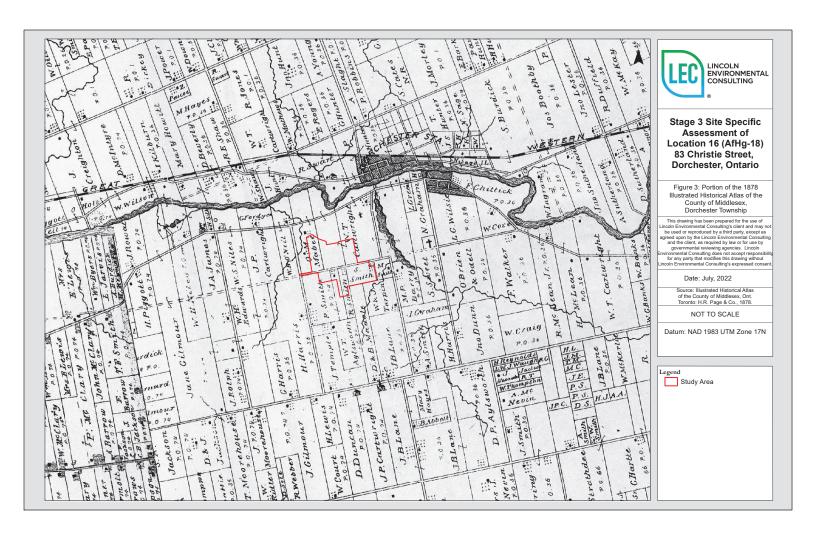
Plate 1: Sample of Artifacts from Location 16 (AfHg-18)

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.







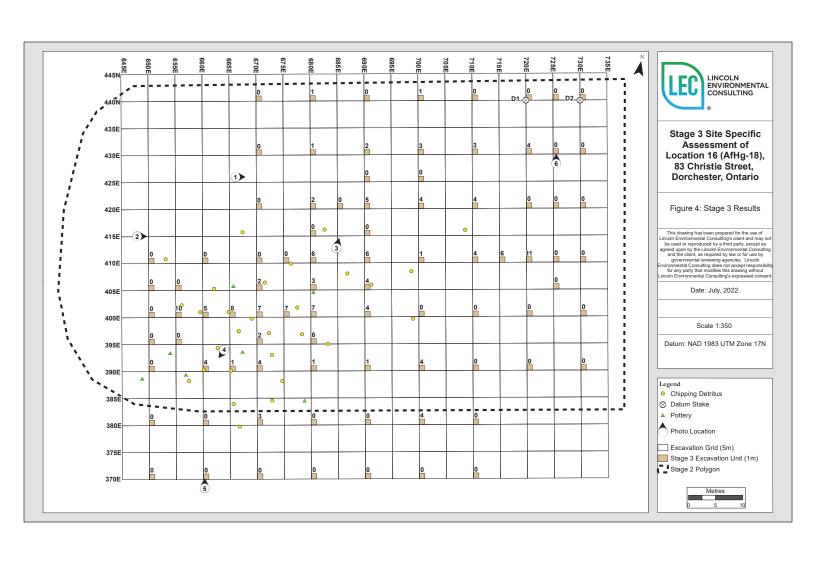


Figure 5: Grid Orientation

5x5m Square Unit

21	22	23	24	25
16	17	18	19	20
11	12	13	14	15
6	7	8	9	10
1	2	3	4	5

- Reference Point (South West Corner)

1x1m sub square with corresponding sub square number

APPENDIX A: LOCATION 16 (AFHG-18) ARTIFACT CATALOGUE

			AFI		JIX A. LUCAI	ION 10	(AFRG-10) F	KIIFACI CAIAL	JGUE
2	Cat. #	East	North	SS	Artifact	Qty	Chert	Morphology	Comments
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4				1					
5 670 400 1 chipping defitus 1 onondaga secondary retouch flake slight usewear along right 6 670 400 1 utilized flake 1 onondaga secondary knapping flake slight usewear along right 8 690 390 1 chipping defitus 1 onondaga flake fragment 10 700 380 1 chipping defitus 2 onondaga flake fragment 11 700 380 1 chipping defitus 2 onondaga flake fragment 11 700 380 1 chipping defitus 2 onondaga flake fragment 12 700 380 1 chipping defitus 5 onondaga flake fragment retouching along both 12 700 390 1 chipping defitus 5 onondaga flake fragment laterals 14 720 410 1 chipping defitus 2 onondaga flake fr	3								
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11									
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	42	675	400	1	fragmentary sherd	4			

43	680	420	1	chipping detritus	1	onondaga	flake fragment	
44	680	420	1	chipping detritus	1	onondaga	secondary knapping flake	
45	690	430	1	chipping detritus	1	onondaga	flake fragment	
				11 3		3		usewear along broken
46	690	430	1	utilized flake	1	onondaga	flake fragment	edge and one lateral
47	660	400	1	chipping detritus	2	onondaga	flake fragment	
48	660	400	1	fragmentary sherd	3			
				9				Crude, corner notched,
49	665	400	1	projectile point	1	Onondaga		missing tip
50	665	400	1	chipping detritus	3	onondaga	flake fragment	
51	665	400	1	chipping detritus	1	onondaga	secondary knapping flake	
52	665	400	1	fragmentary sherd	3			
53	680	395	1	fragmentary sherd	4			
54	680	395	1	chipping detritus	2	onondaga	flake fragment	
55	710	410	1	chipping detritus	2	onondaga	flake fragment	
56	710	410	1	chipping detritus	2	onondaga	secondary knapping flake	
57	700	380	1	chipping detritus	2	onondaga	flake fragment	
58	700	380	1	chipping detritus	1	onondaga	secondary knapping flake	
59	700	380	1	chipping detritus	1	onondaga	secondary retouch flake	
60	670	405	1	chipping detritus	1	onondaga	flake fragment	
61	670	405	1	chipping detritus	1	kettle point	secondary knapping flake	
62	700	430	1	chipping detritus	3	onondaga	flake fragment	
63	680	405	1	chipping detritus	2	onondaga	flake fragment	
64	680	405	1	chipping detritus	1	kettle point	flake fragment	
65	690	420	1	chipping detritus	1	onondaga	flake fragment	
66	690	420	1	chipping detritus	1	onondaga	secondary knapping flake	
67	690	420	1	fragmentary sherd	3			small fragments
68	690	400	1	chipping detritus	3	onondaga		
69	690	400	1	chipping detritus	1	onondaga		
70	690	410	1	chipping detritus	1	onondaga	flake fragment	
71	690	410	1	fragmentary sherd	5			small fragments
72	680	410	1	chipping detritus	3	onondaga	flake fragment	
73	680	410	1	chipping detritus	1	onondaga	secondary knapping flake	
74	680	410	1	retouched flake	1	onondaga	flake fragment	
75	680	410	1	fragmentary sherd	1			small fragment
76	700	420	1	chipping detritus	2	onondaga	flake fragment	
77	700	420	1	chipping detritus	1	onondaga	secondary knapping flake	
78	700	420	1	chipping detritus	1	kettle point	flake fragment	
79	680	400	1	chipping detritus	2	onondaga	flake fragment	
80	680	400	1	chipping detritus	1	onondaga	secondary knapping flake	
81	680	400	1	chipping detritus	1	onondaga	secondary retouch flake	
82	680	400	1	fragmentary sherd	3			
83	690	405	1	chipping detritus	2	onondaga	flake fragment	
84	690	405	1	chipping detritus	2	onondaga	secondary knapping flake	
85		CSP 1		chipping detritus	1	onondaga	flake fragment	
86		CSP 2		chipping detritus	1	onondaga	secondary knapping flake	
87		CSP 3		chipping detritus	1	onondaga	flake fragment	
88		CSP 4		chipping detritus	1	kettle point	flake fragment	

89	CSP 5	fragmentary sherd	1			small fragment
90	CSP 6	chipping detritus	1	onondaga	flake fragment	errian maginioni
91	CSP 7	chipping detritus	1	onondaga	flake fragment	
92	CSP 8	chipping detritus	1	onondaga	secondary knapping flake	
93	CSP 9	fragmentary sherd	1	ononaaga	cocomulary mapping mane	small fragment
94	CSP 10	chipping detritus	1	onondaga	flake fragment	errian maginioni
95	CSP 11	chipping detritus	1	onondaga	secondary knapping flake	
96	CSP 12	chipping detritus	1	onondaga	secondary knapping flake	
97	CSP 13	chipping detritus	1	onondaga	flake fragment	
98	CSP 14	chipping detritus	1	onondaga	flake fragment	
99	CSP 15	chipping detritus	1	kettle point	flake fragment	
100	CSP 16	chipping detritus	1	onondaga	flake fragment	
101	CSP 17	utilized flake	1	onondaga	flake fragment	usewear along right lateral
102	CSP 18	chipping detritus	1	onondaga	flake fragment	3 3
103	CSP 19	chipping detritus	1	onondaga	flake fragment	
104	CSP 20	chipping detritus	1	onondaga	flake fragment	
105	CSP 21	fragmentary sherd	1			small fragment
						usewear along both
106	CSP 22	utilized flake	1	onondaga	secondary knapping flake	laterals
107	CSP 23	fragmentary sherd	1			
108	CSP 24	chipping detritus	1	onondaga	flake fragment	
109	CSP 25	fragmentary sherd	1			small fragment
110	CSP 26	chipping detritus	1	onondaga	secondary knapping flake	
111	CSP 27	chipping detritus	1	onondaga	flake fragment	
112	CSP 28	fragmentary sherd	1			small fragment
113	CSP 29	chipping detritus	1	onondaga	flake fragment	
114	CSP 30	fragmentary sherd	1			
115	CSP 31	chipping detritus	1	onondaga	flake fragment	
116	CSP 32	chipping detritus	1	onondaga	secondary knapping flake	
117	CSP 33	fragmentary sherd	1			small fragment
118	CSP 34	chipping detritus	1	onondaga	flake fragment	
119	CSP 35	chipping detritus	1	onondaga	flake fragment	
120	CSP 36	chipping detritus	1	onondaga	flake fragment	
121	CSP 37	chipping detritus	1	onondaga	secondary knapping flake	