

**Archaeological Assessment (Stages 1, 2 & 3)
Vicdom Sand & Gravel
Uxbridge Main Pit Expansion**

**Parts of Lot 10 and 11, Concession 4, Township of Uxbridge
Regional Municipality of Durham, Ontario**

Submitted to

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and

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Acknowledgments

The completion of this report was facilitated by the assistance of the following individuals:

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- **Vyacheslav Magmodov**, Jagger Hims Ltd. Newmarket;
- **Robert Von Bitter**, Archaeological Data Coordinator, Archaeology Unit, Heritage Branch, Ontario Ministry of Citizenship, Culture and Recreation, Toronto.

Project Summary

An archaeological assessment (Stage 1, 2 & 3) was conducted for an approximate 53 hectare aggregate extraction property located on Parts of Lot 10 and 11, Concession 4, Township of Uxbridge, Regional Municipality of Durham, Ontario. This assessment was undertaken as part of the aggregate pit licensing process, as outlined in Sections 2.2.5 and 2.2.6 of the provincial standards under the *Aggregate Resources Act*.

The property consists of two parcels: the western portion of the study area is 46.1 ha in size and the eastern portion is 6.92 ha in size. The majority of the western parcel - 34.4 ha - was previously assessed and reported upon in 2001 under the C.I.F. numbers of 2000-002-064 and 2000-002-080 (Archaeologix 2001). The data from that report is included in this report along with the additional archaeological assessment conducted in 2008. Approximately one-eighth of the western parcel consists of wetland and ponds and was not subject to assessment. The houses on the western parcel were not assessed but the overgrown lawns surrounding the houses were subject to test pitting at a five metre interval. Two other areas in the northwestern corner of the parcel were also low, wet, and disturbed, having had their topsoil previously stripped away. Exclusive of the areas of steep slope, the remainder of the western portion was subject to either test pitting or pedestrian survey at a five metre interval. The eastern portion was subject to pedestrian survey at a five metre interval.

The Stage 2 field assessment resulted in identification of one small precontact Aboriginal site in 2001, Location 1 (BaGs-30); and one historic scatter, Location 2 (BaGs-31), in 2008. Due to the potential archaeological significance of these locations, both were subject to a Stage 3 assessment in order to better evaluate its significance and information potential.

The Stage 3 assessment of Location 1 (BaGs-30) resulted in the recovery of a minimal amount of cultural material and no additional assessment is recommended. The Stage 3 assessment of Location 2 (BaGs-31) resulted in the recovery of additional 19th century Euro-Canadian material and a Stage 4 assessment of this archaeological site is recommended if the area cannot be satisfactorily avoided. At present the intent is to avoid this site and afford it long term protection on the site plan.

This assessment was undertaken to fulfil a standard archaeological condition of the aggregate licensing process as imposed by the Ministry of Natural Resources. The Ontario Ministry of Culture is asked to review the results presented in this report, and issue a letter of concurrence. A letter of clearance will be requested when the final site plan has been prepared and circulated to the Ministry of Culture.

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1.0 PURPOSE

An archaeological assessment (Stage 1, 2 & 3) was conducted for an approximate 53 hectare aggregate extraction property located on Parts of Lot 10 and 11, Concession 4, Township of Uxbridge, Regional Municipality of Durham, Ontario. This assessment was undertaken as part of the aggregate pit licensing process, as outlined in Sections 2.2.5 and 2.2.6 of the provincial standards under the *Aggregate Resources Act*.

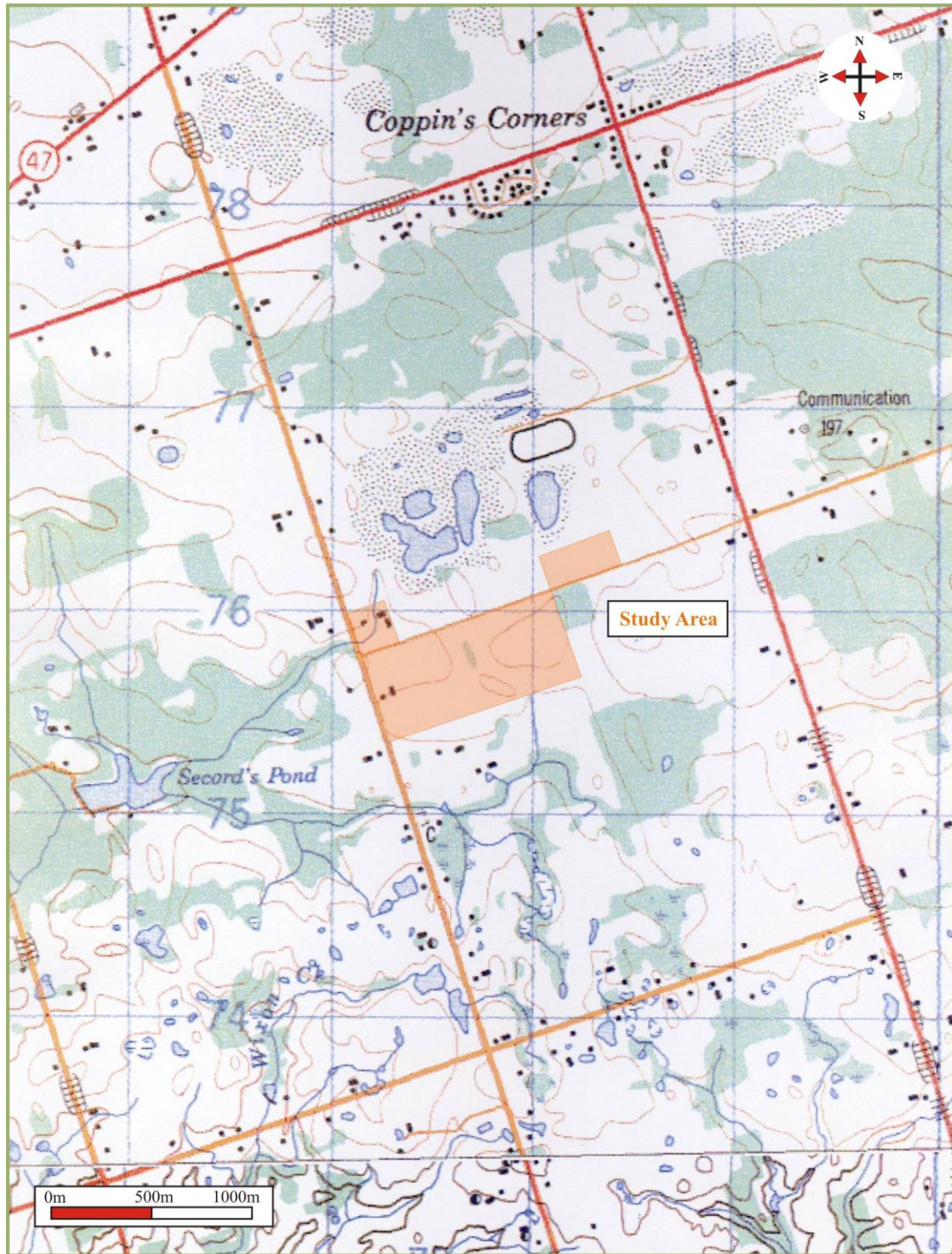
The Stages 2 and 3 field assessments were conducted between May 16th and June 21st, 2000, under archaeological licence 2000-002 and between June 23rd and October 10th, 2008 under archaeological licence P001, both issued to Jim Wilson, M.A., by the Ontario Ministry of Culture.

The Stage 2 field assessment resulted in identification of one small precontact Aboriginal site, Location 1 (BaGs-30), in 2001; and one historic scatter, Location 2 (BaGs-31), in 2008. Due to the potential archaeological significance of these locations, both were subject to a Stage 3 assessment in order to better evaluate its significance and information potential.

The Stage 3 assessment of Location 1 (BaGs-30) resulted in the recovery of a minimal amount of cultural material and no additional assessment is recommended. The Stage 3 assessment of Location 2 (BaGs-31) resulted in the recovery of additional 19th century Euro-Canadian material and a Stage 4 assessment of this archaeological site is recommended. However, given additional constraints on the study area since the nearby wetlands are environmentally significant and part of the Oak Ridges Moraine ecosystem, it is proposed that the site area and a large buffer around Location 2 (BaGs-31) be avoided and subsequently protected from any aggregate activities and their associated impacts.

This assessment was undertaken to fulfil a standard archaeological condition of the aggregate licensing process as imposed by the Ministry of Natural Resources. The Ontario Ministry of Culture is asked to review the results presented in this report, and issue a letter of concurrence. A letter of clearance will be requested when the final site plan has been prepared and circulated to the Ministry of Culture.

Figure 1. Location of the Study Area



2.0 STUDY METHODS

2.1 Stage 1 Background Research

In compliance with the provincial regulations 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 historic maps; and
- an examination of the National Site Registration Database to determine the presence of known archaeological sites in an around the project area.

In addition to the visual evaluation of the subject property, background research was conducted at the Ministry of Citizenship, Culture and Recreation Office (MCTR) in Toronto, the University of Western Ontario Map Library, and the corporate library of Archaeologix Inc.

2.2 Stage 2 Field Assessment Methods

The property consists of two parcels: the western portion of the study area is 46.1 ha in size and the eastern portion is 6.92 ha in size. The majority of the western parcel - 34.4 ha - was previously assessed and reported upon in 2001 under the C.I.F. numbers of 2000-002-064 and 2000-002-080 (Archaeologix 2001). The data from that report is included in this report along with the additional archaeological work conducted in 2008. The weather during the 2001 Stage 2 and 3 assessments was sunny and warm and there were no conditions detrimental to the recovery of archaeological remains. The weather during the 2008 Stage 2 and 3 assessments was sunny and mild and there were no conditions detrimental to the recovery of archaeological remains.

Approximately one-eighth of the western parcel consists of wetland and ponds and was not subject to assessment (Figures 4 and 5). The houses and barns on the western parcel were not assessed but the overgrown lawns surrounding the houses were subject to test pitting at a five metre interval (Figures 6 and 7). Two other areas in the northwestern corner of the parcel were also low, wet, and disturbed, having had their topsoil previously stripped away (Figures 8 and 9). Exclusive of the areas of steep slope, the remainder of the western portion was subject to either test pitting or pedestrian survey at a five metre interval. The majority of the western parcel had been ploughed and was well weathered; ground visibility was excellent (Figure 10). However the eastern quarter of this parcel was too steep to plough and had numerous large rocks on the surface (Figure 11). This area was subject to a test pit assessment at a five metre interval if the slope was not too steep (Figure 12). Each test pit was excavated to subsoil, and all soil was screened through six-millimetre hardware cloth to facilitate the recovery of artifacts. Each test unit was approximately 30 centimetres in diameter and was back filled. The entire eastern parcel had been ploughed and was well weathered with excellent ground visibility. It also was subject to pedestrian survey at a five metre interval (Figure 13).

In the event that an artifact was encountered during the pedestrian survey, survey intervals were intensified to one metre within a twenty metre radius of the find. In the event an artifact was encountered in a test pit, additional test pits were dug in close proximity. Figure 3 maps the areas assessed and techniques employed.

Permission to enter the property and remove artifacts was granted by Andy Cooper in 2001 and Vyacheslav Magmodov in 2008, both of Jagger Hims Limited, acting as the agent of Vicdom Sand & Gravel Limited. All recovered artifacts will be housed at the corporate head office of Archaeologix until their transfer to the Ministry of Culture collections facility located at 900 Highbury Avenue, London.

2.3 Stage 3 Archaeological Site Documentation

The Stage 3 assessment included the hand excavation of one-metre test units strategically located to sample the nature and extent of the cultural deposits at the site. A permanent datum was established near the margin of the site. At Location 1 (BaGs-30), the datum was located along the western margin of the site near the wetland area (Figure 17). As for Location 2, (BaGs-31), the datum was established at the northwest corner of the site beside a wire fence immediately south of an abandoned gravel roadway (Figure 18). The five-metre grid was established from this point for each site, oriented on magnetic north. The five-metre units were referred to by the intersection coordinates of their southwest corner. Each five-metre square was divided into 25 one-metre units, with sub-square number one located in the southwest corner of the five-metre unit, number five in the southeast corner, number six located immediately north of number one, and so on. Each one-metre test unit was excavated to subsoil, with all soil screened through six millimetre hardware cloth to facilitate the recovery of small artifacts. All excavated artifacts were retained for laboratory analysis and description.

3.0 RESULTS

3.1 Background Research

3.1.1 The Natural Environment

The study area is situated within the Oak Ridges Moraine physiographic region (Chapman and Putnam 1984: 166-169):

The Oak Ridges Moraine stands out as one of the most distinctive physiographic units of Southern Ontario. ... While, for the most part, these hills are comprised of sandy or gravelly materials, this is not always the case. Some, including the highest ridges around Uxbridge and Clarke triangulation stations, are formed of till which protrudes above the sands. ...The original vegetation of the area was a mixed forest of pine and hardwoods....Among

the hardwoods, hard maple, beech, and red and white oak were most important and a few good stands may still be seen.

(Chapman and Putnam 1984: 166-167)

The closest potable water source is an unnamed tributary of the Duffin Creek watershed that ends in the wetlands located in the western parcel of the study area. The soils are a sandy loam which would have been suitable for precontact Aboriginal agricultural practices.

3.1.2 Precontact Aboriginal Archaeological Resources & Potential

There have been very few archaeological assessments and research surveys conducted in this portion of the Regional Municipality of Durham. Consequently, there is only one registered archaeological site located within 3 kilometres of the study area (Government of Ontario n.d.): the Glass Site (BaGs-4). This is a historic Mississauga First Nation site named after the discovery of a scraper constructed from a lavender-coloured glass shard. The artifact belongs to the “Mississauga Glass Tool Tradition” (TRCA 2002: 29). However, there is also anecdotal evidence of precontact Aboriginal presence in the area. To the west of the study area on the west half of Lots 10 and 11 in Concession 3, the Secord family donated a stone maul to the Toronto and Region Conservation Authority. Given the presence of natural springs on the property, there is a possibility for sporadic occupation of the area by Archaic populations (TRCA 2002: 30).

Table 1. Cultural Chronology for Southeastern Ontario

PERIOD	CHARACTERISTICS	TIME	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
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
Historic	Euro-Canadian	A.D. 1796 - present	European settlement

Due to the presence of two small wetlands within the limits of the study area, the potential for pre-contact Aboriginal resources was judged to be moderate. Table 1 provides a general outline of the culture history for Southeastern Ontario drawn from Ellis and Ferris 1990.

Figure 2. A Portion of the 1877 Historical Atlas of Ontario County Map of Uxbridge Township



Figure 3. Stage 2 Methods and Results

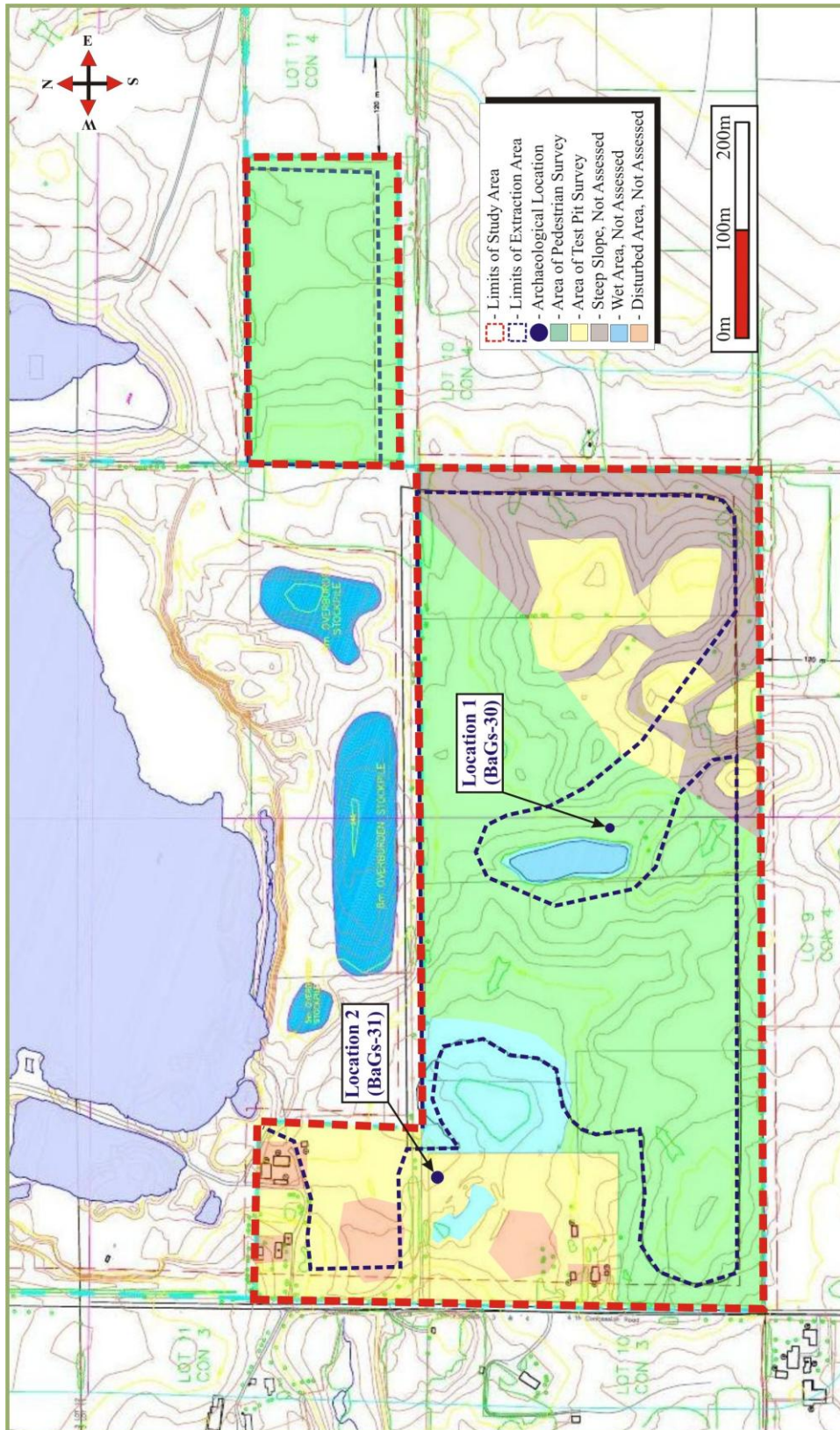


Figure 4. Not Assessed: Wetland in Foreground, But Dry Area to the North Test Pitted at 5m Intervals



Figure 5. Not Assessed: Pond Area



Figure 6. Not Assessed: House and Gravel Driveway



Figure 7. Not Assessed: Barns and Laneways



Figure 8. Not Assessed: Northern Area With Topsoil Stripped, Low and Wet



Figure 9. Not Assessed: Southern Area With Topsoil Stripped, Low and Wet



Figure 10. Area of Pedestrian Survey in 2001, Walked at 5m Intervals



Figure 11. Not Assessed: Area of Steep Slope



Figure 12. Area of Test Pitting in 2008, Test Pitted at 5m Intervals



Figure 13. Area of Pedestrian Survey in 2008, Walked at 5m Intervals



3.1.3 Potential for Historic Archaeological Sites

The 1877 H. Beers & Company map of Uxbridge Township in the *Illustrated Historical Atlas of Ontario County* (Figure 2) indicates the presence of three different Euro-Canadian structures in the western parcel of the study area, while no historic structures are recorded in the eastern parcel.

Using the 1877 data, the owner of the west half of Lot 10, Concession 4 was R. McCormick, whose homestead was located where a house presently still stands. The northwestern extension of the study area’s western parcel falls within the west half of Lot 11, Concession 4 and was owned by J. Little. Two structures are noted on the map in this area, the western structure being an unlabelled house and the eastern structure being a labelled “S.[team-powered] Sawmill”. The study area’s eastern parcel falls within a portion of the east half of Lot 11, Concession 4 and was owned by Mrs. M. Walker. No historic structures are noted on this portion of the lot, her house likely being one of the structures noted in the east half of Lot 10, Concession 4 outside of the current study area. Given the three documented historic structures of which two no longer appear to be standing, the historic archaeological potential of the study area was judged to be high.

Figure 14. Stage 2 Artifacts Recovered from Location 1 (BaGs-30) and Location 2 (BaGs-31)



Actual Size of Artifacts

3.2 Stage 2 Field Assessment

The Stage 2 field assessment resulted in two locations: one precontact (Location 1, BaGs-30) and one Euro-Canadian (Location 2, BaGs-31). Both locations were discovered in the western parcel of the study area. Figure 3 maps the areas assessed and the techniques employed.

3.2.1 Location 1 (BaGs-30)

Location 1 (BaGs-30) is a 15 by 5 metre scatter of eight pieces of Onondaga chert chipping detritus (Figure 14:1), just east of the small natural pond located in the center of the western parcel of the study area. The catalogue for this site is presented in Appendix A. Despite the intensification of the survey interval to one metre within 40 metres of this find, no additional cultural material was noted.

3.2.2 Location 2 (BaGs-31)

Location 2 (BaGs-31) is a 20 by 20 metre scatter of seven positive test pits containing 19th century Euro-Canadian historic material. The test pits yielded a total of 38 artifacts. The majority were tablewares (n= 30 or 78.95% of the Stage 2 artifact collection) along with four glass artifacts (10.53% of the Stage 2 artifact collection), three cut nails (7.89% of the Stage 2 artifact collection), and one additional metal artifact (2.63% of the Stage 2 artifact collection). The catalogue for this site is presented in Appendix A and is discussed in detail below.

Ceramic Artifacts

Table 2. Summary of Ceramic Tablewares

Artifact	Freq.	% of Tablewares
banded whiteware	1	3.33
painted whiteware	2	6.67
transfer printed whiteware	2	6.67
plain whiteware	9	30.00
moulded ironstone	1	3.33
plain ironstone	14	46.67
porcelain, semi	1	3.33
Total	30	100.00

The predominant ceramic tableware recovered was ironstone (n=15 or 50.00% of the ceramic tableware collection). Ironstone or graniteware is a variety of refined white earthenware introduced in the 1840's that became extremely popular by the 1870's and 1880's. It is usually much thicker than other whiteware, and often decorated with raised moulded designs of wheat or fruit. Given the small size of the pieces recovered, 14 of the pieces are plain fragmentary pieces with only one moulded shard (Figure 14:2). The

moulded decoration could not be identified with certainty given the small size of the shard.

Whiteware made up almost half of the ceramic tableware collection (n=14 or 46.46% of the ceramic tableware collection). Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the late 1820's to early 1830's, however the initial manufacture date of what archaeologists call "whiteware" is not known. Early whiteware tends to have a porous paste, with more vitrified, harder, ceramics becoming increasingly common later in the 19th century. Nine of the shards are undiagnostic plain pieces, but the other five shards are decorated. There are two shards each of blue transfer printed whiteware and painted whiteware, with one sole shard of banded whiteware exhibiting pale blue bands.

Transfer printed whiteware became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue, like these two artifacts (Figure 14:3). Hand painted whiteware was popular from as early as 1830 through to the 1870's. These are most likely floral decorations but this determination is uncertain given their small size (Figure 14:4). The prominent colours on these two shards are blue, red, and black. Banded wares were decorated with horizontal bands of coloured slip applied in varying widths. Colours are predominantly muted earth tones including, black, green, brown, orange, yellow, grey, and pale blue (Figure 14:5). Banding occurred both as a primary decorative element and in conjunction with other design elements such as marbling, or the dendritic patterns found on mocha ware. Banded patterns can be found on whiteware from the 1830's until the 20th century. Banded designs are most frequently found on whiteware. After 1850 annular wares became available only on the blue banded variety and its use continued into the 20th century (Sussman 1997).

Glass Artifacts

Four pieces of glass were recovered during the Stage 2 test pitting. While all four pieces are too small to assign chronologically, three shards (two clear shards and one brown shard) have been identified as bottle glass while one clear shard has been identified as glass from a lamp chimney.

Metal Artifacts

The four metal artifacts recovered include an undiagnostic metal ring with an attached prong (Figure 14:6) and three cut nails (Figure 14:7). Cut nails were machine cut and have a flat head. They were invented as early as 1790, but did not become common in Ontario until 1830 and were eventually replaced by wire drawn nails in the 1890's.

3.2.3 Potential Sites Not Found

Table 3. Land Registry Data to 1897 for the West Half of Lot 11, Concession 4, Uxbridge Township

No.	Instrument	Dated	Grantor	Grantee	Quantity/Remarks
	Patent	June 1844	The Crown	Canada Company	100 acres
35388	Bargain & Sale	October 1849	Canada Company	James Forsyth	100 acres
24956	Bargain & Sale	September 1865	James Forsyth	Ransom Forsyth	100 acres
2147	Bargain & Sale	March 1876	Ransom Forsyth	James Little	100 acres
2745	Bargain & Sale	January 1878	James Little	James Watson	100 acres
4385	Bargain & Sale	April 1884	James Watson	William Watson	100 acres
4802	Will	date illegible	William Watson	James Watson	100 acres
6696	Bargain & Sale	February 1895	James Watson	James Smith	100 acres
6999	Bargain & Sale	January 1897	James Smith	Elizabeth Smith	100 acres

Two notable structures illustrated in the 1877 historical atlas map of the study area (Figure 2) were not recovered: a structure and a steam powered sawmill noted in the southwest corner of Lot 11, Concession 4 in the property owned by J. Little. Neither structure was noted during the test pit survey of the area in 2008. However, both structures are noted in the area that had been stripped of topsoil and heavily disturbed prior to the Stage 2 assessment having been undertaken. Therefore, any archaeological remains have been destroyed by this modern activity. In any case, the steam powered sawmill may not have left any archaeological remains if it was a portable sawmill. Portable steam powered sawmills

“typically consisted of a boiler, steam engine, circular saw, cutoff saw, which cut wood into slabs, and an edger, which would cut down the boards after they were initially cut by the circular saw. Though the word portable makes it seem that they were small and easy to transport, they were actually quite large and were transported by truck. Often shelters were built at the temporary sites to protect the mills.”

(Hajiatoni 2006: 3)

However, these mills were generally used to fell trees within the surrounding area and not all sawmills became permanent structures. There is some indication that in 1877 this steam powered sawmill was a recent addition to the property. The chain of title for the western half of Lot 11, Concession 4 (see Table 3) indicates that James Little bought the land only the year before the historical atlas was published. The land had previously been owned by the Forsyth family. The Ontario County Directories for 1866 and 1869 note that Ransom Forsyth had a farm on the property but no other business is noted and no advertisements for a sawmill on that property are found in these directories (McEvoy 1866, Conner and Colton 1869). It is likely that the steam powered sawmill was placed later on this property by James Little. Both it and perhaps an associated shack were noted on the historic atlas map (Figure 2) and later dismantled, leaving little or no

archaeological footprint that would have been subsequently destroyed by the modern day topsoil stripping in the area.

3.2.4 Summary and Recommendations

Location 1 (BaGs-30) yielded a lithic scatter over a 15 metre by 5 metre area. On account of the fact that Location 1 consisted of a spatially discrete area producing a lithic scatter, it was recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its significance and information potential. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one metre square test units. Two datum stakes had been laid in on the field edge in preparation for further fieldwork.

Location 2 (BaGs-31) yielded a 20 by 20 metre scatter of test pits containing mid-19th century Euro-Canadian historic material. On account of the fact that Location 2 consisted of a spatially discrete area producing a significant cluster of Euro-Canadian historic artifacts identified as mid-19th century material given the cut nails and whiteware found, it was recommended that this site be subject to a Stage 3 archaeological investigation to further evaluate its significance and information potential. The Stage 3 assessment would include the mapping of any surface finds and the hand excavation of a series of one metre square test units. Two datum stakes had been laid in on the field edge in preparation for further fieldwork.

3.3 Stage 3 Evaluation of Site Significance and Information Potential

3.3.1 Location 1 (BaGs-30)

The Stage 3 assessment of Location 1 (BaGs-30) included the hand excavation of eight one-metre test units strategically located to sample the nature and extent of the cultural deposits at the site (Figure 15). A permanent datum was established near the western margin of the site, adjacent to the small pond towards which the site seems to have been oriented.

In total, three pieces of Onondaga chert chipping detritus (Figure 19:1) were recovered from the test units (see Appendix B for the catalogue listing by excavation unit). Given the lack of diagnostic artifacts, as well as the limited amount of cultural material recovered from the test units, no additional archaeological assessment is recommended for BaGs-30.

3.3.2 Location 2 (BaGs-31)

The Stage 3 assessment of Location 2 (BaGs-31) included the hand excavation of ten one-metre test units strategically located to sample the nature and extent of the cultural deposits at the site (Figure 16). A permanent datum was established near the

northwestern margin of the site, adjacent to the raised gravel road running immediately north of the site.

A total of 416 artifacts were recovered during the Stage 3 assessment of the site, including 1 undiagnostic precontact Aboriginal debitage flake of Onondaga chert and 415 Euro-Canadian historic artifacts. Table 4 presents a summary of the historic artifact classes found; the subsequent discussion considers each artifact class in detail. Appendix B presents the complete catalogue listing by excavation unit.

Table 4. Artifact Summary of Stage 3 Historic Artifacts from Location 2 (BaGs-31)

Artifact	Freq.	%
Ceramic Artifacts	324	78.07
pearlware	1	0.24
whiteware	213	51.33
ironstone	46	11.08
yellowware	5	1.20
utilitarian	45	10.84
ceramic, miscellaneous	14	3.37
Non-Ceramic Artifacts	91	21.93
structural	61	14.70
kitchen or food related	15	3.61
personal	13	3.13
metal, miscellaneous	2	0.48
Total	415	100.00

Ceramic Artifacts

In total 324 fragments of ceramic cups, plates or pots were collected from the excavations at BaGs-31. Included in this total are 213 whiteware shards, 46 ironstone shards, 45 utilitarian shards, five yellowware shards, 1 pearlware shard and 14 ceramic shards that could not be typed. Table 5 provides a detailed breakdown of the ceramic collection by decorative technique for BaGs-31.

Pearlware

Only one shard of pearlware (0.31% of the Stage 3 ceramic collection) was recovered during excavations (Figure 19:2). The shard is from the rim of a plate and exhibits some moulded design along the rim and what appears to be a floral design. No colour is preserved on this small shard. Pearlware, sometimes referred to as “China glazed”, is a variety of earthenware that was popular from 1780 to 1840. Pearlware is often difficult to recognize because of its similar appearance to later whiteware ceramics, however because of the addition of cobalt, the glaze has a light blue to blue-green tint as is the case with this shard.

Figure 15. Stage 3 Excavation Results for Location 1 (BaGs-30)

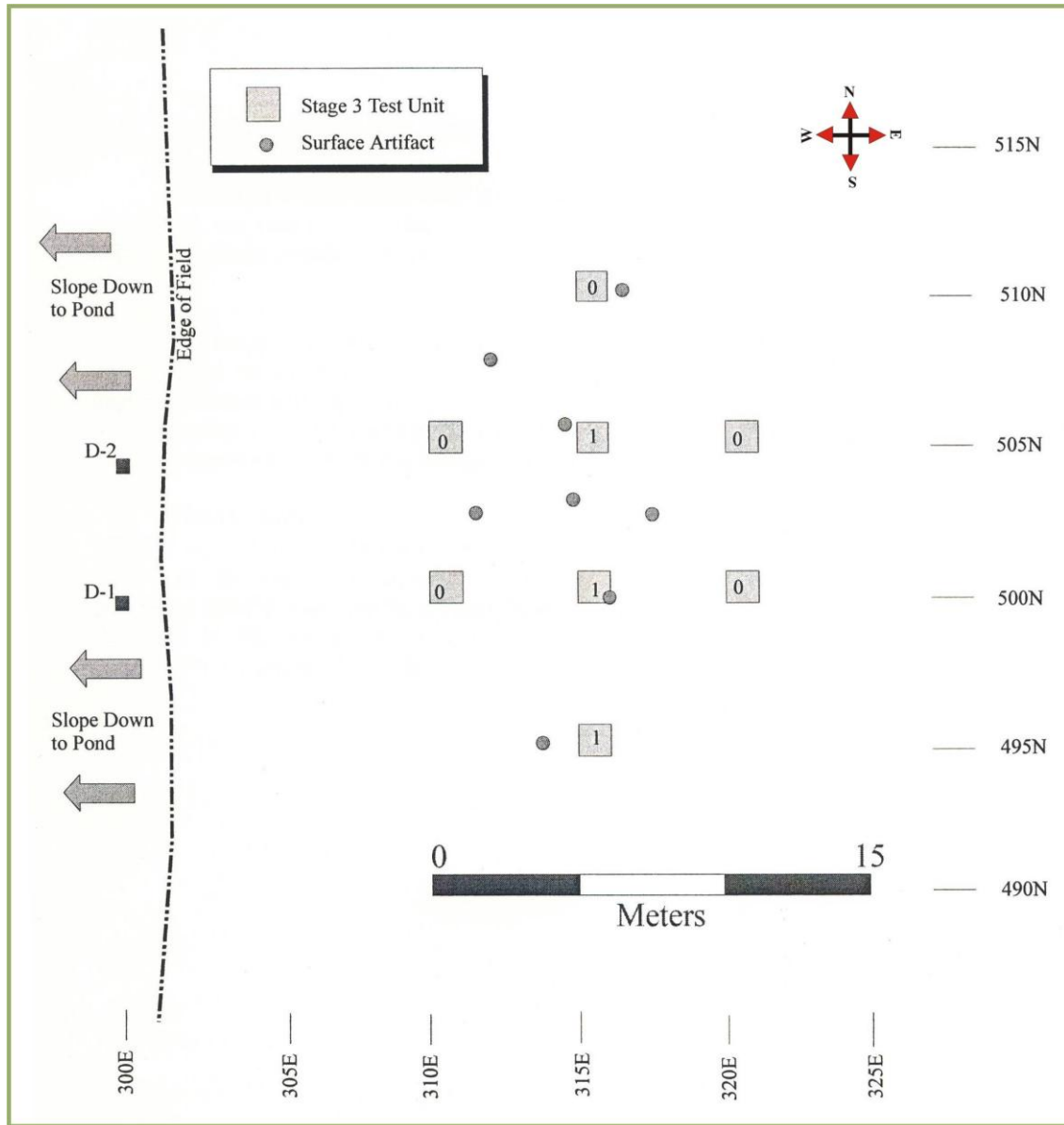


Figure 16. Stage 3 Excavation Results for Location 2 (BaGs-31)

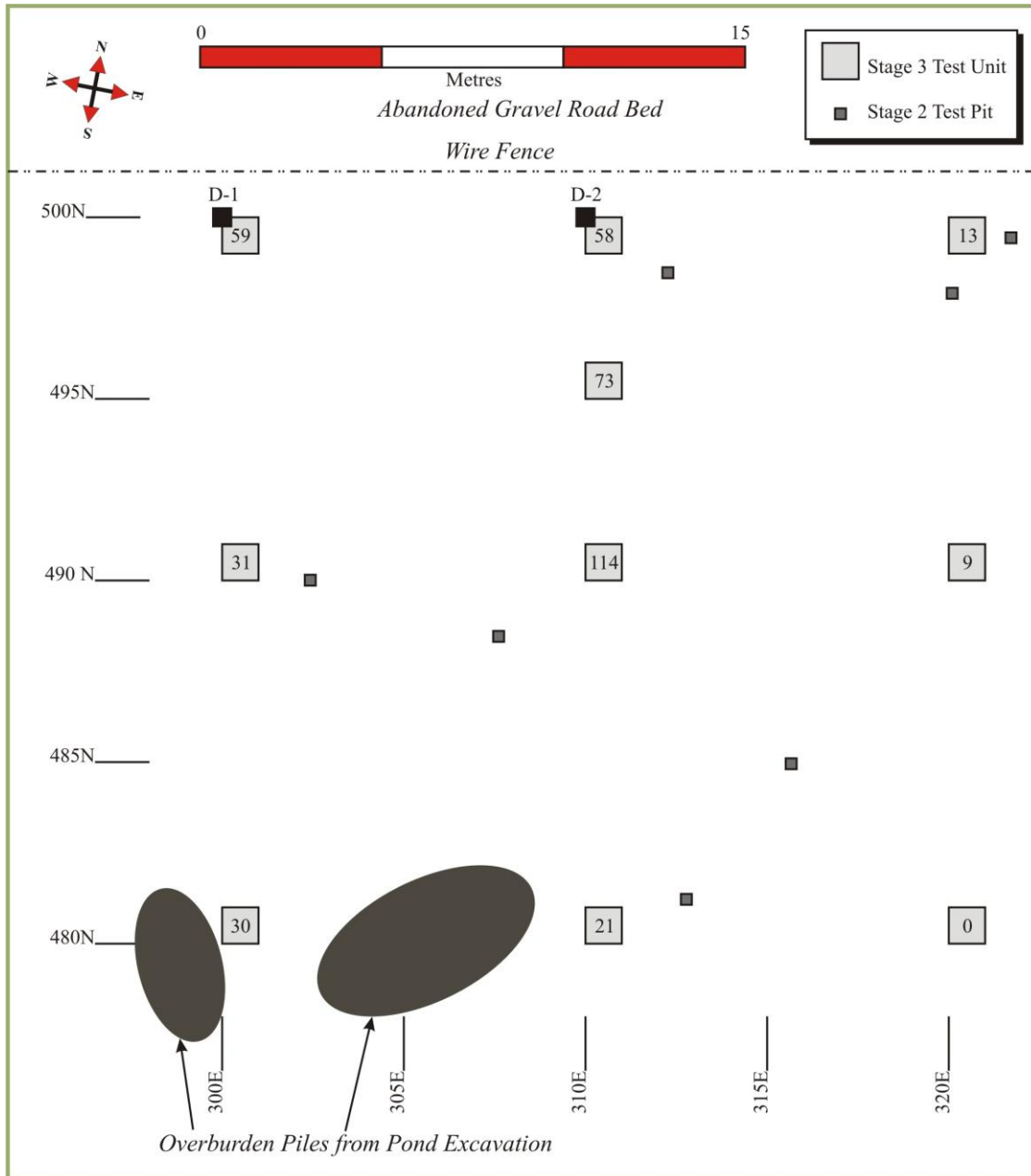


Figure 17. Excavations at Location 1 (BaGs-30) in 2001



Figure 18. Excavations at Location 2 (BaGs-31) in 2008



Figure 19. Stage 3 Artifacts Recovered from Location 1 (BaGs-30) and Location 2 (BaGs-31)



Actual Size of Artifacts

Table 5. Detailed Breakdown of Ceramics by Decorative Technique for BaGs-31

Artifact	Freq.	%
pearlware, moulded	1	0.31
whiteware, banded	2	0.62
whiteware, edged	2	0.62
whiteware, flow transfer printed	8	2.47
whiteware, painted	10	3.09
whiteware, stamped	7	2.16
whiteware, transfer printed	45	13.89
whiteware	139	42.90
ironstone, moulded	1	0.31
ironstone, transfer printed	3	0.93
ironstone	42	12.96
yellowware	5	1.54
earthenware, red	41	12.65
earthenware, yellow	2	0.62
stoneware	2	0.62
ceramic, miscellaneous	14	4.32
Total	324	100.00

Whiteware

The most plentiful ware found during the Stage 3 excavations was various forms of whiteware (n=213 or 65.74% of the Stage 3 ceramic collection). Whiteware is a variety of earthenware with a near colourless glaze that replaced earlier near white ceramics such as pearlware and creamware by the late 1820's to early 1830's, however the initial manufacture date of what archaeologists call "whiteware" is not known. Many of the shards were fragmentary and no longer preserved decoration (n=139 or 65.26% of the whiteware recovered), but for the remainder the decorative techniques preserved include, in order of prevalence, transfer printing (n=45), painting (n=10), flow transfer printing (n=8), stamping (n=7), banding (n=2), and edging (n=2).

Transfer printed whiteware became popular quite early in the 19th century and involved the transfer of an intricate pattern from a sheet of treated paper to the underglaze surface of the clay. Before 1830, almost all transfer printed wares were blue. After 1830, colours such as light blue, black, brown, green, purple and red became more common. Transfer printed whiteware ceramics were less densely decorated than the earlier pearlware types, with more of the white background showing through the designs. The majority (n=41) of the transfer printed ware from Location 2 is blue (Figure 19:3) with two shards exhibiting brown transfer printing and one shard each of purple and black transfer printing (Figure 19:4).

Painted whiteware was often painted with floral motifs. Before about 1830 the floral designs were painted either in all blue or in a polychrome palette featuring blue, brown, yellow, and green ("early palette"). By the 1830s chrome based pigments became

popular, expanding the variety of colours appearing on painted ware (“new palette”) to include black and red (Adams *et al.* 1994: 101). Painted teaware remained popular until the 1870s. The collection here consists of mostly early palette wares (Figure 19:5) although three shards exhibit the late palette colours of red and black.

The flow transfer printed whitewares illustrate a variant of transfer printing known as flow, flown, or flowing colours. While the design is printed, usually in blue, the pigment has been allowed to “flow” into the glaze, thus giving the pattern a misty appearance. Briefly popular in the late 1840’s and 1850’s, flow ware was revived in the 1890’s. The examples from this site (BaGs-31) include five black shards and three blue shards and date to the earlier 1840’s to 1850’s period of popularity (Figure 19:6).

The seven examples of stamped whiteware date to the second half of the 19th century (Figure 19:7). Stamping involved the transfer of paint to the bisque surface through the use of a stamp most frequently made of sponge.

Banded whiteware was decorated through the use of coloured “slips” (liquid clay) to decorate the surface of such vessels as bowls, pitchers and mugs. Typically the slip is a blue, black, brown or earth colour, often appearing in combination. The most common design consists of bands encircling the ceramic item. Banded ware can be differentiated from painted ware since slip decoration adds a certain thickness, thus raising the decoration slightly above the rest of the body. Examples from the first half of the 19th century are fairly elaborate with multiple colours; most banded ware from the last half of the century tends to be plainer, often consisting of nothing but bands of blue slip. The two shards recovered during the Stage 3 assessment are blue and pale green but so little of each shard is preserved that it is difficult to assign them temporally.

Finally two whiteware shards belong to the blue edged whiteware variety but are so fragmentary that they are difficult to date (Figure 19:8). However, both shards have discernibly scalloped edges. Miller (1987) outlines the production range for edged whiteware according to rim decoration and dates various scalloped styles from 1780 to 1850.

Ironstone

A total of 46 (14.2% of the Stage 3 ceramic collection) ironstone shards were found, again the majority being undiagnostic plain fragments (n=42 or 91.30% of the ironstone ware artifacts recovered). Ironstone is a variety of refined white earthenware introduced in the 1840’s that became extremely popular by the 1870’s and 1880’s. It is usually much thicker than whiteware. The glaze is often slightly blue, owing to the addition of cobalt, but smooth unlike the earlier pearlwares. This feature is illustrated by the one shard of purple transfer printed ironstone recovered. Two other ironstone shards were also transfer printed but with a brown transfer pattern. The final shard of ironstone recovered during the Stage 3 assessment is a moulded piece with a brown band along the

edge whose decoration is difficult to classify (Figure 19:9). The most common raised moulded designs used were those of wheat or fruit.

Yellowware

Five shards of plain yellowware ceramics were recovered during the Stage 3 assessment of Location 2 (BaGs-31). Yellowware ceramics were first manufactured in the 1840's, and continue to be manufactured in limited quantities today.

Utilitarian Wares

Utilitarian wares make up 13.89% of the Stage 3 ceramic collection (n=45). Red earthenware is represented by 41 undecorated unglazed shards. Yellow earthenware is represented by 2 shards with brown glazed exteriors. Red and yellow earthenware vessels were manufactured throughout the late 18th and 19th centuries and were the most common utilitarian ware in the first half of the 19th century, eventually being replaced by more durable stoneware vessels. There are also two shards of stoneware, both with an exterior yellow glaze and an interior light blue-grey glaze. Stoneware vessels were produced throughout the 19th century, becoming more durable and refined over time.

Miscellaneous Ceramics

Finally, a total of 14 ceramic shards (4.32% of the Stage 3 ceramic collection) could not be assigned a particular ware type due to their extremely fragmentary nature and lack of undamaged surfaces.

Structural Artifacts

All of the structural artifacts recovered during the Stage 3 excavation indicate a wooden structure given that no brick or mortar fragments were recovered, as summarized in Table 6. The most numerous artifact type was window glass (n=30 or 49.18% of the Stage 3 structural artifact collection). Ian Kenyon (1980) provides a pre-1850 date for window panes that have an average thickness of less than 1.6 mm. Window pane thickness increased throughout the 19th century as the trend shifted towards using larger windows when building homes. The window glass had an average thickness of 1.7 mm. However, when the window glass is divided into two groups of 2.0 mm and above (11 artifacts) versus 1.9 mm and below (19 artifacts), the average window glass thickness of the two groups is 2.0 mm and 1.5 mm respectively. Of the 30 shards recovered, nine measure 1.5 mm in thickness or lower indicating that one or more window panes could date to before 1850 and one or more window panes were installed after 1850.

The archaeologists also recovered 29 nails (45.90% of the Stage 3 structural artifact collection) of which all but one were cut nails. One nail was a wrought nail (Figure 19:10). Wrought nails were hand made and are identifiable by their irregular heads, hammered body texture, and all four sides coming to a taper. Wrought nails were

the most commonly used nail in Upper Canada until about 1830 when machine cut nails started to become more popular. The remaining 29 cut nails were machine cut and have a flat head (Figure 19:11). They were invented as early as 1790, but did not become common in Ontario until after 1830.

Finally, two large bolts were found. They are undiagnostic temporally.

Table 6. Detailed Breakdown of Structural Artifacts for BaGs-31

Artifact	Freq.	%
glass, window	30	49.18
nail, cut	28	45.90
nail, wrought	1	1.64
bolt	2	3.28
Total	61	100.00

Kitchen or Food Related Artifacts

During the Stage 3 assessment of BaGs-31 very few kitchen and food related artifacts were found: 11 fragments of bottle glass and four faunal remains. The 11 bottle glass shard colours include five aqua, three clear, two pink, and 1 brown. One of the clear shards has numerous air bubbles in the glass which indicates that this glass specimen was free blown and not machine made. Most free-blown bottles date prior to 1850 and can be much older (Kendrick 1971). The other glass bottle shards do not preserve any signs of seams or pontil marks but are free of air bubbles; this indicates a date of manufacture after 1850.

Table 7. Detailed Breakdown of Kitchen or Food Related Artifacts for BaGs-31

Artifact	Freq.	%
glass, bottle	11	73.33
faunal remains	4	26.67
Total	15	100.00

The four faunal remains are three vertebral fragments and a severely weathered long bone fragment. All appear to be from a large mammal and are consistent with typical Euro-Canadian domesticated animals such as the domestic cow (*Bos taurus*).

Personal Artifacts

A number of personal artifacts were recovered, including two fragments of glass from a lamp chimney (these are temporally undiagnostic given their small size) and half of a button (Figure 19:12). The button was manufactured from bone and is of the four hole variety. Such a button was commonly used in the 19th century for underclothing. Typically 1 to 2 cm in diameter (this button falls within that range but is too fragmentary

to obtain an exact measurement), bone buttons often retain the wood-like grain of the bone and so are sometimes misidentified as wood. By the last quarter of the 19th century bone buttons began to be replaced by those made of “vegetable ivory”, a substance obtained from the shell of a large tropical nut (Adams *et al.* 1994: 96).

Ten white clay fragments were also found (Figures 19:13 and 19:14), including six bowl fragments, two elbow fragments and two stem fragments; no complete white clay pipes were recovered. Unfortunately none of the preserved items have distinguishing marks; overall the pipe collection offers limited interpretive value.

Table 8. Detailed Breakdown of Personal Artifacts for BaGs-31

Artifact	Freq.	%
glass, lamp chimney	2	15.38
white clay pipe bowl	6	46.16
white clay pipe elbow	2	15.38
white clay pipe stem	2	15.38
button	1	7.70
Total	13	100.00

Other Artifacts

Two undiagnostic pieces of metal (0.48% of the Stage 3 historic artifact collection) that were too broken and corroded to identify were also recovered from Location 2 (BaGs-31).

Land Registry Data for Location 2 (BaGs-31)

BaGs-31 is located in the northwest corner of the west half of Lot 10, Concession 4, Uxbridge Township, former Ontario County, now Regional Municipality of Durham, Ontario. The following summarizes the existing archival records concerning the 19th century occupation for this area and are given in Table 9. The Crown Patent was granted to Matthias Zimmerman in February 1807 for the west half of Lot 10, Concession 4. After he had died, the property was left in his will to Joseph Zimmerman in July 1838. Only three years later in August 1841 Joseph Zimmerman and his wife sold the property to William Walker. In March 1852, William Walker sold the property to Robert McCormick who held onto the land until January 1886. Two directories were issued listing the Ontario County occupants in 1866 and 1869. The 1866 directory lists Robert McCormick on a farmstead and John McCormick on a homestead on Lot 10 Concession 4 (McEvoy 1866: 154). They are both likely on the west half given that there is also a William Walker (most likely the seller of the property to Robert McCormick in 1841) listed for Lot 10, Concession 4 (McEvoy 1866: 157) whose family appears in the 1877 historic atlas as “Mrs. M. Walker” on the east half of Lot 10, Concession 4 (Figure 2). The 1869 directory lists “Robert McCormack [sic]” as living on a farmstead on the west half of Lot 10 Concession 4 and no other individuals are listed for that property (Conner

and Coltson 1869: 164). At this time no other occupant is listed on the property. The homestead lived in by John McCormick might have been abandoned by this time and would not have been recorded in the 1877 *Illustrated Historical Atlas of Ontario County* (J.H. Beers and Co. 1877). In January 1886, Robert McCormick sold the land to Benjamin Madell. This was the last land transaction in the 19th century; Benjamin Madell then sold the west half of Lot 10, Concession 4 to John May in December 1905. Table 2 summarizes the Land Registry data for the west half of Lot 10, Concession 4, Uxbridge Township from the Crown patent to 1905.

Table 9. Land Registry Data to 1905 for the West Half of Lot 10, Concession 4, Uxbridge Township

No.	Instrument	Dated	Grantor	Grantee
	Patent	February 1807	The Crown	Matthias Zimmerman
25139	Will	July 1838	Matthias Zimmerman	Joseph Zimmerman
25173	Bargain and Sale	August 1841	Joseph Zimmerman and wife	William Walker
44683	Bargain and Sale	March 1852	William Walker	Robert McCormick
4744	Bargain and Sale	January 1886	Robert McCormick	Benjamin Madell
8328	Bargain and Sale	December 1905	Benjamin Madell	John May

Summary and Recommendations

The artifacts recovered at Location 2 (BaGs-31) point towards a mid-19th century date of occupation, given the presence of pearlware, of early palette painted whiteware, of earlier transfer printed and flow transfer printed whitewares, and of scalloped blue edged whiteware; the predominance of whiteware over ironstone; the presence of one wrought and numerous cut nails; the presence of window pane glass from around the middle of the century; and the presence of a free blown glass shard. The undiagnostic artifacts such as the white clay pipes and utilitarian wares still point to a nineteenth century occupation.

Given the lack of brick and mortar artifacts, the structure was most likely wooden and not a later, more permanent, brick structure. The land registry and documentary data provide a clue to the identity of the material found. Although the 1877 historic atlas (Figure 2) does not show this house on the map, earlier Ontario County directories indicate that there could have been two occupants on the west half of Lot 10, Concession 4 in the middle of the 1860's: Robert McCormick and John McCormick, listed as having a farmstead and a homestead respectively. Given that Robert McCormick is listed as the property's owner in the land registry data and the historic atlas, and that the home depicted in the 1877 atlas map would have been located where a structure still stands today, John McCormick's homestead might be the one that has been uncovered during the Stage 2 and 3 assessments of Location 2 (BaGs-31). It would have been abandoned in the late 1860's, prior to the area being mapped in the 1877 historic atlas, and subsequently destroyed.

If for any reason BaGs-31 cannot be avoided, the Stage 4 excavation should consist of the block excavation in one-meter units of the area of greatest artifact densities, followed by the mechanical removal of topsoil from the remainder of the site area in order to uncover all subsurface post or cultural features. Additional documentary research, including investigation of available census records, should also be conducted to determine if possible the identity of the occupants of the homestead being excavated at Location 2 (BaGs-31). However, given additional constraints associated with the nearby wetlands are the Oak Ridges Moraine ecosystem, it is proposed instead that the site area and a large buffer, be avoided and subsequently protected from any aggregate activities and their associated impacts. This plan will be formally presented to the Ministry of Culture when the final site plan has been developed.

4.0 RECOMMENDATIONS

An archaeological assessment (Stage 1, 2 & 3) was conducted for an approximate 53 hectare aggregate extraction property located on Parts of Lot 10 and 11, Concession 4, Township of Uxbridge, Regional Municipality of Durham, Ontario. This assessment was undertaken as part of the aggregate pit licensing process, as outlined in Sections 2.2.5 and 2.2.6 of the provincial standards under the *Aggregate Resources Act*.

The Stage 2 field assessment resulted in identification of one small precontact Aboriginal site, Location 1 (BaGs-30), in 2001; and one historic scatter, Location 2 (BaGs-31), in 2008. Due to the potential archaeological significance of these locations, both were subject to a Stage 3 assessment in order to better evaluate its significance and information potential.

The Stage 3 assessment of Location 1 (BaGs-30) resulted in the recovery of a minimal amount of cultural material and no additional assessment is recommended. The Stage 3 assessment of Location 2 (BaGs-31) resulted in the recovery of additional 19th century Euro-Canadian material and a Stage 4 assessment of this archaeological site is recommended. However, given additional constraints related to the presence of the nearby wetlands the Oak Ridges Moraine ecosystem, it is proposed that the site area and a large buffer around Location 2 (BaGs-31) be avoided and subsequently protected from any aggregate extraction activities.

This assessment was undertaken to fulfil a standard archaeological condition of the aggregate licensing process as imposed by the Ministry of Natural Resources. The Ontario Ministry of Culture is asked to review the results presented in this report, and issue a letter of concurrence. A letter of clearance will be requested when the final site plan has been prepared and circulated to the Ministry of Culture.

Should deeply buried archaeological material be found on the property during excavation activities, the Ministry of Culture should be notified immediately at (416) 314-7174. In the event that human remains are encountered during excavation, 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 and Commercial Relations, (416) 326-8392.

Respectfully Submitted by

A handwritten signature in blue ink that reads "Jim Wilson". The signature is written in a cursive style with a large, looping initial "J".

Jim Wilson, M.A.
President, Archaeologix Inc.

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Appendix A: Stage 2 Artifact Catalogues

Location 1 (BaGs-30) Stage 2 Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
1	surface find	0 cm	chipping detritus	8	8 Onondaga

Location 2 (BaGs-31) Stage 2 Catalogue

Cat. #	Context	Artifact	Freq.	Comments
1	test pit find	whiteware	9	plain
2	test pit find	whiteware, banded	1	pale blue bands
3	test pit find	whiteware, painted	2	1 blue, red & black, 1 blue & black
4	test pit find	whiteware, transfer printed	2	blue
5	test pit find	ironstone	14	plain
6	test pit find	ironstone, moulded	1	indeterminate
7	test pit find	porcelain, semi	1	
8	test pit find	glass, bottle	3	2 clear, 1 brown
9	test pit find	glass, lamp chimney	1	clear
10	test pit find	nail, cut	3	
11	test pit find	metal hardware, miscellaneous	1	metal ring and prong

Appendix B: Stage 3 Artifact Catalogues

Location 1 (BaGs-30) Stage 3 Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
50	315E 500N:1	0-22 cm	chipping detritus	1	Onondaga
51	315E 505N:1	0-21 cm	chipping detritus	1	Onondaga
52	315E 495N:1	0-18 cm	chipping detritus	1	Onondaga

Location 2 (BaGs-31) Stage 3 Catalogue

Cat. #	Context	Depth	Artifact	Freq.	Comments
12	320E 495N:21	0-50 cm	white clay pipe bowl	2	plain
13	320E 495N:21	0-50 cm	whiteware	4	
14	320E 495N:21	0-50 cm	whiteware, transfer printed	1	black
15	320E 495N:21	0-50 cm	yellowware	1	
16	320E 495N:21	0-50 cm	ironstone	5	
17	320E 495N:21	0-50 cm	ironstone, moulded	1	black painted band, leaf design
18	320E 495N:21	0-50 cm	earthenware, red	1	
19	320E 495N:21	0-50 cm	nail, cut	1	
20	320E 495N:21	0-50 cm	faunal remains	3	
21	320E 495N:21	0-50 cm	glass, bottle	1	aqua
22	320E 495N:21	0-50 cm	glass, window	1	
23	310E 495N:21	0-39 cm	whiteware	29	
24	310E 495N:21	0-39 cm	whiteware, stamped	1	green leaf with painted black & blue lines
25	310E 495N:21	0-39 cm	whiteware, transfer printed	16	blue
26	310E 495N:21	0-39 cm	ironstone	3	
27	310E 495N:21	0-39 cm	ironstone, transfer printed	2	brown
28	310E 495N:21	0-39 cm	earthenware, red	2	
29	310E 495N:21	0-39 cm	faunal remains	1	
30	310E 495N:21	0-39 cm	bolt	2	
31	310E 495N:21	0-39 cm	glass, window	1	
32	310E 495N:21	0-39 cm	glass, bottle	1	clear
33	300E 490N:1	0-18 cm	stoneware	1	moulded, yellow glaze exterior, light blue-grey interior
34	300E 490N:1	0-18 cm	whiteware	13	
35	300E 490N:1	0-18 cm	whiteware, transfer printed	5	4 blue, 1 purple
36	300E 490N:1	0-18 cm	whiteware, flow transfer printed	2	black
37	300E 490N:1	0-18 cm	whiteware, banded	1	green band
38	300E 490N:1	0-18 cm	earthenware, red	3	
39	300E 490N:1	0-18 cm	nail, cut	2	
40	300E 490N:1	0-18 cm	white clay pipe bowl	1	plain
41	300E 490N:1	0-18 cm	glass, bottle	1	clear, air bubbles in glass
42	300E 490N:1	0-18 cm	ironstone	2	
43	320E490N:1	0-19 cm	whiteware	5	
44	320E490N:1	0-19 cm	whiteware, transfer printed	1	blue
45	320E490N:1	0-19 cm	ironstone	1	

Cat. #	Context	Depth	Artifact	Freq.	Comments
46	320E490N:1	0-19 cm	nail, wrought	1	
47	320E490N:1	0-19 cm	nail, cut	1	
48	310E 480N:1	0-26 cm	whiteware	4	
49	310E 480N:1	0-26 cm	whiteware, edged	1	blue, scalloped edge, fragmentary
50	310E 480N:1	0-26 cm	whiteware, transfer printed	1	blue
51	310E 480N:1	0-26 cm	whiteware, painted	1	blue, green & black
52	310E 480N:1	0-26 cm	ironstone	5	
53	310E 480N:1	0-26 cm	yellowware	1	
54	310E 480N:1	0-26 cm	earthenware, red	3	
55	310E 480N:1	0-26 cm	ceramic, miscellaneous	1	
56	310E 480N:1	0-26 cm	glass, window	3	
57	310E 480N:1	0-26 cm	glass, bottle	1	brown
58	300E 480N:1	0-38 cm	whiteware	8	
59	300E 480N:1	0-38 cm	whiteware, transfer printed	6	blue
60	300E 480N:1	0-38 cm	whiteware, banded	1	blue
61	300E 480N:1	0-38 cm	yellowware	1	
62	300E 480N:1	0-38 cm	nail, cut	1	
63	300E 480N:1	0-38 cm	earthenware, red	8	
64	300E 480N:1	0-38 cm	ironstone	3	
65	300E 480N:1	0-38 cm	glass, window	2	
66	310E 495N:1	0-28 cm	whiteware	25	
67	310E 495N:1	0-28 cm	whiteware, transfer printed	6	blue
68	310E 495N:1	0-28 cm	whiteware, edged	1	blue, scalloped rim, fragmentary
69	310E 495N:1	0-28 cm	whiteware, flow transfer printed	4	3 blue, 1 black
70	310E 495N:1	0-28 cm	whiteware, painted	6	4 green, 1 red, 1 blue ban
71	310E 495N:1	0-28 cm	whiteware, stamped	4	blue
72	310E 495N:1	0-28 cm	ironstone	2	
73	310E 495N:1	0-28 cm	pearlware, moulded	1	possible floral design, fragmentary
74	310E 495N:1	0-28 cm	earthenware, red	4	
75	310E 495N:1	0-28 cm	yellowware	1	painted blue band
76	310E 495N:1	0-28 cm	earthenware, yellow	1	brown glaze ext
77	310E 495N:1	0-28 cm	white clay pipe bowl	2	plain
78	310E 495N:1	0-28 cm	white clay pipe stem	1	plain
79	310E 495N:1	0-28 cm	ceramic, miscellaneous	3	damaged
80	310E 495N:1	0-28 cm	glass, window	6	
81	310E 495N:1	0-28 cm	nail, cut	4	
82	310E 495N:1	0-28 cm	glass, bottle	2	aqua
83	300E 495N:21	0-41 cm	whiteware	18	
84	300E 495N:21	0-41 cm	whiteware, flow transfer printed	1	black
85	300E 495N:21	0-41 cm	ironstone	3	
86	300E 495N:21	0-41 cm	earthenware, red	6	
87	300E 495N:21	0-41 cm	stoneware	1	yellow glaze exterior, light blue-grey interior
88	300E 495N:21	0-41 cm	yellowware	1	
89	300E 495N:21	0-41 cm	white clay pipe elbow	1	
90	300E 495N:21	0-41 cm	white clay pipe bowl	1	plain
91	300E 495N:21	0-41 cm	ceramic, miscellaneous	3	burnt
92	300E 495N:21	0-41 cm	glass, window	4	

Cat. #	Context	Depth	Artifact	Freq.	Comments
93	300E 495N:21	0-41 cm	glass, bottle	2	pink
94	300E 495N:21	0-41 cm	nail, cut	16	
95	300E 495N:21	0-41 cm	metal, miscellaneous	1	
96	300E 495N:21	0-41 cm	whiteware, stamped	1	green
97	310E 490N:1	0-32 cm	whiteware	33	
98	310E 490N:1	0-32 cm	whiteware, painted	3	2 blue, 1 red & green
99	310E 490N:1	0-32 cm	whiteware, stamped	1	1 red & green
100	310E 490N:1	0-32 cm	whiteware, transfer printed	9	2 brown, 7 blue
101	310E 490N:1	0-32 cm	whiteware, flow transfer printed	1	black
102	310E 490N:1	0-32 cm	ironstone	18	
103	310E 490N:1	0-32 cm	earthenware, red	14	
104	310E 490N:1	0-32 cm	ceramic, miscellaneous	7	burnt
105	310E 490N:1	0-32 cm	white clay pipe elbow	1	
106	310E 490N:1	0-32 cm	white clay pipe stem	1	
107	310E 490N:1	0-32 cm	nail, cut	3	
108	310E 490N:1	0-32 cm	glass, window	13	
109	310E 490N:1	0-32 cm	glass, bottle	3	2 aqua, 1 clear
110	310E 490N:1	0-32 cm	chipping detritus	1	Onondaga chert; retouch flake
111	310E 490N:1	0-32 cm	metal, miscellaneous	1	
112	310E 490N:1	0-32 cm	earthenware, yellow	1	brown glaze exterior
113	310E 490N:1	0-32 cm	glass, lamp chimney	2	
114	310E 490N:1	0-32 cm	button	1	bone, 4 holes, fragmentary
115	310E 490N:1	0-32 cm	ironstone, flow transfer printed	1	purple, oriental design

Appendix C: Qualifications of the Principal Investigator

Jim Wilson, M.A.
President, Archaeologix Inc.

Ontario Professional Archaeological License P001

Education History:

- 1988 Honours B.A., University of Western Ontario, London, Ontario Canada.
Department of Anthropology.
- 1990 Master's Degree, McMaster University, Hamilton, Ontario Canada. Department
of Anthropology.

University Lecturing Positions:

- 1993 McMaster University
1994 McMaster University
1995 University of Western Ontario

Expert Witness Testimony:

- 2002 Ontario Municipal Board; Regarding the Kitchener Municipal Golf Course
Proposal.
- 2006 Niagara Escarpment Tribunal; Regarding the Hunter' s Point Application

Archaeological Experience:

- 97-08 President, Archaeologix Inc.
- 96-97 Principle Field Investigator, Mayer Heritage Consultants Inc.
- 94/95 City of London Archaeologist Planner.
- 1994 Principle Field Investigator, Mayer Heritage Consultants Inc.
- 1993 Ontario Heritage Foundation Research: Research Assistant on the Middle
Sydenham River Survey.

McMaster University: Project Director for the Thames River Middle
Woodland Settlement/Subsistence Project.

Wilson Heritage Services: Project Director, Aldborough Township
Archaeological Resource Assessment.

1992 McMaster University: Project Director for the Thames River Middle Woodland Settlement/Subsistence Project.

1991 Mayer, Poulton and Associates: Field Director for the Edenridge Subdivision Assessment.

Archaeological Research Associates: Field Assistant.

1990 McMaster University: Field Assistant on the Mixteca Alta Archaeological Survey; Oaxaca, Mexico.

1989 McMaster University: Project Director of the Boresma Site excavations.

Mayer, Poulton and Associates. Field Assistant on the Rosedale Subdivision Assessment.

1988 Mayer, Pihl and Poulton: Field Assistant for the Ontario Hydro Longwoods Transformer Station Project.

Mayer, Pihl and Poulton: Assistant on the Union Gas Hamilton to Niagara Falls pipeline survey and subsequent mitigations.

McMaster University: Field Assistant for the Harvie Site mitigation, a 19th century pioneer cemetery.

1987 Mayer, Pihl and Poulton: Field Assistant on the Vaughn Master Plan Survey.

Museum of Indian Archaeology: Field Assistant for the Matthew's Wood's Project.

Mayer, Pihl and Poulton: Field Assistant on the Ontario Hydro Longwoods Transformer Station Assessment, Phase One.

University of Western Ontario Field School.

1986 Museum of Indian Archaeology: Field Assistant at the Crawford Lake Site.

Publications:

1988 The Snake Creek Burial. *KEWA* 88(7):2-6. (With Dr. M.W. Spence).

1991 A Bad Analogy?: Northern Algonquian Models and the Middle Woodland Occupations of Southwestern Ontario. *KEWA*: 91(6):9-22.

1991 The Kittmer Site: A Middle Woodland Camp on the Upper Thames Drainage. *KEWA*: 91(6):2-8.

1992 Archaeological Investigations at the Duncan McGugan Middle Woodland Site. *Annual Archaeological Review of Ontario*, 71-74. (With Dr. C. Ellis).

- 1993 The Preliminary Investigations at the Pocock Site and the Meadowood Phase along the Middle Thames Drainage. *KEWA*: 93(3):2-21.
- 1993 The Rice Lake Phase Reconsidered. *KEWA*: 93(6):17-25.
- 1994 The Racher Site (AfHi-141): More Evidence Concerning Large Riverine Middle Woodland Sites Along the Middle Thames River Drainage. *KEWA*: 94(4): 2-17.
- 1997 Summary of an On-Going Archaeological Assessment, Lt.-Colonel John Butler Homestead (AgGu-66), Niagara-on-the-Lake. In *Arch Notes* Vol.2(5):6-14. (With R.G. Mayer and S. Gouglas).
- 1997 Cherry Hill: A Kirk Corner-Notched Site at Fonthill, Ontario. *KEWA* : 97(7):2-11. (With B. Wimmer and A. Figura).
- 1998 Osteological Analysis of an Early Woodland Burial: Mo Pierce site, South bay Marina Complex, Township of Pelee, Essex County, Ontario (AnHq-20). *Arch Notes*: 3(3):13-18.
- 1999 The Pocock Site: Exploring the Early Woodland/Middle Woodland Transition in Southwestern Ontario. *KEWA*: 99(1):2-27.
- 1999 The Greg Tarry Site (AeHf-38), A Small Uren Sub-Stage Camp in Aylmer, Ontario. *KEWA*: 99(3):2-8.
- 2000 The Moyer' s Flat Site Pot. *KEWA*: 00(7):2-4
- 2002 The Fregg Site (AhGx-390), A Small Point Late Archaic Occupation in Ancaster. *KEWA*: 02(3):2-18

Presentations:

- 1989 An Introduction to the Boresma Site: A Middle Woodland Occupation in the Middle Thames River Drainage. At: **The Ontario Archaeological Society Annual Meeting**; London Ontario.
- 1989 The Middle Woodland Period in the Thames River Drainage. For: **McMaster Anthropology Society**.
- 1992 The 1989 Excavations at the Boresma Site: A Middle Woodland Basecamp. For: **London Chapter of the Ontario Archaeological Society**.
- 1993 The Prehistory of the Delaware Area from the Late Archaic to the Early Late Woodland. For: **London Chapter of the Ontario Archaeological Society**.
- 1993 Early Woodland and Middle Woodland Settlement Systems: Exploring Two Distinct Adaptive Strategies. At: **The Ontario Archaeological Society Annual Meeting**. Niagara Falls, Ontario

- 1993 Which Way to the Lawson Site? Late Woodland Settlement Patterns West of the Caradoc Sand Plain. At: **The Ontario Archaeological Society Annual Meeting**; Niagara Falls, Ontario. (With D. Riddell).
- 1995 Identifying Reductions in Residential Mobility in the Early and Middle Woodland Periods in Southwestern Ontario. At: **The Canadian Archaeological Society Annual Meetings**; Kelowna, British Columbia.
- 1995 GIS applications and archaeological master plans. At: **The Annual ESRI Canada Arc/Info Users Conference**; Waterloo, Ontario.
- 1996 GIS Workshop. At: **The 10th Annual Canadian Association of Professional Heritage Consultants Meetings**, Toronto, Ontario.
- 1998 Archaeological Master Planning, the London Experience. At: **The 1999 Ontario Professional Planners Institute Annual Meetings**, Kingston, Ontario.
- 2001 The Van Bree Site: Young Phase/Glen Meyer Interaction near Arkona. For: **London Chapter of the Ontario Archaeological Society**.
- 2002 Don Crich Site: A Princess Point Camp on the North Branch of the Thames River For: **London Chapter of the Ontario Archaeological Society**.
- 2004 Wesleyan Methodist Cemetery and the Early History of London East. For: **Middlesex Chapter of the Ontario Genealogical Society**.
- 2005 The Wesleyan Methodist Cemetery and the Early History of London East. For: **Elgin County Chapter of the Ontario Genealogical Society**.
- 2006 Early London East: Trains, Burials and Houses of Ill Repute. For: **London Historical Society**.
- 2006 Winter Excavations at the Western Fair Grounds. For: **London Chapter of the Ontario Archaeological Society**.
- 2008 Lafarge Man and the Transitional Woodland Occupations of the London Area. For: **London Chapter of the Ontario Archaeological Society**. (With Dr. M.W. Spence and T. Carmichael).