

ARCHEOWORKS INC.

Stage 1-2 Archaeological Assessment (AA) of:

6586 Beatty Line

Part of Lot 17, Concession 14

Town of Fergus

Geographic Township of Nichol

Wellington County

Ontario

Project #: 116-8107-07

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PIF#: P029-377-2007

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Presented to:

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Executive Summary

Archeoworks Inc. was retained by *Sorbara Development Group*, of Vaughan, Ontario, to conduct a Stage 1-2 archaeological assessment of 6596 Beatty Line, located within part of Lot 17, Concession 14, in the Geographic Township of Nichol, Town of Fergus, County of Wellington. The study area measures approximately 112 acres in size.

The Stage 1-2 survey, reported herein, was conducted under the project and field direction of Ms. Kim Slocki, in accordance with the *Ontario Heritage Act* (1990) under an archaeological consulting licence (P029) issued to Kim Slocki. Permission to enter this property in order to conduct archaeological field activities, including the recovery of artifacts was granted on April 5th, 2007.

The background research of the property has determined that the closest registered archaeological sites are located approximately 3000 metres to the south of the study area. The *Ministry of Tourism, Culture and Recreation* (now the *Ministry of Culture*) primer on archaeology, land use planning and development in Ontario stipulates that undisturbed lands within 300 metres of a primary water source, and undisturbed lands within 200 metres of a secondary water source, are considered to be of high archaeological potential (1997: pp. 12-13). As such, with a tributary of Irvine Creek bisecting the study area and another flowing less than 100 metres from the southwest boundary, we find significant potential for the location and recovery of Aboriginal archaeological resources within 200 metres of these watercourses.

A review of the study area within the *1877 Illustrated Historical Atlas of Wellington County* has indicated that it was inhabited by J. Duguid. The study area is bisected by an historic railway system; however, no structures are illustrated within the study area limits. As such, there is low potential for locating historical remains within the study area.

The Stage 2 archaeological assessment involved a test-pit survey of approximately 18.2 acres and a pedestrian survey of approximately 80.12 acres of land, complying with the *Final Draft: Standards and Guidelines for Consulting Archaeologists* (2006), published by the *Ministry of Culture*. The remaining 13.68 acres of land, comprising a bisecting tributary of the Irvin Creek and, an existing house and railway system, were wet and disturbed and, thus, not subject to survey. Despite careful scrutiny, no archaeological remains were encountered during the test-pit and pedestrian survey; as such, the subject lands are considered free from archaeological concern.

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Introduction

Archeoworks Inc. was retained by *Sorbara Development Group*, of Vaughan, Ontario, to conduct a Stage 1-2 archaeological assessment of 6596 Beatty Line, located within part of Lot 17, Concession 14, in the Geographic Township of Nichol, Town of Fergus, County of Wellington. The study area measures approximately 112 acres in size (*see Figure 1*).

The Stage 1-2 survey, reported herein, was conducted under the project and field direction of Ms. Kim Slocki, in accordance with the *Ontario Heritage Act* (1990) under an archaeological consulting licence (P029) issued to Kim Slocki. Permission to enter this property in order to conduct archaeological field activities, including the recovery of artifacts was granted on April 5th, 2007.

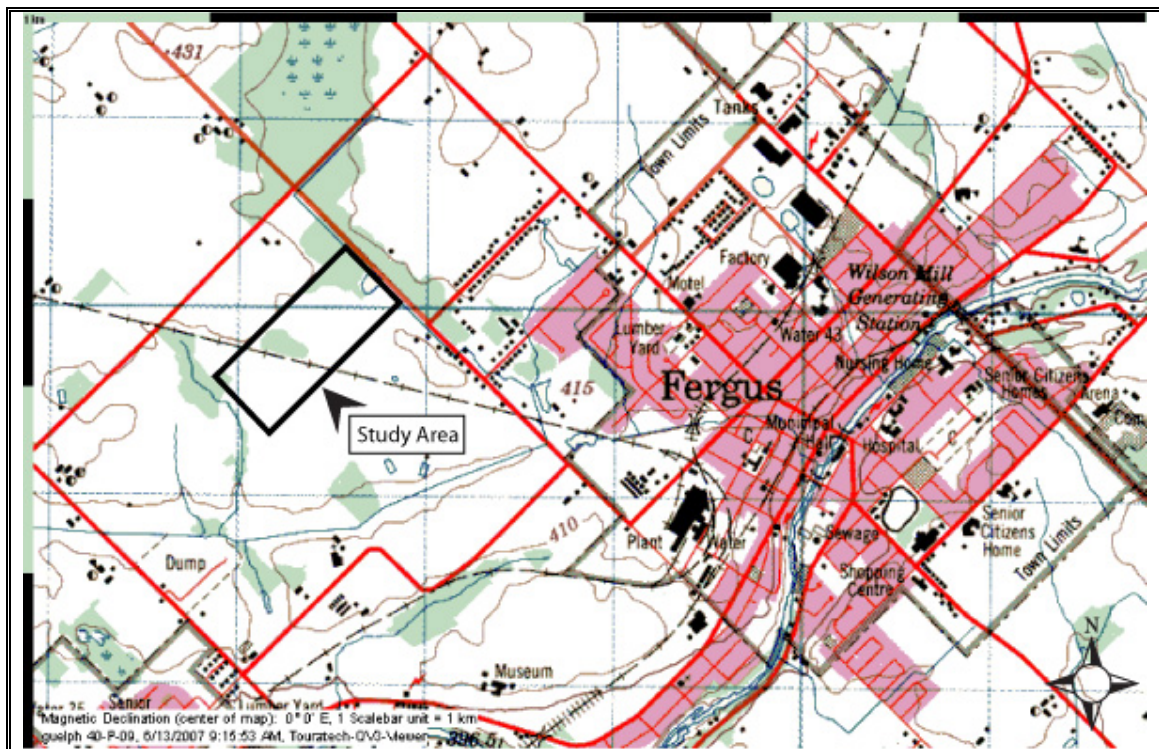


Figure 1: 1:50,000 Map Identifying Location of Study Area (Guelph 40 P/09)

1) Registered Archaeological Sites

In order that an inventory of archaeological resources could be compiled for the study area, the site record forms for registered sites housed at the *Ministry of Culture (MCL)* were consulted. Each site is registered according to the Borden System, which is an archaeological numbering system used throughout Canada to track archaeological sites and the artifacts that come from them. The specific study area under review is located within Borden Block AkHc and according to the *Ministry of Culture* site registry files, the closest encountered registered archaeological sites were located approximately 3000 metres to the south of the study area and consist of two Aboriginal findspots dating to the Archaic period. This small number of documented sites located a far distance from the study area may be more a result of the lack of archaeological surveying within the immediate area than a paucity of past human activity and associated archaeological remains.

Thus, it is still useful to provide the cultural history of the occupation in Southern Ontario (*see Table 1*), to offer a glimpse at what may be encountered during a Stage 2 field investigation.

Table 1: History of Occupation in Southern Ontario

Period	Archaeological Culture	Date Range	Attributes
PALEO-INDIAN			
Early	Gainey, Barnes, Crowfield	11,000 - 10,400 BP	Small nomadic hunter-gatherer bands. Fluted projectile points
Late	Holcombe, Hi-Lo, Lanceolate	10,400 - 9,500 BP	Small nomadic hunter-gatherer bands. Lanceolate projectile points
ARCHAIC			
Early	Side-notched, corner notched, bifurcate-base	9,500 – 8,000 BP	Small nomadic hunter-gatherer bands; first notched and stemmed points, and ground stone celts.
Middle	Otter Creek , Brewerton	8,000 – 4,500 BP	Small territorial hunter-gatherer bands; wider variety of ground stone tools; first copper tools; bone tools
Late	Narrow, Broad and Small Points Normanskill, Lamoka, Genesee, Adder Orchard etc.	4,500 – 2,800 BP	More numerous territorial hunter-gatherer bands; increasing use of exotic materials and artistic items for grave offerings; regional trade networks
WOODLAND			
Early	Meadowood, Middlesex	2,800 – 2,000 BP	Introduction of pottery, burial ceremonialism; pan regional trade networks
Middle	Point Peninsula	2,000 – 1,200 BP	Cultural and ideological influences from Ohio Valley complex societies; incipient horticulture
Late	Algonquian, Iroquoian	1,200 - 700 BP	Transition to larger settlements and agriculture
	Algonquian, Iroquoian	700 – 600 BP	Establishment of large palisaded villages (Iroquoian)

	Algonquian, Iroquoian	600 – 400 BP	Tribal differentiation and warfare (Iroquoian)
HISTORIC			
Early	Huron, Odawa, Algonquin	AD 1600 – 1650	Tribal displacements
Late	Six Nations Iroquois, Ojibway, Algonquin	AD 1650 – 1800s	Migrations and resettlement
	Euro-Canadian	AD 1800 - present	European immigrant settlements

2) Physiographic Description and Precontact Potential

An investigation of the study area's physiography was conducted by reviewing *The Physiography of Southern Ontario (3rd Edition)*, a volume published by the *Ministry of Natural Resources* and authored by L.J. Chapman and D.F. Putnam. This investigation is conducted to aid the researcher in developing an argument for archaeological potential based on the environmental conditions of each subject property. Environmental factors such as close proximity to water, soil type, and nature of the terrain, for example, can be used as predictors to determine where human occupation may have occurred in the past.

The study area is situated within the Guelph Drumlin Field physiographic region of Southern Ontario. Within this area, including parts of the Regional Municipalities of Hamilton-Wentworth, Waterloo, and Halton and part of Wellington County, there are approximately 300 drumlins of all sizes. For the most part these hills are of the broad oval type. The drumlins of this field are not as closely grouped as those of some other areas and there is more intervening low ground, which is largely occupied by fluvial materials. The till in these drumlins is loamy and calcareous, and was derived mostly from dolostone of the Amabel Formation. In addition it contains fragments of underlying red shale. The till throughout is rather stony, with large surface boulders being more numerous in some localities than others (Chapman & Putnam, 1984).

In terms of archaeological potential, potable water is arguably the single most important resource necessary for any extended human occupation or settlement. As water sources have remained relatively stable in southern Ontario since post-glacial times, proximity to water can be regarded as a useful index for the evaluation of archaeological site potential. Indeed, distance from water has been one of the most commonly used variables for predictive modeling of site location. In fact, the *Ministry of Tourism, Culture and Recreation* (now the *Ministry of Culture*) primer on archaeology, land use planning and development in Ontario stipulates that undisturbed lands within 300 metres of a primary water source, and undisturbed lands within 200 metres of a secondary water source, are considered to be of high archaeological potential (1997: pp. 12-13). As such, with a tributary of Irvin Creek flowing less than 100 meters from the southwestern boundary of the study area and another tributary of the same creek bisecting the study area at the northeastern boundary, we find significant potential for the location and recovery of Aboriginal archaeological resources within 200 metres of these watercourses, in undisturbed locations.

3) Historical Context and Potential

To assess a study area's potential for the recovery of historic remains, several documents are reviewed in order to gain an understanding of the land-use history. These specifically include the *Illustrated Historical Atlases* for the Counties of Ontario.

The study area comprises part of Lot 17, Concession 14, within the Township of Nichol (now in the Town of Fergus), Wellington County (*see Figure 2*). A review of the study area within the 1877 *Illustrated Historical Atlas of Wellington County* has indicated that it was inhabited by J. Duguid. The study area is bisected by an historic railway system; however, no structures are illustrated within the study area limits. As such, there is low potential for locating historical remains within the study area based on a review of this source.

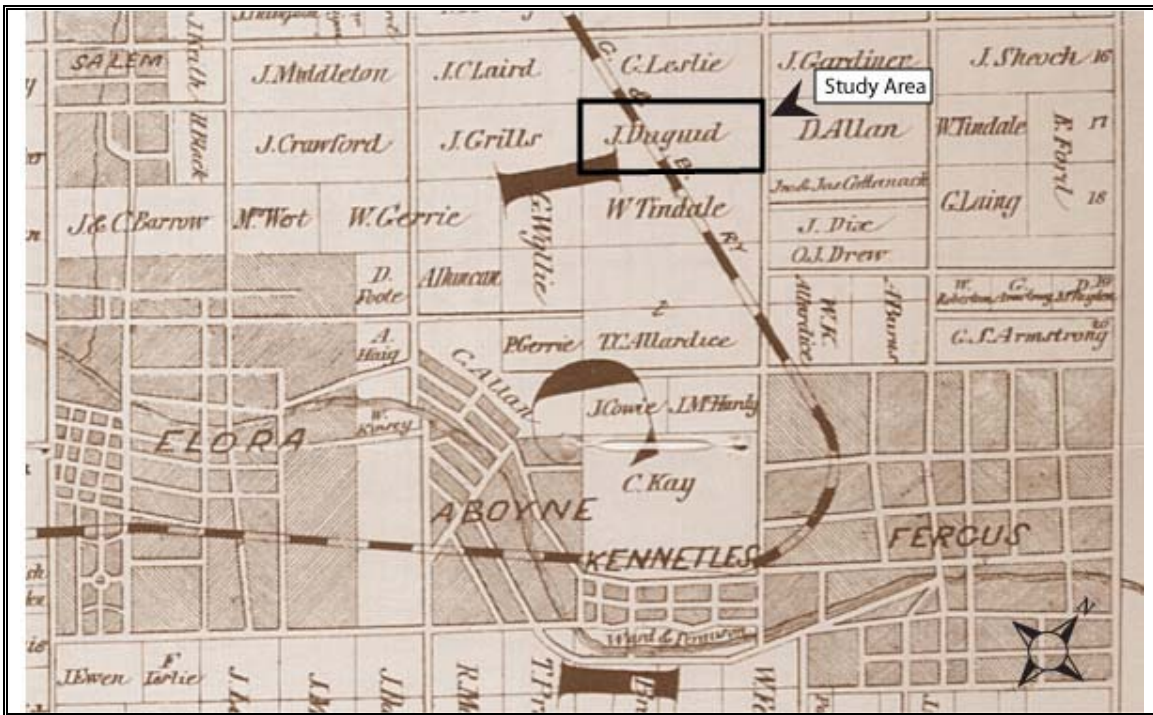


Figure 2: 1877 Historical Map of Study Area

4) Field Review

Stage 2 archaeological fieldwork was undertaken on October 14-16, 2008 to identify and describe any archaeological resources extant within the study area, prior to any construction activities. The weather during the Stage 2 assessment was a mixed of light rain and sunny periods, with temperatures reaching a high of 18°C.

Of the 112 acres of land to survey, a total of approximately 13.67 acres of land were not systematically assessed due to their disturbed or physiographic conditions. Of the 13.67 acres of land, 3.47 acres were comprised of an existing house, its associated gravel driveway; the remains of concrete foundation and an historic railway system (*see Figure 3, Plates 1-3*). The remainder of the unassessed lands were comprised of low-lying and wet physiographic conditions associated with a tributary of the Irvin Creek (*see Figure 3, Plate 4*).

The undisturbed lands, comprising fallow herbaceous areas, woodlots, grassed lawns surrounding the existing house and agricultural fields, were subjected to either a shovel test-pit or pedestrian form of survey, complying with the *Final Draft: Standards and Guidelines for Consulting Archaeologists* (2006), published by the *Ministry of Culture*.

Approximately 18.2 acres of fallow herbaceous areas, woodlots, and grassed lawns, were subjected to a shovel test-pit survey at survey intervals of five metres, due to the established high potential for encountering Aboriginal archaeological remains (*see Figure 3, Plates 5*). Shovel test-pit surveys are defined as excavating 30x30cm units at set intervals of five metres on a grid pattern in areas requiring this form of assessment. Approximately 2821 test-pits were excavated to sterile subsoil depths of 20-40 centimetres and the topsoil was screened through six-millimetre mesh in order to facilitate the recovery of artifacts. All test-pits were backfilled. Despite careful scrutiny, no archaeological remains were encountered during the test-pit survey.

The remaining 80.13 acres consisted entirely of agricultural fields that were either ploughed or uncropped. As the visibility of the soil and field conditions in all fields was excellent, these areas were subjected to a pedestrian form of survey at survey intervals of five metres (*see Figure 3, Plates 6-7*). Despite careful scrutiny, no archaeological remains were encountered during the pedestrian survey.

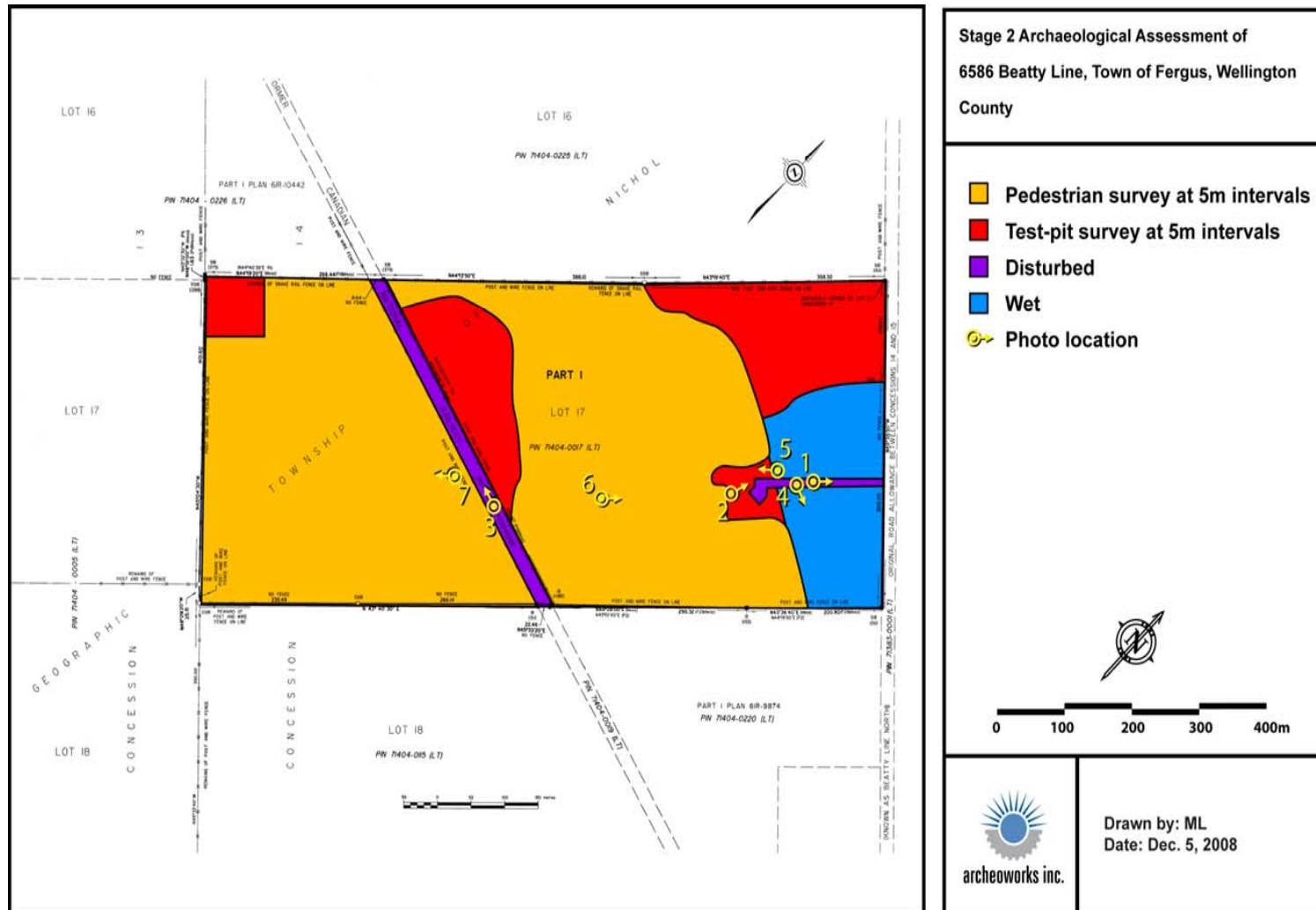


Figure 3: Stage 2 Archaeological Assessment

5) Conclusions & Recommendations

During the Stage 1-2 archaeological assessment of 6586 Beatty Line, within part of Lot 17, Concession 14, in the Town of Fergus, Geographic Township of Nichol, Wellington County, no archaeological remains were encountered. As a result of these findings, it is recommended that:

1. The subject lands be considered free from archaeological concern.
2. This report is filed with the Minister of Culture in compliance with Section 65 (1) of the *Ontario Heritage Act*. The ministry reviews reports to ensure that the licensee has met the terms and conditions of the licence and archaeological resources have been identified and documented according to the standards and guidelines set by the ministry, ensuring the conservation, protection and preservation of the heritage of Ontario. It is recommended that development not proceed before receiving confirmation that the *Ministry of Culture* has entered the report into the provincial register of reports.
3. Should previously unknown or unassessed deeply buried archaeological resources be uncovered during development, 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 archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*. The office of the Heritage Operations Unit, *Ministry of Culture* (519-675-7742) should be contacted immediately.
4. Any person discovering human remains must immediately notify the office of the Heritage Operations Unit, *Ministry of Culture* (519-675-7742), the police or coroner and the Registrar of Cemeteries, *Ministry of Government Services* (416-326-8404).

Under Section 6 of Regulation 881 of the *Ontario Heritage Act*, *Archeoworks Inc.* will, “keep in safekeeping all objects of archaeological significance that are found and all field records that are made.”

6) Bibliography

Chapman, L. J. and Putnam, D. F.

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**Appendix A:
Photos**



Plate 1: Looking northeast at paved driveway by existing house.



Plate 2: Looking north at the remains of a concrete foundation.



Plate 3: Looking west at the former location of an historic railway system.



***Plate 4:** Looking east at the tributary of the Irvin Creek which bisects the study area and its associated low-lying and wet lands.*



***Plate 5:** Looking southwest at test-pitting of grassed field by the remains of the concrete foundation.*



***Plate 6:** Looking northeast at pedestrian survey of ploughed agricultural field.*



Plate 7: Looking southwest at pedestrian survey of uncropped agricultural field.