



April 2010



STAGE 1 ARCHAEOLOGICAL ASSESSMENT

Camrock Development Corporation
5783 Bloomington Road
Part of Lot 10, Concession 8
Town of Whitchurch-Stouffville
Regional Municipality of York

Submitted to:
Camrock Development Corporation
c/o SCS Consulting Group
30 Centurian Drive, Suite 100
Markham, ON
L3R 8B8
Tel: (905) 475-1900 Fax: (905) 475-8335

REPORT



**A world of
capabilities
delivered locally**

PIF Number P243-048-2010

Report Number: 09-1112-6163-R01

Distribution:

- 4 Copies - Camrock Development Corporation
- 3 Copies - Ontario Ministry of Culture
- 2 Copies - Golder Associates Ltd.





Executive Summary

Golder Associates Ltd. completed a Stage 1 archaeological assessment on behalf of Camrock Development Corporation for an approximately 100 hectare site located at 5783 Bloomington Road, part of Lot 10 Concession 8, Town of Whitchurch-Stouffville, in the Regional Municipality of York. This Stage 1 archaeological assessment was undertaken to meet the requirements of a filling permit application to the Municipality of York. The project location is divided into three distinct phases based on the timing of filling permit submission and on future potential development.

The objective of the Stage 1 assessment was to compile available information about the known and potential cultural heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources, consistent with Ministry of Culture guidelines (Government of Ontario 1993).

Golder Associates Ltd. applied archaeological potential criteria commonly used by the Ontario Ministry of Culture to determine areas of archaeological potential within the study area. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. However, background research on the study area resulted in the determination that the proposed area has been previously disturbed by 20th century development impacts. Phase 1 and 2 of the project location have been extensively disturbed by gravel extraction and were determined to have no archaeological potential and will not require archaeological field assessment. Phase 3 of the project location has also been partially disturbed by gravel extraction and also exhibits areas characterized as wetlands. These identified areas were determined to have no archaeological potential and will not require archaeological field assessment. A Stage 2 archaeological assessment is recommended in the Phase 3 section of the project location for all remaining areas determined not previously disturbed that may be impacted by future potential development.

As further archaeological assessment is recommended, the Ontario Ministry of Culture is asked to review the results in this report and issue a letter of concurrence with the findings herein. A partial letter of clearance is requested at this time for the Phase 1 and Phase 2 sections of the project location.



Table of Contents

1.0 PURPOSE.....	1
2.0 STUDY METHODS	3
3.0 BACKGROUND RESEARCH.....	4
3.1 The Natural Environment.....	4
3.2 Previously Known Archaeological Resources and Surveys.....	4
3.3 Historic Site Research	7
3.4 Visual Evaluation	11
4.0 RESULTS	19
4.1 Potential for Pre-contact Aboriginal Archaeological Sites	19
4.2 Potential for Historic Archaeological Sites	19
5.0 SUMMARY AND RECOMMENDATIONS.....	21
6.0 REFERENCES CITED	22
7.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT	24

TABLES

Table 1: Cultural Chronology for the Regional Municipality of York	4
Table 2: Archaeological Sites Within One Kilometre of the Study Area	5
Table 3: Historic Properties According to the 1878 <i>Illustrated Historical Atlas of the County of York</i>	8

FIGURES

Figure 1: Location of Study Area.....	2
Figure 2: Portion of the Soil Map of York County	6
Figure 3: Treaty Boundaries Based on Morris 1943.....	9
Figure 4: Portion of the 1878 Historic Map of the Township of Whitchurch.....	10
Figure 5: Photographic Key	12
Figure 6: 1978 Aerial View of Study Area	17
Figure 7: Topographic Survey of Northwestern section of Property, Phase 1 of Development.....	18



STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

PLATES

Plate 1: Facing west overlooking pond, eastern edge of study area	13
Plate 2: Northeastern view of study area showing previous gravel quarry after remediation	13
Plate 3: Facing Bloomington Road, northwestern edge of study area overlooking remediated pasture lands and sloping.....	14
Plate 4: Facing west-southwest overlooking horse paddocks, outbuildings, and remediated pasture lands - northeastern edge of study area.....	14
Plate 5: House and associated driveway, northern edge of study area.....	15
Plate 6: Outbuilding and associated disturbance, northeastern edge of study area.....	15
Plate 7: Facing south, western edge of study area	16
Plate 8: Facing west-northwest, southeastern edge of study area	16



Acknowledgments

Acknowledgments	Ivo Battistella, Camrock Development Corp.; Julia Risi, SCS Consulting Group, Markham
Project Manager	Carla Parslow, Ph.D.
Licensed Project Director	Carla Parslow, Ph.D.
Report Production	Irena Jurakic, M.A.
Senior Review	Carla Parslow, Ph.D., Rebecca Balcom, M.A., Principal
Proponent Contact	Ivo Battistella, Camrock Development Corp.; Julia Risi, SCS Consulting Group, Markham
Ministry of Culture	Robert Von Bitter, Malcolm Horne

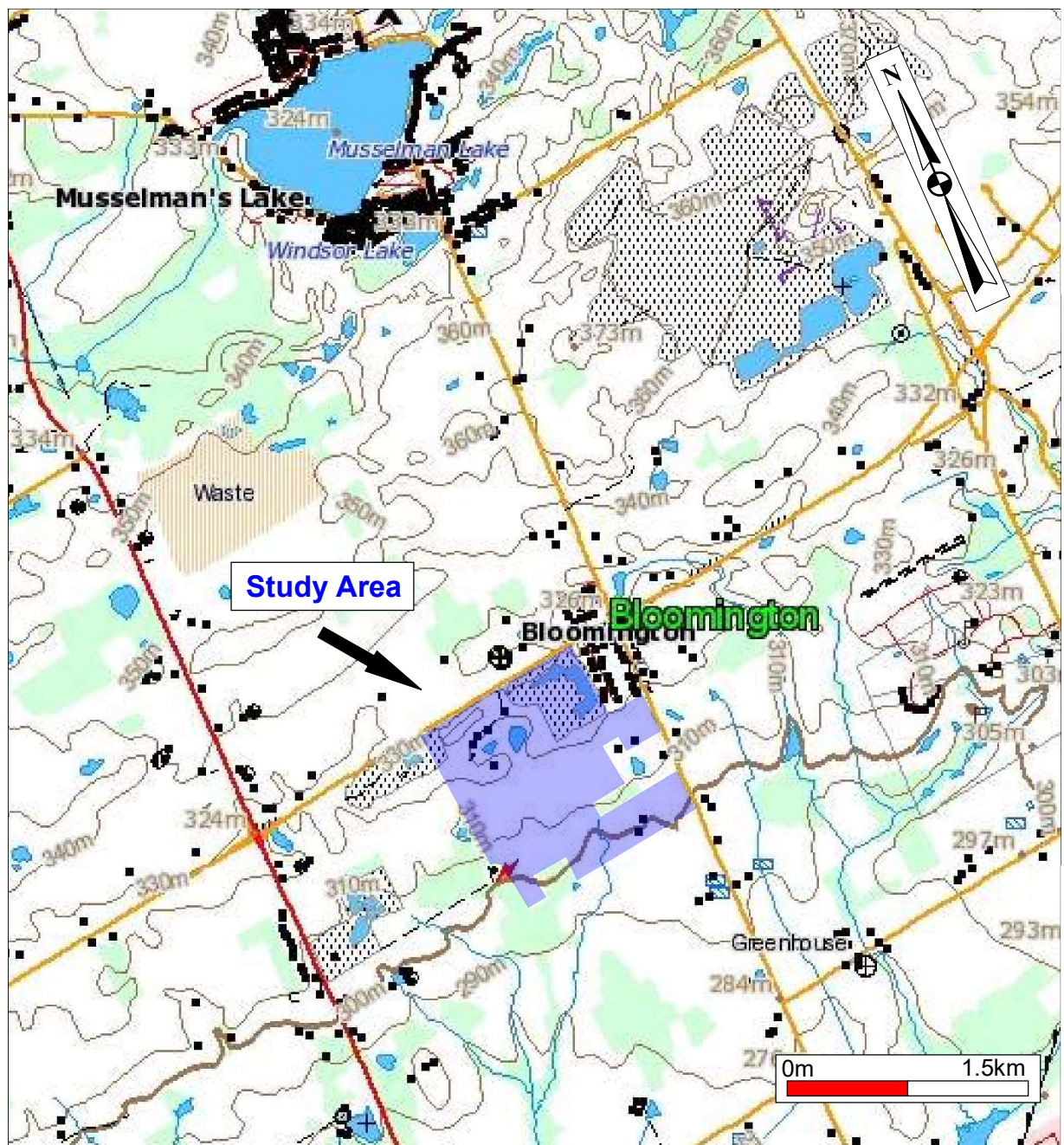


STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

1.0 PURPOSE

Golder Associates Ltd. (Golder) completed a Stage 1 archaeological assessment on behalf of Camrock Development Corporation for an approximately 100 hectare site located at 5783 Bloomington Road, part of Lot 10 Concession 8, Town of Whitchurch-Stouffville, in the Regional Municipality of York (Figure 1). This Stage 1 archaeological assessment was undertaken to meet the requirements of a filling permit application to the Municipality of York. The project location is divided into three distinct phases based on the timing of filling permit submission and on future potential development.

The objective of the Stage 1 assessment was to compile available information about the known and potential cultural heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources, consistent with Ministry of Culture guidelines (Government of Ontario 1993).



LEGEND

Study Area

REFERENCE

DRAWING BASED ON
Government of Canada
1988 *Topographic Map Sheet 31D/3: Newmarket (Edition 5)*.
Centre for Topographic Information, Natural Resources
Canada, Ottawa.

NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ
IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 1 Archaeological Assessment Camrock Development Corporation Town of Whitchurch-Stouffville, R.M. of York, ON	
TITLE		Location of Study Area	
		PROJECT No.	09-1112-6163
		FILE No.	0911126163-R01001
		SCALE	AS SHOWN REV.
CADD		IJ	Jan 20/10
CHECK			
		FIGURE 1	

Battistella Property



Site is on South side Bloomington, between Highway 48 and Ninth Line in Stouffville.
 Intention is to fill Phase 1 at this time, in conjunction with adjacent site works (see dashed line).
 Following Phase 1 works, permit package to be assembled for Phase 2 area.
 Ultimate plan may be to develop entire site area.





2.0 STUDY METHODS

In compliance with the provincial regulations and standards set out in the *Archaeological Assessment Technical Guidelines* (Government of Ontario 1993), the Stage 1 Archaeological Overview/Background Study included:

- a review of the land use history, including pertinent historical, environmental, and archaeological data, to determine areas of archaeological potential within the corridor;
- an examination of the National Site Registration Database to determine the presence of known archaeological sites in and around the project area; and
- a visual evaluation of the study corridor.

In addition to the visual evaluation of the subject property, background research was conducted at the Ministry of Culture Office in Toronto, the McGill University Digital Library, and the corporate library of Golder Associates Limited.



3.0 BACKGROUND RESEARCH

3.1 The Natural Environment

The study area is located in the town of Whitchurch-Stouffville, in the Regional Municipality of York. The study area includes approximately 100 hectares on part of Lot 10, Concession 8. The subject property is situated within the Oak Ridges Moraine physiographic region (Chapman and Putnam 1984: 166-169):

Its general altitude is about 1,000 feet a.s.l. and it extends from the Niagara Escarpment to the Trent River, forming the height of land dividing the streams of the Lake Ontario drainage basin from those flowing into Georgian bay and the Trent River. The surface is hilly with a knob-and-basin relief typical of end moraine. While for the most part, these hills are composed of sandy or gravelly materials,... [some] are formed of till which protrudes above the sands.

(Chapman and Putnam 1984:166-167)

The study area is situated directly atop a gravel pit (Figure 2). The soils of the study area are classified as a Woburn Loam. This soil type is typical on smooth and moderately sloping topographies. This loamy soil would have been suitable for pre-contact Aboriginal agriculture given its good drainage and modern agricultural capability ratings (Hoffman and Richards 1955: 33-34). The nearest potable water sources are three unnamed tributaries of Little Rouge Creek 600 metres to the south. Larger bodies of water such as Musselman's Lake and Windsor Lake lie 2.5 kilometres to the north. Two large ponds are present in the northeastern portion of the study area, but these are a result of 20th century gravel extraction and are not naturally occurring.

3.2 Previously Known Archaeological Resources and Surveys

Previous archaeological assessments and research surveys in the Regional Municipality of York have demonstrated that the area was intensively utilized by pre-contact Aboriginal peoples. Table 1 summarizes the culture history of Regional Municipality of York, based on Ellis and Ferris (1990). According to the Ontario Archaeological Site Database (OASD), of the total 10 known archaeological sites within one kilometre of the study area (Table 2), eight are pre-contact Aboriginal in nature and one is multi-component (personal communication, R. von Bitter January 27th, 2010). Given the proximity of tributaries of the Little Rouge Creek and the registered Aboriginal sites, the potential for pre-contact Aboriginal archaeological resources was judged to be moderate to high.

Table 1: Cultural Chronology for the Regional Municipality of York

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



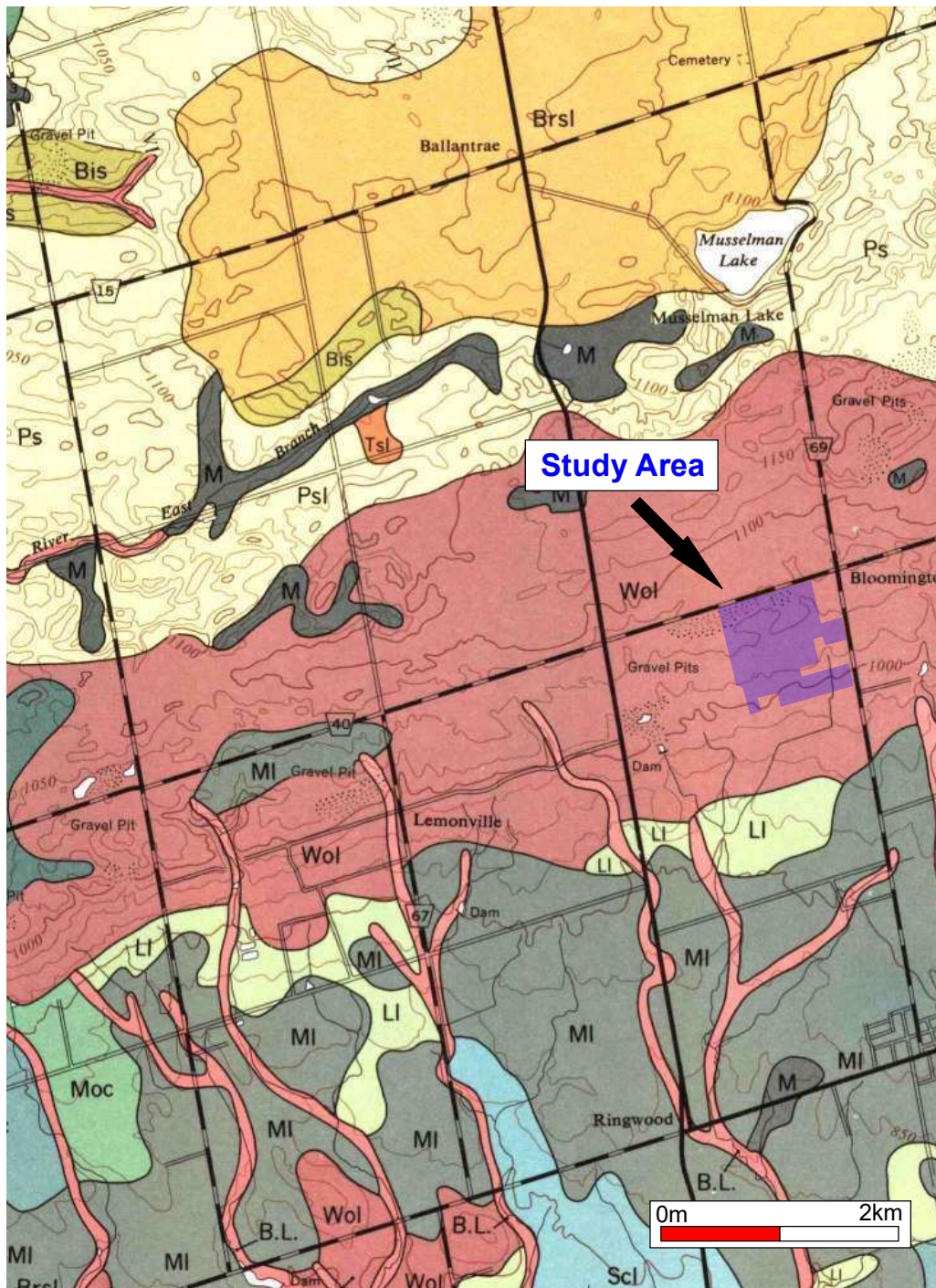
STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

Table 1: Cultural Chronology for the Regional Municipality of York (continued)

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

Table 2: Archaeological Sites within One Kilometre of the Study Area

Borden #	Site Name	Site Type	Cultural Affiliation
AlGt-157	Radcliffe	midden	Late Woodland
AlGt-291	5b-1	findspot	pre-Contact Aboriginal
AlGt-292	5b-2	findspot	pre-Contact Aboriginal
AlGt-293	5c-1	campsite	Late Archaic
AlGt-294	5c-2	findspot/homestead	pre-Contact Aboriginal/Euro Canadian
AlGt-295	5c-3	findspot	pre-Contact Aboriginal
AlGt-296	5c-4	findspot	pre-Contact Aboriginal
AlGt-297	5c-5	findspot	Euro Canadian
AlGt-298	5c-6	findspot	pre-Contact Aboriginal
AlGt-300	-	findspot	pre-Contact Aboriginal



LEGEND

- Woburn Loam
- Gravel Pits
- Study Area

REFERENCE

DRAWING BASED ON
Hoffman, D.W. and N.R. Richards
1955 Soil Survey of York County, Ontario. Soil Map of York County,
(Regional Municipality of York). Ontario. Report Number 19 of
the Ontario Soil Survey. Experimental Farms Service,
Canada Department of Agriculture and the Ontario Agricultural
College, Guelph.

NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ
IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT		Stage 1 Archaeological Assessment Camrock Development Corporation Town of Whitchurch-Stouffville, R.M. of York, ON	
TITLE		Portion of the Soil Map of York County	
PROJECT No.		09-1112-6163	FILE No. 0911126163-R01002
CADD		IJ	Jan 26/10
CHECK			
SCALE		AS SHOWN	REV.
		FIGURE 2	



3.3 Historic Site Research

The study area is situated within the Township of Whitchurch in York County, on properties that have been occupied by Euro-Canadian settlers since the late 18th to early 19th century. The area first enters the Euro-Canadian historic record as part of Treaty Number 13 made between the Mississauga First Nation and the British. This treaty:

On the 23rd day of September, 1787, ... Sir John Johnson, representing the King and Wabukanyne, Neace and Paquan, Principal Chief and Warchiefs of the Mississa[auga] Nation at the Carrying Place, did execute an agreement for the purpose of conveying a tract of land to the King, but it has been ascertained that the Instrument was defective and imperfect, and nothing was done about carrying it out until the first day of August, 1805, an Indenture was made, at the River Credit at Lake Ontario...for and in behalf of Our Sovereign Lord the King and the Principal Chiefs, Warriors and people of the Mississa[uga] Nation of Indians.

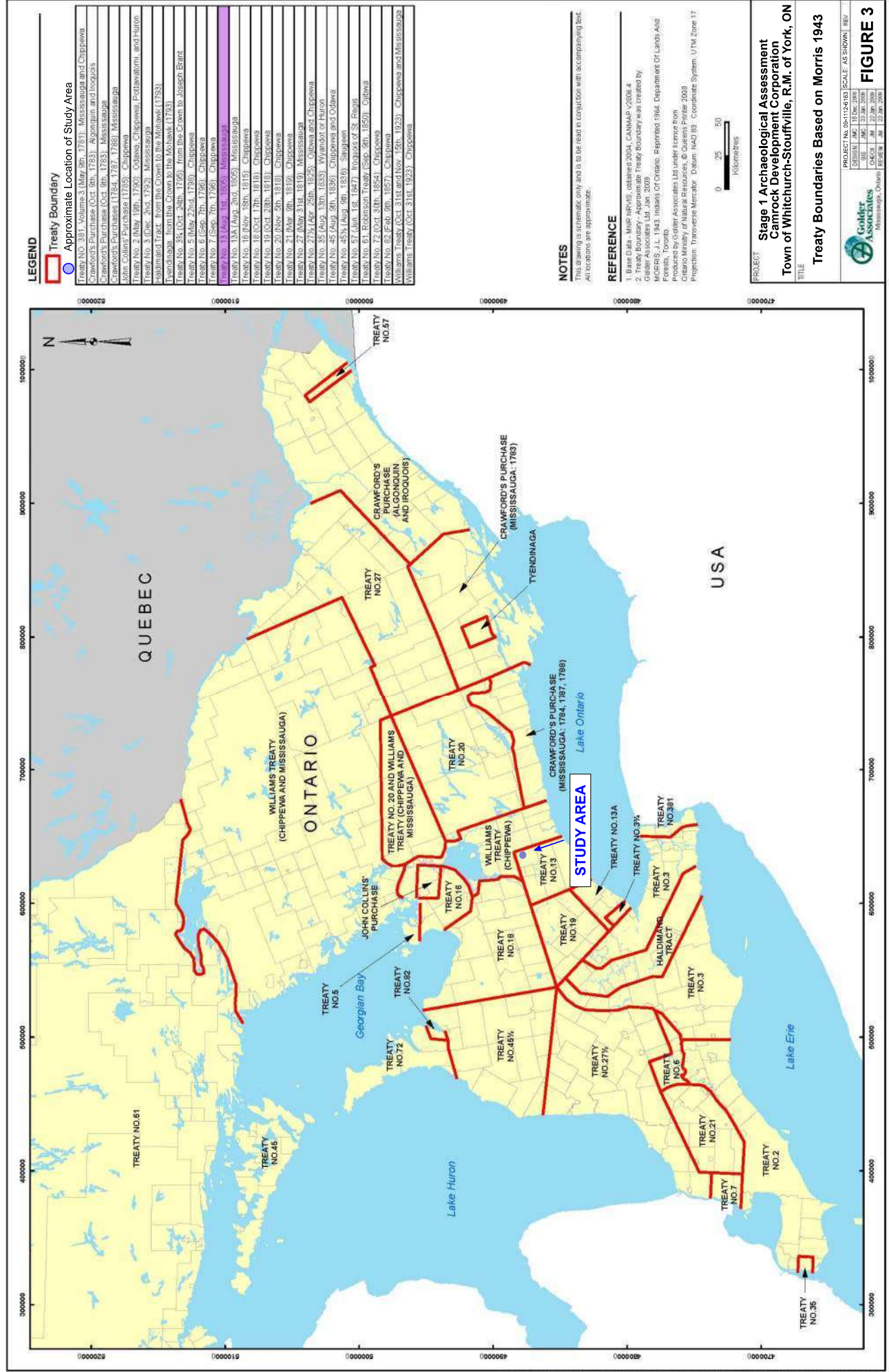
This purchase ..., is known as the Toronto Purchase and described as follows: "Commencing at the east bank of the south outlet of the River Etobicoke; thence up the same following the several windings and turnings of the said river to a maple tree, blazed on 4 sides at a distance of three quarters in a straight line from the mouth of the said river; thence north twenty-two degrees west twenty-four miles and one quarter; thence north sixty-eight degrees east fourteen miles; thence south twenty-two degrees east twenty-eight miles more or less to Lake Ontario; then westerly along the water's edge of Lake Ontario, to the eastern bank of the south outlet of the River Etobicoke, being the place of beginning, together with all the woods and waters thereon." This last described parcel is only a small portion of the parcel, supposed to have been conveyed by the Indians, September 23rd, 1787, and the consideration demanded by the Indians was only ten shillings.

(Morris 1943: 21-22)

While it is difficult to exactly delineate treaty boundaries today, Figure 3 gives an approximate outline of the limits of Treaty Number 13. Although the treaty was first established in 1787, it was deemed defective and not instituted fully until 18 years later in 1805.

Whitchurch Township was established in 1792 as part of one of the original 19 counties of the province – the county of York by John Graves Simcoe, the first Lieutenant Governor of Upper Canada. Whitchurch Township was initially surveyed from 1800 to 1802 by John Stegman and this survey also established the network of concession roads (north-south) and sideroads (east-west) that still exist to this day. Settlers arrived in the late 18th to early 19th century and included homesteaders, squatters given legal rights, Quaker and Mennonite families and Hessian soldiers granted land by the British for services rendered during the American War of Independence (Town of Whitchurch-Stouffville 2010).

Abraham Stouffer purchased 600 acres of land in the southeast corner of the township in 1805 and established saw and grist mills. Soon a hamlet grew up around Stouffer's mills, which was then known as Stoufferville. Within a decade of Stouffer establishing his mills, 55 families are recorded as settling in the community (Barkey 1977: 4). In 1832, when the post office was established, the name was shortened to Stouffville. Whitchurch and Stouffville were amalgamated in 1971.





STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

The 1878 Illustrated Historical Atlas of the County of York indicates that the entirety of the study area was intensively occupied and farmed (Figure 4). The study area incorporates three late 19th century occupied historic lots with residences and farmed fields indicated. Table 3 lists the owners of the lots covered by the study area. The study area also includes remnants of a historic rail bed that crossed through the southwestern portion.

Table 3: Historic Properties According to the 1878 *Illustrated Historical Atlas of the County of York*

Lot	Concession	Owner	Structure
10	8	Joseph Lemon	House
9	8	Jonathan Lemon	House
8	8	Robert Stapleton	House



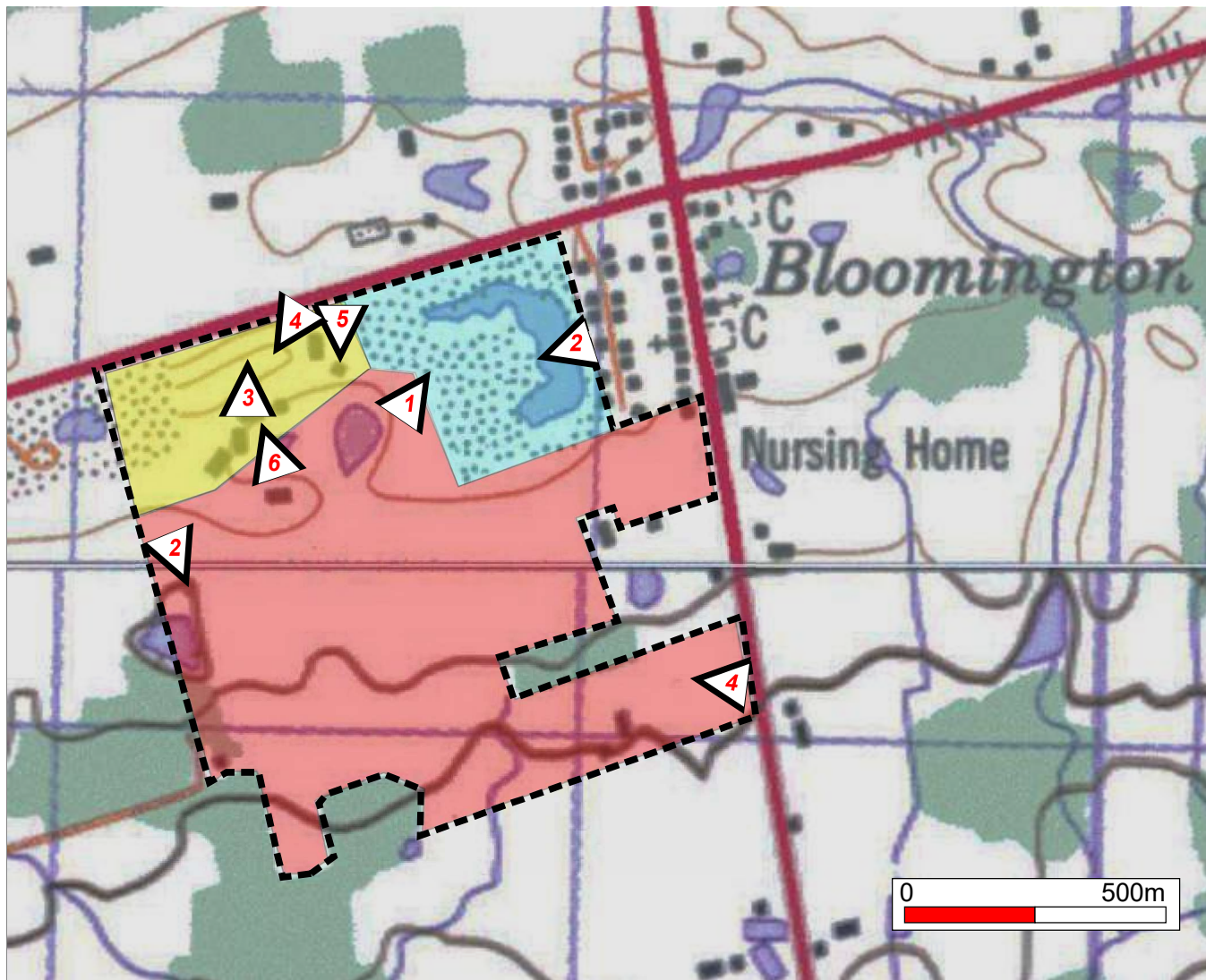
3.4 Visual Evaluation

The project location was visually evaluated on January 21, 2010. Weather conditions were sunny with variable clouds and the land was snow covered but a general sense of the environment was attainable. The property is currently in use as a horse stabling business. There are three residential buildings on the property with various outbuildings. The property is divided into three geographic locations, corresponding to three phases of development: Phase 1, 2, and 3. Development activities at the Phase 1 and 2 locations consist of filling activities to level out the areas. Phase 3 is reserved for potential future development. The nature of this potential development is not known. Figure 5 illustrates the three sections, corresponding to Phases of development, and also shows the photographic key.

Portions of the entire study area have been impacted by previous land use as a gravel pit. As the soil map of York County shows (Figure 2), that gravel pits were situated at the northern end of the property. An employee at the property indicated that the pits were remediated over thirty years ago, but could not give an exact date. A 1978 aerial photo (Figure 6) show that quarrying activities continued in the northeast section of the property, Phase 2 of development. Currently, this area contains a house and two man-made ponds (Plate 1) and has been remediated to pasture lands (Plate 2). Based on the quarrying activities, demonstrated in Figure 6, and the filling activities, there is no archaeological potential for this section of the property corresponding to Phase 2 of development.

Although the soil map indicates that there were quarrying activities in the northwest section of the property (Phase 1), the 1978 aerial map does not show this area as an active gravel pit. It is suspected that this area underwent remediation, through filling prior to 1978. The stable employee confirmed that this section was indeed quarried and had undergone remediation. The land is currently used as fenced pasture lands for the horse stable. The property owner, Ivo Batistella, intends to fill this section due to flooding of the area, rendering it un-useable for most of the year. A survey of the northwest section of the property (Figure 7) was completed in 2009 for the fill permit. The survey map and the corresponding photos (Plates 3 and 4) demonstrate a steep sloped basin like area, consistent with remediated quarries. The remaining part of this section, included in Phase 1 of development but not subject to filling, contains a gravel road and various outbuildings (equipment hanger; shed, house, barn and stables) as illustrated in Figure 7 and Plates 4, 5 and 6. Given the past quarrying and filling activities to this area, there is no archaeological potential for this section (Phase 1 of development).

The remainder of the property, corresponding with Phase 3 of development, is characterized as gently rolling agricultural pasture land, with a pond in the northern end of this section and an ephemeral stream in the southern end (Figure 5). Plates 7 and 8 show the relatively undisturbed nature of this pasture land. A Stage 2 assessment is recommended for this section of the property, corresponding to Phase 3 (potential future development).



LEGEND



-Study Area



-Direction of Photographic Plate



Phase 1 - Filling



Phase 2 - Filling



Phase 3 - Potential Future Development

REFERENCE

DRAWING BASED ON
Government of Canada
1988 *Topographic Map Sheet 31 D/3: Newmarket (Edition 5)*. Centre for
Topographic Information, Natural Resources Canada.

1994 *Topographic Map Sheet 30 M/14: Markham (Edition 9)*. Centre for
Topographic Information, Natural Resources Canada.

Photographic Plate Directions Based on Project Director's Notes

NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ
IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT

**Stage 1 Archaeological Assessment
Camrock Development Corporation
Town of Whitchurch-Stouffville, R.M. of York, ON**

TITLE

Photographic Key



**Golder
Associates**

PROJECT No.	09-1112-6163	FILE No.	0911126163-R01005
CADD	IJ	SCALE	AS SHOWN REV.
CHECK			

FIGURE 5



STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

Plate 1: Facing west overlooking pond, eastern edge of study area



Plate 2: Northeastern view of study area showing previous gravel quarry after remediation





STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

Plate 3: Facing Bloomington Road, northwestern edge of study area overlooking remediated pasture lands and sloping



Plate 4: Facing west-southwest overlooking horse paddocks, outbuildings, and remediated pasture lands - northeastern edge of study area





Plate 5: House and associated driveway, northern edge of study area



Plate 6: Outbuilding and associated disturbance, northeastern edge of study area





STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

Plate 7: Facing south, western edge of study area



Plate 8: Facing west-northwest, southeastern edge of study area





0m 25m 50m

LEGEND

- Phase 1 - Filling
- Phase 2 - Filling
- Phase 3 - Potential Future Development

REFERENCE

Archives of Ontario MNR Docket 441792
1978-R40-4401-50

NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ
IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

PROJECT **Stage 1 Archaeological Assessment**
Camrock Development Corp., 5783 Bloomington Road
Town of Whitchurch-Stouffville, R.M. of York, ON

TITLE

1978 Aerial View of Study Area



PROJECT No.	09-1112-6163	FILE No.	0911126163-R01006
CADD		SCALE	AS SHOWN
CHECK	CP	Mar 3, 2010	

FIGURE 6

LEGEND

SKETCH SHOWING TOPOGRAPHY
FOR SITE DEVELOPMENT PURPOSES OF

PART OF 10
CONCESSION 8

TOWN OF WHITCHURCH-STOUFFVILLE
REGIONAL MUNICIPALITY OF YORK
(GEOGRAPHIC TOWNSHIP OF WHITCHURCH, COUNTY OF YORK)



METRIC: DISTANCES SHOWN HEREON ARE IN METRES AND
CAN BE CONVERTED TO FEET BY DIVIDING BY 0.3048

NOTE:
BOUNDARY INFORMATION SHOWN HEREON IS DERIVED FROM
OFFICE RECORDS AND IS SUBJECT TO A LEGAL SEARCH AND
FINAL SURVEY.

THIS SKETCH IS NOT A PLAN OF SURVEY AND SHALL NOT BE
USED EXCEPT FOR THE PURPOSES INDICATED IN THE TITLE BLOCK.
THIS SKETCH IS NOT TO BE USED FOR MORTGAGE
OR TRANSACTION PURPOSES.

GEODETIC: ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE
DERIVED FROM THE TOWN OF WHITCHURCH-STOUFFVILLE BENCHMARK NO. 768491
ELEVATION = 344.877 METRES.

- LEGEND:
- DB DITCH BASIN
 - INVERT
 - WV WATER VALVE
 - CALL
 - COLLECT
 - LIGHT STANDARD
 - UTILITY POLE
 - HYDRO TRANSFORMER
 - BELL POLE
 - WATER TOWER
 - CABLE TELEVISION BOX
 - FIRE HYDRANT
 - WATER VALVE
 - WATER CHAMBER
 - GAS VALVE
 - WATER METER
 - STREET LIGHT

NOTES

THIS DRAWING IS SCHEMATIC ONLY AND IS TO BE READ
IN CONJUNCTION WITH ACCOMPANYING TEXT.

ALL LOCATIONS ARE APPROXIMATE.

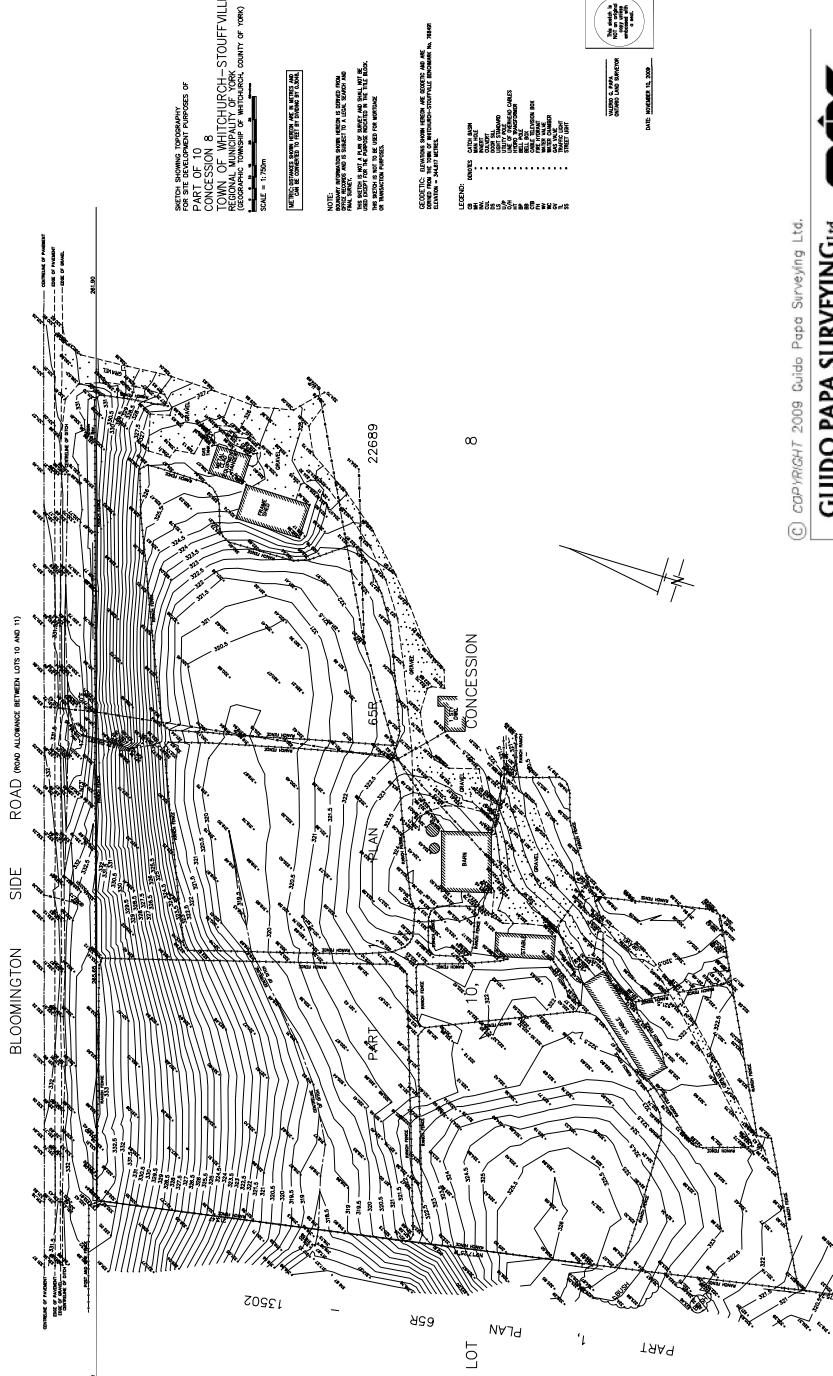
PROJECT Stage 1 Archaeological Assessment
Camrock Development Corporation
Town of Whitchurch-Stouffville, R.M. of York, ON

TITLE Topographic Survey of Northwestern Portion
of Project Location - Phase 1 of Development



PROJECT No.	88-1124-03	TITLE No.	88-1124-03-02
CADD	OF	DATE	03/10
CHECK			

FIGURE 7



SKETCH SHOWING TOPOGRAPHY
FOR SITE DEVELOPMENT PURPOSES OF
PART OF 10
CONCESSION 8
TOWN OF WHITCHURCH-STOUFFVILLE
REGIONAL MUNICIPALITY OF YORK
(GEOGRAPHIC TOWNSHIP OF WHITCHURCH, COUNTY OF YORK)

SCALE = 1:750m

NOTE:
BOUNDARY INFORMATION SHOWN HEREON IS DERIVED FROM
OFFICE RECORDS AND IS SUBJECT TO A LEGAL SEARCH AND
FINAL SURVEY.

THIS SKETCH IS NOT A PLAN OF SURVEY AND SHALL NOT BE
USED EXCEPT FOR THE PURPOSES INDICATED IN THE TITLE BLOCK.
THIS SKETCH IS NOT TO BE USED FOR MORTGAGE
OR TRANSACTION PURPOSES.

GEODETIC: ELEVATIONS SHOWN HEREON ARE GEODETIC AND ARE
DERIVED FROM THE TOWN OF WHITCHURCH-STOUFFVILLE BENCHMARK NO. 768491
ELEVATION = 344.877 METRES.

- LEGEND:
- DB DITCH BASIN
 - INVERT
 - WV WATER VALVE
 - CALL
 - COLLECT
 - LIGHT STANDARD
 - UTILITY POLE
 - HYDRO TRANSFORMER
 - BELL POLE
 - WATER TOWER
 - CABLE TELEVISION BOX
 - FIRE HYDRANT
 - WATER VALVE
 - WATER CHAMBER
 - GAS VALVE
 - WATER METER
 - STREET LIGHT



© COPYRIGHT 2009 Guido Papa Surveying Ltd.

GUIDO PAPA SURVEYING Ltd.
ONTARIO LAND SURVEYORS
216 Orris Road • Suite 505
Woodbridge • Ontario • L4L 8S5
Tel: 905.264.2727 • Fax: 905.264.2728
www.g-p-s.ca

DRAWN	CHECKED	REF. NO.
D.S.B./V.G.P.	V.G.P.	09-381

C/O EVO BATTISTELLA



4.0 RESULTS

4.1 Potential for Pre-contact Aboriginal Archaeological Sites

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Golder applied archaeological potential criteria commonly used by the Ministry of Culture (Government of Ontario 1997) to determine areas of archaeological potential along the study corridor. These variables include: distance to various types of water sources, soil texture and drainage, glacial geomorphology, and the general topographic variability of the area.

Distance to modern or ancient water sources is generally accepted as the most important determinant of past human settlement patterns and, considered alone, may result in a determination of archaeological potential. However, any combination of two or more other criteria, such as well-drained soils, or topographic variability, may also indicate archaeological potential. Finally, extensive land disturbance can eradicate archaeological potential (Wilson and Horne 1995).

In archaeological potential modeling, a distance to water criterion of 300 metres is generally employed for primary water courses, including lakeshores, rivers and large creeks, while a criterion of 200 metres is applied to secondary water sources, including swamps and small creeks. For the present project, the study area is 600 metres north of three small unnamed tributaries of Little Rouge Creek. Musselman's Lake and Windsor Lake are 2.5 kilometres north. There are two large ponds in the northeastern portion of the property, but these are likely manmade and not naturally occurring considering past land use of the property as a gravel pit.

Soil texture can be an important determinant of past settlement, usually in combination with other factors such as topography. With respect to soil texture, Aboriginal groups preferred well drained lighter (sandy) soils to heavier soils. The soils of the study area are well drained loamy soils suitable for pre-contact Aboriginal agricultural practices. These soils provide further archaeological potential for aboriginal sites within the study area.

When the above noted archaeological potential criteria are applied to the study area, the archaeological potential for pre-contact Aboriginal sites is deemed to be moderate to high. This assessment is due to the presence of water sources and well drained loamy soil. However, as demonstrated in Section 3.4, that potential has been severely impacted by 20th century gravel quarrying and archaeological potential is now negligible for some portions of the property.

4.2 Potential for Historic Archaeological Sites

The criteria used by the Ontario Ministry of Culture to determine potential for historic archaeological sites include the presence of: 1) particular, resource-specific features that would have attracted past subsistence or extractive uses; 2) areas of initial, non-Aboriginal settlement; 3) early historic transportation routes; and 4) properties designated under the Ontario Heritage Act (Government of Ontario 1997:14).

The area has been intensively used and occupied since the late 18th to early 19th centuries and the historic road grid surveyed by John Stegman from 1800 to 1802 is still in use today. The study area incorporates six late 19th century occupied historic lots – five with residences and farmed fields indicated (Figure 4). According to the Ontario Archaeological Site Database (OASD), two of the known archaeological sites within one kilometre of the



STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

study area (Table 2) are Euro Canadian including one findspot of red earthenware rimsherd (AIGt-297) and one homestead (AIGt-294) (personal communication, R. von Bitter January 27th, 2010).

When the above noted archaeological potential criteria are applied to the study area, the archaeological potential for Euro Canadian sites should be moderate to high, given the early history of occupation of the region and the documented late-19th century homesteads associated with the study area. However, as demonstrated in Section 3.4, that potential has been severely impacted by 20th century gravel quarrying and archaeological potential is now negligible for some portions of the property.



5.0 SUMMARY AND RECOMMENDATIONS

A Stage 1 archaeological background study was conducted on behalf of Camrock Development Corporation for an approximately 100 hectare site located at 5783 Bloomington Road, part of Lot 10 Concession 8, Town of Whitchurch-Stouffville, in the Regional Municipality of York. This Stage 1 archaeological assessment was undertaken to meet the requirements of a filling permit application to the Municipality of York. The project location is divided into three distinct phases based on the timing of filling permit submission and on future potential development.

The objective of the Stage 1 assessment was to compile all available information about the known and potential cultural heritage resources within the study area and to provide specific direction for the protection, management and/or recovery of these resources, consistent with Ministry of Culture guidelines (Government of Ontario 1993).

The Stage 1 assessment was conducted on January 21, 2010 under archaeological consulting licence P243, issued to Carla Parslow, Ph.D., by the Ontario Ministry of Culture. Golder applied archaeological potential criteria commonly used by the Ontario Ministry of Culture to determine areas of archaeological potential within the study area. The archaeological potential for pre-contact Aboriginal and Euro-Canadian sites was deemed to be moderate to high on these properties. For pre-contact Aboriginal sites this determination is made due to the presence of nearby water sources and suitable soils for pre-contact Aboriginal agricultural practices. The historic Euro-Canadian potential was deemed to be moderate to high due to documentation indicating early 19th century occupation. However, background research on the study area resulted in the determination that the proposed area has been previously disturbed by 20th century development impacts. Phase 1 and 2 of the project location have been extensively disturbed by gravel extraction and were determined to have no archaeological potential and will not require archaeological field assessment. Phase 3 of the project location has also been partially disturbed by gravel extraction and also exhibits areas characterized as wetlands. These identified areas were determined to have no archaeological potential and will not require archaeological field assessment. A Stage 2 archaeological assessment is recommended in the Phase 3 section of the project location for all remaining areas determined not previously disturbed that may be impacted by future potential development.

As further archaeological assessment is recommended, the Ontario Ministry of Culture is asked to review the results in this report and issue a letter of concurrence with the findings herein. A partial letter of clearance is requested at this time for the Phase 1 and Phase 2 sections of the project location.

Should deeply buried archaeological material be found during construction activities, the Ontario Ministry of Culture should be notified immediately (416) 314-7174. In the event that human remains are encountered during construction, the proponent should immediately contact both the Ministry of Culture and the Registrar or Deputy Registrar of the Cemeteries Regulation Unit of the Ministry of Consumer Services, (416) 326-8404.



6.0 REFERENCES CITED

Barkey, Jean

- 1977 *Stouffville, 1877-1977: A Pictorial History of a Prosperous Ontario Community*. Stouffville Historical Committee. The Bryant Press, Canada.

Chapman, Lyman John and Donald F. Putnam

- 1984 *The Physiography of Southern Ontario*. 3rd ed. Ontario Geological Survey Special Volume 2. Ontario Ministry of Natural Resources, Toronto.

Ellis, Chris J. and Neal Ferris (editors)

- 1990 *The Archaeology of Southern Ontario to A.D. 1650*. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 5.

Government of Canada

- 1988 *Topographic Map Sheet 31 D/3: Newmarket* (Edition 5). Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa.

Government of Ontario

- 1993 *Archaeological Assessment Technical Guidelines*. Archaeology & Heritage Planning Unit, Cultural Programs Branch, Ministry of Culture, Tourism and Recreation.
- 1997 *Conserving a Future for Our Past: Archaeology, Land Use Planning & Development in Ontario*. Ministry of Citizenship, Culture and Recreation, Archaeology and Heritage Planning Unit, Toronto.
- 1978 Aerial Photo MNR Docket 441792. Roll Number R40-4401-50. Ministry of Culture, Archives of Ontario.

Natural Resources Canada

- 2010 National Air Photo Library. Roll Number A22629 - Photo Number 24. April 28th, 1972. Vertical Viewing Angle at 8000 Feet.

n.d. Archaeological Data Base Files. Heritage Operations Unit, Ministry of Culture, Toronto.

Hoffman, D.W. and N.R. Richards

- 1955 *Soil Survey of York County, Ontario*. Report Number 19 of the Ontario Soil Survey. Experimental Farms Service, Canada Department of Agriculture and the Ontario Agricultural College, Guelph.

Morris, J.L.

- 1943 *Indians of Ontario*. 1964 reprint. Department of Lands and Forests, Government of Ontario.

Miles and Company

- 1878 *Illustrated Historical Atlas of the County of York and the Township of West Gwillimbury and Town of Bradford in the County of Simcoe, Ontario*. 1996 reprint. Wilson's Publishing Company and APMIST Enterprises Ltd., Canada.



STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

Town of Whitchurch-Stouffville

2010 Town of Whitchurch-Stouffville Website.

<http://www.townofws.com/index.asp> Last accessed January 21st, 2010.



7.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

Golder Associates Ltd. (Golder) has prepared this report in a manner consistent with that level of care and skill ordinarily exercised by members of the archaeological profession currently practicing under similar conditions in the jurisdiction in which the services are provided, subject to the time limits and physical constraints applicable to this report. No other warranty, expressed or implied is made.

This report has been prepared for the specific site, design objective, developments and purpose described to Golder by Camrock Development Corporation. The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

The information, recommendations and opinions expressed in this report are for the sole benefit of the Client. No other party may use or rely on this report or any portion thereof without Golder's express written consent. If the report was prepared to be included for a specific permit application process, then upon the reasonable request of the client, Golder may authorize in writing the use of this report by the regulatory agency as an Approved User for the specific and identified purpose of the applicable permit review process. Any other use of this report by others is prohibited and is without responsibility to Golder. The report, all plans, data, drawings and other documents as well as electronic media prepared by Golder are considered its professional work product and shall remain the copyright property of Golder, who authorizes only the Client and Approved Users to make copies of the report, but only in such quantities as are reasonably necessary for the use of the report by those parties. The Client and Approved Users may not give, lend, sell, or otherwise make available the report or any portion thereof to any other party without the express written permission of Golder. The Client acknowledges the electronic media is susceptible to unauthorized modification, deterioration and incompatibility and therefore the Client cannot rely upon the electronic media versions of Golder's report or other work products.

Unless otherwise stated, the suggestions, recommendations and opinions given in this report are intended only for the guidance of the Client in the design of the specific project.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Culture's Archaeological Assessment Technical Guidelines (1993) (Stages 1-3 and Reporting Format).



STAGE 1 ARCHAEOLOGICAL ASSESSMENT CAMROCK DEVELOPMENT CORPORATION

Report Signature Page

Carla Parslow, Ph.D.
Senior Archaeologist

CAP/RJB/ij/am/vc

Rebecca Balcom, M.A.
Principal, Director of Cultural Sciences

\\mis1-s-filesrv1\data\active\2009\1112\09-1112-6163 camrock - stage 1 & 2 - york region\reports\final\0911126163-r01 final.docx

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Ltd.
2390 Argentia Road
Mississauga, Ontario, L5N 5Z7
Canada
T: +1 (905) 567 4444

