

# **FISHER ARCHAEOLOGICAL CONSULTING**

PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH, ONTARIO

ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY &  
STAGE 2: ASSESSMENT  
Final Report  
(Original)

PIF #: P115-0037-201  
5 February, 2018





**PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH, ONTARIO**

**ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY & STAGE 2: ASSESSMENT**

**FINAL REPORT  
(Original)**

**Property Location:**

220 Arkell Road, Guelph, Ontario  
Part Lot 6, Concession 8, Former Geographic Township of Puslinch,  
now the City of Guelph, Ontario

**Submitted to:**

Ontario Ministry of Tourism, Culture and Sport

&

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PIF No.: P115-0037-2018

(PIF is valid)

5 February, 2018



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**PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH, ONTARIO**

**ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY & STAGE 2: ASSESSMENT**

**EXECUTIVE SUMMARY**

Fisher Archaeological Consulting conducted the Stage 1 Background Research and Stage 2 Assessment for the proposed plan of subdivision at 220 Arkell Road, Guelph, Ontario. The legal description of the Study Area is Part Lot 6, Concession 8, Geographic Township of Puslinch, now the City of Guelph, Wellington County, Ontario.

The Study Area is an irregularly shaped parcel of land, with the main portion being a rectangle, and a long panhandle, a driveway that leads to Arkell Road. The main section is approximately 315 metres by 185 metres, while the thin panhandle is approximately 200 metres by 20 metres at its maximum. The plan of subdivision (**Figure 3a**) will also include an ecological linkage (Block 33) and open green space for use as park and trails (Blocks 34 and 38), all of which will be conveyed to the City of Guelph, and the city will re-zone these blocks as non-development lands. Note that the final development plan shows that some small areas of these blocks will have some development, and these areas have been included in the archaeological assessment. Only the wooded west edge of the Study Area within the non-development lands was excluded from the Stage 2: Assessment (**Figure 9**).

The Stage 1: Background Study concluded that archaeological potential for the Study Area was high for both Indigenous and Euro-Canadian resources, except for small areas that were extensively disturbed by the construction of structures in modern times. Indigenous potential was based on the proximity of the Study Area to running water, a wetland and a drumlin; Euro-Canadian potential was based on the proximity to Arkell Road, an early settlement road.

The Stage 2: Assessment was conducted through pedestrian survey and shovel test pitting. One Indigenous artifact was found during pedestrian survey, an isolated non-diagnostic biface. Thus, this findspot has no further Cultural Heritage Value or Interest (CHVI). The shovel test pit survey identified multiple areas of modern disturbance, and these areas had no natural soil profile remaining. Other areas of slight disturbance from the addition of landscaping fill were noted, but these disturbances did not extend fully into the subsoil. No other Indigenous artifacts nor Euro-Canadian artifacts were found during the assessment.

In summary, the whole of the Study Area was assessed apart from the protected wooded section on the west side, part of a block of land that will be conveyed to the City of Guelph. The shovel testing was conducted at appropriate intervals, and nothing having CHVI was discovered.

Therefore, FAC recommends the following:

- 1) The portion of the Study Area as indicated on **Figure 9** has been adequately assessed, and nothing having further CHVI was identified. Therefore, no further archaeological work is recommended for this portion of the Study Area;
- 2) The portion of the Study Area as indicated on **Figure 9** that is to be zoned as non-development land and that has not been assessed, will require an archaeological assessment should its zoning change in the future, or ground disturbing activities be proposed.



**PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH, ONTARIO**

**ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY & STAGE 2: ASSESSMENT**

**FINAL REPORT**

**1.0 PROJECT CONTEXT**

The following is a Stage 1 and 2 report, prepared for review by the Ontario Ministry of Tourism, Culture and Sport (MTCS). Archaeological consultants, licensed by MTCS, are required to follow the *Standards and Guidelines for Consultant Archaeologists* (MTC 2011) during land use planning as part of the evaluation of cultural heritage resources. This includes reporting all findings to MTCS. There are four stages for archaeological work — Stages 1 to 4.

- |         |  |
|---------|--|
| Stage 1 | Background Study and Property Inspection. The purpose of the Stage 1 archaeological assessment is two-fold. Firstly, it is to determine the potential for the presence of as yet undocumented cultural heritage resources, and secondly, to determine whether known cultural heritage resources are extant on the subject land(s). |
| Stage 2 | Field work. Stage 2 is the actual field examination of high potential areas, and involves either surface survey of ploughed fields or shovel testing in areas that are undisturbed or cannot be cultivated.  |
| Stage 3 | Testing. The purpose of the Stage 3 is to ascertain the dimensions of the site, its cultural affiliation (if possible), and to evaluate its significance. If the site in question is determined to be archaeologically significant, then appropriate mitigation measures will be decided upon.                                     |
| Stage 4 | Mitigation. Stage 4 involves the mitigation of the development impacts to the archaeological site through either site excavation or avoidance (preservation).  |

Stage 1 determines the amount of Stage 2 work required. Stage 2 determines if Stage 3 is warranted, and Stage 3, in turn, determines if the archaeological resources are significant and warrant Stage 4 – either full excavation or preservation of the site.

All work was conducted under archaeological licence P115. The Archaeological Stage 1: Background Study & Stage 2: Assessment pertain to project information number P115-0037-2018.

**1.1 Development Context**

Fisher Archaeological Consulting (FAC) was contracted by Black, Shoemaker, Robinson and Donaldson (BSR&D) Ltd., to conduct the Stage 1: Background Research and Stage 2: Assessment for the proposed plan of subdivision at 220 Arkell Road, Guelph, Ontario (*Figure 1*). The legal description of the Study Area is Part Lot 6, Concession 8, Geographic Township of Puslinch, now the City of Guelph, Wellington County, Ontario.

The Study Area is an irregularly shaped parcel of land, with the main portion being a rectangle, and a long panhandle (a driveway that leads to Arkell Road). In this part of Guelph, the original township survey of Puslinch had laid out concessions so that they were at a 45 degree angle away from true north, i.e., the concession roads ran in a northeast-southwest direction. In this report, cardinal directions are



always made in reference to true north. Thus the corners of main rectangle are north, south, east, and west, while the sides of the main rectangle are referred to as northwest, northeast, southeast and southwest. The main section is approximately 315 metres by 185 metres, while the driveway is approximately 200 metres long.

The plan of subdivision (**Figure 3a**) will also include an ecological linkage (Block 33) and open green space for use as park and trails (Blocks 34 and 38), all of which will be conveyed to the City of Guelph, and the city will re-zone these blocks as undeveloped lands. Note that the final development plan shows that some small areas of these blocks will have some development, i.e. trail construction in Blocks 34 and 38 and a small sliver of future road allowance in the north corner of Block 33 (**Figure 3a**), and these areas have been included in the archaeological assessment. Only the wooded southwest edge of the Study Area within the non-development lands (part of Blocks 34 and 38) was excluded from the Stage 2: Assessment (**Figure 9**). Also note that the development plan has been reconfigured after the completion of the archaeological assessment (See **Figure 3b** for the original development plan). The driveway portion has been shortened in the final development plan (compare **Figure 3b** with **Figure 3a**), but as the driveway is still to be utilized for construction access, the original length of the driveway is still included in the Archaeological Study Area.

The archaeological condition was established by the City of Guelph under the Planning Act during mandatory pre-consultation. At that meeting, the City of Guelph identified all studies, reports and plans needed to deem a formal application for a draft plan of subdivision and zone change “complete” under the Planning Act. An archaeological report was specified as one of the required reports. FAC had permission from the proponent to conduct all required field work including the collection and removal of any artifacts if recovered.

## 1.2 Archaeological Context<sup>1</sup>

The main part of the Study Area is currently residential, with a late 20<sup>th</sup> century residence, a swimming pool, lawns and outbuildings (chicken coop and work shop) set in the central portion of a 5.8 ha lot. This lot was originally part of agricultural land, but the original farmstead was not in this location. The outer portions of the Study Area consist of a long driveway accessing Arkell Road, extensive lawns, wooded sections and treed hedgerows that indicate former field boundaries.

The northwestern edge of the main Study Area is bordered by a treed hedgerow, on the north side of which is an active construction zone. The Study Area is bordered by a treed hedgerow to the northeast with active agricultural fields beyond. The main Study Area’s southeastern edge borders a row of houses to the east of the driveway, and a treed section to the west of the driveway. The southwestern edge is adjacent to a woodlot. The driveway is flanked by mixed uses – trees, lawn, a storm water management feature, and pasture.

The following discussion details the environmental and cultural setting of the Study Area. This provides a framework for conducting the archaeological potential survey.

### 1.2.1 Physiographic Features

The surficial topography of most of southern Ontario is primarily the result of Quaternary glacial and post-glacial action. The Study Area is situated on Guelph Formation bedrock (Sandford 1969), but there are no surface outcrops nearby. In terms of Quaternary geology, the Study Area is on the boundary of

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<sup>1</sup>The following sections are modified from previous FAC reports on file with MTCS.



the Guelph Drumlin Field and a spillway adjacent to the Paris Moraine, one of the Horseshoe Moraines of southern Ontario (Chapman and Putnam 1984: Map P.2715). The Guelph Drumlin Field covers 320 square miles within Hamilton-Wentworth, Waterloo and Halton Regions and Wellington County (Chapman and Putnam 1984: 137). The drumlins in the vicinity of the Study Area are aligned northwest/southeast, and they are broad and elliptical in shape (Chapman and Putnam 1984: 137).

Both the Guelph drumlin field and the Paris Moraine are defined by undulating topography, with hills and valleys. The Study Area appears to lie on the edge of a broad drumlin. The topography of the Study Area and its immediate surroundings is fairly level on the northeast side (on the drumlin), sloping down slightly to the southwest.

### 1.2.2 Soils

The natural soils in the region are part of the Grey-Brown Podzolic Great Group with an average depth to subsoil of 45 to 60 cm (Hoffman *et al.* 1963:19). The soil within the Study Area is Guelph loam, which is moderately stony and offers good drainage (Hoffman *et al.* 1963:23, 34), Burford loam, which is more gravel-based than the aforementioned, and muck (**Figure 4**). The driveway is on Burford loam soil, while the Guelph loam is on the central portion and northeast side of the main part of the Study Area and the muck soil is on the southwestern treed portion of the main part of the Study Area.

Generally, a preference for settlement sites in all time periods would be on well-drained soils, rather than poor ones such as clay or muck soils. However, soil type cannot be used as the sole criterion for predictive modelling of site locations, as has been observed through archaeological survey and excavation.

### 1.2.3 Water Sources and Vegetation

The distance to a water source is a major factor in determining an area's archaeological potential. Other factors include soil, vegetation and landscape features. Generally, areas within 300 metres of a seasonal or year round source of water are considered to be of high archaeological potential.

The closest source of running water is small stream that arises 250 metres from the Study Area's northern corner. This stream is a tributary of the Eramosa River, which then joins up with the larger Speed River in the centre of Guelph, about four kilometres northwest of the Study Area. The Speed River continues westwards and eventually drains into the Grand River. Topographic maps (**Figures 1** and **6**) indicate that the woodlot southwest of the Study Area is seasonally wet, and this wetland feeds into the above noted tributary stream..

The Town of Guelph is near the north edge of the Carolinian Biotic Province within the Carolinian-Canadian Transition Zone. The transition zone is a blend of the boreal forest (spruce, balsam, *etc.*) with cedar, white and red pine, alder, yellow birch, beech, elm, hemlock, aspen, basswood and sugar maple (Mason 1981:59). The vegetation profile is typified by hard maple, basswood, beech, hemlock and pine on the high elevations; hard maple, elm, beech, balsam, oak, and cherry on the intermediate and valley slopes; and elm, black ash, willow and cedar in the wet lands (Janusas 1987:62). Historically, the area was a prime ecological area of woods and swamps (Chapman and Putnam 1984:128).

Observation of vegetation during the Stage 2: Assessment noted deliberately planted species close to the house, with white cedar wind breaks, as well as tamarack, silver maple, and spruce. Buckthorn was common on the borders of the property in the hedgerows and in the treed area west of the driveway.



#### 1.2.4 Lithic Sources

Sources of siliceous stone, specifically chert, for making tools were often focal areas for pre-Contact Indigenous peoples. There are no immediate primary sources of chert in the area. The nearest primary chert source is the Ancaster Formation, found 40 km to the southeast in an arc from Stoney Creek to Clappison's Corners, Ontario. Sources further afield include the Onondaga Formation found along the northeast shore of Lake Erie (Eley and von Bitter 1990:4).

#### 1.2.5 Archaeological Sites

FAC performed a search of the MTCS Ontario Archaeological Sites Database (OASD) for registered sites within one kilometre of the Study Area, which returned 11 results (**Table 1**).

**Table 1:**  
**Registered Sites Within One Kilometre**

Borden#	Name	Affiliation	Period	Description
AjHb-8	Gordon Street	Indigenous	pre-Contact: Early Archaic	Findspot
AjHb-56	Kowall	Indigenous	pre-Contact: Late Archaic, Early Woodland	Findspot
AjHb-59	Farley	Indigenous	pre-Contact	Findspot
AjHb-60	McGarr	Indigenous	pre-Contact: Middle and Late Archaic	Campsite
AjHb-61	Hanley	Indigenous	pre-Contact	Findspot
AjHb-62	Blair	Indigenous	pre-Contact: Middle Woodland	Scatter
AjHb-63	Godwin	Indigenous	pre-Contact	Findspot
AjHb-69	-	Indigenous	pre-Contact	Findspot
AjHb-73	Wolf	Indigenous	pre-Contact: Early Woodland	Campsite
AjHb-74	Golf	Indigenous	pre-Contact	Campsite
AjHb-82	S. Walsh	Euro-Canadian	post-Contact: post-1850	Homestead

These sites are indicative of both the long-term Indigenous use of the land prior to European contact and the early Euro-Canadian settlement of the region. The number of Indigenous sites covering millennia (Late Archaic to Middle Woodland) indicates a favourable environment for habitation and hunting, which in turn could be taken as an indicator of high archaeological potential.

#### 1.2.6 Previous Archaeological Work in the Vicinity of the Study Area

A search using Past Portal on the MTCS website revealed one instance of archaeological work occurring within 50 metres of the Study Area.

- Archeoworks Inc. 2012, *Stage 1-2 Archaeological Assessment (AA): Part of Lot 5, Concession 8 Victoria Park Golf Course West, City of Guelph, Regional Municipality of Waterloo, Ontario*.

Archeoworks Inc. was retained by the Victoria Park Golf Club West in 2012 to conduct a Stage 1-2 Archaeological Assessment on a 41-hectare section of the golf course directly adjacent to the northwestern edge of the current Study Area. Several disturbed locations were discovered; these were due to extensive grading and landscaping activities related to construction of the golf course. Several



potentially undisturbed locations were subjected to test pit survey, but no archaeological material was recovered, and the area was determined to have no further CHVI, with a recommendation that no further archaeological work would be required.

Additionally, another study within 75m of the southeastern edge of the current Study Area was conducted in 2012 by Detritus Consulting.

- Detritus Consulting 2012, *Archaeological Assessment (Stages 1, 2 and 3), Proposed Victoria Wood Development, 246 Arkell Road, Guelph Ontario.*

This work took place close to the location where a homestead had been identified on historical mapping of the area, and a large number of historic Euro-Canadian artifacts were recovered from a series of test pits. Stage 3: Testing was subsequently recommended and carried out, recovering a significant amount of 19<sup>th</sup> and 20<sup>th</sup> century Euro-Canadian material. The report concluded that the composition of the assemblage combined with historical background research dated the bulk of material post-1870, thus designating the area as one with no further CHVI, and no further archaeological work was recommended.

### **1.3 Historical Context**

#### **1.3.1 Indigenous History**

Indigenous peoples have inhabited Southern Ontario for over 11,000 years, and there is potential to find evidence of the earliest groups (Early and Late Paleo-Indian) through to the post-European Contact period in the general Guelph area. After the final retreat of the glaciers and the opening up of the Great Lakes basin, people first moved into Southern Ontario. What follows is a brief synopsis of the peoples who came before the European settlers — from Paleo-Indians to Late Woodland people when first contact was made<sup>2</sup>.

During the geological time frame of Lake Algonquin there is direct evidence that people were inhabiting southern Ontario (Ellis & Deller 1990:39). These people are known to researchers as Paleo-Indians who were non-agriculturalists and depended upon hunting and foraging of wild foods to survive. They would have moved their camps on a regular basis to the areas that would have provided resources as they became available. The size of the groups of people would in part depend upon the size and nature of those resources available at a particular location (Ellis & Deller 1990:52). People would have gathered or dispersed through the year depending on the availability of resources and social constraints. The environmental conditions of spruce parkland/woodland to pine forests would have necessitated frequent moves and a large range of territory in order to acquire adequate resources.

While the Paleo-Indian period lasted for a millennium, the Archaic horizon lasted for approximately seven times that length spanning from 8,000 B.C. to 850 B.C. It would appear that the Archaic peoples in Southern Ontario were subsisting in smaller territories than the former Paleo-Indians, thereby becoming more regionalized. Their population was increasing, probably due to the more reliable food resources as well as greater biodiversity in these resources. The broad divisions in the Archaic may be broken down into the Early, Middle and Late Archaic. The Early Archaic peoples continued with some characteristics from the Paleo-Indians, but developed some of their own, as any culture is never static.

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The following discussion of the general Paleo-Indian, Archaic and Woodland history of Indigenous peoples in southern Ontario is taken directly from CRM *et al.* 2002, as the author of the cultural section in the 2002 report is one of the authors of this report.



One of the major differences between the Late Archaic and Early Woodland (800 B.C. to *ca.* 0 B.C.) in the archaeological record of southern Ontario was the appearance of pottery. By the time of the Middle Woodland, there was a major shift in the way people settled the landscape and procured foods. It is at this time (500 B.C. to A.D. 700) that people were making fish a more important aspect of their diet, although hunting and foraging were done as well. As a consequence, rich and large sites began to appear on river valley floors. The sites were inhabited periodically for sometimes hundreds of years, and represented a warm season macroband base camp, to take advantage of spawning fish. People kept returning to particular fish spawning grounds, and became more reliant on this resource. People were becoming more sedentary and had a restricted band territory, compared to the people of the Archaic.

When exactly the Late Woodland began and the Middle Woodland ended has been debated by archaeologists, but the designation has been based on a number of material distinct differences from the Middle Woodland. Differences include things such as new settlement and subsistence strategies, a new type of pottery construction, different pottery decorating techniques, and a variety of projectile point forms. Based on these characteristics, it is generally felt that the Late Woodland period began at around A.D. 800 and continued until A.D. 1650, after which the time frame is designated as the post-contact period.

### **1.3.2 Regional History - The City of Guelph and Puslinch Township**

The Mississauga lived in the general region of the Study Area until, subject to Indian Treaty #3, their lands were brought under government control in 1792. The boundary of Puslinch Township had already been surveyed in 1784 by Augustus Jones (Puslinch Historical Society 1950). Euro-Canadian settlement of the region was well under way by the early 19<sup>th</sup> century, and in the 1820s when John Galt, a leader in the Canada Company, chose Guelph for his headquarters, “even Puslinch could boast a few settlers” (Walker & Miles 1877: 51). The township lots were surveyed in two phases, 1828 and 1831 (Walker & Miles 1877: 51); the first lot surveys of Puslinch Township were in the eastern half, including Concession 8, conducted by David Gibson in 1827 (Clark 2016).

Puslinch Township was named by Lady Seaton whose family lived at the Manor of Puslinch in England. Sir John Colborne (Lord Seaton) was the Lieutenant Governor of Upper Canada at the time. The township was originally part of the Gore District and remained so until 1846 when it joined Wellington District (now County). Puslinch was incorporated as a township in 1850 (Puslinch Historical Society 1950).

Arkell Road leads east directly from historic Brock Road to Arkell, a community settled in 1830 by Englishman Thomas Arkell, on Lots 6 and 7 of the eastern edge of Concession 9 (Rural Routes 2009). This historic settlement was approximately 2.5 km southwest of the Study Area. During the course of the late 20<sup>th</sup> and early 21<sup>st</sup> centuries, the City of Guelph grew south to include parts of Arkell and Puslinch Township.

### **1.3.3 Lot 6, Concession 8, Puslinch Township**

In documenting the land-use of the Study Area, FAC examined a number of historical visual images, including, but not limited to, historic maps, superceded and current National Topographic System (NTS) maps and aerial images. The following table summarizes the information gleaned from these sources regarding the Study Area and its vicinity



**Table 2:**  
**Summary of Visual Records Examined**

Image	Year	Comments
<i>Charles Wheelock's Map of the County of Wellington, Canada West</i> Guy Leslie & Charles J. Wheelock P.L.S. <b>Figure 5a</b>	1861	- Southwestern half of lot 6, Concession 8 is owned by Simon Walsh - Study Area is 1 km southwest of the town plot of Farnham
<i>Puslinch Township Historical Atlas of Waterloo &amp; Wellington Counties, ON</i> Walker & Miles <b>Figure 5b</b>	1877	- Southwestern half of lot 6, Concession 8 is owned by S. Welsh [ <i>sic</i> ], with a house indicated just to the west of the tip of the Study Area's tail (the driveway) - Village of Farnham still indicated but does not appear as large as in 1861 map
<i>Puslinch Township. Historical Atlas of Wellington County, ON</i> Historical Atlas Publishing Co., Toronto	1906	- Southwestern half of lot 6, Concession 8 was owned by William Walsh - House indicated in same location as 1877 map
<i>Guelph, Ontario</i> Sheet 40 P/09 Dept of National Defence Scale 1 Inch : 1 Mile <b>Figure 6a</b>	1939	- Structures indicated east of the Study Area fronting on Arkell Road, but none within the Study Area - Wetland protrudes into the southwestern edge of the Study Area
<i>Guelph, Ontario</i> Sheet 40 P/09 Scale 1 Inch : 1 Mile <b>Figure 6b</b>	1952	- Study Area unchanged from 1939 map
<i>Aerial Photograph: Shot 435801</i> Ontario Dept. of Lands and Forests Scale 1 : 63,360 <b>Figure 7a</b>	1954/55	- Study Area contains three agricultural fields divided by treed hedgrows, large wooded area shown west of Study Area - Farm structures visible east of the Study Area, fronting Arkell Road - Area surrounding the Study Area is rural -no visible structure in the Study Area
<i>Soil Map of Wellington County, Soil Report No. 35</i>	1962	-Western part of the Study Area listed as Muck soil, remainder as Guelph and Burford loam soils
<i>Guelph East, Ontario</i> Sheet 40 P/09B Dept. of Energy, Mines and Resources Scale 1 : 25,000	1965	-Structure present in centre of the main section of the Study Area



Image	Year	Comments
<i>Guelph East, Ontario</i> Sheet 40 P/09B Dept. of Energy, Mines and Resources Scale 1 : 25,000 <b>Figure 6c</b>	1975	- Structure still present within the Study Area; trees/hedgerows shown bordering much of the main section of the Study Area
<i>Guelph, Ontario</i> , ed 6 Natural Resources Canada Sheet 40 P/09 Scale 1:50,000 <b>Figure 6d</b>	1985	- Area northwest of Study Area is now a golf course - Two structures and a driveway present within the Study Area in the same location as the present-day house, workshop, and driveway - Pond present S of the house and workshop - Structures and silos to the east of Study Area fronting Arkell Road
<i>Guelph, Ontario</i> , ed. 7 Sheet 40 P/09 Natural Resources Canada Scale 1:50,000 <b>Figure 1</b>	1994	- Unchanged from 1985 map
2000 Air Photo <i>Explore Wellington</i> <a href="https://sgis.wellington.ca/">https://sgis.wellington.ca/</a> <b>Figure 7b</b>	2000	-Driveway present which leads from Arkell Road to the house and workshop. The hedgerows are still extant -Treed section in S corner of Study Area shown in the 1954 aerial photograph still extant - Pond with an island visible S of the house - Golf course present to the northwest of the Study Area, while farm complex present to the east
Google Earth Image, Digital Globe	2006	- A swimming pool is now present, on the N side of the house - The pond has been filled in, and a gazebo is visible in the centre of the filled-in area
2010 Air Photo <i>Explore Wellington</i> <a href="https://sgis.wellington.ca/">https://sgis.wellington.ca/</a>	2010	- Trees along the west side of the driveway are no longer extant - No other changes from previous aerial image
Google Earth Image Digital Globe	2016	- Construction has begun on a new subdivision SE of the Study Area - No changes to the Study Area
Google Earth Image Digital Globe <b>Figure 2</b>	2017	- Entire golf course area bordering the northwestern edge of the Study Area is now stripped; it is an active construction zone - No changes to the Study Area

The above table illustrates that the Study Area had been part of an agricultural field system for many decades, located within a rural setting until recently. Together, with other sources including the land registry information, the records indicate that the first Euro-Canadian settlers arrived in Puslinch Township in 1828. In 1831, John Arkell established his eponymous settlement situated east of the Study Area. The patent in the Study Area was granted to Edward Walsh by the Crown in 1831, which was transferred to his grandson Simeon in 1859, as well as a section of the adjoining half lot.



According to the 1861 *Map of the County of Wellington, Canada West*, Simon Walsh owned the property (**Figure 5a**). This lot appears to have stayed within the Walsh family for generations: S. Welsh (*sic*) is listed on the lot in the 1877 *Historical Atlas* (**Figure 5b**), and William Walsh is listed on the 1906 *Historical Atlas* map.

The NTS topographical maps show the Study Area was within largely rural surroundings, unchanged until the 1980s. A wetland area is present to the west of the Study Area. Farm structures appear to the east of the Study Area as early as 1939 (**Figure 6a**). The first structure appears in the Study Area by 1975 (**Figure 6c**). Sometime between 1975 and 1985, an outbuilding, a pond, and a long driveway connecting to Arkell Road were constructed in the Study Area (**Figure 6d**). The golf course northwest of the Study Area was also built sometime between 1975 and 1985 (**Figures 6c** and **6d**); The pond was filled in between 2000 and 2006, and an in-ground pool was added to the north side of the house during the same period (**Figure 2**). Additional changes to the property in the past decade appear to be minimal.

Google Earth images of the Study Area show the house, outbuilding (workshop), pool, and chicken coop situated amidst large lawns. The golf course was decommissioned and construction was started on new subdivisions immediately northwest of the Study Area in 2016 (**Figure 2**).

#### 1.3.4 Historical Plaques

A search for historical plaques located within one kilometre of the Study Area returned no results. One plaque with direct relevance to the Study Area was identified: “The Settlement of Puslinch,” located several kilometres south of the Study Area on Ellis Road, details the early land surveys and settlement efforts in the Township (OHP 2018).

#### 1.3.5 Stage 1 Analysis of Archaeological Potential

Information about the archaeological potential of the Study Area was gathered from various sources. The archaeological potential for pre-Contact/historic Indigenous settlement has been assessed using the data collected from the Ontario Archaeological Sites Database (OASD) and environmental data collected from geological, soils, NTS topographic and Ontario maps. Historic Euro-Canadian site potential has been assessed using data from the OASD, from primary sources such as Land Registry records, historic maps, 20<sup>th</sup> century mapping and aerial photography, and from secondary historic sources.

The *Standards and Guidelines* (MTC 2011) **Sections 1.3.1** and **1.4.1** indicate that the following features or characteristics indicate archaeological potential:

- Previously-identified archaeological sites
- Water sources
  - Primary water sources (lakes, rivers, streams, creeks) ✓
  - Secondary water sources (intermittent streams/creeks, springs, marshes, swamps) ✓
  - Features indicating past water sources
  - Accessible or inaccessible shorelines
- Elevated topography (drumlins, plateaux, dunes) ✓
- Pockets of well-drained sandy soil
- Distinctive land formations (waterfalls, caves)
- Resource areas
  - Food or medicinal plants (migratory routes, spawning areas)
  - Scarce raw materials (copper, chert outcrops)
- Early Euro-Canadian industry (fur trade, logging, prospecting)
- Early historic transportation routes (roads, rail, portages) ✓
- Areas of early Euro-Canadian settlement



- Property listed on a municipal register or designated under the *Ontario Heritage Act* or that is a federal, provincial, or municipal historic landmark or site
- Property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupations

Archaeological potential for Indigenous sites is based on environmental factors, such as distance to water and soil type, and proximity to known sites and features (such as trails or specific resources). The northeastern part of the Study Area is on well-drained sandy loam soils on the edge of a drumlin. The Study Area is within 250 metres of a tributary of the Eramosa River and its southwest side is adjacent to a treed wetland. Therefore, the Study Area has a high potential for the discovery of Indigenous material.

Archaeological potential for historic Euro-Canadian sites is based on similar factors for Indigenous site potential, as well as the distance to historic roadways. As *per Sections 1.3.1 and 1.4.1 Standard 1d* of the *Standards and Guidelines*, lands within 100 metres of an historic roadway will have high archaeological potential (MTC 2011). Thus, the southern portion of the Study Area (*i.e.* the driveway) is determined to have high archaeological potential for historic material due to the presence of the historic Arkell Road.

Archaeological potential is considered to have been removed in areas of deep, modern land alterations following **Section 1.3.2** of the *Standards and Guidelines* (MTC 2011). Within the Study Area, the footprints of the current house, outbuildings and in-ground pool are isolated deep modern disturbances. These areas do not require further archaeological assessment.

Based on the above information, the Study Area is judged to have high potential for both Indigenous and Euro-Canadian archaeological resources.

## 2.0 STAGE 2 FIELD METHODOLOGY

The Stage 2: Assessment was conducted in accordance with the *Standards and Guidelines* (see below over a period of eight days starting July 24, 2018, and finishing September 24, 2018). The weather was variable during the course of the Stage 2: Assessment, but lighting and ground conditions were good throughout (see the NPD Table at the end of this report for a full description of the weather and ground conditions). **Figure 8** presents the Stage 2: Assessment methodology.

The assessment was conducted through both pedestrian survey and shovel testing (**Figure 8**). Ploughing was feasible and was conducted for the lawn areas in the northwestern and northeastern sections of the Study Area, as well as a strip along the southeastern edge of the Study Area. The areas which could not be ploughed due to the presence of hedgerows, trees, utilities, and other built features were shovel tested. These areas included the lawn and treed areas surrounding the house, outbuildings, a paddock beside the workshop, and the driveway edges. It should be noted that some areas listed as no-development zones were also assessed at this time (See **Section 1.1** above and **Figure 3a**). When the assessment was conducted, the final configuration of the development plan had not yet been determined, and those areas were assessed to ensure full coverage. The wooded section of the no-development zone on the southwestern edge of the Study Area had already been confirmed as no-development prior to the assessment, and it was therefore not tested (**Figure 8**).



## 2.1 Pedestrian Survey

The pedestrian survey was conducted over the course of a single day on the 24<sup>th</sup> July 2018, in accordance with the *Standards and Guidelines* **Section 2.1.1 Pedestrian Survey** (MTC 2011). The pedestrian survey was conducted at five-metre intervals on fields that had been ploughed and that were well weathered, with 80 to 100 % ground surface visibility (**Plates 1 -4**). When archaeological material was identified, the field crew intensified around the find spot, closing in at a one metre interval, and walking a 20-metre radius to determine if the find spot was an isolated artifact or part of a larger scatter following **Section 2.1.1 Pedestrian Survey Standard 7** (MTC 2011). All locations were sketched on the field map and diagnostic artifact(s) collected.

## 2.2 Shovel Test Pit Survey

The shovel testing was conducted over seven days in September 2018 (see **NPD Table**), in accordance with the *Standards and Guidelines*, **Section 2.1.2 Test Pit Survey** (MTC 2011). Shovel testing was conducted in areas not accessible for ploughing, as described in **Section 2.0**. The shovel testing was conducted at five-metre intervals, including within a metre of extant structures when possible (**Plates 5 and 16**). Where extensive disturbance was noted, shovel testing was conducted at a 10 metre interval until natural soils were again encountered (**Figure 8, Plate 10**). Each shovel test pit had a minimum diameter of 30 cm, and extended 5 cm into subsoil. All shovel test pits were excavated stratigraphically; soils were screened through six mm mesh, and any objects/artifacts found were recorded and kept according to provenience. Each recorded shovel test pit was assigned an individual identifier (such as TP1), and each soil layer within the shovel test pit was assigned a consecutive lot number (Lot 1, Lot 2, etc.).<sup>3</sup> All shovel test pits were backfilled, with the soil and the sod cap tamped down.

Approximately 55% of the Study Area was visually assessed; 24% was shovel tested at a five metre interval, 1% was shovel tested at a 10 metre interval, 5% was not tested due to recent disturbances such as the footprints of structures, the presence of buried utilities, and a large-scale subsurface disturbance where a pond had been excavated (it had since been filled in with contaminated soils and these soils had recently been removed) (**Plate 8**), and the remaining 15% was not tested due to its being the wooded section of the no-development zones. All work was recorded through photo-documentation, field notes, and mapping. Global positioning system (GPS) coordinates were taken of the pedestrian survey find spot using a Garmin eTrex 20 and this is presented in **Supplementary Documentation**.

## 3.0 RECORD OF FINDS

### 3.1 Documentary Record for Stage 2

Field notes	- FAC 2018-3 Book 3, and in this report
Field photographs, digital	- see <b>Appendix A</b> , Photographic Catalogue
Maps based on field work	- Results, in this report - On field map
Artifacts	- see <b>Table 3</b> , Recovered Material Catalogue
GPS Data	- see <b>Supplementary Documentation</b>

#### Size of the Packed Artifact Collection:

Box FAC 2018:006: Isolated Find (biface fragment): 1 3x5" recloseable bag  
See the NPD table for the long-term storage plans.

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<sup>3</sup>Note: Lot 1 in TP1 may not be the same as Lot 1 in TP2.



The Stage 2: Assessment resulted in the recovery of one isolated Indigenous artifact from the pedestrian survey. No Indigenous artifacts were recovered during the shovel test pit survey, and no Euro-Canadian artifacts were recovered from either the pedestrian survey or the shovel test pit survey. See **Supplementary Figure 1** for the Stage 2: Assessment results.

### **3.2 Stratigraphy and Soils**

Stratigraphy across the Study Area was variable, a result of its location at the intersection of two distinct physiographic regions (the Guelph Drumlin Field and the Paris Moraine, see **Figure 4**), and more significantly because of landscape modification during the recent past. Shovel tests generally encountered a medium brown silty loam ploughzone topsoil with a few pebbles or cobbles. Different types of subsoils were encountered. The most common subsoil was a greyish yellow or white sand; others included a reddish-brown silty sand with varying amounts of pebbles found on the northeastern side of the Study Area; orange sand subsoil appeared in pockets along the driveway; and reddish-brown silty clay was present close to the south corner of the Study Area.

Extensive recent disturbance was noted at the south-central part of the Study Area, where a large recently excavated pit is present (**Plate 8**). Discussion with the land owner revealed that the pit had first been excavated by a previous owner to create a pond (**Figures 6d** and **7b**). The pond was subsequently filled in with contaminated soil from off-site, and this soil then had to be removed. The entire former pond had been re-excavated deeply into the subsoil and then refilled with clean fill. Shovel tests in the lawn surrounding this pit retained a natural stratigraphy, with medium brown silty topsoil over a white sand subsoil at an average depth of 30 cm (**Plate 9**).

Shovel testing on the northeast side of the driveway identified another area of deep disturbance. Shovel tests along a 30 m strip immediately beside the driveway encountered a layer of dark, rich, loamy soil up to 64cm deep, which had a distinct odour of manure and sat atop stony, grey clay-silt subsoil. The organic layer contained occasional early 20<sup>th</sup> century objects, including fence wire, wire nails, and porcelain, and many shovel test pits encountered large pieces of wood (**Plates 13** and **14**). This area is interpreted as a former ditch beside the driveway that was filled in sometime in the 20<sup>th</sup> century using soil from adjoining agricultural fields and/or a livestock paddock. Shovel tests on the west side of the long driveway encountered different stratigraphy, characterised by natural topsoil (medium brown sandy loam) over orange sand subsoil.

A small area of fill was noted on the northwest side of the driveway where it turns to head towards the house (**Plate 10**). Shovel tests in this area determined that the area had been previously stripped to subsoil, then filled in with pebbly grey clay fill, likely from off-site (**Plate 11**). This area was approximately 20m x 20m (see **Figure 9**), and surrounded by areas of shallow natural topsoil over subsoil. It was shovel tested at a 10m interval to confirm the extent of disturbance.

The east end of the enclosed yard on the north side of the workshop also displayed signs of deep disturbance (**Plate 15**). Shovel tests in this area encountered fill layers over top of breeze blocks and sheet metal at a depth of 25cm. A few metres south of this, closer to the workshop, shovel test pits displayed natural stratigraphy, with no buried construction debris.

Most of the remainder of the Study Area that was shovel testing appeared to retain at least some natural stratigraphy, even if it was beneath fill layers. The lawn on the northwest, northeast, and southeast sides of the house and pool appears to have been artificially levelled (**Plates 5 - 7**), although testing in these areas still encountered natural topsoil over subsoil. The lawn surrounding the pool fence appeared



artificially built up, especially on the western side, where natural stratigraphy was found beneath a medium brown sandy loam fill layer.

Four major structures were noted in the Study Area: the house, an in-ground pool, a chicken coop/greenhouse, and a workshop. The house sits near the centre of the Study Area, and is L-shaped and of fairly modern construction, approximately 25 m east-west by 40 m north-south (**Figure 2**). Testing within one metre of the house was not possible on any side, due to the presence of the pool, driveway, paved footpaths, and rock garden (**Plate 5**). The in-ground pool is rectangular, adjacent to the north side of the house and is surrounded by a concrete patio and chain-link fence, the whole of which measures 15 m north-south by 20 m east-west. Shovel tests were excavated within one metre of the pool fence on the west, north, and east sides. On the west side, pits displayed natural stratigraphy underneath a medium brown sandy loam fill - likely taken from elsewhere on the property - to raise the ground level. The chicken coop/greenhouse is located approximately 25 m west of the house, and is 13 m by 5 m (**Plate 12**). Testing was conducted within one metre of this structure on all sides, and encountered natural stratigraphy. The workshop is located southeast of the house beside the paddock (**Plate 16**). It measures approximately 30 m by 10 m, and testing was conducted within one metre of the structure on the south.

A small area of woods southwest of the driveway was also test pitted (**Plate 17**) revealing natural soils. The hedgerows were also tested, and these also had natural soils.

### 3.3 Recovered Material Summary

One artifact of Indigenous origin, and no artifacts of historic Euro-Canadian origin, were recovered during the Stage 2: Assessment. The single Indigenous artifact was recovered during the pedestrian survey portion of the Stage 2: Assessment (**Plate 18**). The recovered material catalogue for the one artifact is presented in **Table 3**. Its significance will be considered in **Section 4.0**. No artifacts were encountered during the shovel testing phase of the project.

**Table 3**  
**Isolated Find During Pedestrian Survey**

Catalogue No.	Artifact type	Raw material	Comments
L0001	Lithic biface	Onondaga chert	Non-diagnostic, broken, potlids from heat exposure

## 4.0 ANALYSIS AND CONCLUSIONS

The background research had determined that the Study Area had high potential for both Indigenous and Euro-Canadian archaeological resources, unless previously disturbed. The shovel test pit survey identified multiple areas of modern disturbance, and these areas had no natural soil profile remaining. Other areas of slight disturbance from the addition of landscaping fill were noted, but these disturbances did not extend fully into the subsoil. One artifact was identified during the pedestrian survey phase of the Stage 2: Assessment.

### 4.1 Artifact Analysis

The pedestrian survey recovered an isolated biface fragment in the field east of the house (See **Supplementary Figure 1**). No other artifacts were identified, despite intensification of the pedestrian survey. Therefore, this is an isolated find.



The artifact is made from Onondaga chert, and is the mid-section of a biface with the tip and stem broken off (**Plate 18**). The biface has been exposed to an intense heat, with a number of pot-lids being present. Its length measures 49 mm, width at its maximum is 37 mm, and thickness is 8 mm. Its edges are finely worked, suggesting that it was a finished or almost finished tool. As a finished product, this would have been a relatively large point. The lack of diagnostic traits, as well as its isolation, make dating this particular stone tool impossible; assignment of affiliation therefore, is limited to Indigenous from any time period. As a non-diagnostic artifact, it does not meet the requirements for a recommendation to proceed to Stage 3: Testing, following **Section 2.2 Standard 1.b** (MTC 2011). Nor does it meet the standard for recording the findspot with a Borden form as the biface is non-diagnostic, following **Section 7.12 Standard 1.c** (MTC 2011). This findspot does not possess further CHVI.

#### 4.2 Final Conclusions

The Stage 1: Background Study concluded that archaeological potential for the Study Area was high for both Indigenous and Euro-Canadian resources, except for small areas that were extensively disturbed by the construction of structures in modern times. Indigenous potential was based on the proximity of the Study Area to running water, a wetland and a drumlin; Euro-Canadian potential was based on the proximity to Arkell Road, an early settlement road. The Stage 2: Assessment confirmed the presence of one Indigenous artifact, but did not identify any materials related to the early Euro-Canadian settlement of the area. The Indigenous artifact is an isolated non-diagnostic findspot with no further CHVI.

### 5.0 SUMMARY AND RECOMMENDATIONS

In summary, the whole of the Study Area was assessed apart from the protected wooded section on the west side, part of a block of land that will be conveyed to the City of Guelph. All ploughed areas were assessed by pedestrian survey at a five metre interval. This resulted in the identification of one isolated Indigenous findspot of indeterminate temporal and cultural affiliation, and it was determined to have no further CHVI. The shovel testing was conducted at appropriate intervals, and nothing having CHVI was discovered.

Therefore, FAC recommends the following:

- 1) The portion of the Study Area as indicated on **Figure 9** has been adequately assessed, and nothing having further CHVI was identified. Therefore, no further archaeological work is recommended for this portion of the Study Area;
- 2) The portion of the Study Area as indicated on **Figure 9** that is to be zoned as non-development land and that has not been assessed, will require an archaeological assessment should its zoning change in the future, or ground disturbing activities be proposed.

### 6.0 ADVICE ON COMPLIANCE WITH LEGISLATION

#### Standard 1

- a) This report is submitted to the Minister of Culture as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c0.18. 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 and Culture, a letter will be issued by the minister stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.
- b) It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has complete archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest, and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.
  - c) Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48(1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with sec. 48(1) of the *Ontario Heritage Act*.
  - d) The Cemeteries Act, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, c.33 (when proclaimed in force) requires that any person discovering human remains must notify the police or coroner and the Registrar of cemeteries, Ministry of Consumer Services (416 212-7499).

## **Standard 2**

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 licence.



## REFERENCES

- Archeoworks Inc.  
2012 Stage 1-2 Archaeological Assessment (AA):Part of Lot 5, Concession 8 Victoria Park Golf Course West, City of Guelph, Regional Municipality of Waterloo, Ontario. Report on file, MTCS, Toronto.
- Clark, M.  
2016 Thomas Rees Brock: How the Brock Road Got Its Name. *Puslinch Today*. <https://www.puslinchtoday.ca/2016/06/18/how-brock-road-got-its-name/>. Accessed 26 September 2018.
- Chapman, L.J. and D.F. Putnam  
1984 *The Physiography of Southern Ontario, Third Edition*, Ontario Geological Survey, Special Volume 2.
- Cultural Resource Management Group Ltd. (CRM Group), FAC, HHI, Dillon Consulting Ltd.  
2002 *Archaeological Master Plan Study Report for the City of Windsor*. Report submitted to the City of Windsor.
- Detritus Consulting  
2012 Archaeological Assessment (Stages 1, 2 and 3), Proposed Victoria Wood Development, 246 Arkell Road, Guelph Ontario. Report on file, MTCS, Toronto.
- Eley, B.E. and P.H. von Bitter  
1989 *Cherts of Southern Ontario*. Toronto: Royal Ontario Museum.
- Ellis C.J., and D.B. Deller  
1990 Palaeo-Indians. IN *The Archaeology of Southern Ontario to A.D. 1650*, C.J. Ellis and N. Ferris (eds). Occasional Publication of the London Chapter, OAS No. 5: 37-63.
- H. Parsell & Co. and Walker & Miles  
1877 *Historical Atlas of Waterloo and Wellington Counties Ontario*. Toronto: H. Parsell & Co., Walker & Miles.
- Hoffman, D.W., B.C. Matthews and R.E. Wicklund  
1963 *Soil Survey of Wellington County Ontario*, Report No. 35 of the Ontario Soil Survey.
- Janusas, S.  
1987 *An Analysis of the Historic Vegetation of the Regional Municipality of Waterloo*. Regional Municipality of Waterloo.
- Mason, R.  
1981 *Great Lakes Archaeology*. New York: Academic Press.
- Ministry of Tourism and Culture (MTC)  
2011 *Standards and Guidelines for Consultant Archaeologists*. Toronto: Queen's Printer for Ontario.



Ontario's Historical Plaques (OHP)

- 2018    The Settlement of Puslinch. *Ontario's Historical Plaques*.  
[http://www.ontarioplaques.com/Plaques/Plaque\\_Wellington01.html](http://www.ontarioplaques.com/Plaques/Plaque_Wellington01.html). Accessed 27  
September 2018.

Puslinch Historical Society

- 1950    *Annals of Puslinch 1850-1950*,  
<http://www.clarksoftomfad.ca/AnnalsofPuslinch1850-1950.htm>. Accessed 26  
September 2018.

Rural Routes

- 2009    Arkell. *Ontario Rural Routes*. [www.ruralroutes.com/5445.html](http://www.ruralroutes.com/5445.html). Accessed 31 January  
2018.

Sandford, B.V.

- 1969    Geology, Toronto-Windsor Area, Ontario. *Geological Survey of Canada "A" Series*,  
Map No. 1263A.



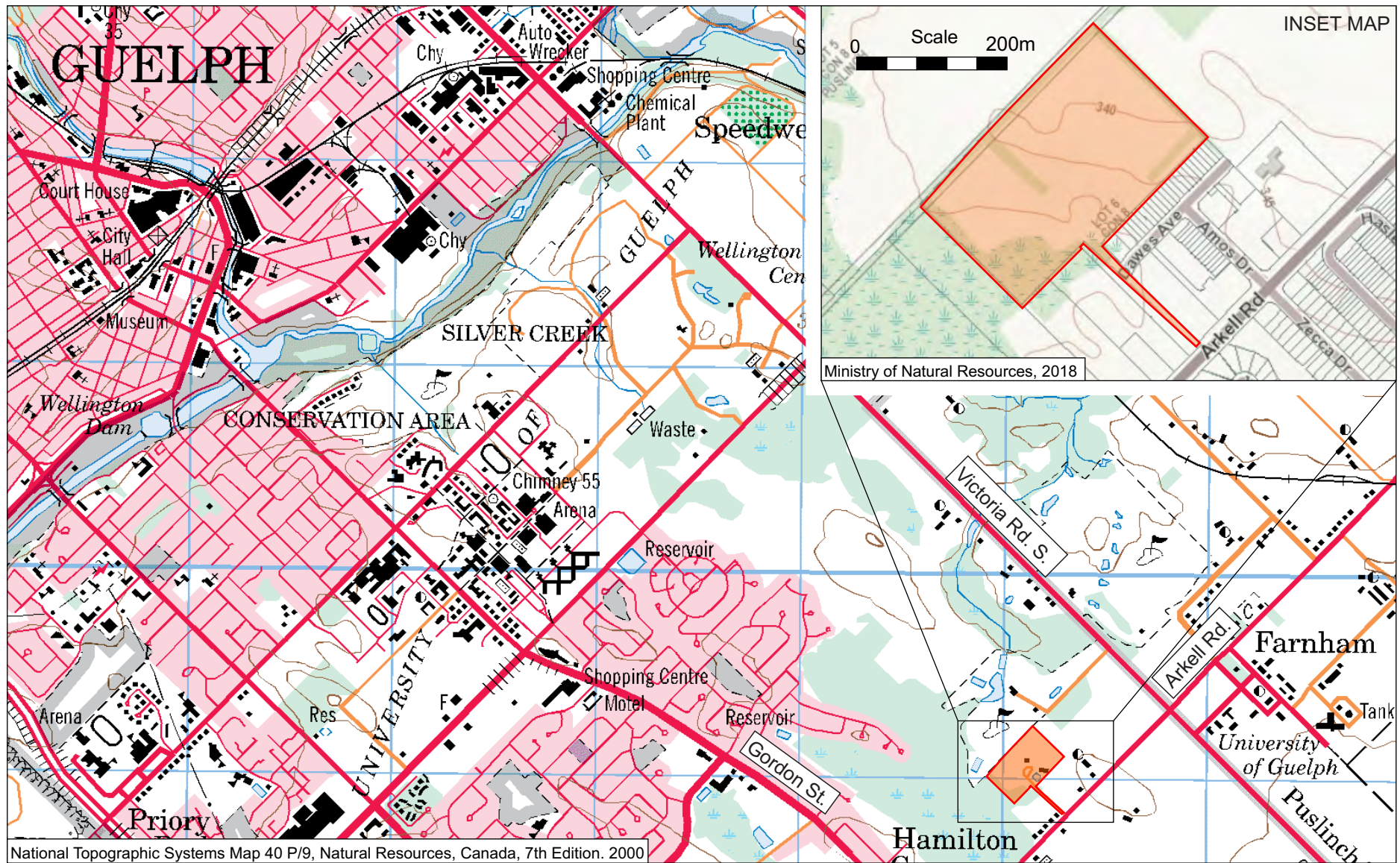
### PROJECT PERSONNEL

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Project Manager:	Ruth Macdougall (P359)		
Field Director:	Julia Wither (R1055) Aaron Clemens (R329)	Drew Smith (R480)	
Field Archaeologists:	Nathan Garrett Alicia Lee Chiara Williamson	Garett Hunt Drew Smith	
Background Research:	Emily Anson (R482)		
Report Authors:	Emily Anson	Julia Wither	
Report Editor:	Jim Molnar		
Graphics:	Aaron Clemens (R329)	Julia Wither	

### NPD Table for Proposed Subdivision, 220 Arkell Road, Guelph, Ontario

Permission was obtained to enter the property described in the above report			Yes
The licensee had permission to remove any archaeological objects recovered during the scope of the above named project			Yes
The archaeological record will be curated at FAC's facilities			
Property Inspection Dates	Weather	Ground Conditions	Principal Investigator
24 July 2018	Cloudy, high of 25°	Fine, dry	AC
07 September 2018	Some cloud, with a light breeze 22°	Fine, dry	JW
17 September 2018	Sunny and warm, high of 27°	Fine, dry	DS
18 September 2018	Overcast, damp, and muggy 26°	Fine, dry	JW
19 September 2018	Clear, cool to start 23°	Fine, dry	JW
20 September 2018	Slightly overcast, high of 18°	Fine, dry, dry	JW
21 September 2018	Warm and clear; windy with strong gusts and rain in the afternoon 29°	Fine, dry until the rain began	JW
24 September 2018	Overcast with a light breeze and chilly, becoming warmer and windier 17°	Fine, dry	JW





FAC

Date: 21/12/18

Designer: AC,RM

KEY



Study Area



0 Scale 1km

PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2: Assessment

Figure 1: Location and Topography of Study Area





**FAC**

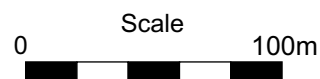
Date: 4/01/19

Designer: AC, RM

KEY



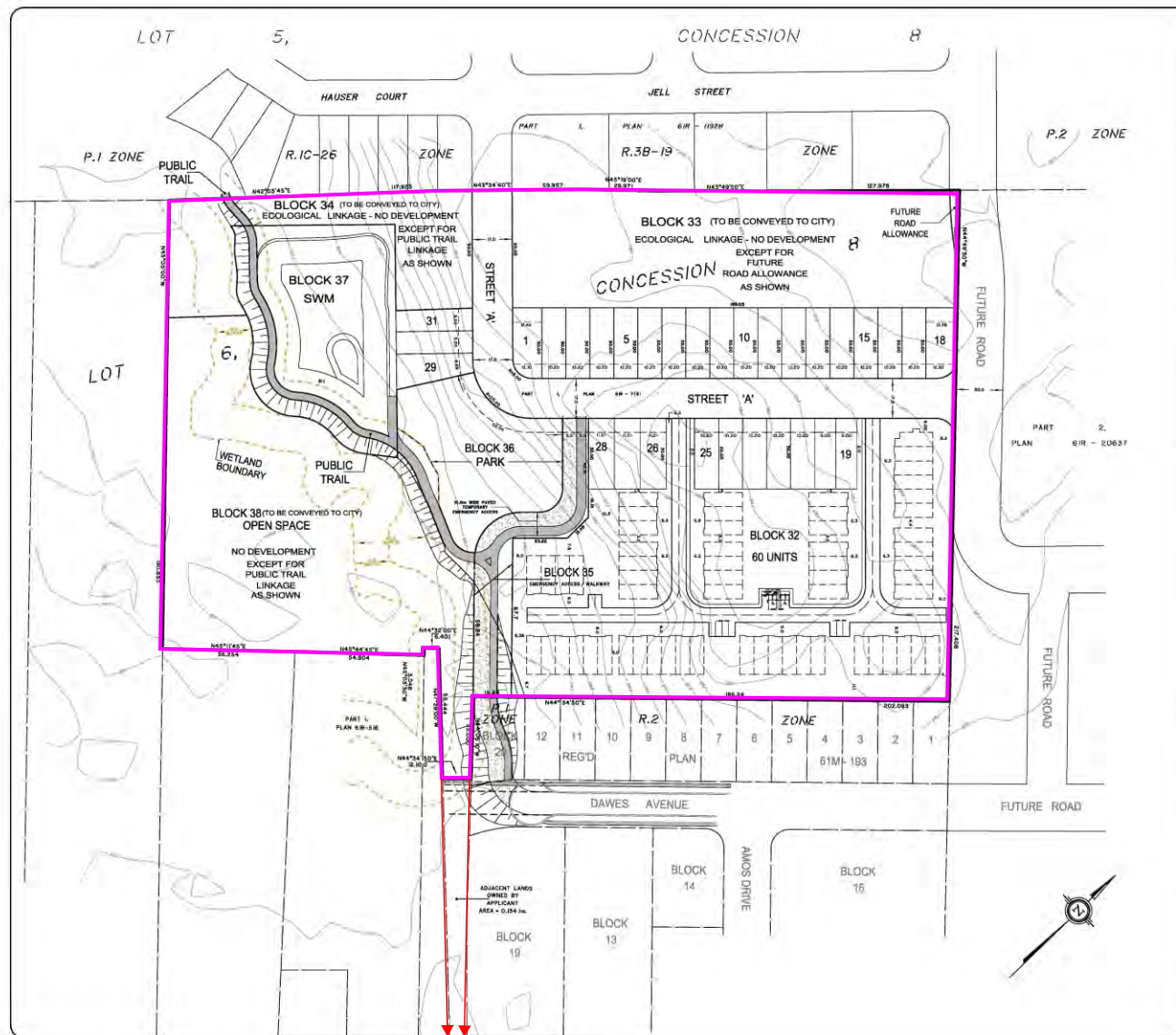
Study Area



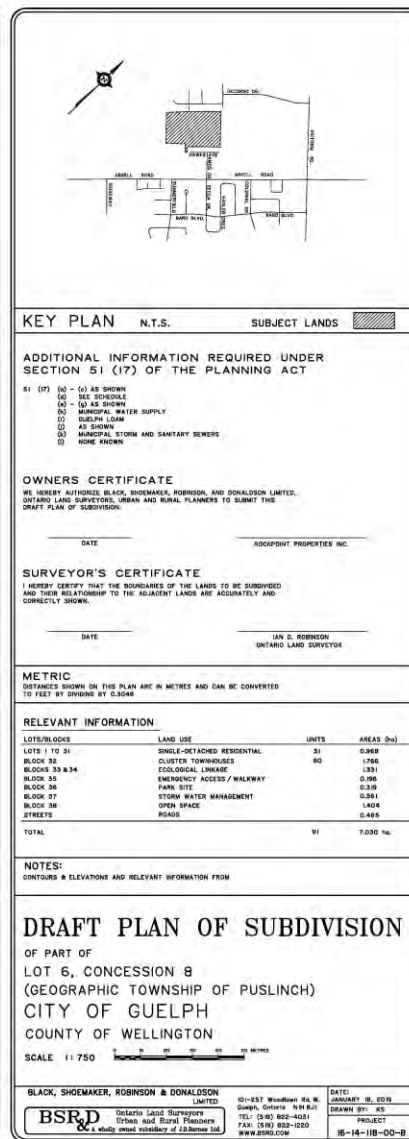
PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2: Assessment

Figure 2: Aerial View of the Study Area





Note, Study Area for access lane continues to Arkell Rd ROW



Development Plan provided by proponent.



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Date: 28/01/19  
Designer: RM, JF

KEY



Final Development Boundary



Archaeological Study Area

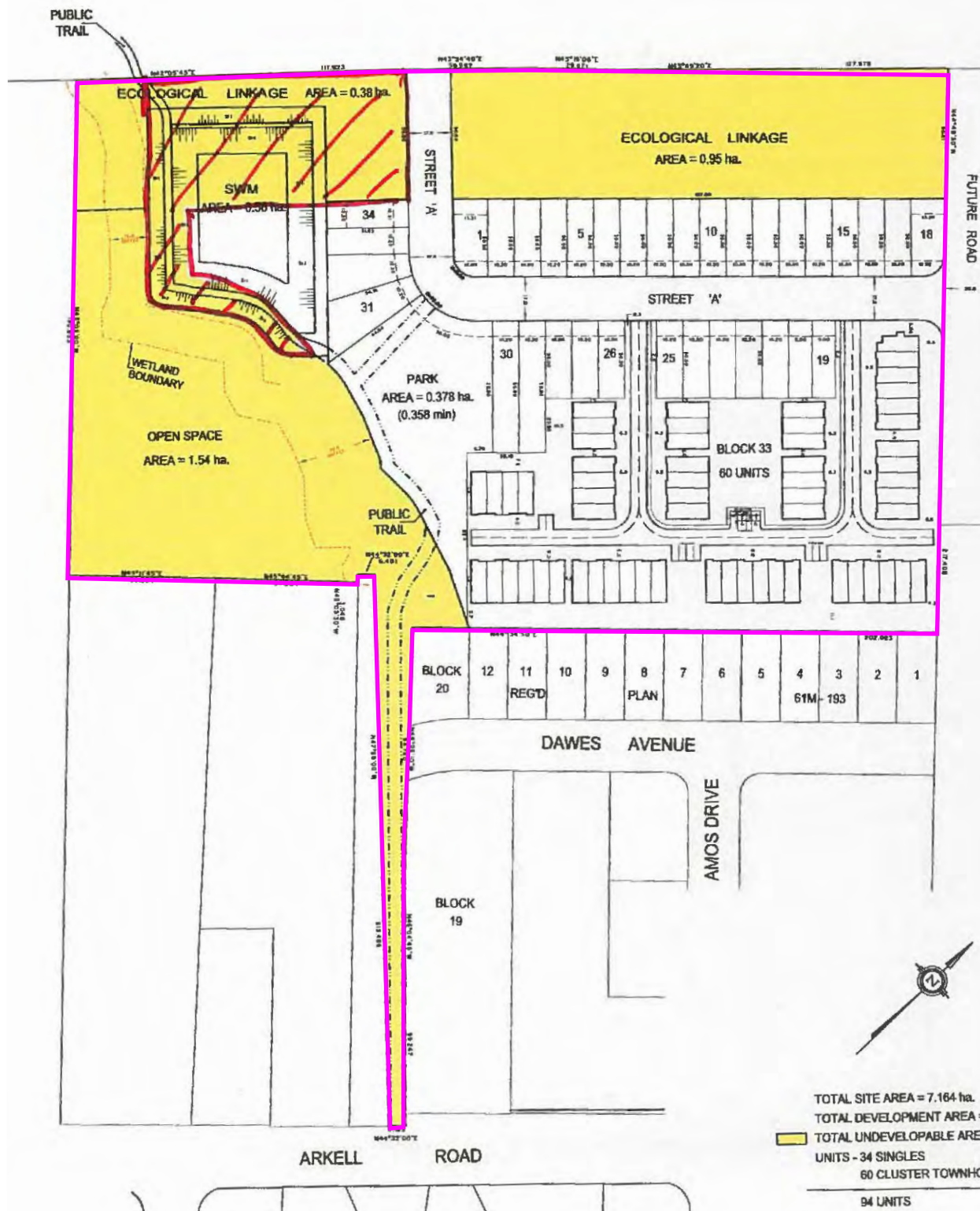


Scale  
0 100m

**PROPOSED PLAN OF SUBDIVISION**  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2 Assessment

Figure 3a: Final Development Plan





Initial Development Sketch provided by proponent.



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Date: 28/01/19

Designer: RM

KEY

Initial Development Sketch & Archaeological Study Area

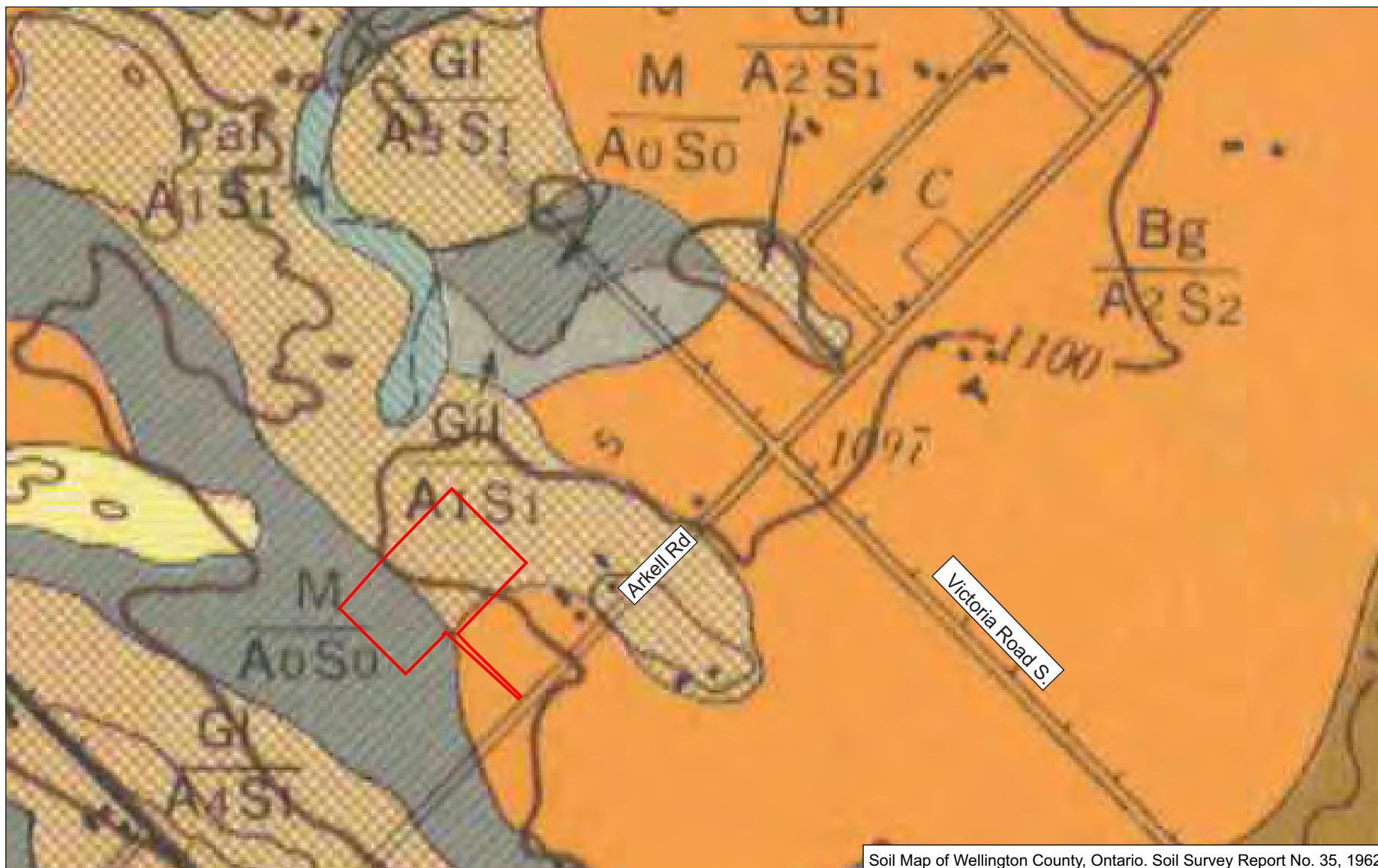


0 Scale 100m

PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2 Assessment

Figure 3b: Initial Development Sketch  
showing the Archaeological Study Area





Soil Map of Wellington County, Ontario. Soil Survey Report No. 35, 1962



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Designer: AC, RM

#### KEY

- Study Area Boundary (approximate)
- Muck
- Guelph Loam

- Burford Loam



Scale  
0 400m

PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2: Assessment

Figure 4: Soils within the Study Area





Map of the County of Wellington, Canada West. Wheelock 1861



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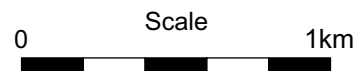
Date: 4/01/19

Designer: AC,RM

# KEY



Study Area, Part of Lot 6, Concession 8  
(approximate)



PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2: Assessment

Figure 5a: 1861 Map of Study Area





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Designer: AC, RM

#### KEY



Study Area, Part of Lot 6, Concession 8  
(approximate)



PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2: Assessment

Figure 5b: 1877 Map of Study Area







Figure 6a: NTS Sheet 40 P/09 (1939)



Figure 6b: NTS Sheet 40 P/09 (1952)



Figure 6c: NTS Sheet 40 P/09 (1975)



Figure 6d: NTS Sheet 40 P/09 (1985)



FAC

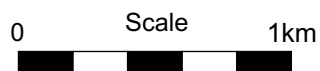
Date: 03/10/18

Designer: JW

KEY



Study Area



PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2: Assessment

Figure 6: Superseded NTS Topos





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Date: 4/01/19  
Designer: JW,RM

KEY



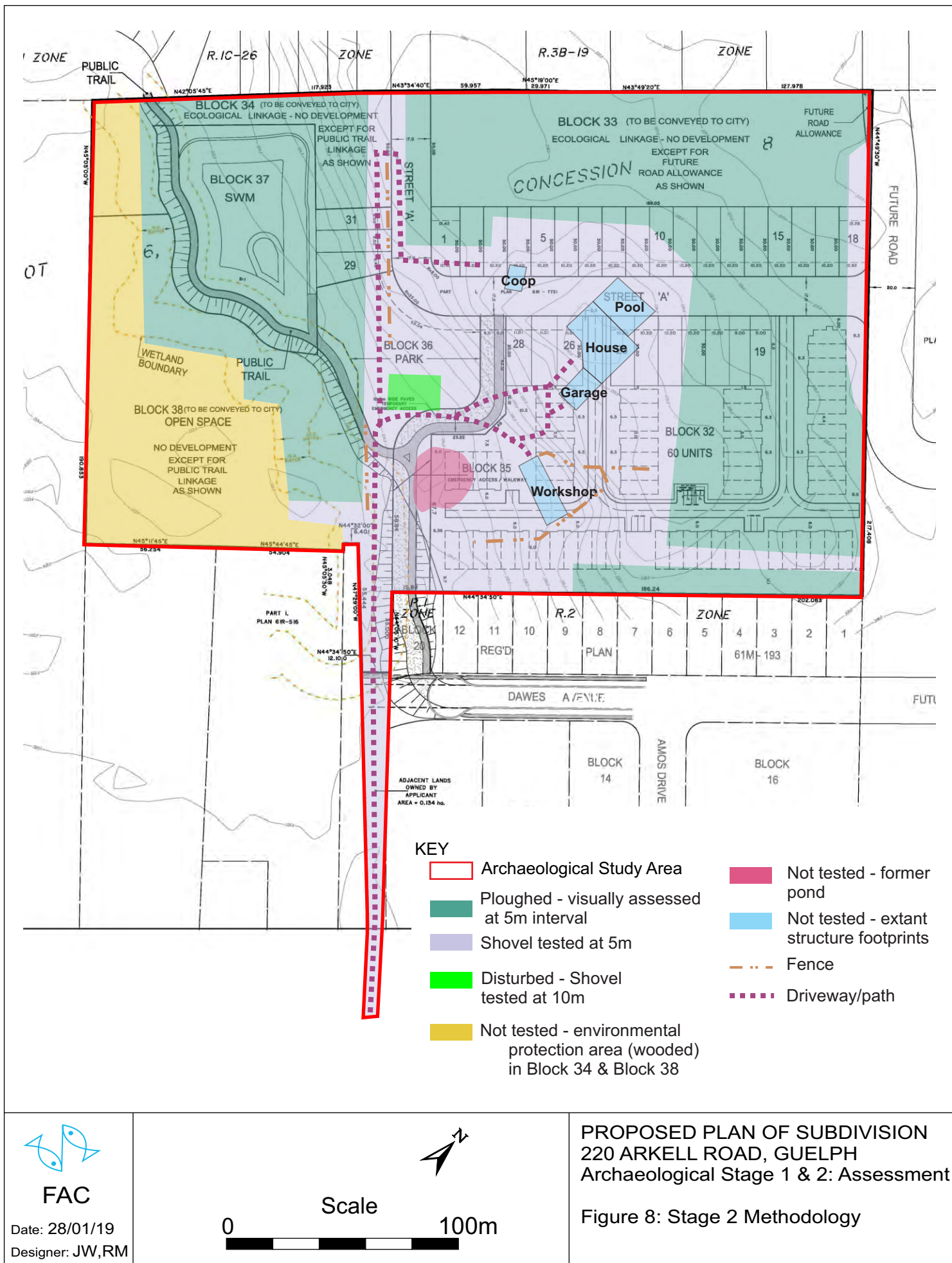
Study Area - Approximate



PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH  
Archaeological Stage 1 & 2: Assessment

Figure 7: Historic Aerial Views of the  
Study Area











Google Earth Image (13 April 2017)





FAC

Date: 4/01/19

Designer: JW, RM

# KEY

-  Study Area
-  Structure footprints
-  Photo arrow



## PROPOSED PLAN OF SUBDIVISION 220 ARKELL ROAD, GUELPH Archaeological Stage 1 & 2: Assessment

Figure 10: Stage 2 Assessment, Photographic  
Plates Location & Direction





**Plate 1:** Field conditions north of the house, showing stony soil, looking NE (Photo 0389).



**Plate 2:** Crew walking along northwestern edge of property boundary, looking N (Photo 0391).



**Plate 3:** Ploughed strip at SE edge of Study Area, hedgerow on right, subdivision on left is beyond the Study Area, looking SW (Photo 0403).



**Plate 4:** Crew field walking on west side of Study Area, looking S (Photo 0387).



**Plate 5:** Crew test pitting adjacent to the E side of the house, looking NW (Photo 7178).



**Plate 6:** Overview of the lawn on the E side of the house, looking NW (Photo 7130).





**Plate 7:** Crew test pitting the lawn east of the house, looking N (Photo 7135).



**Plate 8:** Overview of the former pond, recently re-excavated, to remove contaminated fill, looking N (Photo 0421).



**Plate 9:** Crew test pitting between the driveway and the gazebo, looking NW (Photo 133002).



**Plate 10:** Crew test pitting in an area of fill north of the former pond, looking W (Photo 7346).

**Plate 11:** Test pit showing layers of fill in disturbed area beside driveway, looking W (Photo 7282).



**Plate 12:** Crew test pitting on the SW side of the chicken coop, looking NW (Photo 7357).





**Plate 13:** Test pit showing fill in former ditch beside driveway, looking NW (Photo 7296).

**Plate 14:** Context for test pit beside driveway, looking NW (Photo 7339).



**Plate 15:** Crew test pitting NE of the workshop, looking N (Photo 7252).



**Plate 16:** Crew test pitting on SW side of the workshop, looking NW (Photo 105135).



**Plate 17:** Crew test pitting in wooded area SW of driveway, looking SW (Photo 7342).



**Plate 18:** Isolated find, biface, Catalogue No. L001 (Photo 5578).



**PROPOSED PLAN OF SUBDIVISION  
220 ARKELL ROAD, GUELPH, ONTARIO**

**ARCHAEOLOGICAL STAGE 1: BACKGROUND STUDY & STAGE 2: ASSESSMENT**

**APPENDIX A: PHOTOLOGUE**

<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
DSCF0378	24 July	Crew at beginning of field walking	S
0379	24 July	Field conditions of the first section showing good visibility and well weathered	W
0380	24 July	Crew field walking while showing ploughing conditions are consistent	E
0381	24 July	Close up of typical ground conditions in areas that have been ploughed	N
0382	24 July	Close up of plough cut into the ground, deep enough to show subsoil	SW
0383	24 July	Field conditions from north end of this section with field crew picking up transect flags	SE
0384	24 July	Field conditions from south east end of the north west section of ploughed field, consistently turned over with sufficient weathering and visibility	WSW
0385	24 July	Crew field walking at 5m intervals	SW
0386	24 July	Crew field walking at 5m intervals to the end of ploughed field	N
0387	24 July	Field conditions looking toward the south end of the field. Vast majority of the field is well over 80% visibility	S
0388	24 July	Crew field walking at 5m intervals	NE
0389	24 July	Field conditions north of the house, showing stony soil, as well as ploughed and weathered	NE
0390	24 July	Crew walking at 5m intervals along furrows	E
0391	24 July	Crew walking along northern edge of property boundary	N
0392	24 July	Field conditions north of the current house	SE
0393	24 July	Field conditions along largest section of Study Area	NW



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
0394	24 July	Field conditions adjacent to current house, this area will also become Location 1	E
0395	24 July	Grassy conditions at house, looks built up around the house but the area close to the ploughed field looks to be natural topography	E
0396	24 July	Grassy conditions adjacent to ploughed field, likely natural topography	ENE
0397	24 July	Crew field walking large section of ploughed field	NNE
0398	24 July	Field conditions showing mostly acceptable visibility and very good weathering	NW
0399-0400	24 July	Same spot showing conditions and furrows, as well as crew field walking	NE
0401	24 July	Crew field walking using furrows as transects	NW
0402	24 July	Ground water test site? Blue bar with lock in eastern corner of the field	NE
0403	24 July	Corridor between treeline and modern housing showing conditions and weathering	SW
0404	24 July	Same spot, showing the north east half of corridor having been ploughed and weathered	NE
0405	24 July	Crew field walking the eastern corridor	W
0406	24 July	Crew field walking the eastern corridor heading south west	SW
0407	24 July	Overgrown section, possibly sloped at southern end of corridor	SW
0408-09	24 July	Area initially marked as potential for ploughing remains under tall grass, may need to be shovel tested	S-SE
0410-11	24 July	Intensification around Location 1, a small scatter of modern bottle glass and ceramics	WSW
0412	24 July	Intensification around Location 1	W
0413	24 July	Location and context of Location 2	SE
0414-15	24 July	Other end of section that will require shovel testing adjacent to barn	ENE-NE
0416	24 July	Front lawn along driveway, unploughed. Also shows some kind of small disturbance enclosed with snow fencing	WSW



Photo #	Date (2018)	Description	Dir.
0417	24 July	Conditions of lawn, not ploughable but certainly shovel testable	SSW
0418	24 July	Pink property marker stake	SW
0419	24 July	Gazebo on grassy lawn with disturbance behind it	NW
0420	24 July	Lawn south west of silt fence, gently slopes down. May be landscaped	WNW
0421	24 July	Full view of disturbance with snow fencing	ENE
7123	7 Sept.	Crew digging beside ploughed field and fenced former paddock, north of the workshop.	W
7124	7 Sept.	Crew test pitting beside paddock, with propane tank in the background.	SW
7125-29	7 Sept.	Test pit 1, with context shot. Test pit 1 was located beside the ploughed field close to the paddock, and <b>[describe strat]</b> .	NW
7130	7 Sept.	Overview of lawn on E side of house. Shows the smoothly sloping lawn, which has probably been modified from its natural topography.	NW
7131	7 Sept.	Overview of improvements on the E side of the driveway. The fence on the N side of the workshop is visible in the background behind a concrete patio located beside the driveway.	S
7132	7 Sept.	Crew test pitting beside the fence on the N side of the workshop, E of the driveway.	SE
7133	7 Sept.	View along E side of the house looking towards the sloping lawn.	N
7134	7 Sept.	View of the driveway next to garage. Treed area E of the chicken coop is visible beyond the driveway.	W
7135	7 Sept.	Crew test pitting along the SW edge of the ploughed field, NE of the house.	W
7136	7 Sept.	View along the E side of the house, looking towards the top of the sloped area. The top of the slope appears unnaturally flat, and may have been filled in or levelled when the house was constructed.	S



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
7137	7 Sept.	View along the fence on the E side of the pool. The ploughed field is visible in the background, and a small shed is partially visible on the left.	NNW
7138-40	7 Sept.	Test pit 2, with context shot. Test pit 2 was located in the lawn, E of the pool and garden.	NW
7141	7 Sept.	Crew test pitting beside the ploughed field on the lawn N of pool.	SE
7142	7 Sept.	View of the N side of the house and pool with ploughed field in the foreground. Unnaturally level lawn is very evident in this photo.	S
7143	7 Sept.	View of the fence around the pool, and of the lawn on the N side of house. The ploughed field is visible in the foreground and the chicken coop in the background.	SW
7144	7 Sept.	View along the N side of the pool fence. A large boulder is visible at the NW corner, and the unnatural slope up to the pool fence is also evident.	W
7145	7 Sept.	View of a large boulder at the NW corner of the pool fence.	SSW
7146	7 Sept.	View of the lawn and fruit trees between the chicken coop and the west side of the house.	SSE
7147	7 Sept.	View of the lawn on the W side of pool.	E
7148	7 Sept.	Overview of the lawn and fruit trees on the W side of the house.	SE
7149	7 Sept.	Tree and rocks between the pool and ploughed field on the W side of the house.	ESE
7150	7 Sept.	NW side of the chicken coop, with ploughed field in the foreground.	SSE
7151	7 Sept.	Field track on the SE side of the ploughed field W of the chicken coop.	SSW
7152	7 Sept.	View of the ploughed field W of the chicken coop, with field track in the foreground.	SW
7153	7 Sept.	View along the SE side of the chicken coop, with unmortared wall in the background.	ENE



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
7154	7 Sept.	Treed area between the SE side of the chicken coop and the driveway beside the garage.	E
7155	7 Sept.	Grassy area SW of the chicken coop, with Bell marker in the centre. Root ball of the fallen conifer tree is just visible in the background.	S
7156	7 Sept.	Downed tree and black cloth fencing on the edge of the lawn SW of the chicken coop. Root ball of the fallen conifer tree is visible in the background.	SE
7157	7 Sept.	Overview of the lawn SW of the chicken coop, with decorative well. The decorative well hides a functional concrete well head.	ENE
7158	7 Sept.	Downed tree and black cloth fence on the edge of the lawn SW of the chicken coop.	NW
7159	7 Sept.	Overview of the field track extending from the main driveway along edge of a ploughed field. The field track starts at the point where the driveway bends to the NE.	WNW
7160	7 Sept.	View down driveway towards Arkell Road, from where the driveway bends to the NE to meet the house.	SE
7161	7 Sept.	View down driveway where it turns NE and heads towards the house.	NE
7162	7 Sept.	View of black cloth fence on the SW side of the contaminated soil pit, with the gazebo in the background.	E
7163	7 Sept.	Lawn between the driveway and the contaminated soil pit.	SE
7164	7 Sept.	Black cloth fence on the SW side of the contaminated soil pit, looking towards the driveway.	S
7165	7 Sept.	Overview of contaminated soil pit. The gazebo is visible in the background.	SE
7166	7 Sept.	W side of the contaminated soil pit, with black cloth fence in the foreground.	ENE
7167	7 Sept.	Contaminated soil pit with black cloth fence in the foreground. Gazebo is also visible.	E
7168	7 Sept.	Large rocks and trees on the N side of driveway where it bends to head towards the house. Black cloth fence beside the fallen conifer is visible in the background.	N



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
7169	7 Sept.	View of the driveway heading towards the house. The triangle of lawn surrounded by driveway is visible on the right, and the garage is visible in the background.	NNE
7170	7 Sept.	View of the driveway heading towards the workshop.	E
7171	7 Sept.	Overview of the driveway on the W side of the workshop. A large pile of stacked boulders is visible behind the basketball hoop.	NNE
7172	7 Sept.	View of the contaminated soil pit and gazebo from the north.	SSW
7173	7 Sept.	Lawn between the workshop and the contaminated soil pit. The paddock fence is visible in the background.	E
7174	7 Sept.	Overview of the driveway on the W side of the garage. The driveway appears to be cut into the natural slope on the side closest to the house.	N
7175	7 Sept.	Overview of the driveway on the S side of the garage.	NE
7176	7 Sept.	Crew test pitting on the E side of the house at the top of the sloped area.	S
7177	7 Sept.	Crew digging Test pit 3, beside the driveway and a small patio.	SE
7178	7 Sept.	Crew test pitting adjacent to the E side of the house.	NW
7179-81	7 Sept.	Test pit 3, with context shot. Test pit 3 was located beside the small stand-alone patio next to the driveway.	N
7201	17 Sept.	Crew test pitting in the lawn on the E side of house.	NW
7202	17 Sept.	Crew test pitting along ploughed field edge just north of paddock.	SE
7203	17 Sept.	Crew test pitting in paddock on the E side of the Study Area. The adjoining subdivision off Arkell Road is visible in the background.	SSW
7204	17 Sept.	Crew test pitting in paddock, with workshop in the background.	SSW
7205-09	17 Sept.	Test pit 4 (no context shot).	-



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
7210-17	17 Sept.	Test pit 5 (no context shot).	-
7218-22	17 Sept.	Test pit 6 (no context shot).	-
7223-24	17 Sept.	Crew digging in overgrown area on the E side of the paddock, with workshop in the background.	NW
7225-26	17 Sept.	Crew digging in the trees on the E edge of the Study Area.	SW
7227-31	17 Sept.	Test pit 7 (no context shot).	-
7232	17 Sept.	Crew digging in the trees on the E edge of the Study Area.	NW
7233-41	17 Sept.	Test pit 8 (no context shot).	-
7242	17 Sept.	Crew digging in the trees on the E edge of the Study Area.	NE
7243-45	17 Sept.	Dense brush and trees and the remains of an electric fence on the E edge of the paddock.	NNE
7246	18 Sept.	Crew test pitting in the workshop yard, with paddock in the background.	SE
7247	18 Sept.	Overview of the workshop yard, looking towards the driveway. Dense plant growth along the workshop is visible on the left side.	WNW
7248-51	18 Sept.	Test pit 9, with context shot. Test pit 9 was located in the SE corner of the workshop yard.	NNE
7252	18 Sept.	Crew test pitting in workshop yard, showing piles of debris.	NW
7253	18 Sept.	Overview of workshop yard showing dense vegetation, looking towards the paddock.	ESE
7254	18 Sept.	Large animal burrow and stacked wood in the workshop yard beside the paddock fence.	NNE
7255	18 Sept.	Crew test pitting just outside the SW end of the paddock. The dense vegetation in this area is characteristic of disturbed areas.	SW
7256	18 Sept.	Overview of ATV track at the S end of the Study Area, near the driveway. Subdivision off Arkell Road is visible in the background.	NE



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
7257	18 Sept.	Crew test pitting along the ATV track. One of the flags for the Hydro line is visible in the foreground.	NE
7258	18 Sept.	Crew test pitting in the woods beside the ATV track.	NW
7259	18 Sept.	Crew test pitting along the north side of the driveway, close to Pole #1.	E
7260-66	18 Sept.	Test pit 12, with context shot. Test pit 12 was located on the north side of the driveway, close to Pole #1.	W
7267-71	18 Sept.	Test pit 11, with context shot. Test pit 11 was located on the north side of the driveway close to Pole #1.	NNE
7272	18 Sept.	Crew test pitting along the S side of the driveway, close to the main Study Area.	SE
7273-78	18 Sept.	Test pit 13, with context shot. Test pit 13 was located on the S side of the driveway across from the ATV track.	NW
7279	18 Sept.	Crew test pitting in an area of fill where the driveway meets a field track as it bends north to head towards the house.	NW
7280-85	18 Sept.	Test pit 14, with context shot. Test pit 14 was located close to the intersection of the driveway with a field track, where the driveway bends to head towards the house.	W
7286	19 Sept.	Crew test pitting along the N side of the driveway close to Pole #2.	NW
7287-92	19 Sept.	Test pit 15, with context shot. Test pit 15 was located on the N side of the driveway close to Pole #2.	NW
7293-97	19 Sept.	Test pit 16, with context shot. Test pit 16 was located on the N side of the driveway, between Pole #2 and 3.	NW
7298-302	19 Sept.	Test pit 17, with context shot. Test pit 17 was located on the N side of the driveway, close to Pole #3.	NW
7303-07	19 Sept.	Test pit 18 (no context shot).	-
7308-13	19 Sept.	Test pit 19, with context shot. Test pit 19 was located between Pole #3 and 4 on the N side of the driveway.	NW
7314	19 Sept.	Crew test pitting on the N side of the driveway close to Arkell Road.	SE



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
7315-20	19 Sept.	Test pit 20, with context shot. Test pit 20 was located on the N side of the driveway between Pole #3 and 4.	NW
7321-26	19 Sept.	Test pit 21, with context shot. Test pit 21 was located on the S side of the driveway, close to Arkell Road.	NW
7327-32	19 Sept.	Test pit 22, with context shot. Test pit 22 was located on the S side of the driveway.	NW
7333-38	19 Sept.	Test pit 23, with context shot. Test pit 23 was located on the S side of the driveway in a built-up area.	WNW
7339	19 Sept.	Crew test pitting on the S side of the driveway.	SE
7340	19 Sept.	Crew test pitting at the NW limit of the Study Area.	NW
7341	19 Sept.	Field track along the NW edge of the ploughed field close to the NW limit of the Study Area.	NE
7342	19 Sept.	Crew test pitting in the woods at the W limit of the Study Area.	NE
7343	19 Sept.	Crew test pitting in the woods near the intersection of the driveway and field track. The lawn S of the chicken coop is just visible in the background on the left side of the photograph.	SE
7344-45	19 Sept.	Crew test pitting in the woods near large fallen conifer in the lawn S of the chicken coop.	S
7346	19 Sept.	Crew test pitting in an area of fill beside the driveway.	W
7347	20 Sept.	Crew test pitting in the lawn S of the chicken coop.	NW
7348-51	20 Sept.	Test pit 24, with context shot. Test pit 24 was located in the lawn S of the chicken coop.	NW
7352-55	20 Sept.	Test pit 25, with context shot. Test pit 25 was located in the lawn S of the chicken coop.	NW
7356	20 Sept.	Crew test pitting in the lawn S of the chicken coop. The decorative well is visible in the background.	SSW
7357	20 Sept.	Crew test pitting on the SW side of the chicken coop.	N
7358	20 Sept.	Crew test pitting on the field track W of the chicken coop.	NE



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
20180921_083357	21 Sept.	Crew test pitting close to the gazebo.	N
102556-102643	21 Sept.	Test pit 26, with context shot.	
105135	21 Sept.	Crew test pitting within 1m of the workshop on the S side.	N
115118-115149	21 Sept.	Test pit 27, with context shot.	
125041	21 Sept.	Crew test pitting between the workshop driveway and adjacent trees.	E
133002	21 Sept.	Crew test pitting between the driveway and the gazebo.	ENE
135758-135801	21 Sept.	Crew member with chicken in their screen.	-
141826	21 Sept.	Crew test pitting S of the contaminated soil pit.	SE
DSCF7359	22 Sept.	Crew test pitting in the triangle of lawn in the middle of the driveway.	SW
7360-65	22 Sept.	Test pit 28, with context shot. Test pit 28 was located S of the driveway and the garage.	N
7366	22 Sept.	Crew test pitting on the NW side of the chicken coop.	WSW
7367	22 Sept.	Crew test pitting beside the garden on the W side of the house.	SE
7368-72	22 Sept.	Test pit 29, with context shot. Test pit 29 was located on the NE side of the chicken coop.	NNW
7373	22 Sept.	Crew test pitting in the lawn between the pool and the chicken coop.	SSW
7374	22 Sept.	Large boulders at the NW corner of the pool fence.	SE
7375	22 Sept.	Piled rocks on the W side of the pool fence.	E
7376	22 Sept.	Crew test pitting N of the pool.	E



<b>Photo #</b>	<b>Date (2018)</b>	<b>Description</b>	<b>Dir.</b>
7377	22 Sept.	Crew test pitting in the woods on the NE edge of the Study Area.	SE
7378	22 Sept.	Crew test pitting on the edge of the woods on the NE edge of the Study Area.	ESE
7379	22 Sept.	Crew test pitting in the woods close to the E corner of the Study Area.	NW
7380	22 Sept.	View of the house from the NE edge of the Study Area.	SW