# Stage 1-2 Archaeological Assessment of Proposed Westwood Estates

Part of Lot 33 Concession 1, Geographic Township of Humberstone, Historical County of Welland, R.M. of Niagara, Ontario

**Submitted to:**
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**ORIGINAL REPORT**

December 1, 2021

## Executive Summary

Detritus Consulting Ltd. was retained by Mr. Craig A. Rohe of Upper Canada Consultants ('the Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 33, Concession 1, Geographic Township of Humberstone, Historic County of Welland, now in the Regional Municipality of Niagara, Ontario (Figure 1). This investigation was conducted in advance of a proposed residential development on lands located along the west side of Cement Road, Port Colbourne ( 'Study Area'; Figure 7).

An archaeological assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet this condition, a Stage 1-2 assessment of the Study Area was conducted during the pre-approval phase of the development under archaeological consulting license P462 issued to Mike Pitul by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario 2011).

The Study Area is a roughly rectangular shaped parcel measuring approximately 30.74 hectares ('ha'; Figure 1) that faces Cement Road to the west; on the north side the Study Area is adjacent to the residential properties that front Stanley Street; to the east side the residential properties and open land that front Olga Drive and Fountain Road to the west; on the south side, the Study Area boundary is irregular and was determined using Universal Transverse Mercator coordinates provided by the Proponent. At the time of the Stage 1 assessment, the Study Area comprised areas of agricultural field and areas of scrub that were former agricultural fields; an area of prior disturbance in the northwest associated with the subdivision along Stanley Street; and areas of Niagara Peninsula Conservation Authority ('NPCA') protected wetland (Figure 3).

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. As such, a Stage 2 field assessment was recommended for the areas of current and former agricultural field within the Study Area, which were to be ploughed and permitted to weather. The area of prior disturbance and NPCA protected wetlands were photo-documented only.

The subsequent Stage 2 assessment of the Study Area was conducted on July 27, 2021, and on September 27, 2021. This investigation consisted of a typical pedestrian survey of the recently ploughed and weathered fields at 5m intervals.

This investigation resulted in the identification and documentation of 168 Euro-Canadian artifacts from 86 findspots and the registration of site AfGt-336 (Tiles 3 and 6 of the Supplementary Documentation).

The Stage 2 assemblage comprises predominantly ceramic sherds (n=135), with household bottle glass and plant potter fragments (n=30) and brick fragments (n=3) completing the assemblage. Most of the ceramic sherds were decorated, including transfer printing, sponging, edging and hand painting decorative styles.

Based on all the available evidence, site AfGt-336 has been interpreted as a medium size, middle to late 19th century domestic deposit. Given the presence of at least 20 artifacts that date the period of use to before 1900, the site meets the criteria for a Stage 3 assessment as per Section 2.2, Standard 2c of the *Standards and Guidelines* (Government of Ontario 2011), and therefore retains CHVI. **A Stage 3 archaeological assessment is recommended for site AfGt-336.**

The Stage 3 assessments of site AfGt-336, will be conducted according to Section 3.2 of the *Standards and Guidelines* (Government of Ontario 2011). Typically, a Stage 3 assessment for a site documented during a pedestrian survey of ploughed agricultural land begins with an

intensive controlled surface pickup ('CSP') across the Stage 2 limits of site. During the Stage 2 pedestrian survey of site AfGt-336, however, all of the artifact findspots were digitally mapped individually and collected for laboratory analysis. Thus, the conditions for a Stage 3 CSP at the site were met during the Stage 2 assessment. Instead, the Stage 3 assessments of site AfGt-336 will consist of test unit excavation only, conducted as per Section 3.2.2 of the *Standards and Guidelines* (Government of Ontario 2011).

Because it is not yet evident if the level of CHVI at site AfGt-336, will result in a recommendation to proceed to Stage 4 (see Section 4.3 above), the Stage 3 assessment at the site will consist of the hand excavation of 1m square test units across its Stage 2 limits, as per Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). Additional 1m test units, amounting to 20% of the grid total, will be placed in areas of interest within each site extent as per Table 3.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011). All excavated soil will be screened through six-millimetre mesh; all recovered artifacts will be recorded by their corresponding site and grid unit designation and collected for laboratory analysis. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded and geotextile fabric will be placed over the unit before backfilling the unit.

*The Executive Summary highlights key points from the report only; for more detailed information and findings, as well as a complete set of recommendations, the reader should examine the complete report.*

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## Project Personnel

| | |
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## Acknowledgments

Generous contributions by the following individuals and agencies made this report possible.

- Mr. Craig A. Rohe of Upper Canada Consultants

# 1.0 Project Context

## 1.1 Development Context

Detritus Consulting Ltd. ('Detritus') was retained by Mr. Craig A. Rohe of Upper Canada Consultants ('the Proponent') to conduct a Stage 1-2 archaeological assessment on part of Lot 33, Concession 1, Geographic Township of Humberstone, Historic County of Welland, now in the Regional Municipality of Niagara, Ontario (Figure 1). This investigation was conducted in advance of a proposed residential development on lands located along the west side of Cement Road, Port Colbourne ( 'Study Area'; Figure 5).

The assessment was triggered by the Provincial Policy Statement ('PPS') that is informed by the *Planning Act* (Government of Ontario 1990a), which states that decisions affecting planning matters must be consistent with the policies outlined in the larger *Ontario Heritage Act* (Government of Ontario 1990b). According to Section 2.6.2 of the PPS, "development and site alteration shall not be permitted on lands containing archaeological resources or areas of archaeological potential unless significant archaeological resources have been conserved." To meet this condition, a Stage 1-2 assessment of the Study Area was conducted during the pre-approval phase of the development under archaeological consulting license P462 issued to Mike Pitul by the Ministry of Heritage, Sport, Tourism and Culture Industries ('MHSTCI') and adheres to the archaeological license report requirements under subsection 65 (1) of the *Ontario Heritage Act* (Government of Ontario 1990b) and the MHSTCI's *Standards and Guidelines for Consultant Archaeologists* ('*Standards and Guidelines*'; Government of Ontario 2011).

The purpose of a Stage 1 Background Study is to compile all available information about the known and potential archaeological heritage resources within a Study Area, and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the following Stage 1 assessment were as follows:

- To provide information about the Study Area's geography, history, previous archaeological fieldwork and current land conditions;
- to evaluate in detail, the Study Area's archaeological potential which will support recommendations for Stage 2 survey for all or parts of the property; and
- to recommend appropriate strategies for Stage 2 survey.

To meet these objectives Detritus archaeologists employed the following research strategies:

- A review of relevant archaeological, historic and environmental literature pertaining to the Study Area;
- a review of the land use history, including pertinent historic maps; and
- an examination of the Ontario Archaeological Sites Database ('ASDB') to determine the presence of known archaeological sites in and around the Study Area.

The purpose of a Stage 2 Property Assessment is to provide an overview of any archaeological resources within the Study Area; to determine whether any of the resources might be archaeological sites with cultural heritage value or interest ('CHVI'); and to provide specific direction for the protection, management and/or recovery of these resources. In compliance with the *Standards and Guidelines* (Government of Ontario 2011), the objectives of the Stage 2 Property Assessment were as follows:

- To document all archaeological resources within the Study Area;
- to determine whether the Study Area contains archaeological resources requiring further assessment; and
- to recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

The licensee received permission from the Proponent to enter the land and conduct all required archaeological fieldwork activities, including the recovery of artifacts.

## 1.2 Historical Context

### 1.2.1 Post-Contact Aboriginal Resources

Prior to the arrival of European settlers, the Niagara region was occupied by the Neutral or Attawandaron tribe. The earliest recorded visit to the Niagara region was undertaken by Etienne Brûlé, an interpreter and guide for Samuel de Champlain. In June 1610, Brûlé requested permission to live among the Algonquin people and to learn their language and customs. In return, Champlain agreed to take on a young Huron named Savignon and teach him the language and customs of the French. The purpose of this endeavour was to establish good relations with Aboriginal communities in advance of future military and colonial enterprises in the area. In 1615, Brûlé joined twelve Huron warriors on a mission to cross enemy territory and seek out the Andaste people, allies of the Huron, to ask their assistance in an expedition being planned by Champlain. The mission was a success, but took much longer than anticipated. Brûlé returned with the Andaste, but arrived two days too late to help Champlain and the Hurons, who had already been defeated by the Iroquois (Heidenreich 1990).

Throughout the middle of the 17th century, the Iroquois sought to expand upon their territory and to monopolise the local fur trade as well as trade between the European markets and the tribes of the western Great Lakes region. A series of bloody conflicts followed known as the Beaver Wars, or the French and Iroquois Wars, contested between the Iroquois confederacy and the Algonkian speaking communities of the Great Lakes region. Many communities were destroyed including the Huron, Neutral, Susquehannock, and Shawnee leaving the Iroquois as the dominant group in the region. By 1653 after repeated attacks, the Niagara peninsula and most of Southern Ontario had been vacated (Heidenreich 1990).

The late 17th and early 18th centuries represent a turning point in the evolution of the post-contact Aboriginal occupation of Southern Ontario. It was at this time that various Iroquoian-speaking communities began migrating from New York State, followed by the arrival of new Algonkian-speaking groups from northern Ontario (Konrad 1981; Schmalz 1991). More specifically, this period marks the arrival of the Mississaugas into Southern Ontario and, in particular, the watersheds of the lower Great Lakes. The oral traditions of the Mississaugas, as recounted by Chief Robert Paudash and recorded in 1904, suggest that the Mississaugas defeated the Mohawk Nation, who retreated to their homeland south of Lake Ontario. Following this conflict, a peace treaty was negotiated between the two groups and, at the end of the 17th century, the Mississaugas' settled permanently in Southern Ontario, including the Niagara Peninsula (Praxis Research Associates n.d.). Around this same time, members of the Three Fires Confederacy (Chippewa, Ottawa, and Potawatomi) began immigrating from Ohio and Michigan into southwestern Ontario (Feest and Feest 1978:778-779).

The Study Area first entered the record as a result of Treaty No. 3, which…

> *…was made with the Mississa[ug]a Indians 7th December, 1792, though purchased as early as 1784. This purchase in 1784 was to procure for that part of the Six Nation Indians coming into Canada a permanent abode. The area included in this Treaty is, Lincoln County excepting Niagara Township; Saltfleet, Binbrook, Barton, Glanford and Ancaster Townships, in Wentworth County; Brantford, Onondaga, Tusc[a]r[o]ra, Oakland and Burford Townships in Brant County; East and West Oxford, North and South Norwich, and Dereham Townships in Oxford County; North Dorchester Township in Middlesex County; South Dorchester, Malahide and Bayham Township in Elgin*

> *County; all Norfolk and Haldimand Counties; Pelham, Wainfleet, Thorold, Cumberland and Humberstone Townships in Welland County*.
>
> Morris 1943:17-18

The size and nature of the pre-contact settlements and the subsequent spread and distribution of Aboriginal material culture in southern Ontario began to shift with the establishment of European settlers. Lands in the Lower Grand River area were surrendered by the Six Nations to the British Government in 1832, at which point most Six Nations people moved into Tuscarora Township in Brant County and a narrow portion of Oneida Township (Page & Co. 1879; Tanner 1987; Weaver 1978). Despite the inevitable encroachment of European settlers on previously established Aboriginal territories, "written accounts of material life and livelihood, the correlation of historically recorded villages to their archaeological manifestations, and the similarities of those sites to more ancient sites have revealed an antiquity to documented cultural expressions that confirms a deep historical continuity to Iroquoian systems of ideology and thought" (Ferris 2009:114). As Ferris observes, despite the arrival of a competing culture, First Nations communities throughout southern Ontario have left behind archaeologically significant resources that demonstrate continuity with their pre-contact predecessors, even if they have not been recorded extensively in historical Euro-Canadian documentation.

### 1.2.2 Euro-Canadian Resources

The Study Area is located in Part of Lot 33, Concession 1, Geographic Township of Humberstone, Historic County of Welland, now in the Regional Municipality of Niagara, Ontario.

On July 24, 1788, Sir Guy Carleton, the Governor-General of British North America, divided the Province of Québec into the administrative districts of Hesse, Nassau, Mecklenburg, and Lunenburg (Archives of Ontario 2009). Further change came in December 1791 when the former Province of Québec was rearranged into Upper Canada and Lower Canada under the provisions of the Constitutional Act. Colonel John Graves Simcoe was appointed as Lieutenant-Governor of Upper Canada and he spearheaded several initiatives to populate the province including the establishment of shoreline communities with effective transportation links between them (Coyne 1895).

In July 1792, Simcoe divided Upper Canada into 19 counties stretching from Essex in the west to Glengarry in the east. Each new county was named after a county in England or Scotland; the constituent townships were then given the names of the corresponding townships from each original British county (Powell and Coffman 1956). Later that year, the four districts originally established in 1788 were renamed the Western, Home, Midland, and Eastern Districts. As population levels in Upper Canada increased, smaller and more manageable administrative bodies were needed resulting in the establishment of many new counties and townships. As part of this realignment, the boundaries of the Home and Western Districts were shifted and the London and Niagara Districts were established. Under this new territorial arrangement, the Study Area became part of the Niagara District (Archives of Ontario 2009).

In 1845, after years of increasing settlement that began after the War of 1812, the southern portion of Lincoln County was severed to form Welland County (the two counties would be amalgamated once again in 1970 to form the Regional Municipality of Niagara).

Humberstone Township was settled in 1785. In 1817 it featured 75 inhabited houses, a grist mill, and a saw mill. By 1850 the number of inhabited houses had increased to 279, and the population to 2,377 inhabitants. At this time, the township also contained a grist mill, three saw mills, a foundry, two churches, and eight public schools. The township continued to grow throughout the 19th century. By 1875, the population had increased to 3,200 (Page & Co. 1876). The most prominent community in the area was Port Colbourne, less than a mile to the east of the Study Area. As the southern terminus of the Welland Canal, Port Colbourne had gained an early prominence in the region. By 1870, Port Colborne boasted a population of 1,200 and contained four churches, a public school, a Roman Catholic separate school, a village hall, as well as three planing mills and sash door factories, a grist mill, a saw mill, a branch of the Imperial Bank, a Montreal and Dominion telegraph office and an extensive grain elevator belonging to the Welland Railway Company (Page & Co. 1876).

Land registries for the township show that the Crown grant of land for lot 33 was to Captain Thomas Welch in 1796. He subsequently sold the lad in 1798 to Christian Zavitz. By 1830 it appears that Christian Zavitz may have died a 296-acre portion that contains the Study Area is sold by Jesse Zavitz to John Steele. John Steele remained the owner until 1844 when 97 acres are sold to John Schofield. In December 1855, Adam Schofield inherits the property and sells it to Matthew Bland. Bland retains the land until 1860 when it is sold back to Adam Schofield.. In 1874, Adam Schofield again sells the 97-acre portion of the lot, this time to Cyrus Ranchey. The Ranchey family retain the land into the 20th century.

The *Illustrated Historical Atlas of the Counties of Lincoln and Welland* ('Historical Atlas'; Page & Co. 1876; Figure 2) shows Cyrus Ranchey as the owner the portion of Lot 33, Concession 1 in which the Study Area is located. The map indicates any structure on the property located close to Sugar Loaf Point south of the Study Area and on the south side of the road that bisects the lot.

Although significant and detailed landowner information is available on the *Historical Atlas* map of Crowland Township, it should be recognized that historical county atlases were funded by subscriptions fees and were produced primarily to identify factories, offices, residences and landholdings of subscribers. Landowners who did not subscribe were not always listed on the maps (Caston 1997:100). Moreover, associated structures were not necessarily depicted or placed accurately (Gentilcore and Head 1984).

## 1.3 Archaeological Context

### 1.3.1 Property Description and Physical Setting

The Study Area is a roughly rectangular shaped parcel measuring approximately 30.74 hectares ('ha'; Figure 1) that faces Cement Road to the west; on the north side the Study Area is adjacent to the residential properties that front Stanley Street; to the east side the residential properties and open land that front Olga Drive and Fountain Road to the west; on the south side, the Study Area boundary is irregular and was determined using Universal Transverse Mercator coordinates provided by the Proponent. At the time of the Stage 1 assessment, the Study Area comprised areas of agricultural field and areas of scrub that were former agricultural fields; an area of prior disturbance in the northwest associated with the subdivision along Stanley Street; and areas of Niagara Peninsula Conservation Authority ('NPCA') protected wetland (Figure 3).

The majority of the region surrounding the Study Area has been subject to European-style agricultural practices for over 100 years, having been settled by Euro-Canadian farmers by the middle of the 19th century. Much of the region continues to be used for agricultural purposes today.

The Study Area is situated within the Haldimand Clay Plain. According to Chapman and Putnam…

> …although it was all submerged in Lake Warren, the till is not all buried by stratified clay; it comes to the surface generally in low morainic ridges in the north. In fact, there is in that area a confused intermixture of stratified clay and till. The northern part has more relief than the southern part where the typically level lake plains occur.
>
> Chapman and Putnam 1984:156

Haldimand Clay is slowly permeable, imperfectly drained with medium to high water-holding capacities. Surface runoff is usually rapid, but water retention of the clayey soils can cause it to be droughty during dry periods (Kingston and Presant 1989). The soil is suitable for corn and soy beans in rotation with cereal grains as well as alfalfa and clover (Huffman and Dumanski 1986).

The original forest cover consisted of a mix of pines and hardwoods such as sugar maple, oak, beech and cherry. This pattern of forest cover is characteristic of areas of clay soil within the Maple - Hemlock Section of the Great Lakes - St. Lawrence Forest Province - Cool Temperate Division (McAndrews and Manville 1987).

The closest historical source of potable water is likely Lake Erie, roughly 500m south of the Study Area. While a canal runs north-south through the Study Area and the southern edge is fringed in places by another creek, both may have been excavated in the 19th century as a method of draining the wetlands that are common in the area. This may explain the location of the structure at the far southern end of Lot 33, closer to a potable water source.

### 1.3.2 Pre-Contact Aboriginal Land Use

The portion of Southwestern Ontario surrounding the Study Area was occupied by people as far back as 11,000 years ago as the glaciers retreated. For the majority of this time, people were practicing hunter gatherer lifestyles with a gradual move towards more extensive farming practices. Table 1 provides a general outline of the cultural chronology of Humberstone Township (Ellis and Ferris 1990).

**Table 1: Cultural Chronology for the Humberstone Township**

| Time Period | Cultural Period | Comments |
|---|---|---|
| 9500 – 7000 BC | Paleo-Indian | first human occupation<br>hunters of caribou and other extinct Pleistocene game<br>nomadic, small band society |
| 7500 - 1000 BC | Archaic | ceremonial burials<br>increasing trade network<br>hunter gatherers |
| 1000 - 400 BC | Early Woodland | large and small camps<br>spring congregation/fall dispersal<br>introduction of pottery |
| 400 BC – AD 800 | Middle Woodland | kinship based political system<br>incipient horticulture<br>long distance trade network |
| AD 800 - 1300 | Early Iroquoian (Late Woodland) | limited agriculture<br>developing hamlets and villages |
| AD 1300 - 1400 | Middle Iroquoian (Late Woodland) | shift to agriculture complete<br>increasing political complexity<br>large palisaded villages |
| AD 1400 - 1650 | Late Iroquoian | regional warfare and<br>political/tribal alliances<br>destruction of Huron and Neutral |

### 1.3.3 Previous Identified Archaeological Work

In order to compile an inventory of archaeological resources in the vicinity of the Study Area, Detritus consulted the archaeological site records stored in the ASDB (Government of Ontario n.d.). This database contains information concerning archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13km east to west and approximately 18.5km north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The Study Area is located within and close to Borden Block AfGt.

Information concerning specific site locations is protected by provincial policy, and is not fully subject to the *Freedom of Information and Protection of Privacy Act* (Government of Ontario 1990c). The release of such information in the past has led to looting or various forms of illegally conducted site destruction. Confidentiality extends to all media capable of conveying location, including maps, drawings, or textual descriptions of a site location. The MHSTCI will provide information concerning site location to the party or an agent of the party holding title to a property, or to a licensed archaeologist with relevant cultural resource management interests.

According to the ASDB, two archaeological sites have been registered within a 1km radius of the Study Area (Table 2). Both were been identified as pre-contact Aboriginal sites associated with the Archaic and Woodland periods.

**Table 2: Registered Archaeological Sites within 1km of the Study Area**

| Borden Number | Site Name | Time Period | Affinity | Site Type |
|---|---|---|---|---|
| AfGt-234 | | Archaic, Late, Woodland, Late | Aboriginal | camp / campsite, seasonal |
| AfGt-2 | Tennessee Avenue | Archaic, Woodland | Aboriginal | Unknown |

To the best of Detritus' knowledge, no assessments have been conducted adjacent to the Study Area, nor is there a site located within 50m of the Study Area.

### 1.3.4 Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. Detritus applied archaeological potential criteria commonly used by the MHSTCI to determine areas of archaeological potential within Study Area. According to Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011), these variables include proximity to previously identified archaeological sites, distance to various types of water sources, soil texture and drainage, glacial geomorphology, elevated topography, 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, when 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. When evaluating distance to water it is important to distinguish between water and shoreline, as well as natural and artificial water sources, as these features affect site locations and types to varying degrees. As per Section 1.3.1 of the *Standards and Guidelines* (Government of Ontario 2011), water sources may be categorized in the following manner:

- Primary water sources, lakes, rivers, streams, creeks;
- secondary water sources, intermittent streams and creeks, springs, marshes and swamps;
- past water sources, glacial lake shorelines, relic river or stream channels, cobble beaches, shorelines of drained lakes or marshes; and
- accessible or inaccessible shorelines, high bluffs, swamp or marshy lake edges, sandbars stretching into marsh.

As was discussed above, the closest historical source of potable water is likely Lake Erie, roughly 500m south of the Study Area. While a canal runs north-south through the Study Area and the southern edge is fringed in places by another creek, both may have been excavated in the 19th century as a method of draining the wetlands that are common in the area. This may explain the location of the structure at the far southern end of Lot 33, closer to a potable water source.

Soil texture is also an important determinant of past settlement, usually in combination with other factors such as topography. The Study Area is situated within the Haldimand Clay Plain. As noted previously, the primary soils within the Study Area have been documented as being suitable for pre-contact and post-contact Aboriginal practices. Considering also the length of occupation prior to the arrival of European settlers, as evidenced by the two pre-contact Aboriginal sites registered within 1km of the Study Area, the pre-contact and post-contact Aboriginal potential of the Study Area is judged to be moderate to high.

For Euro-Canadian sites, archaeological potential can be extended to areas of early Euro-Canadian settlement, including places of military or pioneer settlements; early transportation routes; and properties listed on the municipal register or designated under the *Ontario Heritage Act* (Government of Ontario 1990b) or property that local histories or informants have identified with possible historical events.

As the background research presented above indicates, settlement in Humberstone Township began in the late 18th century. The Humberstone Township map in the *Historical Atlas* (Figure 2) illustrate the extent to which the area had been settled by the second half of the 19th century. The village of Port Colborne and the southern terminus of the Welland Canal lie close by and, by the mid-1850s, the Buffalo and Lake Huron Railway ran through Lot 33 just north of the Study Area. Considering these factors, the Euro-Canadian archaeological potential of the Study Area is judged to be moderate to high.

Aerial imagery consulted during the Stage 1 assessment revealed an area of possible disturbance in the northwest corner of the Study Area, including a driveway, turnaround and piles of debris (Figure 3). This appears to have been construction associated with the development along Stanley Street to the north and would be investigated during the Stage 2 field assessment.

Finally, despite the factors mentioned above, extensive land disturbance can eradicate archaeological potential within a Study Area, as per Section 1.3.2 of the *Standards and Guidelines* (Government of Ontario 2011). However, current aerial imagery of the Study Area identified no potential disturbance areas within the Study Area.

# 2.0 Field Methods

The Stage 2 assessment was conducted on July 27, 2021, and on September 27, 2021. During the Stage 2 field work, assessment conditions were excellent; at no time were the field, weather, or lighting conditions detrimental to the recovery of archaeological material. The weather on July 27 was partly cloudy with a high of 30˚C; on September 27, clear and a high of 26˚C. Photos 1 to 13 demonstrate the land conditions throughout the Study Area at the time of the assessment, including areas that met the requirements for a Stage 2 archaeological assessment, as per Section 7.8.6, Standards 1a and b of the *Standards and Guidelines* (Government of Ontario 2011). Figure 3 illustrates the Stage 2 assessment methods, including all photograph locations and directions; Figure 4 illustrates that Stage 2 assessment methods in relation to the development of the Study Area.

The limits of the portion of the Study Area that were to be assessed were clearly delineated by the extent of ploughing undertaken by the Proponent, which extended only to the edge of the NPCA Protected Wetland areas (Figure 3).

Approximately 47% of the Study Area comprised active and former agricultural fields that were accessible to ploughing, and thus met the criteria for a Stage 2 pedestrian survey, as per Section 2.1.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). This field was ploughed and allowed to weather prior to the pedestrian survey, as per Section 2.1.1, Standards 2 and 3 of the *Standards and Guidelines* (Government of Ontario 2011). The ploughing was deep enough to provide total topsoil exposure, and provided a minimum of 80% surface visibility as per Section 2.1.1, Standards 4 and 5 of the *Standards and Guidelines* (Government of Ontario 2011). The ploughed land was subject to pedestrian survey at a 5m interval in accordance with Section 2.1.1, Standard 6 of the *Standards and Guidelines* (Government of Ontario 2011; Photos 1-4, 9-14).

The pedestrian survey resulted in the identification and documentation of 168 Euro-Canadian artifacts from 86 findspots and the registration of site AfGt-336 (Tiles 3 and 6 of the Supplementary Documentation).

All of the surface artifacts encountered during the pedestrian survey were recorded according to their specific findspot designation and were collected for laboratory analysis and description, as per Section 2.1.1, Standard 8 of the *Standards and Guidelines* (Government of Ontario 2011). A reading was taken for each findspot location, in addition to two fixed reference landmarks as per Section 2.1, Standard 4 and Section 5.0, Standard 2a of the *Standards and Guidelines* (Government of Ontario 2011).

All coordinates recorded during the Stage 2 assessment were taken using a Garmin eTrex 10 GPS unit with a minimum accuracy 1-2.5m (North American Datum 1983 [‘NAD83’] and Universal Transverse Mercator [‘UTM’] Zone 17T) and are presented in the Supplementary Documentation to this report.

Detritus used this mapping to identify any clusters within the surface finds that met the criteria for Stage 3 assessment as outlined in Section 2.2 of the *Standards and Guidelines* (Government of Ontario 2011). All 86 findspots were considered to form a single assemblage, forming site AfGt-336.

Approximately 1.2% of the Study Area comprised the possible disturbance area identified on aerial imagery of the Study Area (see Section 1.3.4 above). Following a Stage 2 property inspection, conducted according to Section 2.1.8, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011), this area was evaluated as having no potential based on the identification of extensive and deep land alteration that has severely damaged the integrity of archaeological resources, as per Section 2.1, Standard 2b of the *Standards and Guidelines* (Government of Ontario 2011). All of the visibly disturbed areas documented within the Study Area were mapped and photo documented in accordance with Section 2.1, Standard 6 and Section 7.8.1, Standard 1b of the *Standards and Guidelines* (Government of Ontario 2011).

The remaining 51.8% of the Study Area comprised the areas of NPCA Protected Wetland. These lands are protected from development and were mapped and photo documented in accordance

with Section 2.1, Standard 6 and Section 7.8.1, Standard 1a of the *Standards and Guidelines* (Government of Ontario 2011).

# 3.0 Record of Finds

The Stage 2 archaeological assessment was conducted employing the methods described in Section 2.0 above, resulting in the documentation of a single Euro-Canadian site, AfGt-336. An inventory of the documentary record generated by the fieldwork is provided in Table 3 below.

**Table 3: Inventory of Document Record**

| Document Type | Current Location | Additional Comments |
|---|---|---|
| 1 page of field notes | Detritus office | Stored digitally in project file |
| 1 map provided by the Proponent | Detritus office | Stored digitally in project file |
| 1 field map | Detritus office | Stored digitally in project file |
| 20 photographs | Detritus office | Stored digitally in project file |

All of the material culture collected during the Stage 2 survey is contained in one box and will be temporarily housed in the offices of Detritus until formal arrangements can be made for its transfer to Her Majesty the Queen in right of the Province of Ontario or another suitable public institution acceptable to the MHSTCI and the Study Area's owners.

## 3.1 AfGt-336

The Stage 2 pedestrian survey of site AfGt-336 resulted in the documentation of 168 Euro-Canadian artifacts (Table 4).

**Table 4: AfGt-336 Artifact Summary**

| Artifacts | Frequency | % |
|---|---|---|
| Ceramics | 135 | 80.36 |
| Household | 30 | 17.86 |
| Structural | 3 | 1.79 |
| **Total** | **168** | **100** |

### 3.1.1 Ceramics

The majority of the artifacts recovered from site AfGt-336 were ceramic sherds (n=135; 80.36%), of which sherds of Refined White Earthenware ('RWE') were the most common (n=127; 94.07%). Table 5 provides a summary of ceramic assemblage by ware type and Table 6 by surface decoration technique.

**Table 5: AfGt-336 Ceramic Assemblage by Ware Type**

| Ceramics | Frequency | % |
|---|---|---|
| RWE | 127 | 94.07 |
| red earthenware | 5 | 3.70 |
| yellowware | 2 | 1.48 |
| ironstone | 1 | 0.74 |
| **Total** | **135** | **100.00** |

**Table 6: AfGt-336 Ceramic Assemblage by Decorative Style** (see section 10.1.1)

| Ceramics | Frequency | % |
|---|---|---|
| RWE, transfer printed | 64 | 47.41 |
| RWE, undecorated | 33 | 24.44 |
| RWE, sponged | 17 | 12.59 |
| RWE, painted | 9 | 6.67 |
| earthenware, red | 5 | 3.70 |
| RWE, edged | 4 | 2.96 |
| yellowware, undecorated | 2 | 1.48 |
| ironstone, undecorated | 1 | 0.74 |
| **Total** | **135** | **100.00** |

By the 1820s, the popular blue-tinted 'pearlware' glaze gave way to a whiter variety that some archaeologists have taken to calling whiteware; like pearlware, however, this term was not used by manufacturers. The white appearance was obtained by reducing the amount of cobalt added to the glaze of pearlware and adding it instead to the paste. It was manufactured throughout the 1800s and can be difficult to distinguish from pearlware or the later 'ironstone,' especially when sherds are small or exfoliated. As Miller suggests,

> *…if an assemblage of ceramics from the first half of the 19th Century is placed before six archaeologists and they are asked for counts of creamware, pearlware, whiteware, and stone china wares, the results will probably be six different enumerations*
>
> Miller 1980a:2

Accordingly, the term RWE is used in this report to identify ceramic sherds that are neither clearly pearlware, nor the denser ironstones, noting that this approach gives a conservative date to any pearlware sherds not correctly identified. The majority of the sherds of RWE were decorated, with transfer printing, sponging, hand painting and edging styles all represented (see section 10.1.1 for descriptions).

Red earthenware and yellowware are utilitarian wares that are fired at a lower temperature than pearlware RWE and ironstone. Both are made from a more coarse and porous paste and are named for the colour of the clay used which is brightened by the addition of a clear glaze. These cannot be used to date an archaeological assemblage since they were in use throughout the 19th century. Nevertheless, their frequency on sites began to decline slowly from the 1850s onwards with the importation of stoneware from the United States and then dramatically after 1890 when they were replaced by glass jars (Miller 1980b:9). Earthenware vessels were also less expensive than other, more refined tablewares. As a result, an abundance of earthenware pieces relative to other ware types, especially on a late 19th century site, may indicate lower economic status. None of the six sherds were decorated.

Ironstone was originally designed by the Turner family in the late 1700s (Tharp 2017), a direct result of the drive among Staffordshire potters to find a cheap alternative to imported porcelain (Ironstone 2017; Wikipedia 2017). By 1813 James Mason had reworked and patented the ware as "ironstone china." The patent lasted only fourteen years and by then a variety of Stafforshire potteries were producing a similar product and Mason's brand name had become associated with all of the various ceramics that were in production (going by such branding names as 'stone china' and 'semi-porcelain'). Ironstone began to be imported from England to Canada during the 1840s and came to dominate the ceramics trade during the latter part of the century. In appearance it can appear bluish or white, often thick, tends to be less decorated and even undecorated in the latter 19th century. Ironstone has a dense paste, making it more durable than earlier wares and the sherds notably heavier. Only a single, undecorated sherd of ironstone was recovered from site AfGt-336.

As part of the analysis, all ceramic sherds within the Stage 2 assemblage were examined in order to describe the function of the item from which the ceramic sherd originated. For those sherds that were too fragmentary for a functional assignment, an attempt was made to at least provide a formal description, such as to which portion of an item the sherd belonged. For example, what used to be a porcelain teacup but now found in an archaeological context could be classified archaeologically in the artifact catalogue in a descending order of specificity depending on preservation and artifact size: a teacup (function), a cup (function), a hollowware (form), or a rim fragment (form). Hollow wares and flat wares were differentiated based on the presence or absence, respectively, of curvature in the ceramic cross-section of each sherd. The classification system used here is based upon Beaudoin (2013:78-82), but teas were differentiated as teacups and tea saucers as necessary. If Beaudoin's classifications could not be applied, then the broader definitions of Voss (2008:209) were used. Ultimately, if sherds were small enough that even a general functional or formal ware type could not be determined, and then the sherd was simply classified as a rim fragment, a non-rim fragment, a base fragment, or indeterminate.

Most of the ceramic pieces within the Stage 2 assemblage were too fragmentary to determine form (Table 7) or function (Table 8). Among the sherds that could be classified, most were identified as

hollowware (n=67), and included sherds identified as belonging to bowls, cups, basins, platters, plates, saucers and storage vessels, all common 19th century household vessels.

**Table 7: Ceramic Assemblage by Form**

| Ceramic | Flat | Hollow | Unknown |
|---|---|---|---|
| earthenware, red | | 5 | |
| ironstone, undecorated | | 1 | |
| RWE, edged | 4 | | |
| RWE, painted | 4 | 1 | 4 |
| RWE, sponged | 2 | 4 | 11 |
| RWE, transfer printed | 12 | 7 | 45 |
| RWE, undecorated | 5 | 3 | 25 |
| yellowware, undecorated | | | 2 |
| **Total** | **27** | **21** | **87** |

**Table 8: Ceramic Assemblage by Function**

| Ceramic | Bowl | Plate | Unknown |
|---|---|---|---|
| earthenware, red | | | 5 |
| ironstone, undecorated | | | 1 |
| RWE, edged | | 4 | |
| RWE, painted | | 1 | 8 |
| RWE, sponged | 1 | | 16 |
| RWE, transfer printed | | 1 | 63 |
| RWE, undecorated | | | 33 |
| yellowware, undecorated | | | 2 |
| earthenware, red | | | 5 |
| **Total** | **1** | **6** | **128** |

### 3.1.2 Household Artifacts

The household artifacts from AfGt-336 was a combination of glass wares and plant potters. These are enumerated below in Table 9.

**Table 9: AfGt-336 Household Artifacts**

| Artifact Type | Bowl | Plate |
|---|---|---|
| terracotta | 14 | 46.67 |
| glass, bottle | 11 | 36.67 |
| glass, bottle finish | 4 | 13.33 |
| glass, bottle base | 1 | 3.33 |
| **Total** | **30** | **100%** |

Bottle glass is also generally not considered to be diagnostic and is often simply categorized according to colour. Uncommon prior to the 1870s, clear or colourless glass came into widespread use after the development of automatic bottle manufacturing machines in the early 20th century (Lindsey 2021). Clear, aqua and green bottle glass was recovered from AfGt-336 or these, principally clear suggesting a late 19th to early 20th century date range.

The assemblage included four finishes. Two were brandy type finishes, one a crown (common at the time for sauce bottles) and one wide patent type common for medicine bottles. These finish

types were all in use during the latter half of the 19th century and into the 20th century, except for the crown type finish which is predominantly 20th century and remains in use today (Lindsay 2021).

Terra cotta is the oldest ceramic type, dating back to prehistoric times. However, in the 19th century historic context it refers to the orange-red, unglazed, utilitarian products produced in the second half of the 19th century and through to contemporary times, either as sewer pipes (thicker body, cylindrical) or plant potters (thinner body, conical). The sherds recovered from AfGt-336 were from plant potters. Other than being produced from the second half of the 19th century (Currie 1993), these sherds are not temporally diagnostic.

### 3.1.3 Structural Artifacts

Only three structural artifacts were recovered from AfGt-336, all fragments of red brick. The class of structural artifacts includes nails and window glass, normally ubiquitous on 19th century sites near homes and farmsteads. Having so few present suggests that site AfGt-336 was not close to a building and may constitute a former field-edge waste pit.

# 4.0 Analysis and Conclusions

Detritus was retained by the Proponent to conduct a Stage 1-2 archaeological assessment on part of Lot 33, Concession 1, Geographic Township of Humberstone, Historic County of Welland, now in the Regional Municipality of Niagara, Ontario (Figure 1). This investigation was conducted in advance of a proposed residential development on lands located along the west side of Cement Road, Port Colborne (Figure 5).

The Stage 1 background research indicated that the Study Area exhibited moderate to high potential for the identification and recovery of archaeological resources. As such, a Stage 2 field assessment was recommended for the areas of current and former agricultural field within the Study Area, which were to be ploughed and permitted to weather. The area of prior disturbance and NPCA protected wetlands were photo-documented only.

The subsequent Stage 2 assessment of the Study Area was conducted on July 27, 2021, and on September 27, 2021. This investigation consisted of a typical pedestrian survey of the recently ploughed and weathered fields at 5m intervals.

This investigation resulted in the identification and documentation of 168 Euro-Canadian artifacts from 86 findspots and the registration of site AfGt-336 (Tiles 3 and 6 of the Supplementary Documentation).

The Stage 2 assemblage comprises predominantly ceramic sherds (n=135), with household bottle glass and plant potter fragments (n=30) and brick fragments (n=3) completing the assemblage. Most of the ceramic sherds were decorated, including transfer printing, sponging, edging and hand painting decorative styles.

# 5.0 Recommendations

Based on all the available evidence, site AfGt-336 has been interpreted as a medium size, middle to late 19th century domestic deposit. Given the presence of at least 20 artifacts that date the period of use to before 1900, the site meets the criteria for a Stage 3 assessment as per Section 2.2, Standard 2c of the *Standards and Guidelines* (Government of Ontario 2011), and therefore retains CHVI. **A Stage 3 archaeological assessment is recommended for site AfGt-336.**

The Stage 3 assessments of site AfGt-336, will be conducted according to Section 3.2 of the *Standards and Guidelines* (Government of Ontario 2011). Typically, a Stage 3 assessment for a site documented during a pedestrian survey of ploughed agricultural land begins with an intensive controlled surface pickup ('CSP') across the Stage 2 limits of site. During the Stage 2 pedestrian survey of site AfGt-336, however, all of the artifact findspots were digitally mapped individually and collected for laboratory analysis. Thus, the conditions for a Stage 3 CSP at the site were met during the Stage 2 assessment. Instead, the Stage 3 assessments of site AfGt-336 will consist of test unit excavation only, conducted as per Section 3.2.2 of the *Standards and Guidelines* (Government of Ontario 2011).

Because it is not yet evident if the level of CHVI at site AfGt-336, will result in a recommendation to proceed to Stage 4 (see Section 4.3 above), the Stage 3 assessment at the site will consist of the hand excavation of 1m square test units across its Stage 2 limits, as per Table 3.1, Standard 1 of the *Standards and Guidelines* (Government of Ontario 2011). Additional 1m test units, amounting to 20% of the grid total, will be placed in areas of interest within each site extent as per Table 3.1, Standard 2 of the *Standards and Guidelines* (Government of Ontario 2011). All excavated soil will be screened through six-millimetre mesh; all recovered artifacts will be recorded by their corresponding site and grid unit designation and collected for laboratory analysis. If a subsurface cultural feature is encountered, the plan of the exposed feature will be recorded and geotextile fabric will be placed over the unit before backfilling the unit.

# 6.0 Advice on Compliance with Legislation

This report is submitted to the Minister of Heritage, Sport, Tourism and Culture Industries as a condition of licensing in accordance with Part VI of the *Ontario Heritage Act*, R.S.O. 1990, c 0.18. The report is reviewed to ensure that it complies with the standards and guidelines that are issued by the Minister, and that the archaeological fieldwork and report recommendations ensure the conservation, protection and preservation of the cultural heritage of Ontario. When all matters relating to archaeological sites within the project area of a development proposal have been addressed to the satisfaction of the Ministry of Heritage, Sport, Tourism and Culture Industries, a letter will be issued by the ministry stating that there are no further concerns with regard to alterations to archaeological sites by the proposed development.

It is an offence under Sections 48 and 69 of the *Ontario Heritage Act* for any party other than a licensed archaeologist to make any alteration to a known archaeological site or to remove any artifact or other physical evidence of past human use or activity from the site, until such time as a licensed archaeologist has completed archaeological fieldwork on the site, submitted a report to the Minister stating that the site has no further cultural heritage value or interest , and the report has been filed in the Ontario Public Register of Archaeology Reports referred to in Section 65.1 of the *Ontario Heritage Act*.

Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore subject to Section 48 (1) of the *Ontario Heritage Act*. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out archaeological fieldwork, in compliance with Section 48 (1) of the *Ontario Heritage Act*.

The *Cemeteries Act*, R.S.O. 1990 c. C.4 and the *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33 (when proclaimed in force) require that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

Archaeological sites recommended for further archaeological fieldwork or protection remain subject to Section 48 (1) of the Ontario Heritage Act and may not be altered, or have artifacts removed from them, except by a person holding an archaeological license.

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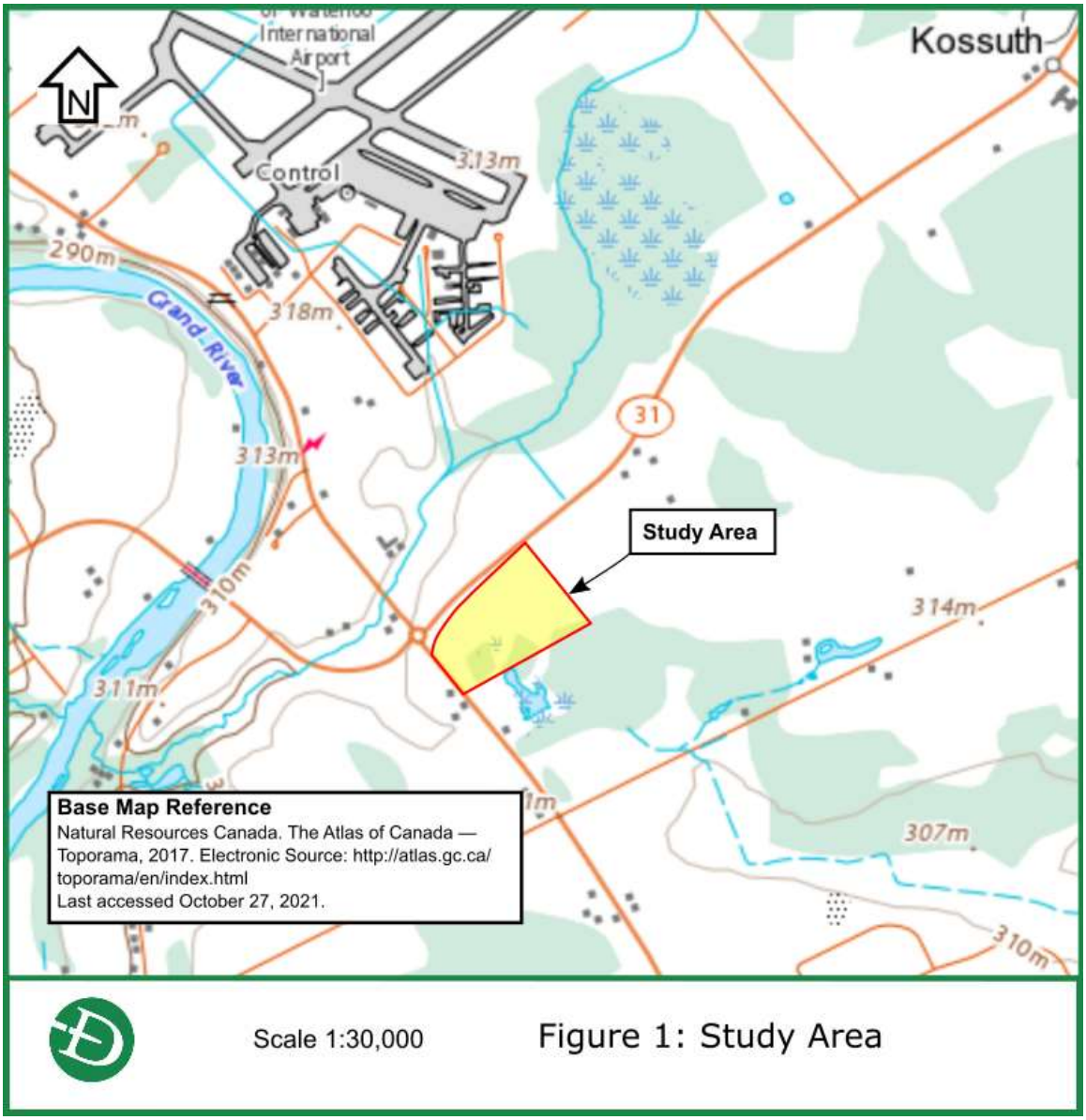
# 8.0 Maps


International Airport
Kossuth
N
Control
313m
290m
318m
Grand River
313m
31
Study Area
310m
314m
311m
307m
310m
Base Map Reference
Natural Resources Canada. The Atlas of Canada — Toporama, 2017. Electronic Source: http://atlas.gc.ca/toporama/en/index.html
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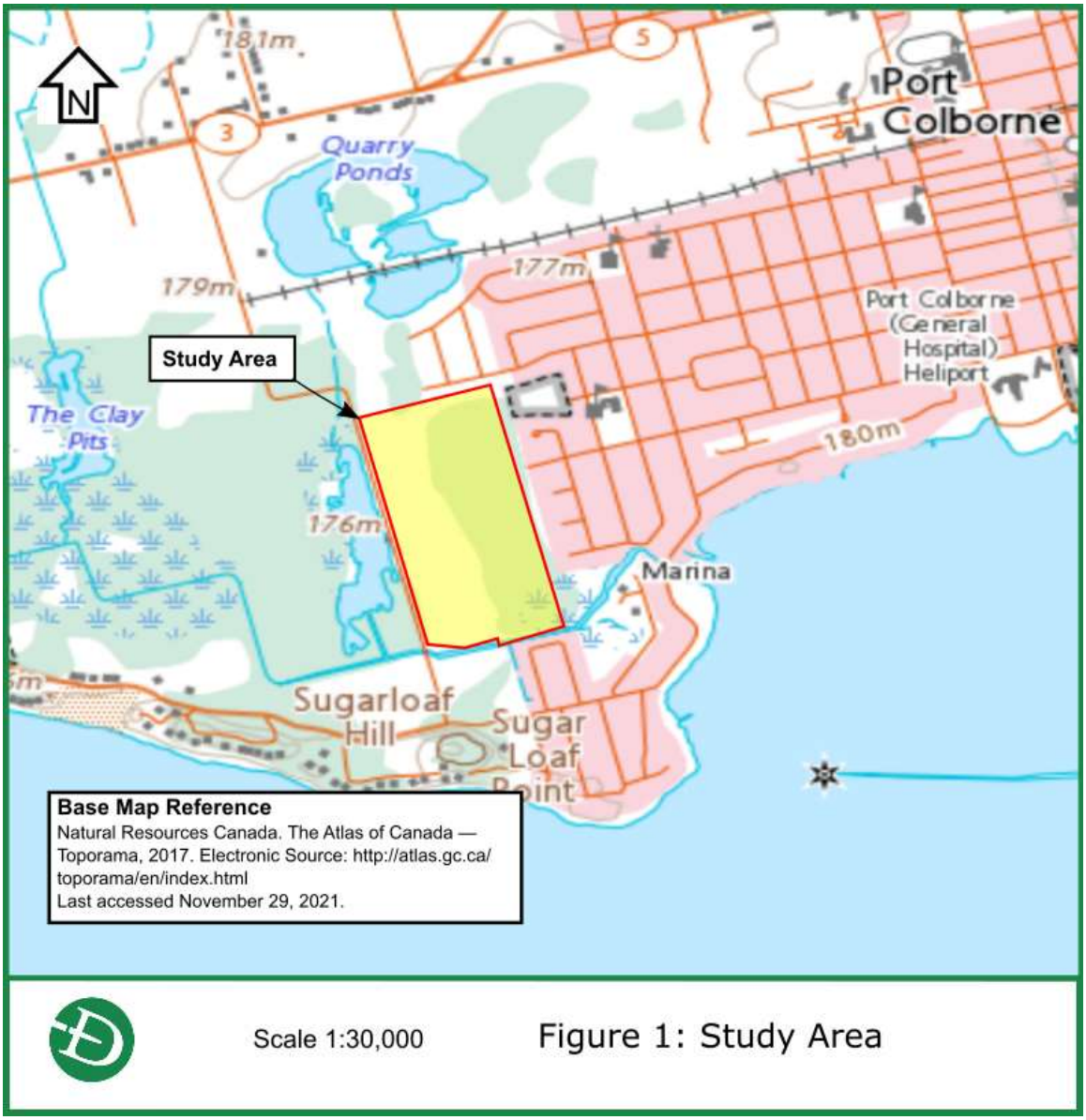
Scale 1:30,000
Figure 1: Study Area


N
181m
3
5
Quarry Ponds
Port Colborne
179m
177m
Port Colborne (General Hospital) Heliport
Study Area
The Clay Pits
180m
176m
Marina
Sugarloaf Hill
Sugar Loaf Point
Base Map Reference
Natural Resources Canada. The Atlas of Canada — Toporama, 2017. Electronic Source: http://atlas.gc.ca/toporama/en/index.html
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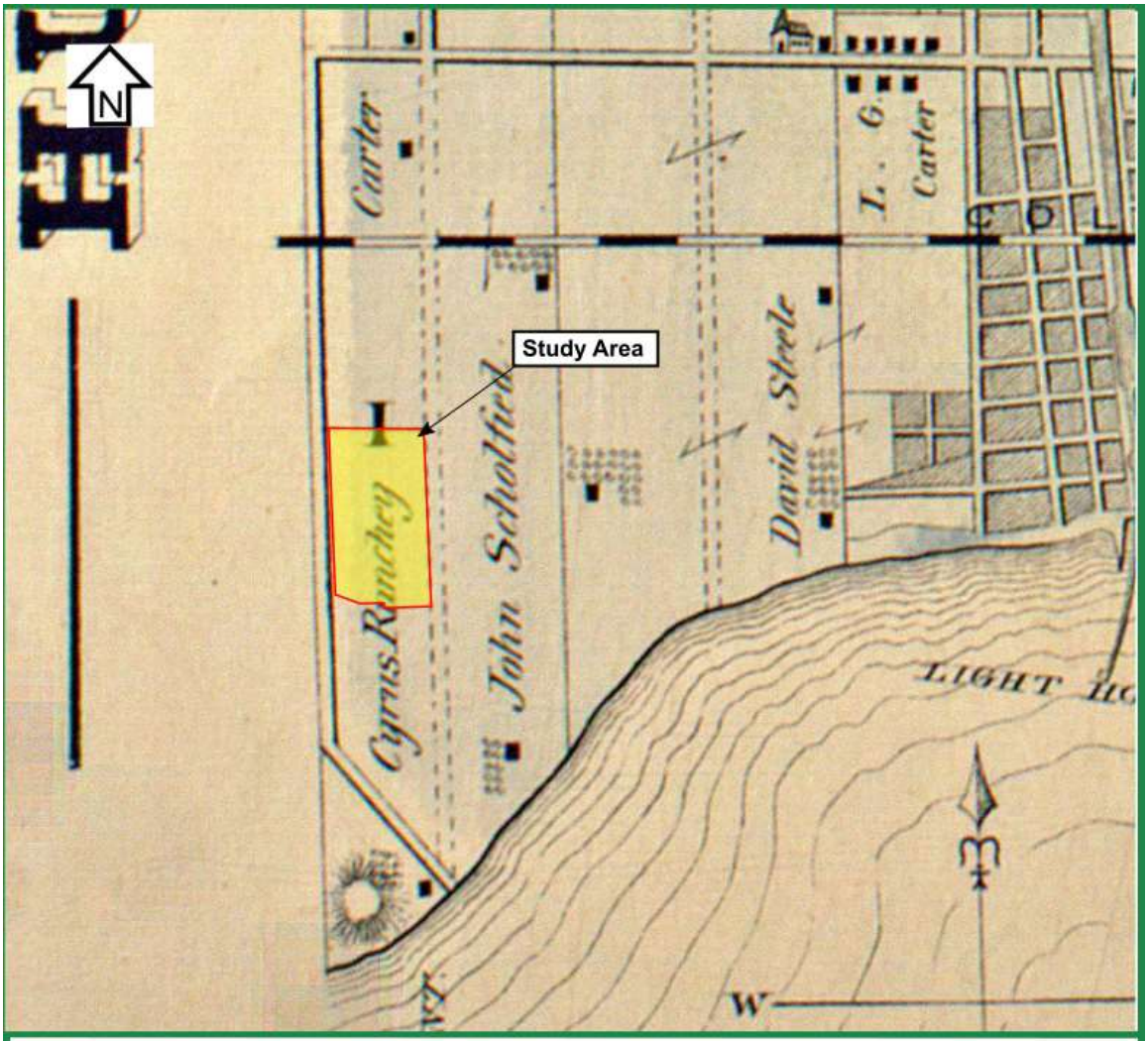
Scale 1:30,000
Figure 1: Study Area




Not to scale

Figure 2: Portion of the 1876 *Historical Atlas* Map of Humberstone Township

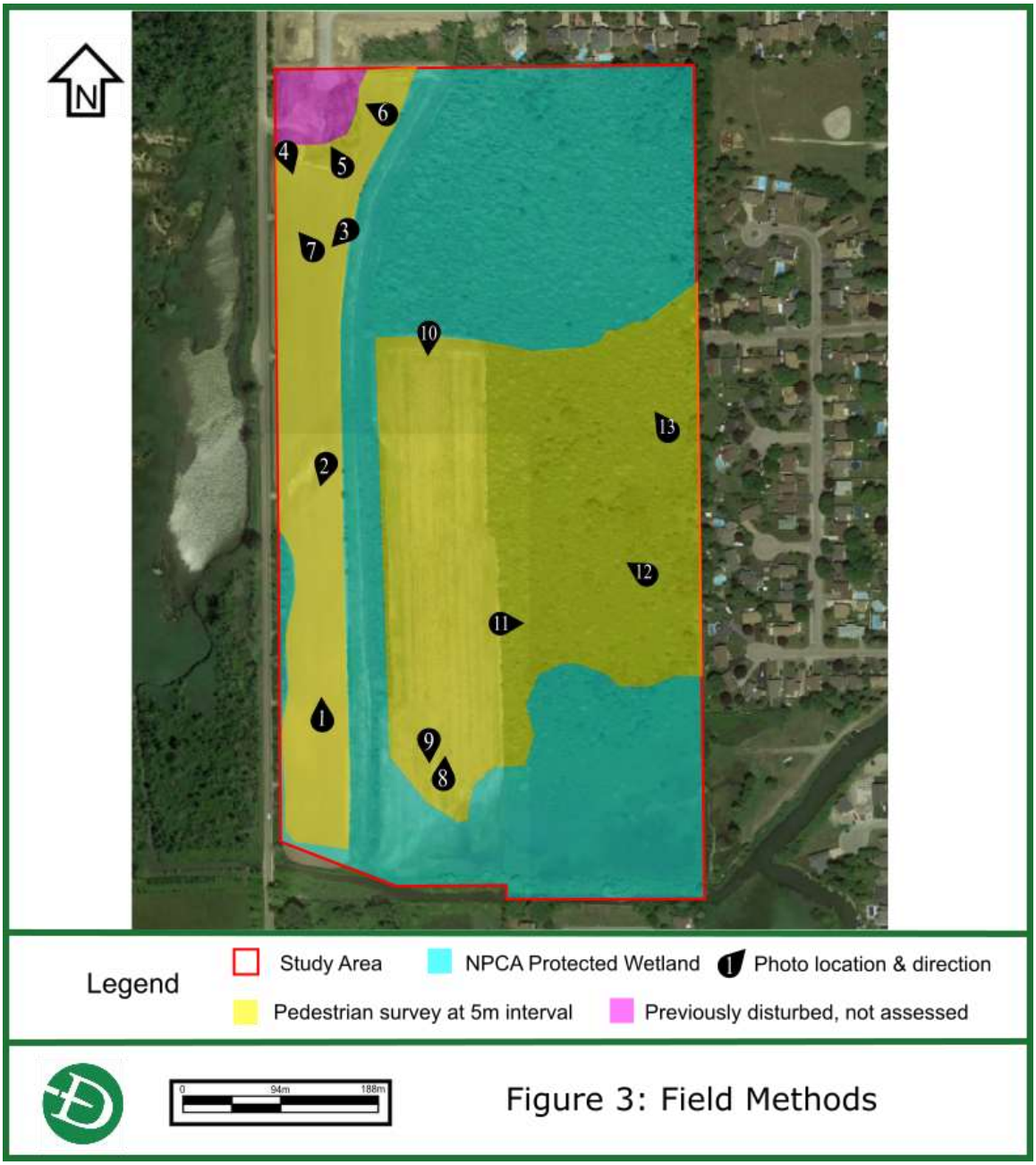



Figure 3: Field Methods

Figure 4: Development Plan

# 9.0 Images

## 9.1 Field Photos

**Photo 1: Agricultural field with pedestrian survey, facing north**

**Photo 2: Agricultural field, facing south**

**Photo 3: Agricultural field with pedestrian survey, facing southwest**

**Photo 4: Agricultural field, facing south southeast**

**Photo 5: Area of prior disturbance, facing northwest**

**Photo 6: Area of prior disturbance, facing west northwest**

**Photo 7: Agricultural field with flags marking artifact scatter, facing northwest**

**Photo 8: Agricultural field, facing north**

**Photo 9: NPCA Protected Wetland, facing south**

**Photo 10: Agricultural field with pedestrian survey, facing west**

**Photo 11: Agricultural field, facing east**

**Photo 12: Agricultural field with pedestrian survey, facing northwest**

**Photo 13: Agricultural field, facing southwest**

## 9.1 Artifact Photos

**Plate 9: Artifacts from AdSg-333: top row, Cat#s 4, 6, 108 and 8; bottom row, Cat#s 14, 59, 44, 51 and 81**

# 10.0 Appendix

## 10.1 AfGt-336 Stage 2 Artifact Catalogue

| Cat # | Context | Artifacts | Freq. | Ceramic Form | Ceramic Function | Colour | Notes |
|---|---|---|---|---|---|---|---|
| 1 | CSP 1 | glass, bottle | 1 | | | green | |
| 2 | CSP 2 | glass, bottle | 2 | | | blue | |
| 3 | CSP 2 | terracotta | 2 | hollow | unknown | | |
| 4 | CSP 3 | glass, bottle finish | 1 | | | clear | brandy type finish |
| 5 | CSP 4 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 6 | CSP 5 | glass, bottle finish | 1 | | | clear | crown type finish |
| 7 | CSP 5 | RWE, undecorated | 1 | unknown | unknown | | |
| 8 | CSP 6 | glass, bottle finish | 1 | | | green | brandy type finish |
| 9 | CSP 6 | terracotta | 1 | hollow | unknown | | |
| 10 | CSP 7 | glass, bottle | 1 | | | blue | |
| 11 | CSP 7 | terracotta | 1 | hollow | unknown | | |
| 12 | CSP 7 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 13 | CSP 8 | RWE, transfer printed | 1 | unknown | unknown | blue | base |
| 14 | CSP 9 | RWE, painted | 1 | unknown | unknown | red | |
| 15 | CSP 10 | RWE, transfer printed | 2 | unknown | unknown | blue | |
| 16 | CSP 10 | terracotta | 1 | hollow | unknown | | |
| 17 | CSP 11 | RWE, transfer printed | 1 | unknown | unknown | blue | rim |
| 18 | CSP 11 | terracotta | 1 | hollow | unknown | | |
| 19 | CSP 12 | RWE, undecorated | 1 | flat | unknown | | base |
| 20 | CSP 12 | terracotta | 1 | hollow | unknown | | |
| 21 | CSP 13 | RWE, painted | 1 | flat | plate | red | rim |
| 22 | CSP 14 | RWE, undecorated | 1 | unknown | unknown | | base |
| 23 | CSP 15 | RWE, undecorated | 1 | unknown | unknown | | |
| 24 | CSP 16 | RWE, painted | 1 | unknown | unknown | blue | |
| 25 | CSP 17 | RWE, transfer printed | 1 | hollow | unknown | blue | |
| 26 | CSP 18 | earthenware, red | 1 | hollow | unknown | tan | rim |
| 27 | CSP 19 | RWE, sponged | 1 | hollow | bowl | blue | |
| 28 | CSP 19 | RWE, undecorated | 1 | unknown | unknown | | |
| 29 | CSP 20 | RWE, sponged | 1 | unknown | unknown | blue | |
| 30 | CSP 20 | RWE, transfer printed | 2 | unknown | unknown | blue | |
| 31 | CSP 20 | earthenware, red | 1 | hollow | unknown | brown | rim |
| 32 | CSP 21 | RWE, transfer printed | 1 | flat | unknown | blue | rim |
| 33 | CSP 22 | RWE, transfer printed | 1 | flat | unknown | blue | |
| 34 | CSP 22 | earthenware, red | 1 | hollow | unknown | brown | |
| 35 | CSP 23 | RWE, sponged | 2 | unknown | unknown | blue | |
| 36 | CSP 23 | RWE, undecorated | 1 | unknown | unknown | | |
| 37 | CSP 23 | terracotta | 1 | unknown | unknown | | |
| 38 | CSP 24 | RWE, undecorated | 1 | unknown | unknown | | |
| 39 | CSP 24 | terracotta | 1 | unknown | unknown | | |
| 40 | CSP 24 | brick | 1 | | | red | |
| 41 | CSP 25 | RWE, transfer printed | 2 | unknown | unknown | blue | |
| 42 | CSP 26 | glass, bottle | 1 | | | green | |
| 43 | CSP 26 | RWE, transfer printed | 2 | flat | unknown | blue | |
| 44 | CSP 27 | RWE, sponged | 1 | hollow | unknown | blue | |
| 45 | CSP 27 | RWE, undecorated | 1 | unknown | unknown | | |
| 46 | CSP 27 | terracotta | 1 | unknown | unknown | | |
| 47 | CSP 28 | RWE, undecorated | 1 | hollow | unknown | | |
| 48 | CSP 28 | RWE, undecorated | 1 | unknown | unknown | | base |
| 49 | CSP 28 | RWE, painted | 1 | unknown | unknown | red | |
| 50 | CSP 29 | RWE, transfer printed | 1 | unknown | unknown | blue | rim |
| 51 | CSP 30 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 52 | CSP 30 | brick | 1 | | | red | |
| 53 | CSP 31 | RWE, sponged | 1 | unknown | unknown | blue | |
| 54 | CSP 31 | RWE, undecorated | 1 | unknown | unknown | | |
| 55 | CSP 32 | RWE, undecorated | 1 | unknown | unknown | | |
| 56 | CSP 32 | terracotta | 1 | hollow | unknown | | |
| 57 | CSP 33 | RWE, undecorated | 2 | unknown | unknown | | |
| 58 | CSP 33 | terracotta | 1 | unknown | unknown | | |
| 59 | CSP 33 | yellowware, undecorated | 1 | unknown | unknown | | |
| 60 | CSP 34 | RWE, undecorated | 1 | unknown | unknown | | rim |
| 61 | CSP 34 | ironstone, undecorated | 1 | hollow | unknown | | |
| 62 | CSP 34 | RWE, transfer printed | 1 | flat | unknown | blue | rim |
| 63 | CSP 35 | RWE, painted | 1 | flat | unknown | blue, green | rim |
| 64 | CSP 36 | glass, bottle | 1 | | | green | |
| 65 | CSP 36 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 66 | CSP 37 | RWE, sponged | 1 | hollow | unknown | blue | |
| 67 | CSP 37 | RWE, painted | 1 | flat | unknown | black, green | |
| 68 | CSP 38 | RWE, sponged | 1 | flat | unknown | blue | |
| 69 | CSP 38 | RWE, painted | 1 | hollow | unknown | blue | |
| 70 | CSP 39 | RWE, transfer printed | 1 | flat | unknown | blue | |
| 71 | CSP 40 | RWE, transfer printed | 1 | flat | unknown | blue | rim |
| 72 | CSP 41 | glass, bottle | 1 | | | aqua | |

| Cat # | Context | Artifacts | Freq. | Ceramic Form | Ceramic Function | Colour | Notes |
|---|---|---|---|---|---|---|---|
| 73 | CSP 42 | RWE, sponged | 2 | unknown | unknown | blue | |
| 74 | CSP 43 | RWE, painted | 1 | unknown | unknown | green | |
| 75 | CSP 44 | terracotta | 1 | hollow | unknown | | |
| 76 | CSP 45 | RWE, transfer printed | 5 | hollow | unknown | blue | rim |
| 77 | CSP 45 | RWE, transfer printed | 1 | unknown | unknown | | |
| 78 | CSP 45 | RWE, painted | 1 | flat | unknown | red | |
| 79 | CSP 46 | RWE, transfer printed | 2 | unknown | unknown | blue | |
| 80 | CSP 47 | RWE, transfer printed | 1 | hollow | unknown | blue | |
| 81 | CSP 48 | RWE, edged | 1 | flat | plate | blue | |
| 82 | CSP 48 | earthenware, red | 1 | hollow | unknown | brown | |
| 83 | CSP 49 | RWE, transfer printed | 3 | unknown | unknown | blue | |
| 84 | CSP 50 | RWE, sponged | 2 | unknown | unknown | blue | |
| 85 | CSP 51 | RWE, transfer printed | 2 | unknown | unknown | blue | |
| 86 | CSP 52 | glass, bottle | 1 | | | brown | |
| 87 | CSP 52 | RWE, undecorated | 2 | unknown | unknown | | |
| 88 | CSP 53 | yellowware, undecorated | 1 | unknown | unknown | | |
| 89 | CSP 54 | RWE, undecorated | 1 | flat | unknown | | |
| 90 | CSP 55 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 91 | CSP 55 | RWE, transfer printed | 1 | unknown | unknown | blue | rim |
| 92 | CSP 56 | RWE, undecorated | 1 | flat | unknown | | |
| 93 | CSP 57 | RWE, sponged | 1 | hollow | unknown | blue | |
| 94 | CSP 58 | earthenware, red | 1 | hollow | unknown | brown | |
| 95 | CSP 58 | RWE, transfer printed | 3 | flat | unknown | blue | |
| 96 | CSP 58 | RWE, edged | 1 | flat | plate | blue | |
| 97 | CSP 58 | RWE, transfer printed | 1 | flat | plate | blue | rim |
| 98 | CSP 59 | RWE, sponged | 1 | unknown | unknown | blue | |
| 99 | CSP 60 | glass, bottle | 1 | | | green | |
| 100 | CSP 61 | RWE, undecorated | 1 | unknown | unknown | | |
| 101 | CSP 61 | RWE, undecorated | 1 | unknown | unknown | red | |
| 102 | CSP 62 | RWE, transfer printed | 2 | unknown | unknown | blue | |
| 103 | CSP 63 | terracotta | 1 | hollow | unknown | | |
| 104 | CSP 63 | brick | 1 | | | red | |
| 105 | CSP 63 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 106 | CSP 64 | RWE, transfer printed | 3 | unknown | unknown | blue | |
| 107 | CSP 65 | RWE, transfer printed | 4 | unknown | unknown | blue | |
| 108 | CSP 66 | glass, bottle finish | 1 | | | aqua | wide patent type finish |
| 109 | CSP 66 | RWE, sponged | 1 | flat | unknown | blue | |
| 110 | CSP 66 | RWE, undecorated | 1 | unknown | unknown | | |
| 111 | CSP 67 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 112 | CSP 67 | RWE, undecorated | 1 | hollow | unknown | | base |
| 113 | CSP 68 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 114 | CSP 69 | RWE, transfer printed | 2 | unknown | unknown | blue | |
| 115 | CSP 70 | RWE, undecorated | 1 | flat | unknown | | |
| 116 | CSP 71 | RWE, undecorated | 2 | unknown | unknown | | |
| 117 | CSP 72 | RWE, undecorated | 1 | flat | unknown | | rim |
| 118 | CSP 72 | RWE, sponged | 1 | unknown | unknown | blue | |
| 119 | CSP 73 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 120 | CSP 74 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 121 | CSP 75 | RWE, transfer printed | 3 | unknown | unknown | blue | |
| 122 | CSP 75 | RWE, undecorated | 1 | unknown | unknown | | |
| 123 | CSP 76 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 124 | CSP 77 | glass, bottle base | 1 | | | clear | |
| 125 | CSP 78 | glass, bottle | 1 | | | green | |
| 126 | CSP 79 | glass, bottle | 1 | hollow | jar | milk | threaded cold cream jar |
| 127 | CSP 80 | RWE, undecorated | 1 | hollow | unknown | | |
| 128 | CSP 80 | RWE, sponged | 1 | unknown | unknown | blue | |
| 129 | CSP 81 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 130 | CSP 81 | RWE, transfer printed | 1 | flat | unknown | blue | rim |
| 131 | CSP 81 | RWE, undecorated | 1 | unknown | unknown | | |
| 132 | CSP 82 | RWE, undecorated | 1 | unknown | unknown | | |
| 133 | CSP 83 | RWE, transfer printed | 1 | unknown | unknown | blue | |
| 134 | CSP 84 | RWE, edged | 1 | flat | plate | blue | relief decoration |
| 135 | CSP 85 | RWE, edged | 1 | flat | plate | blue | relief decoration |
| 136 | CSP 85 | RWE, undecorated | 1 | unknown | unknown | | |
| 137 | CSP 86 | RWE, undecorated | 1 | unknown | unknown | | |

## 10.2 Ceramic Decorative Style Descriptions

### Transfer Printing

The technique of transferring a pattern from an engraved metal plate to the surface of a ceramic vessel is thought to have developed in the mid-18th century (Jervis 1911); it became more widely used among Staffordshire potteries in the 1790s (Shaw 1829). In Southern Ontario, transfer printing was popular through the first half of the 19th Century before simpler techniques or no decoration whatsoever became popular. It underwent a revival after 1870 until the end of the Century (Majewski and O'Brien 1987). Blue transfer print ware was a popular decorated ceramic ware manufactured throughout the 19th century on various wares and it was the dominant colour available for printed wares before 1830. Brown and black transfer print wares were popular for a long span roughly between 1830 and 1870 (Adams 1994).

### Edgewares

Edgewares are ceramics where decoration is concentrated on moulding or colouring the edge or rim of the vessel, most commonly plates. The earliest edgewares bore asymmetrical rococo shell edging and date from roughly 1775. Over time, the style of the edge design changed, becoming symmetrical scalloping (scalloped edgeware) from around 1800, to straight-edged with impressed lines (also known as feathered edgeware) by 1840, and non-impressed with no scalloping (unscalloped edgeware) by 1860 (Hunter and Miller 2009, 13). Dates vary somewhat for the popularity of the dominant colours – blue and green – but blue impressed edgeware dates from 1840 to 1860, blue unscalloped edgeware from after 1860.

### Sponging

Sponging was an inexpensive way of decorating ceramics by using a sponge to transfer ink to the vessel giving it a mottled effect. All over sponging became popular in the 1840s. A lack of sponged ware on a site often indicates the occupants could afford more expensive decorated ceramics (Adams 1994).

### Hand Painted Wares

Hand painted floral tea and dinner ware sets were a staple ceramic item in the 1700s and 1800s. From 1785 to 1815, potters used metal oxide colours that produced subdued, earth tones including brownish orange, olive-green, raw umber, and a limited use of blue. These are known as the early palette colours and are found exclusively on creamware and cream coloured ware, due to their lower firing temperature. Cobalt blue, often referred to as New Palette Blue, was the most dominant colour observed between 1815 and 1830, and typically featured large brushstrokes. Not only was the blue popular with consumers, it was also the only colour which could withstand the higher firing temperatures required for pearlware, until Spode's invention of the late palette colours in 1820-21. These new, brighter colours were the standard on dinner and tea sets on all ware types through the 19th century.