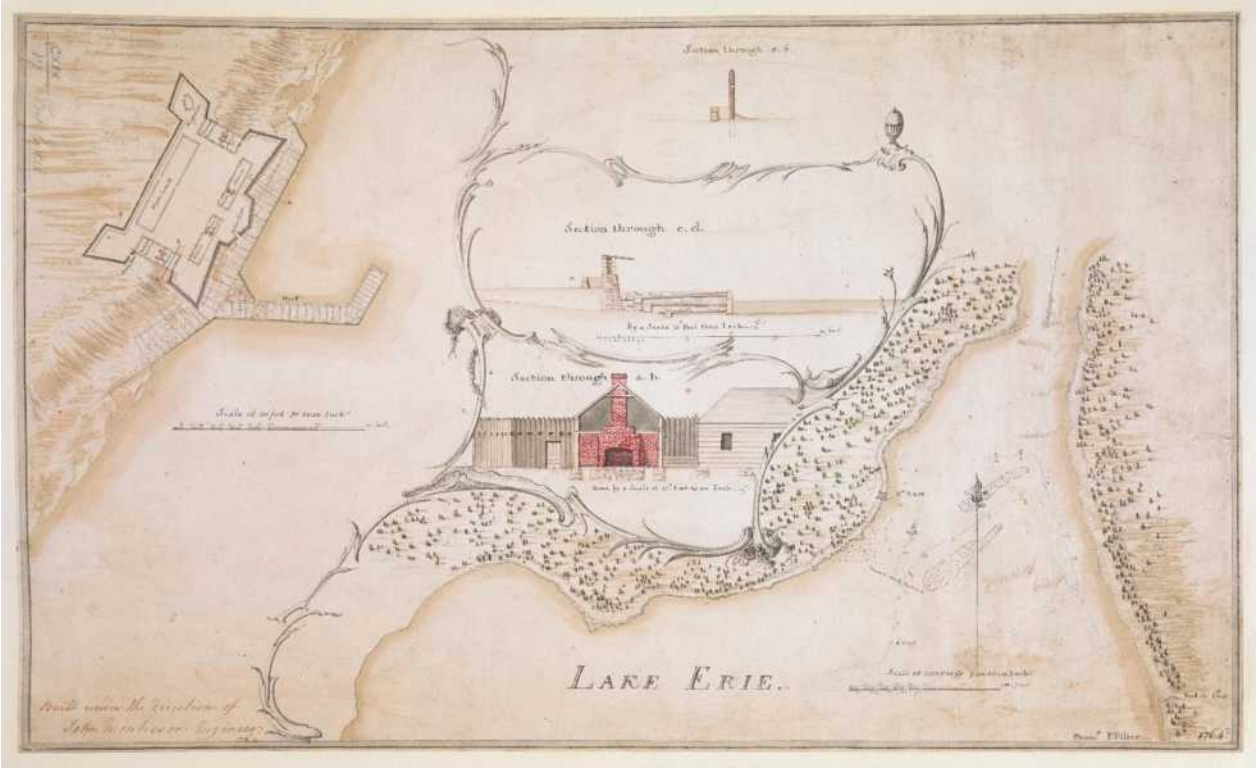
2019 ARCHAEOLOGICAL INVESTIGATIONS AT OLD FORT ERIE N.H.S. (AfGr-3)



WILFRID LAURIER UNIVERSITY ARCHAEOLOGICAL FIELD SCHOOL

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Volume I

Acknowledgements

The author wishes to extend a thank you to everyone involved in the project for their contributions to making 2019 a successful season. I particularly want to thank Jim Hill, Superintendent of Heritage, Niagara Parks Commission, and Travis Hill, Site Manager, Old Fort Erie. Their continued support of the project is one reason why the excavation is successful each year. I value greatly their knowledge of, and expertise in, the War of 1812, military history and Fort Erie history, specifically. Thanks also to Niagara Parks Commission Executive Team: Steve Barnhart, Senior Director, Parks, Environment and Culture; and David Adames, CEO, with whom I've had the pleasure of working on other projects since 1991. Senior management at NPC have also become involved with the project this past year and I greatly appreciate their enthusiastic support; namely, Annelisa Pederson, Director, Cultural Stewardship; and Ellen Savoia, Senior Manager, Environmental Planning. I also wish to acknowledge the Fort interpretative staff for their assistance in so many ways during the project, and all NPC grounds crew employees for assisting with site preparation (machine operators Matt Montgomery and Jeanne McLaughlin) and maintenance.

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My teaching assistants for the project, Steven McPhail, Carli Perri, and Jordan Streb were indispensable for the day-to-day operations in the field and the lab and much credit is owed to them for their professionalism in ensuring that the daily operations ran smoothly. After the field season Carli completed the digitized drawings for this report and did a remarkable job once again. Jordan volunteered to take on the task of artifact photography – a task for which I am extremely grateful.

Many volunteers also contributed to the project in so many ways, from excavation and survey, to post-excavation analysis. Former Laurier student Don Patrick assisted with the field excavation; continuing Laurier students Carli Perri, Jordan Streb, and Brianagh Pagazani spent hours in the lab processing the thousands of objects found.

Thanks to the students of the fall 2019 AR217 Archaeological Laboratory class for cataloguing the bulk of the collections from various units excavated.

Thanks to my good friend Richard Gerrard, Historian, Heritage Toronto, for providing valuable information on the history of specific regiments and identification of artifacts found during the 2019 season. It was a pleasure to see Richard get his hands dirty assisting with the Stage 2 ground-truthing.

Ed Eastaugh and Dr. Jean-François Millaire conducted the initial GPR survey and it was thanks to their patient data collection, analysis and interpretation that I was able to proceed with lifting the asphalt in a public parking lot with a semblance of confidence.

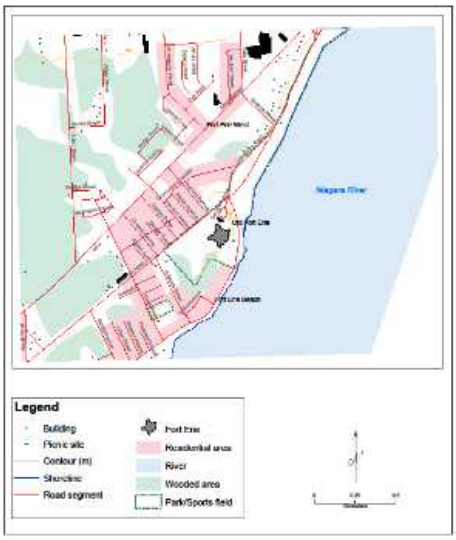
I also want to thank my wife, Dr. Lisabeth Robinson, Historian at the Western Reserve Academy, Ohio, for her interest and support.

Finally, a special thank you goes out to all students involved in the project this year. It is due to their hard work that I can report on the discoveries discussed below.

I offer my sincere apologies to any whom I have omitted inadvertently from these acknowledgments.

1.0 Introduction

The Search for Ontario's Oldest British Military Fort: Old Fort Erie National Historic Site, Fort Erie, Ontario, Canada



In Spring 2019 a Wilfrid Laurier University archaeological field school was conducted on the site of Old Fort Erie, N.H.S. under the direction of Dr. John Triggs, Department of Archaeology and Heritage Studies. The on-site field school ran for five weeks from May 7- June 14 and was carried out with the assistance of 18 students, a return volunteer, three teaching assistants and the project Director.

Over the 5-week period 11 units were excavated in the parking lot situated between the lakeshore and Lakeshore Road. During excavation the overall area was divided into Areas 1, 2, and 3: Area 1, Units A-C; Area 2, Units D, E, F, and G; Area 3, Units H, J, K, and M (Figure 5). Specific Areas were assigned to the Instructional Assistants and the Principal Investigator: Area A, Jordan Streb, Area 2 John Triggs, and Area 3, Carli Perri. The observations and analysis discussed in this report do not make use of the Area designations used in the field. The entire study area; i.e., all units in the parking lot, represents a unified site for purposes of historical, artifactual and stratigraphic analysis. Placement of excavation units was based on archaeological features revealed during the ground-truthing assessment completed on April 16. Students were assigned a specific

Figure 2. Old Fort Erie, Nationa Historic Site, and parking lot – site of the 2019 excavations.

unit, and over the course of the next 5 weeks, excavation proceeded using a stratigraphic excavation methodology and recording system based on the Harris matrix method (Harris 1979). Evidence of the 18th century occupation of the site was found in each area.

The following report documents the results of the 2019 project. Presented are the analysis and interpretation of artifacts and stratigraphic layers within an archaeological chronology represented by

Figure 3. Drone image (June 2017) of parking lot, Wilfrid Laurier University excavations in 2019 on site of the first Fort Erie, 1764-1805. Lakeshore road at top; lakeshore at bottom. Grid north is to right. Old Fort Erie National Historic Site is approximately 50 metres to top of image.

Figure 4. Google Earth image of parking lot, Wilfrid Laurier University excavations in 2019 on site of the first Fort Erie, 1764-1805. Lakeshore road at top; lakeshore at bottom. Grid north is to right. Old Fort Erie National Historic Site is approximately 50 metres to top of image.

Periods defined for the entire site. Periods discussed in the report are the same as those defined in the all previous reports (2012, 2013, 2015 and 2017) for cross-comparison. The main distinction between earlier excavations and the 2019 investigation is that the latest work yielded substantial archaeological evidence recovered from layers and features dating to the period before the War of 1812 when Fort Erie served as a sentinel guarding the approach to the Niagara River between 1764 and 1805.

Figure 5. Site map overlaid on parking lot showing all units excavated in 2019.

Background Information

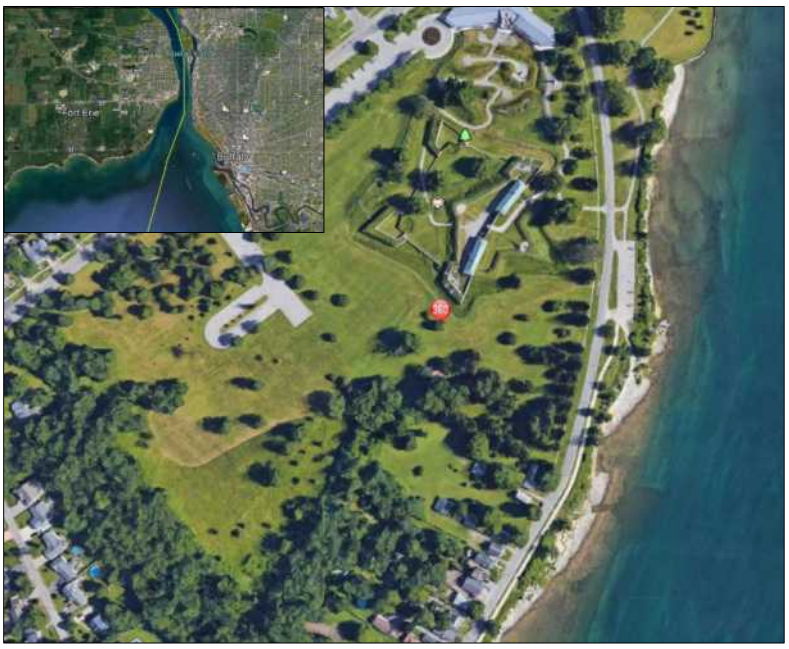


Figure 6. Fort Erie National Historic Site is located at the mouth of the Niagara River, across the international border from Buffalo, New York, in Fort Erie, Ontario.

In 2012, John Triggs, Department of Archaeology and Heritage Studies, Wilfrid Laurier University, began a program of research archaeology at Old Fort Erie, N.H.S. Four seasons of fieldwork, conducted as archaeological field schools, have resulted in exciting discoveries and a better understanding of the fort's long and eventful history. The 2019 field season represents a culmination of all previous work.

In 2012 and 2013, the team investigated the War of 1812 period of the site, specifically the 1814 siege, which is perhaps the most widely known historical event to occur at the site. During the final months of the war, British forces, together with native and civilian allies, laid siege to Fort Erie attempting to dislodge occupying American forces. This episode represented the largest massing of forces during the war, and the greatest loss of life in a single engagement. The reconstructed fort visitors see today, built between 1805 and 1808, was the focal point of the siege (Figure 6).

The early investigations, focusing on the War of 1812 landscape, revealed new insight into the tactics employed by both the British and American commanding officers, Lieutenant-General Gordon Drummond and Major-General Jacob Brown, respectively, during the final days of the siege (Triggs 2015). In 2013, as more War of 1812 period features and artifacts were being uncovered, traces of an earlier occupation at the site began to emerge. Below an earthwork constructed by the defending American army in 1814, a collapsed chimney, cellar pit and kitchen garden, pointed to a previously undocumented 18th century structure associated with the earlier British occupation of the site. As often happens in archaeology, unexpected discoveries can lead to unanticipated research questions. The first question was how extensive are the 18th century remains on the site? The next question was in what condition might these remains be after 250 years of subsequent occupation? Finally, what do we know about this period from the historical sources?

In order to address these questions, the focus shifted to another part of the historic site - an area occupied during the 18th century when the *first* Fort Erie stood on the lakeshore. The first fort, built in 1764, is the oldest British military fort in the province of Ontario. The remote post served as an entrepôt for trading and military expeditions to points farther south and west in the newly acquired British territory formerly controlled by the French. Over the decades, the fort suffered severe ice

damage such that by 1805 it was in ruins and was finally demolished to make way for the second Fort Erie. The first Fort Erie, and associated outbuildings and other landscape features, appears on several 18th and early 19th century maps. Excavations in 2015 and 2017 exposed the remains of three structures contemporary with the first fort: a smithy, an officers' quarters later used as a military storehouse, and a single dwelling used by an officer. Tens of thousands of artifacts and architectural features such as foundations, fireplaces and cellar pits, provide valuable primary information on what life was like at this remote frontier community.

Figure 7. Overlay plan of Fort Erie, 1764, by Francis Pfister, on modern landscape of Fort Erie N.H.S. Several maps situate the fort below the parking lot next to the lakeshore.

Figure 8. The GPR survey used a tow wheel to log data below the asphalt.

Building on all previous discoveries, the objective of the 2019 archaeological season was to locate the first Fort Erie built in 1764. The search for the fort is a study in documentary research, remote sensing, interpretation, and excavation. To begin, Geographic Information Systems, or GIS technology, was employed. Historic maps were overlaid on the modern landscape to determine the general location of the early fort within the boundaries of the historic site (Figure 7). The initial results were promising in that all maps situated the fort in the general vicinity of an asphalt-surfaced parking lot located to the east of the excavations conducted in 2015 and 2017. The next step was to conduct a remote sensing survey in the presumed location of the fort. Due to slightly different placements of the fort based on GIS overlays, the entire parking lot was surveyed using Ground Penetrating Radar (GPR) in October 2018 by staff and faculty of the Department of Anthropology, Western University, London, Ontario. GPR readings were collected along parallel traverses oriented east to west and spaced 25 cm apart (Figure 8). Following

this, the data were processed and displayed as horizontal maps. Finally, the images were analyzed using historic maps.

The results of the GPR survey were promising. Anomalies seen in the GPR readings appeared to indicate architectural remains, which corresponded to historic maps. The preliminary interpretation was that the red linear features seemed to represent the west curtain wall of the fort, running at a slight

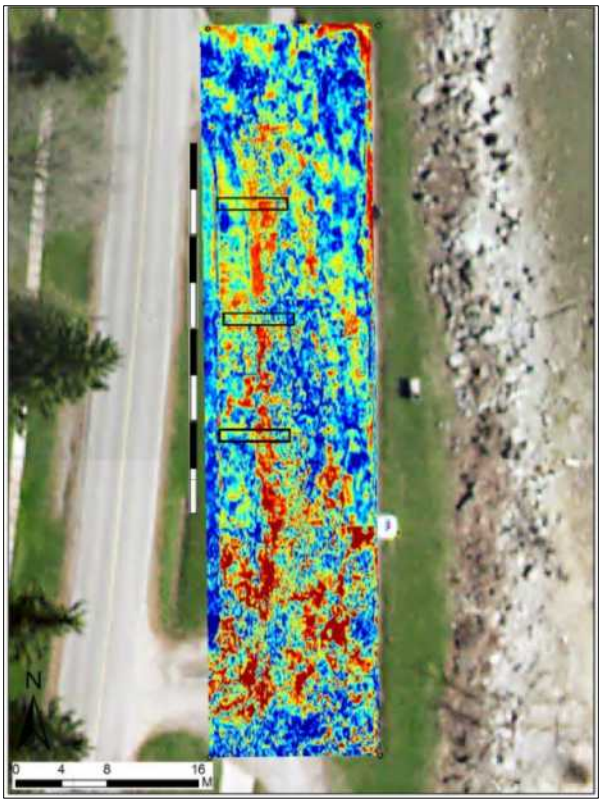


Figure 9. GPR results correspond with 18th century maps showing the west curtain wall and interior buildings. Three trenches were laid in to intersect presumed walls.

Figure 10. Trench 2 showing masonry remains thought to be the west curtain wall of the fort. View looking west.

angle to the adjacent road, with a possible bastion located to the bottom of the image (Figure 9). Moreover, it appeared that the slightly less defined red lines to the right of the curtain wall marked the walls of interior buildings.

As a means of verifying the GPR results ground-truthing was carried out in April 2019. Mechanically excavated trenches were strategically located to intersect the possible curtain wall. Designed to retrieve the maximum amount of information with a minimum of disturbance to the underlying archaeological resources, the trenches were successful in locating architectural features associated with the first fort (Figure 10). The objective of the backhoe trenching was to verify whether the anomalies seen were architectural, to assess the date of any features found, to evaluate the condition of the remains, and to determine depth and nature of the overlying sediment. Details of the GPR survey and the ground-truthing assessment are presented in Section 4.0.

The excavation strategy for the 2019 Wilfrid Laurier University Field School was to investigate further the architectural features believed to be associated with the first Fort Erie. Between May 6 and June 14, the team of students, staff and faculty began work in strategically placed excavation units to better define architectural and archaeological features exposed during the ground-truthing exercise in April. Machine excavation was replaced by manual stratigraphic excavation using trowels. Detailed stratigraphic recording allowed for the documentation of artifacts *in situ* and the documentation of the sequence of events in the fort's history. The overall research objectives of the project were twofold. Firstly, to recover additional information relating to the construction of the fort in 1764, its various transformations through the last decades of the 18th century, until its final demise after standing for more than four decades as a sentinel guarding the entrance to Lake Erie. Secondly, to understand better the adaptations made by the British military, civilians, and Indigenous people at this remote outpost of the British Empire.

The participants on the 2019 field school were:

Unit A - Hayden Chambers/Alicia Lavigne; Unit B – Tuesday Kaiser/Dan Garner; Unit C – Abel Land; Unit D – Elissa France/Sloane Mcdowell; Unit E – Brianagh Pagazani (Advanced Student); Unit F – Gavin Quenneville/Natashya Moran-Blackman; Unit G – Judy Moore, Michael Maugeri; Unit H - Kenneth Sej, Megan Edwards; Unit J – Rachel Tucker, Natasha Beaton; Unit K – Kunjal Shah, Emma Walsh (Advanced Students); Unit M – Don Patrick (volunteer). Carli Perri, Jordan Streb and Steven McPhail were the Instructional Assistants.

Alicia Lavigne	A	2X2
Hayden Chambers	A	2X2
Tuesday Kaiser	B	2X2
Daniel Garner	B	2X2
Abel Land	C	1X2
Sloane Mcdowell	D	2X2
Elissa France	D	2X2
Brianagh Pagazani	E	1X3
Gavin Quenneville	F	2X2
Natashya Moran-Blackman	F	2X2
Judy Moore	G	2X2
Michael Maugeri	G	2X2
Megan Edwards	H	2X2
Kenneth Sej	H	2X2
Rachel Tucker	J	2X2
Natasha Beaton	J	2X2
Emma Walsh	K	2X2
Kunjal Shah	K	2X2

2.0 Environmental Context

Fort Erie is situated in the Haldimand Clay Plain physiographic region, specifically in the sub-region referred to as the Niagara River Valley, a flood plain about 400 metres wide (Chapman and Putnum 1984). Overlying the sedimentary upper Silurian and lower Devonian age bedrock geology, the clay plain in the region of the fort is characterized by a very compact, glacio-lacustrine clay deposit varying in thickness from a few centimetres closer to the lakeshore to at least 40 centimetres about 50 metres inland. The most significant outcrops of the bedrock geology are the Onondaga Formation and the Bois Blanc Formation, both sources of cherty limestone. Onondaga chert, the most abundant natural material from which chert was quarried by aboriginal peoples, is available in outcrops on the north shore of Lake Erie near the fort and for about 100 kilometres west to Nanticoke.

Situated only a few metres from the shoreline of Lake Erie, the land now comprising Fort Erie National Historic Site has been subject to Periodic episodes of inundation due to rising lake levels. Historically, lake levels vary as much as a metre annually although rises of as much as 2.4 metres (roughly 8 feet) have been recorded (MacDonald and Cooper 2006: 11). In fact, the destruction of the first fort built in 1764 is directly attributable to damage from ice and fluctuating lake levels in the last third of the 18th century (see Sections 3.0 and 5.0). The site of the 2019 excavation in the small parking lot on Lakeshore Road (Figure 6) ranges from approximately 176 to 177 metres elevation, compared to the lake level of about 173 metres ASL. Stratigraphic evidence indicates that this area was inundated periodically, possibly due to an annual increase in lake levels, but also due to storm surges which can raise the water level several metres for short periods of time. Underlying sediments in the vicinity of the 2013-2017 excavations, on the west side of Lakeshore Road, immediately opposite the 2019 excavation area, are glacio-lacustrine clay deposits. Soils in the region of the fort are referred to as luvisolic, characterized by slightly acidic A and B horizons formed over calcareous parent materials. Natural sediment formation (the clay-loam A-horizon) over the clay subsoil (the B-horizon) varies in thickness from 0 to 5 centimetres. However, this may not be representative of the actual A-horizon thickness in an undisturbed state. The thinness of the A-horizon in former excavation areas (2013-2017) is due to heavy foot traffic during the siege which acted to compress the natural ground surface. Also, the absence of the A-horizon in some areas is due to the excavation and subsequent re-deposition of the original A-horizon for the creation of defensive earthworks and other military constructions. In 2012 this was found to have taken place over a buffer area running parallel to and adjacent to the linear earthwork on the south and west side of the fort. The scraping of the A-horizon in this fashion - in order to build a sufficiently high earthwork – was due to the extremely difficult task of excavating the very densely compact natural glacio-lacustrine clay subsoil, which necessitated 'borrowing' surface soil from a zone adjacent to the mound.

The topography of the northwestern area of the site, where the first Wilfrid Laurier excavations were carried out in 2012, is characterized by a relatively featureless landscape. This stretches from the south and west side of the long earthwork for a distance of 50-80 metres towards the fort to the north. To the east of the earthwork the land gently slopes down as much as 5 metres in elevation to the lakeshore on the south side of Lakeshore Road. Here a bluff about 1 metre high on average borders a relatively flat limestone shelf located a few centimetres above the current lake level. On the southern side of the historic site boundary is a tree line and wooded area about 40 metres wide, beyond which

are several houses and yards. The fort itself is located on a high point of about 180-181 metres ASL in a commanding position overlooking the parking lot on Lakeshore Road – site of the 18th century fort. The western section of the historic site is poorly drained and in early spring groundwater can be heard flowing over the impermeable clay subsoil downslope towards the lakeshore.

Vegetation in the area during the early historic period was likely mostly deciduous, although timber descriptions in Robert Gourlay's Statistical Account for Upper Canada in 1817 do indicate that local variations were common and a mixed conifer-hardwood forest may have also been present. Fort Erie National Historic Site is located in the most northern extent of the Carolinian biotic province, a zone more characteristic of areas south of Lake Erie. Clues as to the natural forest cover and botanical species present are available in historical sources such as diaries, travel journals, surveyor's notebooks, and maps compiled during the late 18th and 19th centuries (MacDonald and Cooper 2006: 19). Wood charcoal recovered during excavations at the Peace Bridge site by Archaeological Services Inc. from various contexts indicate that the area was dominated by ash, elm and oak, with lesser quantities of maple, beech, ironwood, white pine and larch (MacDonald and Cooper 2006: 22). Food species in the southeastern Niagara Region, available to aboriginal populations, and also during early settlement, included nuts (black walnut, butternut, hickory, oak, beech, and chestnut), berries (raspberries, blackberries, elderberry, strawberry, blueberry and cranberry), fruits (cherry, plum, crab apple, and currant) and cultivated vegetables. A wide variety of medicinal plants were also available (MacDonald and Cooper 2006: 25).

Fauna available to aboriginal populations, and early settlers, would have included a wide array of forest-dwelling animals. Among these were large mammals such as moose, white-tailed deer, wapiti

Figure 11 Old Fort Erie With the Migration of Wild Pigeons, dated 1804; by Edward Walsh, Sigmund Samuel Collection, 952.218, ROM2006_7733_1.

(elk), black bear, and small mammals such as raccoon, beaver, muskrat, snowshoe hare, cottontail, marten, fisher, river otters, weasels, foxes, wolf, cougar, bobcat, lynx, woodchuck, chipmunk and grey squirrel (MacDonald and Cooper 2006: 27-28). Waterfowl would also have been available and included the passenger pigeon in profusion. A watercolour from 1804 by Edward Walsh shows hunters shooting into the overhead flocks of these birds which were ultimately hunted to extinction by the close of the 19th century (Figure 68). Also available were wild turkey, various species of ducks and geese. A wide variety of fish would also have been available to aboriginal populations and settlers.

3.0 Historical Overview of Fort Erie

by Dr. Adam Shoalts[1]

Fort Erie is the oldest British military fort in what is now Ontario.[2] For a quarter of a millennium, under different guises, first as a modest depot, then as a stone fortress, later as ruins, and finally as a reconstructed tourist attraction, it has stood sentinel over the Niagara River. Established in 1764 after the Treaty of Paris formally ceded New France to the British Crown, the early Fort Erie was a remote outpost of the British Empire deep in the North American wilderness. Naturally, the British had found it necessary to construct a series of forts in the newly acquired Great Lakes territory to control the area and the lucrative fur trade. This became a matter of urgency with Pontiac's uprising against British rule in 1763.

John Montressor, a captain in the Royal Engineers, was tasked with selecting a suitable location for a fort somewhere near the headwaters of the Niagara River at Lake Erie and overseeing its construction. Work commenced in the summer of 1764, with five hundred men labouring on the fort. Significantly, this work force consisted of a mix of British regular troops and colonial volunteer Units, including two battalions of Connecticut and New Jersey Provincial forces. Such a mix of Units offers the possibility of testing Andrew Farry's spatial model of British regular and colonial irregular army relations that assumes "significant distinctions will characterize small-scale provincial and British contexts," including differences in ceramics, lead shot, and other distinguishable patterns, which Farry found on Seven Years' War military sites in New York state where both British and colonial forces served.[3] If Farry's pattern holds, it may also prove possible to test it against the later Fort Erie, where there was a mix of militia and regular troops, including during the 1814 siege.

While a historical plaque on display at Fort Erie today states that there were two early forts in addition to the 1805 stone fort, this is unlikely. Certainly, the written evidence makes clear that this original fort was in an almost constant state of disrepair owing to lake storms and ice flows, but as David Owen demonstrated in his history of the site there is no reason to think the fort was ever entirely abandoned or completely rebuilt before 1805.[4] Descriptions of this early fort are limited to sparse military records, a few paintings, and the occasional traveler's terse description (including ones penned by Robert Rogers and Lady Simcoe). Thus, little is known of this original fort, and it is hoped that archaeology will be able to shed more light on it. The almost constant repair work throughout the fort's troubled existence from 1764 to circa 1805 ought to have left behind a rich archaeological record. GIS

[1] This paper was prepared as a requirement of a Graduate Directed Study course under the supervision of Dr. John Triggs, Wilfrid Laurier University, Dept. of Archaeology and Classical Studies, in fall 2012. Historical information cited in this section is elaborated upon by Triggs in Section 5.0 in a detailed cartographic and documentary analysis made possible with the recent findings of the 2019 field season and subsequent study.

[2] Older British forts were established on Hudson Bay and James Bay, but these were built by the Hudson's Bay Company, a private corporation, rather than the British military.

[3] Andrew Farry, "Regulars and "Irregulars": British and Provincial Variability among Eighteenth-Century Military Frontiers," *Historical Archaeology* 2005, 39(2):16.

[4] David A. Owen, *Historic Fort Erie 1764-1823: An Historic Guide* (Niagara Parks Commission: 1986), 18-19.

mapping technology has allowed for period maps of the original fort to be superimposed on contemporary aerial photographs, using the barracks and demi-bastions of the reconstructed second fort as location markers. This gives an approximate idea of where the bastions and walls of the original fort were located in relation to the modern landscape. Some of the major unresolved questions about this first fort are to what extent it functioned as a fur trade depot; how it was laid out and what buildings and barracks it contained, what it contained in the way of gun batteries and powder magazines, and if there is any evidence of ship-building activity at the site. Another major unresolved question about this original fort involves its somewhat mysterious depiction on three maps as apparently missing one half. Maps dating to 1794, 1798, and 1803 all display Fort Erie as consisting of only two landward facing bastions, with the waterside of the fort nonexistent. A letter dated May 20, 1781 stated that the fort "…is in general in a bad state of defense. *The face next the Lake is laid clear open by the late storms*, and the whole Fort must be picketed. The Artificers are now repairing the works…"[5] It would seem extraordinary that a storm could have "laid clear open" the fort's walls, but this is apparently the case. In spring when the ice breaks up on Lake Erie, large ice flows drift down the Niagara River that in a storm can inflict considerable damage to any structures fronting the river. A June 24, 1781 report noted that, "Fort Erie (has been) new(ly) picketted, and the Stonewall, next the Lake repair'd…"[6] While repaired, the fact that this wall and lakeside bastions are missing from the 1794, 1798, and 1803 maps indicate that the fort was regularly damaged by ice and storms. This is also clear from the documentary record. Accounts written throughout the 1780s describe the fort as in "ruins."[7] A report dated December 6, 1788 provides more detail: "The whole of Fort Erie is in so wretched a state and altogether so much in ruins that it is not easy to say which is the worst part of it…*the front next the water which has a stone wall has been washed away by the encroachment of the Lake*."[8] In the summer of 1790 one Major Robert Matthews reported of the fort that, "The work consists of four small Bastions, two of bad mason work washed by the lake, and two on the land side stockaded, it is quite in ruin and was originally very improperly placed."[9] If storms and ice really did wash away on multiple occasions the fort's waterside stone wall, perhaps some of the stone may still be found lying in the shallow waters of the river. At any rate, given that a 1792 report informs us that the fort contained a blockhouse that was, "54 feet long 30 feet wide…the upper floor projects two feet from the lower part which is built of stone" some archaeological evidence of these structures must presumably remain.[10] Furthermore, a civilian visitor to the fort in 1796 noted in his journal that adjoining the fort were, "extensive stores as at Chippeway, and about half a dozen miserable little dwellings."[11] Two paintings of the fort also depict these buildings adjacent to the fort as well as gardens.

The maps also indicate that two wharfs existed below the fort. The cribbing of one these wharfs, labeled as "Grant's & Kirby's wharf" on an 1818 map, is still visible today in the waters of the Niagara River. An 1803 map also displays a "merchant's store" adjacent to this wharf, and this building appears on various subsequent maps. The other wharf is depicted as almost directly below the site of the second

[5] Owen, *Historic Fort Erie*, 31.
[6] Ibid.
[7] Owen, 31-32.
[8] Owen, 32.
[9] Owen, 33.
[10] Owen, 34.
[11] Owen, 39.

Fort Erie and is labeled on an 1818 map as the government wharf. Given the extensive damage from ice to buildings and to the original fort, one wonders if archaeology might reveal that considerable local ship and boat maintenance took place near these wharfs.

By 1805 the British army began construction of a new stone fort in a location above the old ruined fort, a safe distance from the ravages of the Niagara River and Lake Erie. While we know much more about the construction, design and internal layout of this second Fort Erie, there are still major gaps in our knowledge of it. For example, archaeology could possibly reveal the location and extent of the fort's stables, which must have existed but are not mentioned in any of the written sources. It is also not known from the documentary record whether or not Fort Erie had a blacksmith shop. Based on other British forts in Canada, such as Fort St. Joseph, it seems likely that Fort Erie did.[12] In the absence of documentary sources, only archaeology will be able to yield any knowledge about the fort's blacksmith shop and stables. Such findings, in addition to what we may discover about any ship repairs and local gardens, ought to allow for a much better understanding of the extent to which Fort Erie functioned as a self-sufficient entity.[13] The 1794 and 1798 maps of Fort Erie reveal plans for merchant shops clustered along the riverfront. Most of these shops did not come to fruition, yet some buildings, such as the King's Store, we know from later maps did exist. It is hoped that future archaeology will shed light on these neglected aspects of the site's history. Ground-penetrating radar and magnetometer surveys conducted at the site, in conjunction with the period maps superimposed over contemporary satellite images, may offer the best means of detecting the remains of such structures. Conversely, whereas other archaeological investigations of nineteenth century battlefields have relied on metal dictator surveys (Sivilich 1996), this would likely prove of less utility at Fort Erie due to the unfortunately pervasive practice of metal detector assisted pot-hunting over the years.[14]

Despite this unfortunate tendency, archaeological fieldwork in 2012 uncovered considerable numbers of musket and rifle balls, buck shot and birdshot. While most, if not all, of this ordnance is associated with the Siege of Fort Erie that occurred in the summer of 1814, the birdshot is a reminder that troops in peacetime at Fort Erie engaged in hunting. An 1804 painting by Edward Walsh, a surgeon in the 49th regiment of foot, depicts a man hunting passenger pigeons outside Fort Erie. The extent to which local game supplemented military rations at Fort Erie might be determined if the fort's refuse pits were to be excavated. It is also interesting to speculate to what extent soldiers at Fort Erie supplemented their diets by fishing in the rich waters of the Niagara River and Lake Erie. That such activity took place, particularly in the fort's early history, seems likely. It is also known that the Fort's garrison kept gardens outside the fort's walls, but detailed written evidence for this is scant.[15]

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[12] John D. Light and Henry Unglik, *A Frontier Fur Trade Blacksmith Shop 1796 -1812*. (National Historic Parks and Sites, Environment Canada, 1987).

[13] Steven L. De Vore demonstrates that nineteenth century wilderness forts in the American mid-west functioned as largely self-sufficient entities, with gunsmiths, blacksmiths, carpenters, and other craftsmen fulfilling the fort's needs. See Steven L. De Vore, "Fur Trade Era Blacksmith Shops at Fort Union Trading North Dakota Post National Historic Site," *Historical Archaeology* Vol. 24, No. 3, 1990. Given Fort Erie's strategic location on the Great Lakes trade route, it was presumably less self-sufficient and more dependent on trade routes.

[14] Daniel M. Sivilich," Analyzing Musket Balls to interpret a Revolutionary War Site" *Historical Archaeology* Vol. 30, No. 2, 1996.

[15] Excavations in 2013 on the south side of the fort opposite the main gate did indeed reveal evidence of the gardens dating to the pre-war of 1812 Period. Another map in Richard Feltoe, *The Ashes of War: The Fight for*

Archaeology could possibly shed more light on what the living conditions were (in both peace and war) at the fort. For example, is it possible that soldiers, with their military rations supplemented by wild game, fish, and vegetable gardens, actually enjoyed distinctly better diets than their civilian counterparts in Britain? Such a finding might also have implications for our understanding of troop morale and desertion rates among soldiers at Fort Erie.

It is also believed that in peacetime a separate officer's quarters existed outside the Fort. However, the documentary record offers scant clues about such an establishment. If the quarters could be located through a magnetometer or ground-penetrating radar survey, we would learn not only more about the fort's layout, but if an adjacent refuse pit were to be discovered, useful information about differences in diet between officers and enlisted men stationed at Fort Erie might be gleaned from it. As well, we could possibly confirm (or tenuously deny) the accuracy of the reconstructed officer's quarters at the fort today, which are decorated with white-tail deer hides and antlers on the assumption that British officers stationed at the fort hunted deer in their leisure time.

The War of 1812 and the Siege of Fort Erie:

Fort Erie was the scene of considerable action in the War of 1812. Its garrison fought in November 1812 at the battle of Frenchman's Creek and its cannons and nearby batteries occasionally exchanged fire with the American side of the river. In 1813, the British evacuated the fort, leaving it temporarily in American hands as British forces abandoned the Niagara Frontier. It was apparently partially dismantled, and the outbuildings burned at this time but by the end of 1813 it was back in British hands. These early incidents in the war, however, pale in comparison to the role the fort played in the bloody Niagara Campaign of 1814. That year witnessed the United States mount its third and final invasion of the Niagara Peninsula. The Siege of Fort Erie became the climax of this last full-scale invasion. It also proved to be the war's bloodiest engagement. Though exact casualties are impossible to determine, an estimated 3,000 soldiers were killed, wounded, or captured during the six weeks of fighting. The vast majority of these soldiers remained buried on the battlefield today.[16]

Prior to its final invasion in 1814 the Niagara Frontier was aptly described by one American officer as already "desolated with fire and sword" from two years of warfare.[17] On July 3, a well-trained and equipped army of 5,000 Americans rowed across the Niagara River from Buffalo under the cover of darkness, landing on the Canadian shore below Fort Erie. The capture of Fort Erie was to be the first step in their conquest of Canada. The U.S. Army, under the command of the capable General Jacob Brown, planned to march north to the shores of Lake Ontario, where they would rendezvous with the American

Upper Canada, August 1814-March 1815, (2014) also shows extensive gardens in the area surrounding the fort. Comment by J. Triggs, December 19, 2014.

[16] The only known exception are the remains of the twenty-eight soldiers excavated at Snake Hill in 1987 and returned to the United States with all due ceremony. According to Ronald Way, who oversaw the reconstruction of Fort Erie from 1937-1939, the remains of 153 men lie beneath the monument outside the fort's walls. Documents written in 1814 by various American soldiers describe digging a mass grave for the British troops killed in the explosion of the northeast demi-bastion during the August 15 night assault and put the number of dead at around 150. Way stated that three American graves were uncovered during the restoration inside the fort, and that these soldiers were added to the mass grave, making a total tally of 153 beneath the monument.

[17] David B. Douglass, "Reminiscences of the Campaign of 1814, on the Niagara Frontier," *The Historical Magazine*, vol. II no. 1 July, 1873, 7.

fleet and from there subdue the remainder of Upper Canada. Alas for the Americans, only the capture of Fort Erie went according to plan. The fort's outnumbered garrison consisted of a mere 137 men under the command of Major Thomas Buck. Perhaps thinking that discretion is the better part of valour, Buck promptly surrendered after the exchange of only a few shots. (He was subsequently court-martialed for the surrender). On July 5, 1814, the Americans, heading north, encountered the British at Chippawa. The resulting battle proved a decisive U.S. victory. However, twenty days later the two armies clashed again at Lundy's Lane, resulting in heavy casualties for both sides and a strategic defeat for the U.S. army, as this action forced their withdrawal south to Fort Erie and scuttled any plans for further offensive operations.

Indeed, the American Army had been reduced to approximately 3,500 effective troops by August 1, 1814. With General Brown wounded, command divulged to the cautious General Ripley. Ripley initially contemplated a retreat across the Niagara to the American shore but was persuaded to dig in at Fort Erie. American engineers had already undertaken some work to strengthen the site in July after its capture. It would now be transformed into a sprawling fortified encampment, covering some fifteen acres and stretching approximately 800 metres from the old British stone fort to Snake Hill near the Lake Erie shoreline. Eroded portions of the defensive earthwork built by the Americans linking the fort to Snake Hill are still visible on the grounds of Fort Erie today. While Benson Lossing, who visited the site in the summer of 1860, reported that the Americans had dug a double ditch and thrown the earth up into "parapet breastworks," thus far excavations have revealed the existence of only one ditch outside the earthwork.[18] Part of this ditch is still clearly visible in the woods south of the Niagara Parks Commission's property. On the other hand, Ronald Way's speculation that the Americans constructed a "firing-step" has been confirmed as accurate. Such a step, made of earth, was uncovered along the earthwork during fieldwork in 2012, which would have enabled defenders to fire over the wall[19]. Interestingly, an 1816 account of the Siege written by an American officer recalled how as an "additional precaution" the troops stationed along this earthwork were armed with pikes fashioned from captured bayonets, "designed to be used in case of a charge." The officer related that:

> "At twilight, every evening; a great number of pikes, constructed of the British bayonets which were taken on the 15th, were laid at two feet distance from each other, along the whole extent of our line. These being of a length equal to thickness of the parapet, would have been used with great effect in the event of an escalade."[20]

Indeed, one can easily imagine the utility of such a weapon for close-quarter combat in the event the British attempted to storm the works a second time. (The British officer William Drummond also preferred a naval pike for hand-to-hand combat and carried one in lieu of his sword during the ill-fated August 15 night assault.) To date, no bayonets have been uncovered along the American earthwork but

[18] Benson J. Lossing, *The Pictorial Field-Book of the War of 1812* (New York: 1869, reprinted New York: Benchmark Publishing, 1970), 830. Excavations by Triggs in spring 2012 revealed the ditch in two areas: Fanning's Battery and the Western Redoubt. Comment by John Triggs, December 19, 2014.

[19] The firing step found in Fanning's Battery East, Unit Q, is described in this report by Triggs. Comment by John Triggs, December 19, 2014.

[20] "Attack on Fort Erie," *Naval and Military Chronicle of the United States,* (Philadelphia: Vol. 1 no. II February 1816), 109.

unspent musket and rifle balls, buckshot, and buttons were uncovered along this defensive line[21]. Also uncovered was plenty of charcoal, suggesting that soldiers may have cooked their meals within the shelter offered by the earthwork and perpendicular traverses[22]. As an outer defense, the Americans constructed a line of abatis. Finally, for additional firepower and support, three U.S. warships, the Ohio, Porcupine, and Somers were anchored in the waters of Lake Erie just south of the American position. Overall, the small original Fort Erie had been transformed into a formidable fortress, succinctly described by British Lieutenant John Le Couteur as an "ugly customer." The British, under Canadian-born Lieutenant General Gordon Drummond, had only approximately 3,500 men with which to attack the fort.

Near the waters of Lake Erie was a natural sand mound, called Snake Hill, which the Americans transformed into a fortified redoubt. Placed under the command of Captain Towson, this well-defended redoubt formed the left of the American position. The extreme right of the American position extended from Fort Erie's ravelin to the river. Here an earthen wall was thrown up to link the fort to a gun Battery under the command of Captain David Douglass, a twenty-four-year-old, Yale-educated American artillery officer. Portions of this earthwork, said by Lossing to have originally been seven feet high, are still visible today.[23] Douglass described the site of his Battery as "a hillock, partly natural and partly formed by the ruins of an old lime-kiln, between the fort and the lake, nearest the later, eight or ten feet above the water-level, and about as much below the site of the fort."[24] The lime-kiln may explain the ruins of Douglass' Battery as depicted by Lossing in the summer of 1860. Lossing shows a considerable structure consisting of crumbling stone. Fortuitously for our purposes, Lossing's illustration shows these ruins east of the river road, which, provided the road is in the same place today, would mean Douglass' Battery is an area that can be excavated.[25]

In a letter dated September 12, 1814, Douglass gives more detail about his Battery. He described the site of his Battery as: "…originally a sort of arched vault or magazine, raised above ground, and opening toward the water. In the course of one night, I dug away one side into a loose sort of platform, and placed my gun there..."[26] There is no mention of it as originally a lime-kiln in this letter. Instead Douglass seems to suggest that it was a powder magazine. Possibly it had once been a limekiln that was subsequently converted to a powder magazine, and then converted a third time by Douglass into a Battery. These tantalizing questions, however, will only be resolved by an archaeological

[21] In the Western Redoubt excavation area a line of 'posts' were found in the ditch parallel to the earthwork in Unit M. The context of these suggests that they may in fact by the line of pikes mentioned in the 1816 account by the American officer. Comment added by John Triggs, December 19, 2014.
[22] As discussed in the current report, the charcoal is very likely the product of the destruction of the building by a direct mortar bomb hit on September 16 or 17. Comments added by John Triggs, December 19, 2014.
[23] Benson J. Lossing, *The Pictorial Field-Book of the War of 1812* (New York: 1869, reprinted New York: Benchmark Publishing, 1970), 829.
[24] David B. Douglass, "Reminiscences of the Campaign of 1814, on the Niagara Frontier," *The Historical Magazine*, vol. II no. 1 July, 1873, 128.

[26] Douglass, 129.

investigation of the site.[27] Fortunately, from Douglass' written account of his Battery, coupled with historic maps, GIS, and the eroded earthwork still visible today, it ought to be possible with a fair degree of confidence to determine the location of the Battery.

Even more interestingly, Douglass provides detail about what he and his men did by September to protect themselves from the deadly British bombardment:

> On the right of the platform, the ground had a considerable descent; and here I set all hands to work, as near the gun as possible. In a few days, they had made a sort of cellar, ten feet broad and twenty feet long, neatly and firmly walled up with sods. Adjoining this, they dug another similar one, walled in the same way. I caused the whole to be covered with a layer of logs; the cracks filled up with good mortar; and a second layer of logs to be placed over this. The men live in the large part and I in the smaller. I can enjoy the occasional privilege of a candle, in the evening; while those who live in tents are obliged to put their lights out, soon after dark. We are perfectly secure from any kind of annoyance the enemy can send against us; and, on the whole, they are considered about the most comfortable quarters in camp.[28]

Such a structure would be ideal for archaeological investigation. Indeed, while Douglass notes the "cellar" dimensions as "ten feet broad and twenty feet wide" he curiously neglects to write how deep it was. Stratigraphy will have to answer this question. It will also be of considerable interest to see if there is any evidence that the British gunners targeted this location.[29] We now know from the archaeological record that the British guns hit a building located along the earthwork connecting the stone fort to Snake Hill.[30] Almost certainly, given the prominence Douglass' Battery had in firing on the British lines (something Douglass boasted about in his account of the siege), the British gunners would have targeted his location. We may then hope to learn just how effective Douglass' cellars really were in protecting his men. It may also be wondered why, if this design proved the most secure and comfortable in the camp, the rest of the American army continued to reside above ground in tents or buildings protected by traverses. Perhaps, given Douglass' engineering expertise, archaeology will reveal that this was a complex "bomb-proof" shelter that Douglass' counterparts in the infantry lacked the skill to create. That Douglass was a capable engineer held in high esteem by General Gaines, the American commander, is clear from Gaines' correspondence. Gaines wrote of Douglass that:

> Among the many brilliant scenes which combined to disperse the clouds and darkness, and light up the dawn of that memorable morning (August 15), the defense of Douglass Battery stands rivaled by a few, and according to the relative number of the guns, surpassed by none. The youthful commander of that Battery excited my admiration. His constancy and courage, during a brisk cannonade and bombardment for several weeks…his gallantry and good conduct in defense, against a vigorous assault, by a vast superiority of numbers, are incidents which can

[27] The area of Douglass Battery was investigated by the Wilfrid Laurier Field School in spring 2013 and forms the subject of that report. Comment added by John Triggs, December 19, 2014.
[28] Douglas, 130.
[29] GIS analysis of lead shot indeed did provide evidence of British gunners targeting this position. Mortar shell fragments, a solid shot cannon ball and several British musket balls were found on the escarp side of the Battery. Comment added by Triggs, December 19, 2014.
[30] This is the structure referred to in the 2012 report as the Officers' Quarters in the Western Redoubt excavation area. Comment added by Triggs, December 19, 2014.

> never cease to be cherished in my memory, as among the most heroic and pleasing I have ever witnessed.[31]

While there are many unresolved questions concerning the siege, a major one concerns a blockhouse apparently constructed by the Americans inside Fort Erie proper. The existence of this work is known from only one written source, a reconnaissance report by Captain Romilly of the Royal Engineers, who scouted the American works after they had been abandoned and blown up on November 5, 1814. In his report dated November 10, 1814, Romilly noted that: "It appears that they constructed a work beyond the old fort, consisting of the bastions (1 and 2 in the sketch) the curtain was formed of high palisades and a log building behind them, loopholed."[32] From this description, the blockhouse would have been within what is now styled the fort's terreplein. However, the 1930s reconstruction of the fort may have destroyed all trace of this structure.

Archaeology has in fact already revealed the existence of one building used by the Americans during the siege that was not previously known about, aside from an indication of its existence on a single map.[33] This building was situated along the defensive earthwork linking Fort Erie to Snake Hill, near the vicinity of Biddle's Battery. Glass, nails, and a wrought iron door handle excavated at the site all indicate the existence of a building. Pearlware and creamware uncovered at the site reveals that it served as an officer's quarters (as common soldiers would not have had such items), and is suggestive of the fact that even in the American republic, class differences remained between officers and enlisted men. Also uncovered here was a mangled sword hilt, apparently destroyed by an explosion from a mortar round, adding further evidence that this building served as an officer's quarters. The mortar round was excavated *in situ*, and reveals a direct hit by the British gunners. This has raised the question why General Drummond lifted the siege in September, given the evident effectiveness of his bombardment.[34] In addition, large quantities of unspent musket rounds were recovered at this location, suggesting that an ammUnition chest was stored inside the building.[35]

One of the more curious finds in the proximity of this building along the earthwork was the discovery of 47 drawn glass trade beads. These beads are either evidence of aboriginal allies attached to the American force, or perhaps war loot that American soldiers took from enemy warriors they fought during the September 17 sortie or even earlier at Chippawa on July 5[36]. The American forces that crossed the Niagara River into Upper Canada on July 3 included some 500 Native warriors recruited by Congressman and militia General Peter B. Porter. However, desertions began almost immediately, with

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[31] "Attack on Fort Erie," *Naval and Military Chronicle of the United States* 117-20.

[32] Owen, 53.

[33] The structure is depicted on two maps: the November 1814 Romilly plan, and the Cranfield 1815 plan. Comment added by Triggs, December 19, 2014.

[34] This interpretation was advanced by Triggs and is discussed at length in the archaeological section of this report. Comment added by Triggs, December 19, 2014.

[35] This and other archaeological evidence is discussed in the current report. Comment added by Triggs, December 19, 2014.

[36] The found in the Western Redoubt area in Unit H are in the same context as the location of the 11th and the 22nd U.S. regiments along the entrenchment. The 11th and 22nd fought on the American left at the Battle of Chippawa on July 5 under General Ripley. In fact, the British right on this engagement was taken by the native allies.

approximately 150 of the 500 warriors returning to the U.S. following the capture of Fort Erie on July 3.[37] After the battle of Chippawa (July 5, 1814) most of the remaining Native warriors deserted the U.S. Army and returned to New York State. By the time the Siege of Fort Erie began at the start of August, Native warriors still attached to the American army numbered no more than fifty, and it is not known for how long these men remained with the army.[38] These warriors were under Porter's command, and would have been stationed with the militia during the siege. As such, they were stationed along the earthwork connecting Snake Hill to Fort Erie, but to the left of where the beads were uncovered. That location, near Biddle's Battery, would have been occupied by U.S. artillery, U.S. regular infantry (possibly the 11th and 21st regiments), and in the nearby building itself, U.S. army officers. Could the beads have come from one of these soldiers?

In the War of 1812 it was common practice to loot the bodies of dead soldiers on the field of battle. Soldiers looted both for necessities as well as war trophies and for items to sell to local merchants or even their own officers. At the Battle of Chippawa American troops had ample opportUnity to loot the bodies of Native warriors and are believed to have taken souvenirs from the British dead as well. Donald Graves notes that when the American soldiers were burying the British dead after the fighting, they likely helped themselves to mementoes.[39] The American soldiers may also have claimed as trophies whatever accoutrements of the dead Native warriors that took their fancy, including jewelry made of trade beads. There is other evidence of looting bodies during the bloody 1814 Niagara campaign. Lieutenant Colonel William Drummond's body was stripped and looted after he was killed in the August 15, 1814 night assault. Jarvis Hanks, a drummer boy in the American army, recalled that:

> Drummond was laid under a cart. When I first saw him he was naked except his shirt. All the remainder of his clothing, his gold watch, sword, epaulettes, and money, had been plundered by some of our men. We even picked the pockets of those who were dead and dying in the ditch. In the course of the day, the soldier who got Drummond's watch, sold it to one of our officers, for a small sum compared with its real value.[40]

As this example makes clear, looting was as much about claiming "trophies" as it was about necessity. The same night Drummond was killed at Fort Erie, despite the appalling carnage and confusion, his subordinate Lieutenant John Le Couteur retained the presence of mind to help himself to a dead officer's scabbard in the ditch outside the fort.[41] Le Couteur had earlier claimed as the spoils of war, "a

[37] Carl Benn states that most American-allied warriors deserted the campaign after the Battle of Chippawa, returning to their homes in New York State. Carl Benn, *Iroquois in the War of 1812*, (Toronto: University of Toronto Press, 1998), 153 and 159. This is confirmed by Peter B. Porter's account.

[38] The various Nations present at the siege are listed in the Appendix of Joseph Whitehorne, *While Washington Burned: the Battle for Fort Erie, 1814*, pp. 143-144. Triggs attributes the unusual assemblage of beads to the first Nations of New York State for which there no archaeological examples in Ontario. The presence of large numbers of bird shot, suggests that these may be direct evidence of the location of the native allies, rather than booty. Comment added by Triggs, December 19, 2014

[39] Donald F. Graves, *Red Coats and Grey Jackets: The Battle of Chippawa, July 5, 1814 (*Toronto: Dundurn Press, 1994), 136.

[40] Jarvis Hanks, "The Siege of Fort Erie, August to September 1814" in *Soldiers of 1814: American Enlisted Men's Memoirs of the Niagara Campaign*. Jarvis Hanks, Amasiah Ford and Alexander McMullen; edited, with an introduction and notes by Donald E. Graves. (Youngstown, NY : Old Fort Niagara Association, Inc., 1995), 40.

[41] Lt. John Le Couteur, *Merry Hearts Make Light Days: The War of 1812 Journal of Lieutenant John Le*

capital black horse for a charger…(and) saddle & Bridle & Pistols and all."[42] Captain Douglass claimed as a trophy what he believed was the sword of Colonel Hercules Scott, apparently killed while charging his Battery. Such conduct was by no means exceptional. It was reported that after the Battle of Fort George, the Canadian and British dead were literally stripped naked by victorious Americans eager for plunder. Likewise, the Americans received similar treatment following their defeat at Beaver Dams. John Norton reportedly quipped about this affair that, "the Caughnawaga Indians fought the battle, the Mohawks or Six Nations got the plunder, and FitzGibbon got the credit."[43]

One of the most notorious cases of looting in the War of 1812 involved American soldiers stripping trophies from what they believed was the body of Tecumseh after his death at the Battle of the Thames. American soldiers not only stripped Tecumseh's body naked for war trophies, but according to first-hand accounts, actually cut pieces of skin from his body as souvenirs. It is thus not hard to imagine a U.S. soldier's haversack crammed with loot and trophies at Fort Erie, and that sometime during the four-month occupation (which terminated on November 5, 1814) the beads were dropped and forgotten. On the other hand, perhaps one of the Native warriors still attached to the American force simply wandered by the location and dropped the beads there. Applying Farry's spatial model to the artifacts recovered in the vicinity of the beads might possibly provide confirmation or denial that American regular troops (as opposed to Native warriors or militia) were stationed at this location.

Fort Erie's story is a significant chapter in Canadian history. It was the site of one the country's bloodiest battles, the meeting ground for Robert Rogers and Pontiac, a strategic link in the Great Lakes chain, and a military post garrisoned from the 1764 until as late as the early 1820s. Investigating Fort Erie's long and rich history is a task that requires the tools of both the archaeologist and the historian. By skillfully employing these methods, we can hope to arrive at a more complete understanding of this important site's history.

Couteur, 104th Foot. Edited by Donald Graves. (Ottawa: Carleton University Press, 1993),190-191.

[42] Le Couteur, 127.

[43] John Norton, *The Journal of John Norton*, edited by Carl F. Klinck, (Toronto: Champlain Society, 1970), cxx.

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4.0 Stage 2 Reconnaissance

GPR Survey – October 30, 2018

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Figure 12. The Sensors and Software Noggin ground-penetrating radar system used in the survey of the lakeshore

Figure 13. View of the parking lot looking south with baseline on east side.

On October 30, 2018 faculty, staff and students from the Department of Anthropology, Western University in London, Ontario carried out a ground-penetrating radar survey of the lakeside parking lot at Old Fort Erie, National Historic Site. The field crew consisted of Edward Eastaugh, Jean-François Millaire, Associate Professor and Amadeo Sghinolfi, PhD student. The following is the verbatim report on the survey procedures and results.

For the GPR survey we used a Sensors and Software Noggin system that included a 500 MHz center frequency antenna configured with a tow wheel to log distance. We established a 64 m (N-S) by 15 m (E-W) survey grid to cover the entirety of the car park. We surveyed the position of the grid with a Topcon HiperLite + RTK differential GPS. The team collected GPR data along parallel traverses oriented east to west and spaced 25 cm apart with readings logged at 50 scans/m. Recorded GPR profiles were imported into EKKO Project 5 software where they were processed into amplitude slices (data presented as horizontal maps rather than vertical profiles) for interpretation. The GPR amplitude slices and GPS survey data were then imported into ArchMap 10.6 where they were incorporated with satellite photographs, historic maps and previous survey data in the project GIS for analysis.

Figure 14. Walking one of the 25 cm east-west transects across the 15 metre-wide parking lot.

Observations and Interpretation: There are four files, each representing a depth slice that show the high amplitude reflections (red) at different depths below the ground surface. The depth for each is indicated by the file name. Please note that these depths are estimates only as there were no clear hyperbolas (a particular type of return signal that the software uses to calculate depth) in the data. Any future work should not place too much faith in the depths cited.

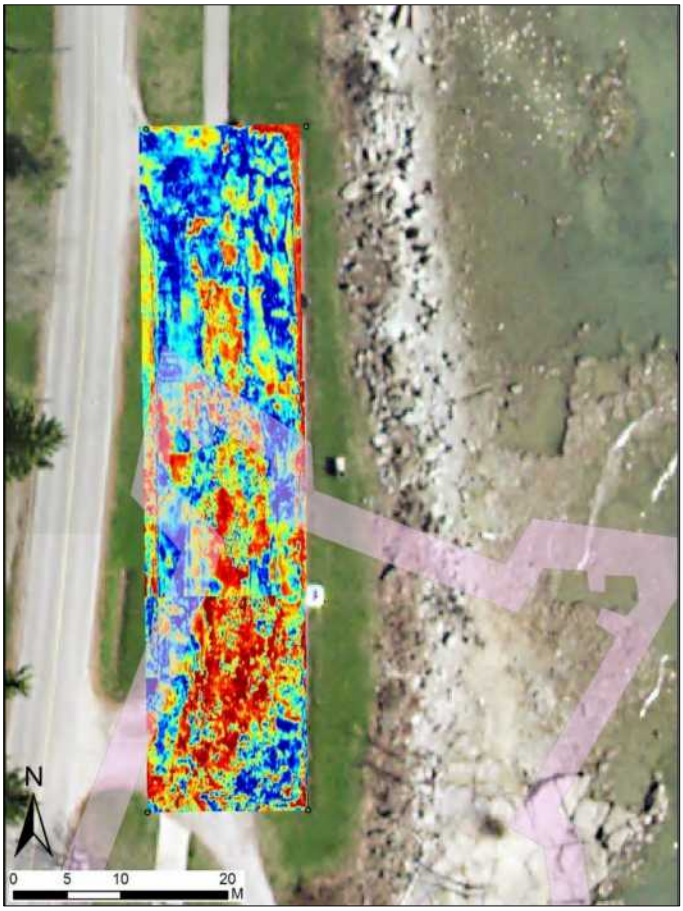

Figure 15. GPR readings Old Fort Erie parking lot, 10/30/20. 20-25 cm slice with suggested overlay of fort.

The two most interesting depth slices are at 20-25cm and 25-30cm. As we already knew, there is a strong high amplitude reflection running north south through the centre of the parking lot seen at 20-25cm below surface. This could be archaeological, but we should be cautious as the anomaly does align with the pathway. Had there been a pathway running along the shore front prior to the parking lot, there might be remnants of that surviving below. However, there does seem to be more going on at the southern end of the survey area, which suggests that not all reflections are the result of an earlier path.

The 25-30 cm plot is perhaps a little more interesting. We still see the linear anomaly running through the centre of the survey area but the high amplitude area in the south appears to have more structure to it. Normally I would be quite confident, given the rectangular nature of the reflection, that this is a building (aligned NNE-SSW) consisting of 2-3 rooms. However, again I am cautious given the rectangular bedding/fracture lines seen in the bedrock. Indeed, you can see a very clear example of

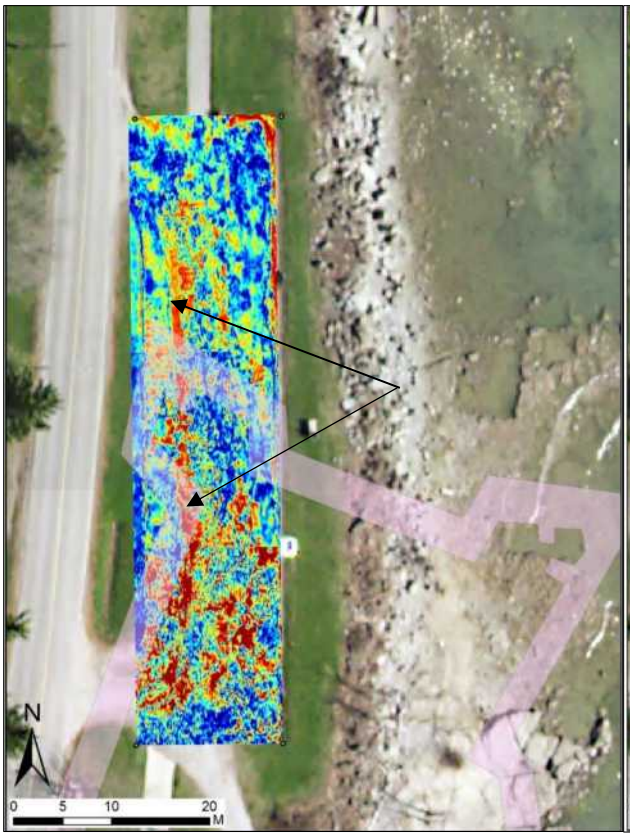

Figure 16. GPR readings Old Fort Erie parking lot, 10/30/20. 25-30 cm slice with suggested overlay of fort. Arrows indicate main N-S anomaly.

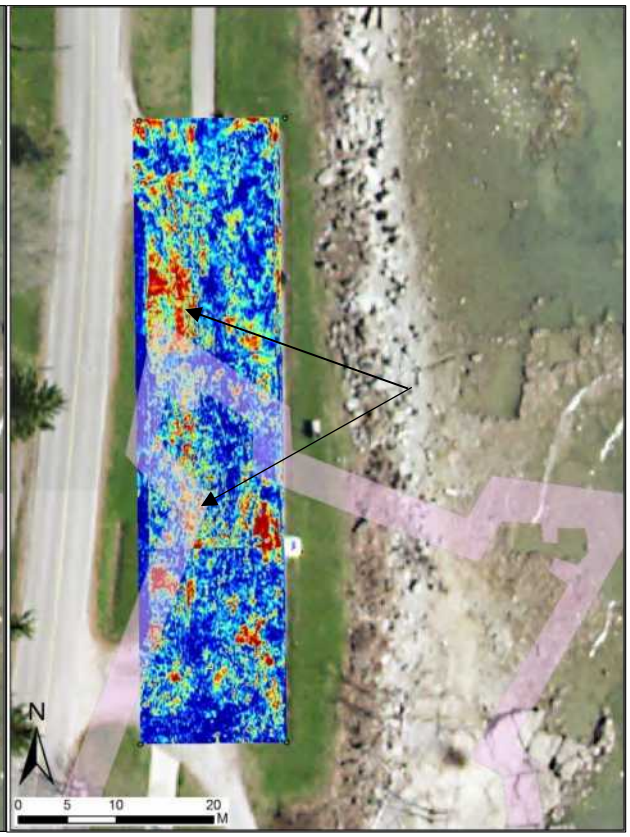

Figure GPR readings Old Fort Erie parking lot, 10/30/20. 30-35 cm slice with suggested overlay of fort. Arrows indicate main N-S anomaly.

this just offshore about half-way up the image. It concerns me that it is a similar shape, size and alignment to the reflections that we see in the data. However, I am cautiously optimistic as this isn't visible over the entire survey area which we might expect were it the result of geology.

In the 30-35cm depth slice we start to lose the linear wall but there is a rectangular high amplitude reflection 2/3rds of the way up on the western edge of the survey area. Again, not unlike a building.

So, all in all, very much a typical geophysics survey. Nothing absolutely definitive, but lots to peek one's interest!"

Conclusions: (J. Triggs)

The GPR survey was successful in identifying anomalies thought to be related to the first Fort Erie constructed, and later modified, in the last third of the 18th century. General correspondence between the GPR anomalies and 18th century maps provide sufficient grounds for additional investigation through excavation with strategically placed units/trenches. The specific anomaly to be tested is the north-south 'red-line' running through the survey area from north to south, across the parking lot from end to end. Referred to as ground-truthing, this next phase was carried out in April 2019 by machine-assisted excavation.

Ground-Truthing – April 29, 2019

Figure 17. View looking southeast showing parking lot before mechanical excavation on April 16. The first Fort Erie is thought to be located below the parking lot on the lakeshore.

Figure 18. View looking north showing parking lot between Lakeshore Road and the Lake Erie shoreline. Excavation in progress for Trench 2. Trench 1 complete.

On April 16 three exploratory trenches were excavated to verify the results of the GPR survey conducted in October 2018. The strategy was to excavated perpendicular to suspected wall alignments based on anomalies detected at various depths. Each trench was about 1 metre wide – the width of a backhoe blade – and ranged in length from 5-6 metres. Excavation was monitored and backhoe operation was halted when features were detected. Features were exposed in Trenches 2 and 3. A wall foundation and associated collapse was found in the former and a dark soil stain in the surrounding subsoil was exposed in Trench 3. No archaeological features were exposed in Trench 1 which was excavated to subsoil. Artifacts were recovered from all three trenches supporting an 18th century date for the features. At the close of the excavation the west side of the parking lot was closed and snow-fencing erected enclosing all exploratory trenches. On May 8, the asphalt surface was removed from the areas between Trenches 1 and 3, 2 and 3, and to the south of Trench 2 (Figure). Excavation units were then established in the open spaces in preparation for the field school students beginning May 15.

Figure 19. View looking north showing three trenches excavated on April 16 to verify GPR survey results of October 30, 2018. Trench 2 is in foreground and Trench 1 in background. Trench 3, in the middle ground, is under excavation.

Figure 20. View looking south and west showing three trenches excavated on April 16 to verify GPR survey results of October 30, 2018. Trench 1 is in foreground and Trench 2 in background. Trench 3, is visible in the middle ground.

Figure 21. Plan views and stratigraphic sections for each trench were photographed after excavation.

Figure 22. After backhoe excavation the area around the three trenches was enclosed with snow-fencing and barriers. Excavation resumed in May with the Wilfrid Laurier University field school.

Figure 23. Carli Perri screening back-dirt through 6 mm mesh. Artifacts found included ceramic and container glass that indicated an 18th century occupation.

Trench 1

Figure 24. Trench 1 looking east. Large pieces of faunal bone and a free-blown bottle base were found in the trench. No architectural or archaeological features were exposed in this trench at the north end of the parking lot.

Figure 25. Trench 1 view looking east. Bedrock at the bottom of Trench 1 at a depth of 80 cm.

Figure 26. Trench 1 view looking south showing bedrock in east end of trench.

Description: Trench 1 This 6 metre trench was the first to be excavated at the north end of the parking lot. A 5-10 cm double layer of asphalt was removed to expose the gravel bedding. This was excavated to expose layers of sandy loam with cinder inclusions to a depth of about 25 cm. Below this were layers of clay loam to a depth of almost 80 at which point bedrock was exposed. No archaeological features were recorded during the excavation, however a considerable number of butchered faunal bones, and a shard of glass from a free-blown bottle typical of the late 18th century was recovered.

Trench 2

Figure 27. Trench 2 view looking east showing the building debris from wall collapse as first exposed during mechanical trenching.

Figure 28. Trench 2 view looking east showing wall collapse and foundation.

Description: Trench 2

This trench was just over 5 metres in length and situated in the south end of the parking lot. Below the asphalt and gravel a layer of sandy clay loam with cinder was found to a depth ranging from 15-30 cm. Below this a deposit of light brown sand was found in the west end of the trench. The trench was carefully scraped proceeding from west to east to expose more of the deposit. At a distance of about 3.0 metres from the east end of the trench rockfall was exposed within the sand layer. This continued for a distance of about 1.2 metres at which point two large, flat-lying stones were exposed. A thin layer of mortar, with inclusions of charcoal and brick flecks in the overlying soil suggested that a wall foundation had been encountered. This was manually excavated and prepared for photography and documentation. The wall foundation intersected the trench at a slight southwest to northeast

angle. Rockfall on the west side of the wall predominantly indicated the direction of collapse or destruction. Excavation was terminated after documentation. Artifacts found included one sherd of Whieldon ware, a type of ceramic manufactured in the 18th century.

Figure 29. Trench 2 overhead shot of wall foundation and collapse being exposed by hand excavation.

Figure 30. Trench 2 view looking east showing wall collapse and foundation. View looking north.

Trench 3

Figure 31. Trench 3 view looking east showing dark stain in subsoil in east end of trench.

Figure 32. Trench 3 view looking slightly northeast showing close-up of dark stain in subsoil in east end of trench.

Description: Trench 3

This 6.5 metre-long trench was situated in the middle ground between trenches 1 and 2. The purpose of this excavation was to follow the line of the wall foundation found in Trench 2 to the south. Instead of the expected wall, a dark soil stain was exposed within the surrounding yellow-brown sandy subsoil. The stain was situated in the east end of the unit and in the same general alignment running in a slight southwest to northeast direction. Inclusions of mortar, brick and charcoal within the overlying and surrounding soil matrix suggested this was a destruction deposit. The surface of the feature was excavated manually, photographed, and excavation was terminated.

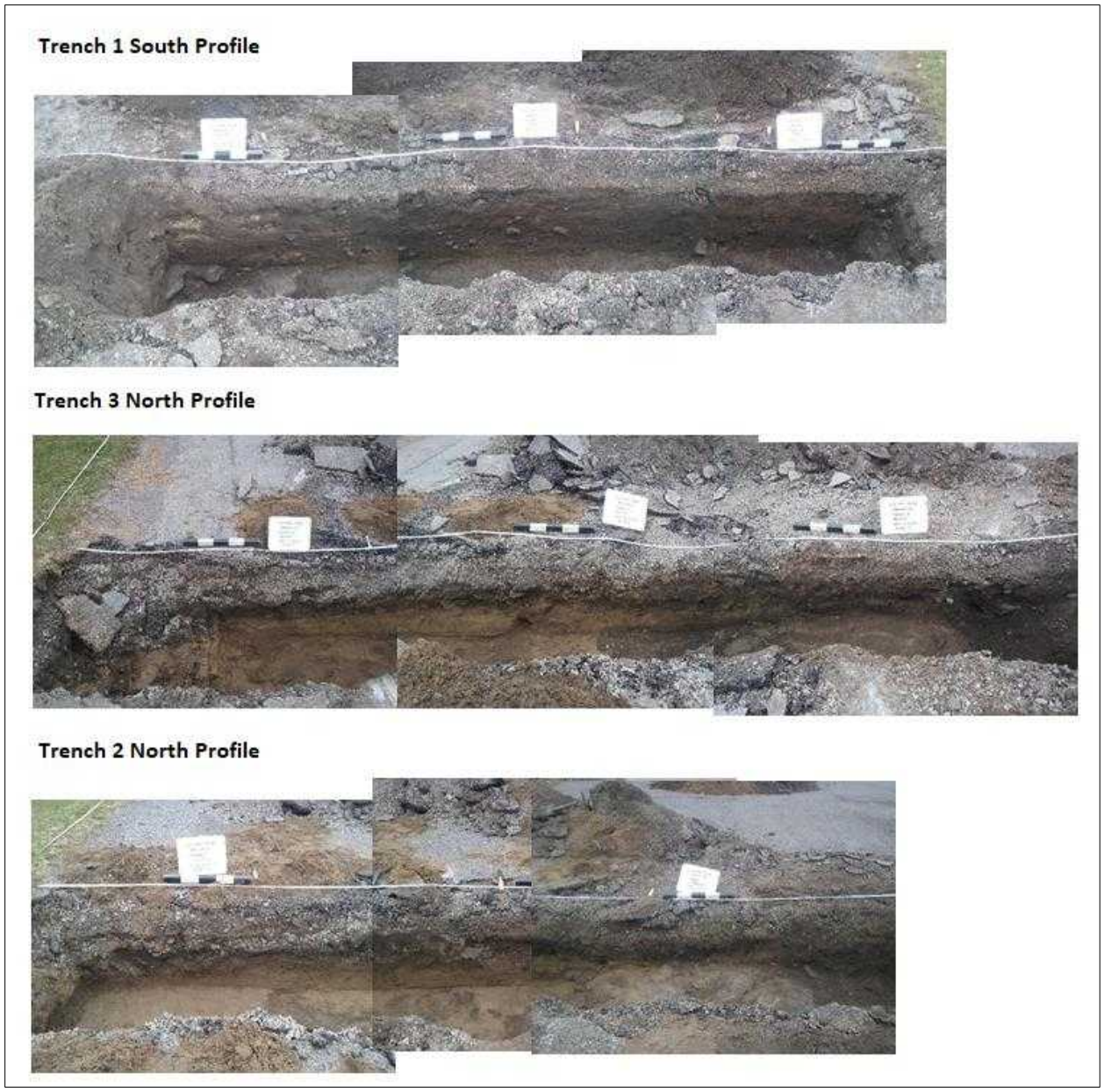

Figure 33. Trench profiles arranged in order from north to south in parking lot.

Summary:

The objective of the backhoe trenching was to verify whether the anomalies seen in the GPR survey were architectural, to assess the date of any features found, to evaluate the condition of the remains, and to determine depth and nature of the overlying sediment. Three strategically located trenches provided the maximum amount of information with a minimum of disturbance to the underlying archaeological resources. In the southernmost trench, Trench 2, a wall foundation was uncovered at a depth of about 30-35 centimetres below the asphalt. Large stones and mortar running through the east end of the unit aligned with the main anomaly found with the GPR (Figure 15). Based on the position of the wall, and its correspondence to early maps, it is very likely that this is related to

the first Fort Erie. Artifacts (ceramics and container glass) recovered in association with the wall, date to the 18th century providing further confirmation. At the time of testing, the condition of the wall was difficult to assess as only the top course was exposed and cleaned for photographs. Mortar on top of the stones was degraded. It is unknown whether mortar is present on lower courses and whether the wall has structural integrity. Subsequent excavation will seek to determine whether the walls are in a state that would allow for stabilization and presentation to the public. An archaeological feature visible in Trench 3 aligns with the GPR anomalies and may be related to the 18th century fort. No archaeological features were recorded in Trench 1. A significant result of the testing was that there was no evidence of disturbance to the 18th century remains.

Figure 5 (above). Backhoe trenches and excavation units.

5.0 Cartographic and Historical Analysis

The history of the first Fort Erie has been well documented by David Owen in his 1986 publication, *Fort Erie, 1764-1823*. The following is intended to be an augmented history of the first fort focusing on historical maps examined in the context of the archaeological and geophysical investigation described above. The maps, and a few watercolours, provide detailed information on the 18th and early 19th century geographical and political landscape. These are evaluated and discussed in terms of accuracy and positioning on the modern landscape. Contemporary historical records also provide contextual information for the maps. Plotting historical maps on the modern park landscape will aid in the identification and management of the archaeological resources within the boundaries of Old Fort Erie, National Historic Site.

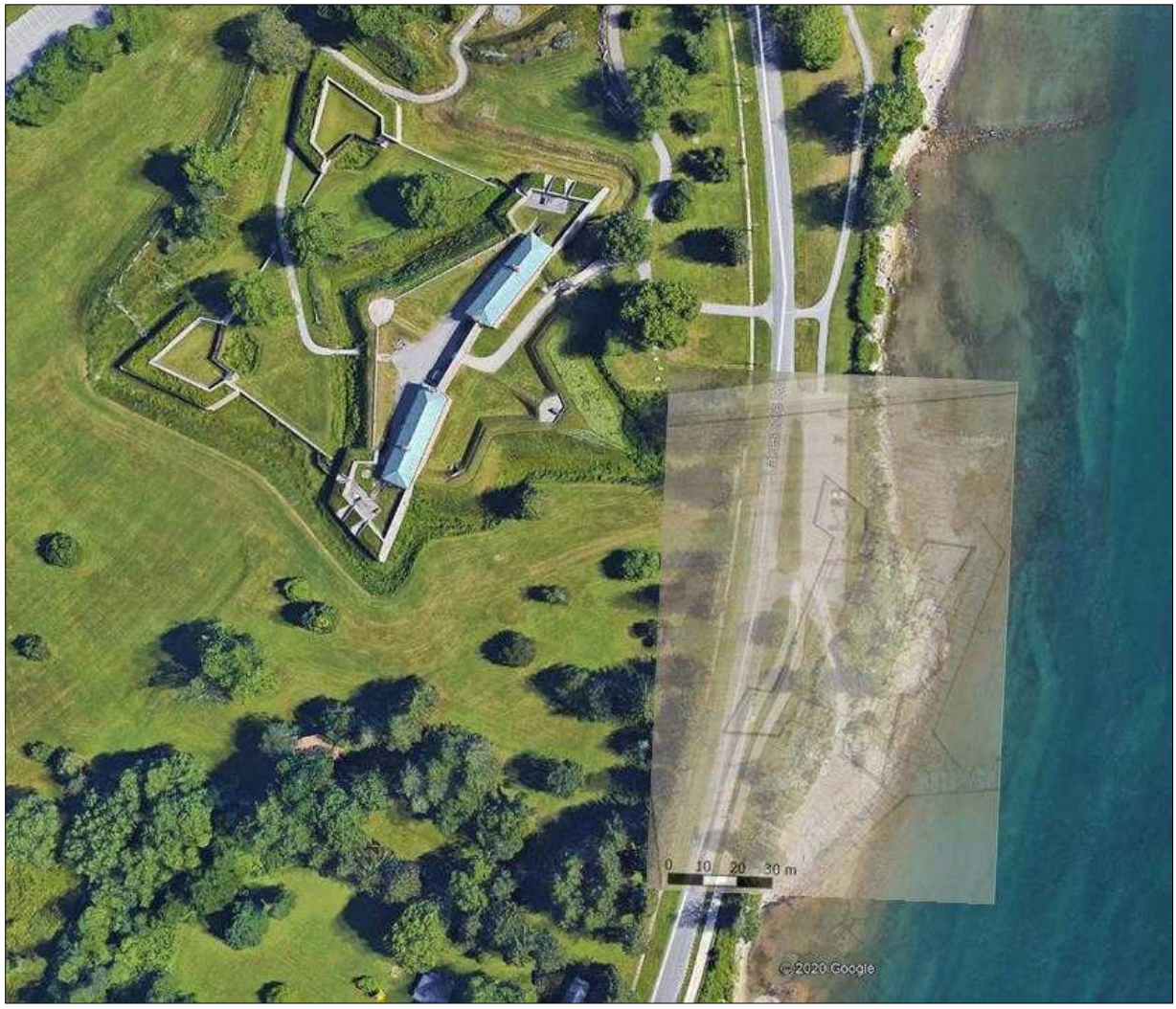

Figure 34. Overlay of the Francis Pfister 1766 plan of Fort Erie, probably the most accurate historical map, on the modern landscape showing the proposed positioning of the fort based on archaeological excavation. This positioning corresponds well with the GPR results which indicated a linear anomaly – now known to be the face of the northwest bastion - and the anomaly at the south end of the parking lot - now known to be the northwest interior corner of the fort.

DOCUMENT 1

Fort Erie was established in 1764, in the aftermath of the great colonial conflict which began in 1754 – the French and Indian War – and ended with the fall of New France in 1763. This marked the beginning of the new British regime in what was formerly the French-controlled territory north of the Great Lakes. The years, 1763-1766 were a period characterized by shifting alliances and conflict between First Nations and the British and French. The historical events often referred to as Pontiac's Rebellion occurred within this time frame. The Niagara frontier was front and centre in this turbulent era and the very existence of Fort Erie is due to the necessity of the new British colonial power to establish a presence in the vast new territory.

The 1755 plan below provides a snapshot of the territory within which Fort Erie would be established less than a decade later. The south shore of Lake Erie to the Ohio River was home to many First Nations including the Delaware, Mohawks, Oneida, Seneca, Shawnee, and Six Nations. Shifting alliances between these groups and the British in the Thirteen Colonies, and the French, resulted in

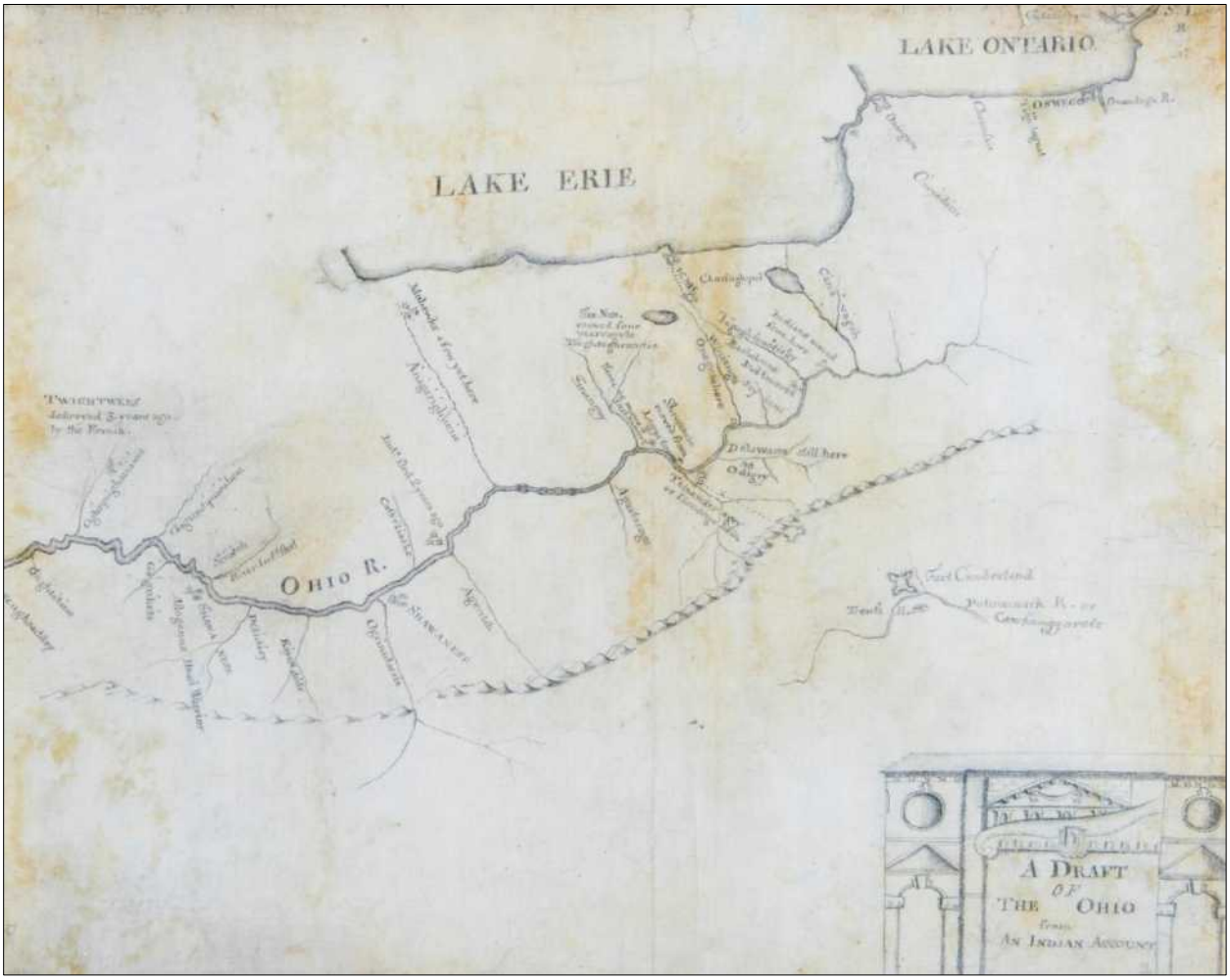

Figure 35. *'A Draft of the Ohio from an Indian Account'*, ca. 1755, William L. Clements Library, University of Michigan, Thomas Gage Papers.

frequent population movements for First Nations. The detail in Figure 35 shows where Fort Erie would soon be established - within a territory populated by indigenous people who were then engaged in a struggle for survival between competing colonial powers.

The detail shows Fort Niagara, below Niagara Falls and the well-travelled portage around the falls. British Fort Oswego, established in 1727, was located near the eastern end of Lake Ontario on the south shore. This fort fell to French and Indian forces in 1756. French Fort Presqu'Île, established in 1753, was located on the south shore of Lake Erie. The French abandoned the fort in 1759 and in 1760 a British fort was built nearby. The British fort was captured by First Nations groups led by the Ottawa War Chief, Pontiac, in 1763. Although the Treaty of Paris officially ended hostilities between the French and British in 1763, no actual consideration was given to the effect the treaty would have on First Nations groups who suddenly were forced to negotiate with a new colonial power. Fort Erie was established in this new landscape of conflict.

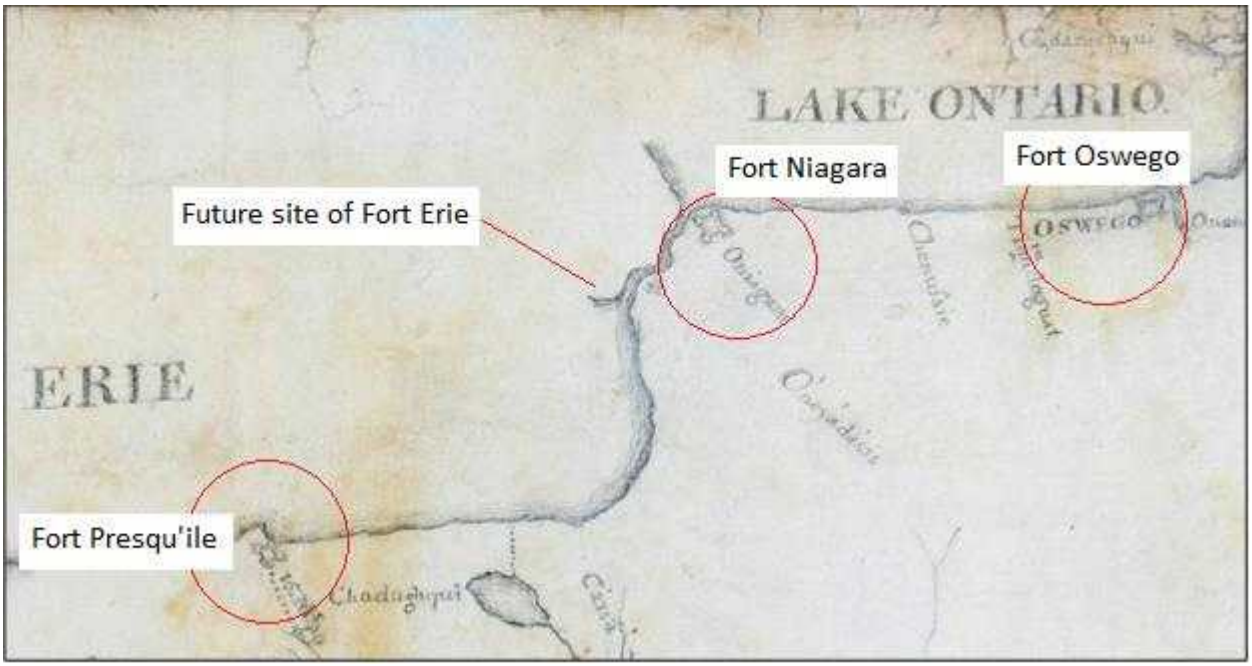

Figure 36. Detail of '*A Draft of the Ohio from an Indian Account*', ca. 1755. Fort Niagara was situated at the outlet of the Niagara River into Lake Ontario. This was the nearest permanently garrisoned British fort to Fort Erie. William L. Clements Library, University of Michigan, Thomas Gage Papers.

DOCUMENT 2

Prior to the French and British coming to the Niagara area, the portage around the falls was a well-established trail that had been used for thousands of years. The first European depiction of the falls was by Father Louis Hennepin, a Recollet priest, who in 1678 accompanied Robert Cavalier, Sieur de la Salle in his explorations down the Mississippi to the Gulf of Mexico. During the 17th and 18th centuries the portage was controlled by the Seneca, represented, in all likelihood, by the two figures in the watercolour below. After 1759 when the French ceased to be a significant military power in Canada, the Seneca began to see British incursion into the area, specifically threatening their control of the route around the falls. In 1763, after the trail was widened into a wagon road, tensions boiled over. The result was what historians used to refer to as the Devil's Hole Massacre in which a band of 300-500 Seneca warriors attacked two companies from the 80th Regiment of Light Armed Foot resulting in 81 dead and 8 wounded British regulars. The event is regarded as being linked to the larger uprising known as Pontiac's Rebellion. Shortly after the Seneca were forced to cede one mile of land on each side of the Niagara River – the Mile Reserve. Fort Erie was at the south end of the Mile Reserve in land which had formerly belonged to the Seneca.

Figure 37. *'An East View of the Great Cataract of Niagara', 1762 – on the carrying place from Lake Ontario to Lake Erie, done on the spot by Thomas Davidson, Capt. Royal Artillery, [Notes]the variety of colours in the woods shows the true nature of the country; the perpendicular height of the Falls 162 feet*.' National Army Museum, London, NAM. 2016-04-1-1.

DOCUMENT 3

One year before Fort Erie was established the new British Dominion was a vast territory that had been exploited previously for the fur trade for more than 150 years. First Nations groups were the new trading partners and it was vital for British interests to make peace with the new allies to continue the lucrative trade. The 1763 map provides a clear indication of the perceived political boundaries within the new territory. Fort Erie would be situated in the Commonwealth of Pennsylvania and the north shores of Lakes Ontario and Erie fall within the state of New York. Interestingly, as shown on the detail of the map, this territory is populated by First Nations, the former trading partners of the French, some of whom were already engaged in armed conflict with the British colonial power. In this sense it was not only the names of the various groups that had yet to be anglicized in the new British Dominion.

Figure 38. "*A New Map of the British Dominions in North America; with the Governments annexed thereto by the late Treaty of Paris and settled by Proclamation of October 7th, 1763*" Thomas Kitchin (London, 1763). Brock University, St. Catharines, Ontario http://brockuhistory.ca/ebooks/hist2f90/media/Kitchen-1763-RudermanMaps.png

The immediate neighbours in the vicinity of what was to be Fort Erie were the Seneca and the North Iroquois, or Six Nations Iroquois. However, mobility was high at this period in time and such geo-politial boundaries did not proscribe the movements of various groups. Nations such as the Delaware, Miamis, Chippewa (Ojibwa), Ottawa, Pottawatami, Huron (Wyandot), Algonquin, Mississauga, Shawnee, Cayuga and others, can all be expected to have been within the territory near Fort Erie, and in some cases actually at the fort itself. Fort Erie must be thought of as a fur trade post, provisioning depot, and meeting place, as much as a British military installation. The 'community' - defined as the people in daily contact - at Fort Erie in the 18th century would have been diverse and in modern parlance, multi-cultural.

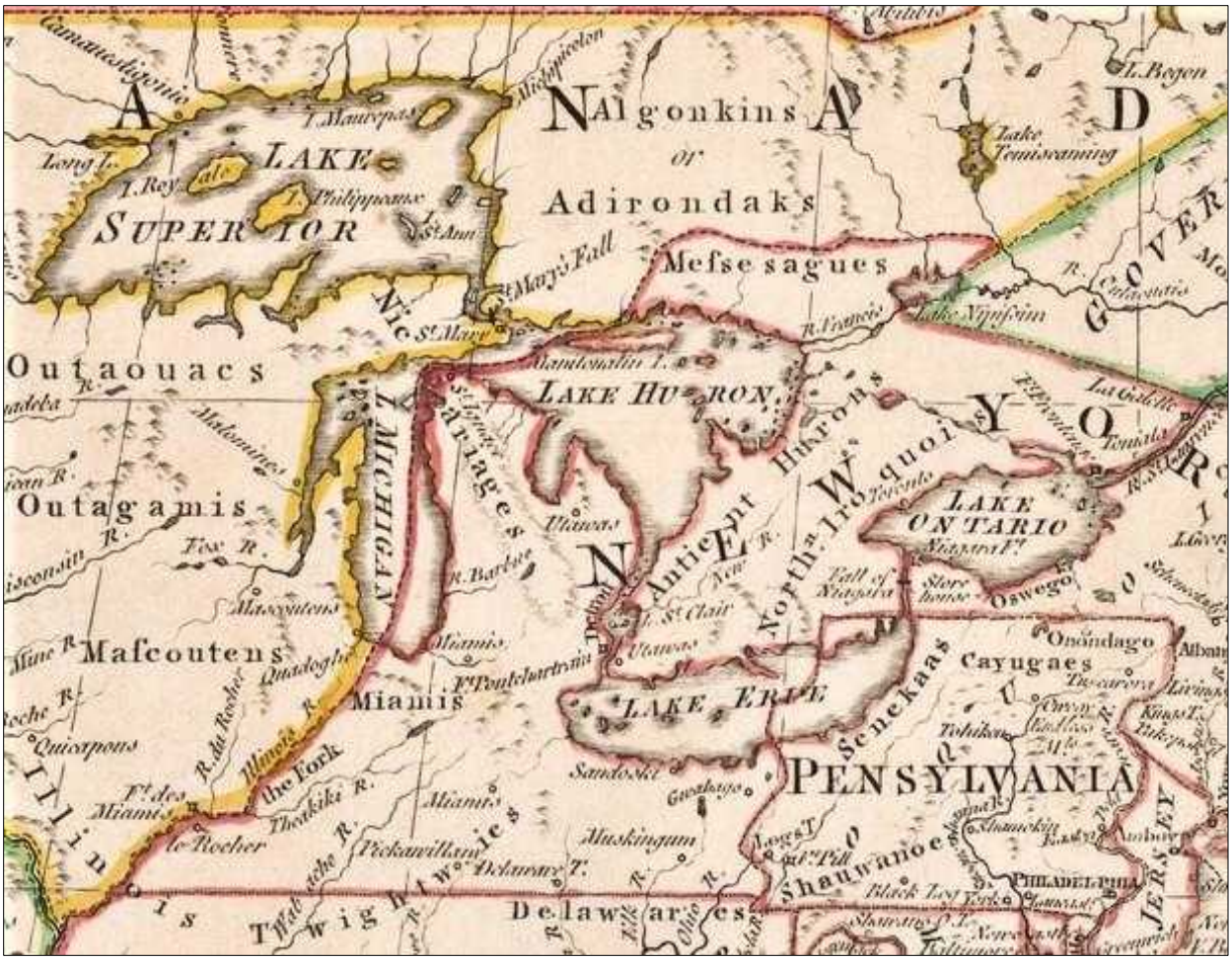

Figure 39. Detail of Thomas Kitchin "*A New Map of the British Dominions in North America; with the Governments annexed thereto by the late Treaty of Paris and settled by Proclamation of October 7th, 1763*" Thomas Kitchin (London, 1763) showing First Nations in the landscape of conflict centred on the lower Great Lakes. Brock University, St. Catharines, Ontario http://brockuhistory.ca/ebooks/hist2f90/media/Kitchen-1763-RudermanMaps.png

DOCUMENT 4

One of the earliest historical references to Fort Erie is found in the journal of the Royal Engineer who planned its construction, Captain John Montresor.

Figure 40. Portrait of John Montresor, Royal Engineer, by John Singleton Copley, ca. 1771, Detroit Institute of Arts, Public Domain.

16th July [1674] *"The Indians in Council granted us the reestablishment of Missillimakinack [sic], also the liberty of building a Post on the N. W. side of the River above the rapids at the mouth of Lake Erie belonging to the Jibbeways [sic]. Received Col. Bradstreet's orders this night to proceed wih 500 men to establish that Post. The long Boats transporting over the Portage. Artificers employ'd as before. Gave in the design I had projected for the construction of the Intended Post above – Approved.* [44]

Montresor was acting on the orders of then Col. John Bradstreet who had planned for a fort at the mouth of the Niagara River on Lake Erie as early as March 1764 during Pontiac's Rebellion. The map below shows the situation of the fort at this location and a proposed plan of Fort Erie drawn by Lt. Bernard Ratzer of the 60th Regiment of Foot, the 'Royal Americans'. The plan is an inset on the larger scale map (1:24,000) of the Niagara River from Lakes Ontario to Erie showing the portage road and fortifications along this route. Later maps indicate that the fort was never actually constructed as depicted on the June plan.

The most significant difference between the proposed plan and the later-constructed fort is the situation of the fort on high ground at the top off a low bluff with an extension on the lower ground adjacent to the lakeshore enclosing two store houses. The four-bastioned fort is a regular square with barracks for officers and soldiers. Later plans do not show the extension or a regular shape. The scale of

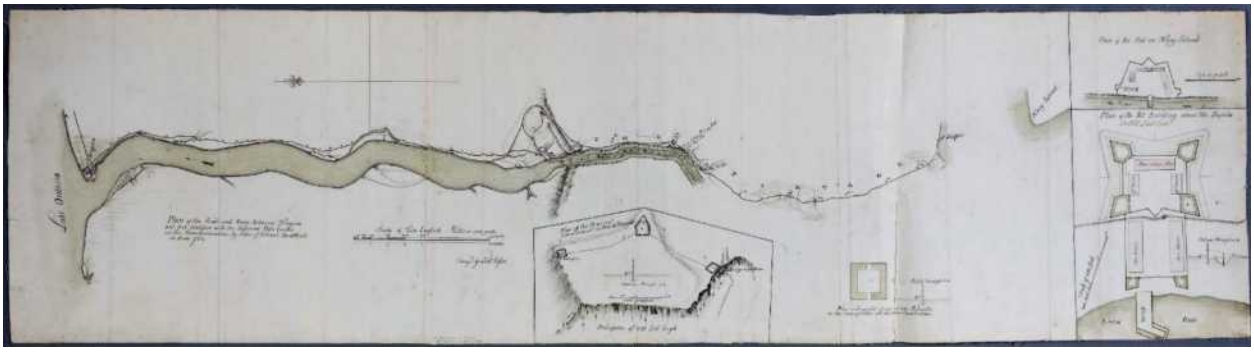

Figure 41. Plan of the road and river between Niagara and Fort Schlosser with the different posts erected on the communication, by order of Colonel Bradstreet in June 1764. Surveyed by Lt. Bernard Ratzer. William L. Clements Library, University of Michigan Thomas Gage papers.

[44] The Montresor journals; by Scull, G. D. (Gideon Delaplaine), 1824-1889, ed. P. 272, Internet Archive https://archive.org/details/montresorjourna00montgoog/page/n2/mode/2up

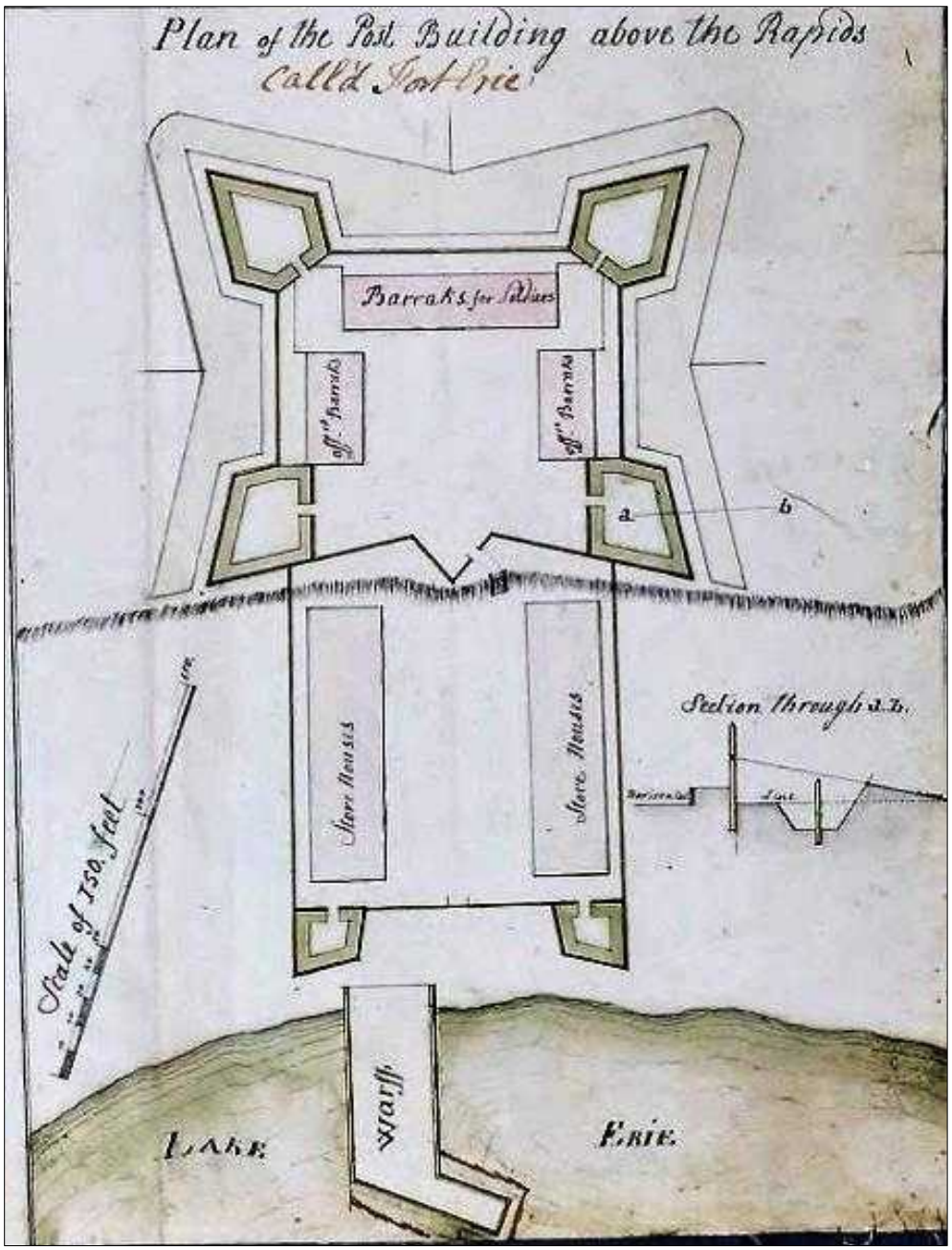

Figure 42. Plan of the road and river between Niagara and Fort Schlosser with the different posts erected on the communication, by order of Colonel Bradstreet in June 1764. Surveyed by Lt. Bernard Ratzer. William L. Clements Library, University of Michigan Thomas Gage papers.

the fort is also significantly smaller than the fort that was built. Using the west curtain – the 'rear' wall of the fort - as a common feature for comparison with later maps, the measurement of 87.5 feet (26.7 metres) is a little more than half the size of the actual fort (based on converging lines of evidence in subsequent research). The features depicted in the drawing, however, do point to the intended purpose of the installation. The wharf was for ship's boats to load and off-load goods in the adjacent, easily accessible storehouses. From the beginning the fort was intended for trade and provisioning of more western posts such as Michilimackinac and Detroit. Unfortunately, as will be seen, the decision to locate the main fortifications on the high ground was never followed and instead the four-bastioned fort would be constructed perilously close to the lakeshore.

DOCUMENT 5

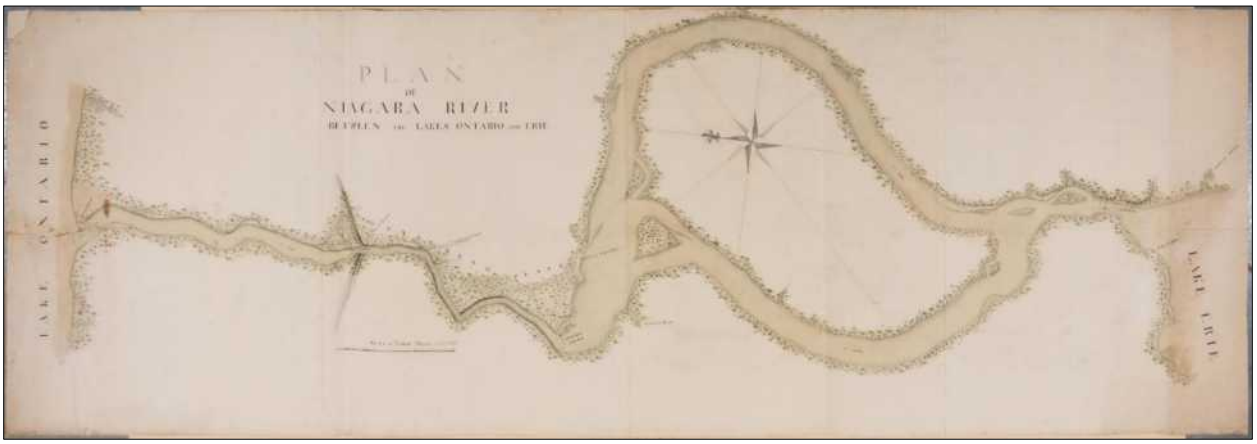

Figure 43. *Plan of Niagara River between the Lakes Ontario and Erie*. Bernard Ratzer July 10, 1764. William L. Clements Library, University of Michigan Thomas Gage papers.

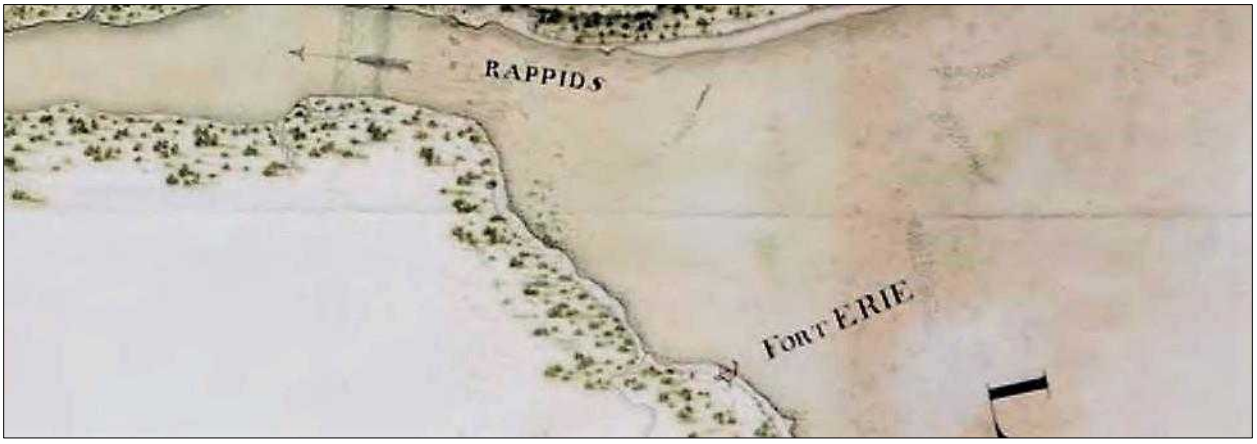

Figure 44. Detail of *Plan of Niagara River between the Lakes Ontario and Erie*. Bernard Ratzer July 10, 1764. William L. Clements Library, University of Michigan Thomas Gage papers.

The July 10 map by Bernard Ratzer shows the proposed fort location in its larger, regional context. The fort was strategically located at the mouth of the Niagara River at the head of the rapids referred to in various pieces of contemporary correspondence. Although only a small-scale sketch of the fort is shown, it is different from the June 1764 proposed fort. Gone is the extension and the regular, four-bastioned fort appears to be situated directly on the lakeshore.

This map was drawn after Capt. Montresor received instructions from Col. Bradstreet on July 7:

You will proceed tomorrow at daylight to the outlet of Lake Erie. Make examination of the discharge above the rapids and select a proper place for fortifications. It must command an anchorage where vessels may lie while being provisioned for Detroit, in all respects a proper entrepot. You shall have one of the assistant engineers to aid you in the work.

Further entries from Captain John Montresor's journal provide important details of the first two months of activities at Fort Erie, some of which have archaeological implications.

> July 17th [1764] *Arrived at Fort Schlosser at 2 o'clock & took with me the Battalions of the Connecticut and Jersey forces being 450 men, & proceeded with 12 large boats & four Batteaux & arrived this night at Navy Island & encamped there. Loaded the Boats with 176 Barrels of Provisions & a Proportion of Tools for constructing the proposed work at the Rapids. Prodigious rains . . . Wrote to Colonel Bradstreet for an Assistant Engineer.*[45]

Fort Schlosser is shown on the map as 'Little Niagara', a small fort at the head of the Niagara portage. The mention of the Connecticut and New Jersey Provincial regiments has important archaeological implications, although regimental buttons from these troops have yet to be found during any of the previous excavation seasons. Provisioning for the sizeable workforce was substantial and archaeological evidence of the tools and barrels would be expected. The Assistant Engineer requested was likely Lt. Bernard Ratzer of the 60th regiment or possibly the 24-year-old engineer and cartographer, Francis Pfister, also of the 60th Regiment of Foot.

> *July 18th* [1764] *Proceeded with the Detachment at Daylight & arrived at the N W side of the Rapids at the Point of Lake Erie & encampt there at the Propos'd Post. Employ'd the Party in cutting of Brush & clearing the Ground. Heavy rains all this day. Wind at the S E. The Ground Extremely rich, covered with Beach, Hickory, Walnut &c. and the situation answering Expectation in every respect for my Fort, Provision Store & wharf. The two companies of Quarter master Daly's Detachmt joined us.*[46]

The description of the trees provides valuable insight into the native, mixed hardwood forest that covered the area before construction.[47] Two additional companies of troops would have raised the number employed in the construction of the fort by as many as 150-300, for a total of more than 600 – 750 men.

> *July 19th* [1764] *Employ'd the Detachmt in cutting of Brushing & felling of Timber on the proposed spot for building the Fort. This Day arrived the Schooner Gladwin from Detroit for Provisions.*[48]

The Schooner Gladwin was built at Navy Island in 1763 and served on Lake Erie as a transport vessel. The Gladwin brought much-needed provisions and supplies to Detroit in 1763 during a time when the fort was besieged for several months by the confederacy of First Nations under Pontiac. The Gladwin also delivered troops to Fort Michilimackinac on Lake Huron in 1764 when the fort was returned to the British by the First Nations warriors who had captured it the year before. Fort Erie was intimately connected to all posts further west as the main source of provisioning.

[45] Ibid., pp. 272-273.
[46] Ibid., p. 273.
[47] All nut-bearing trees, these would have provided a valuable food source for First Nations prior to European contact. Substantial evidence of pre-contact occupation dating from the Late Archaic Period to the Late Woodland Period has been found in earlier Wilfrid Laurier University excavations at Fort Erie.
[48] The Montresor journals, p. 273.

Figure 45. Miniature of John Montresor (possibly) dated ca. 1765 -1775. Inscription on back 'Capt. Sir John Montresor' From Library and Archives Canada. 1989-075 DAP 00001. R5291-0-X-E. Container: C-133736.

July 20th [1764] *Arrived an Assistant Engineer & 14 Contracted Carpenters. Employ'd the Detchmt in felling the Timber & cutting & pointing the Stockades. From the Inattention of the wood cutters several accidents happened by the felling of the timber. Sounded the borders of the Shore & found it every way answers also did the new channel to the N westward of the ledge of Rocks. I set off this afternoon at 6 o'clock for Niagara leaving the necessary directions for carrying on the work with the design for the same. Cattle as usual transported the Provisions across the Portage. Arrived a Captain & 45 men of the 46th at the Rapids. Came in a party to make Peace. Artificers employed as before.*[49]

The reference to a stockade is an interesting structural detail for which archaeological evidence has been found – discussed below in Section 6.0. It is not known if the feature documented in Unit G represents the stockade erected in 1764, but the post holes for any stockade would be visible in the shallow clay soil and possibly even into the limestone bedrock. 'Sounding' indicates the importance of the fort as an entrepot from which goods and men were transported over water to posts further west. The party that came to make Peace refers to a First Nations group who at that time were en route to Fort Niagara for a Peace congress. The reference to the 46th regiment is yet another piece of information useful for dating items such as regimental buttons found at the fort. 'Contracted men' indicates that not only infantry and other military personnel were engaged in the construction of the fort.

> *July 21st* [1764] *. . . Boats constantly employ'd in transporting Provisions from Fort Schlosser to the Rapids. . . A free trade permitted with the Savages but the traffick with Rum which is ordered to be kept up till their departure from hence. Directed by Col. Bradstreet to make him a Report & Plan of all the works carried on here since the Campaign in order to be transmitted to the Comr in Chief. Remarked that one tenth of all Provision for the Army is damaged for want of proper cooperage and storage.*[50]

The Indian trade, as it was referred to in the fur trade era, was crucial in maintaining alliances with First Nations. The ban on trading rum takes on added significance since the cessation of that

[49] Ibid., p. 272.
[50] Ibid., p. 274.

desired commodity by the British at Fort Detroit was one of the grievances that led to hostilities and ultimately the siege of that post in 1763. The French were not so proscriptive and had traded rum routinely during the fur trade period. Montresor's mention of the lack of proper cooperage suggests that this was a skilled trade in great demand but short supply.

> *July 23rd* [1764] *. . . proceeded at 8 o'clock this morning [from Niagara] for the new post at the Discharge of Lake Erie. Set off through the woods & arrived there at 12 o'clock this night. The ox teams & artificers employd as before. . . Ricolet told me he has seen a Rattlesnake 7 feet long and 22 Rattles and that Hogs are the means of driving snakes from ye settlements, as they even eat them.*[51]

Travel between Fort Niagara and Fort Erie was 16 hours according to this account. Another glimpse of the domestic and wild fauna that might be found in archaeological context in an excavation is provided.

> *July 24th* [1764] *This day arrived 4 Companies of Light Infantry under the Command of Major Daly from the opposite side of the Rapids and encamped on the left of the Line. Carrying on the work for this Post. The artificers are employed in squaring Timber for the Barracks and Store Houses and Stockades. The working Party chiefly employed in making a Stone Revetement for the Polygon of the Fort next the Lake.*[52]

This is the first mention of masonry construction at the fort, important because it signifies the resources that were being put into the fort as a major military installation on Lake Erie. Timber was readily available for the construction of the stores, barracks and stockade, and the fact that these were squared – requiring additional labour - as opposed to round log, points to the intended permanence of Fort Erie. Four companies could represent from 300-600 men.

> *July 25th* [1764] *Arrived 3 canoes of distant Western Indians at this Encampment to attend the Congress at Niagara. Carrying on the Works for the Post. A detachment of 40 men with arms sent over the opposite side for Boats, returned again the same day. Sent an Express Boat of this afternoon to col. Bradstreet with my Report of the progress of the Works carrying on here.*[53]

The geo-political climate under which Fort Erie was constructed was characterized by heightened tensions between the British and First Nations vying for control of the vast area encompassing much of the Great Lakes. The desire to make peace was at the forefront of all British actions because, once secured, it freed them to wage war with the hostile, non-compliant tribes. Col. Bradstreet, at Fort Schlosser on the opposite side of the river would launch a campaign against those noncompliant Nations almost immediately after the Congress ended and terms of peace had been agreed upon. Fort Erie was an important cog in the overall British strategy at this time and it was imperative that the fort be completed before Bradstreet set out on his expedition to the more western territory.

> *July 26th* [1764] *Sounded the channel along the Discharge of this Lake to the present post from 5 to 2 Fathoms of water. The working party & artificers employed as before on*

[51] Ibid., p. 274.
[52] Ibid., p. 276.
[53] Ibid., p. 276.

> *Constructing the Post. This detachment consists of 2 Battalions of the Connecticut and Jersey Provincials, 2 companies of the light Infantry & grenadiers of the 55th Regt & a Captain & 45 men of the 46th and 20 naval Carpenters. Employed some Carpenters in repairing the long boats for the Expedition for transporting the Troops. . .*
> *July 27th "Arrived one of the Long Boats and 3 Batteaux with a Detachment of artillery & party for fatigue employ'd in constructing the post as before. . . .*[54]

Presented here is an accurate account of the number of men employed at the fort in constructing the works based on a list dated August 19, 1764. According to the list, the Connecticut Battalion consisted of 157 men of the 265 that were raised in 1764 for the war against Pontiac. The Battalion was commanded by Lieutenant-Colonel Israel Putnam.[55] The New Jersey Provincials, or 'Jersey Blues' in recognition of their blue tunics with scarlet facings, were probably under the command of Capt. Elias Dayton. Dayton was present with Col. Bradstreet on August 8, for the signing of a Peace Treaty with Pontiac at Detroit in 1764. The battalion consisted of 151 men according to the list. The two companies of Light Infantry and Grenadiers of the 55th could number between 160 and 300 men. With 45 men of the 46th and 20 naval carpenters the number employed in constructing the works was somewhere between a minimum of about 525 and maximum of 665 men, all told. The number was augmented the very next day by an unknown number. Clearly, the completion of the fort was a priority for the British as was the fitting up of the long boats for Bradstreet's upcoming expedition to the territory south and west of Lake Erie.

> *July 28th [1764] Arrived the Gladwin Schooner from Detroit, everything quiet. Received Col. Bradstreet's orders for getting the post Defensible by the 30th Inst. The Party & artificers employ'd as before. Orders received for loading the Schooner with the Baggage of the 17th Regt and the General Hospital and Stores. . . Part of this Detachment employed in loading the Schooner for Detroit. The vessels sailed down the new discovered channel near opposite the Post. The waters this day raised 2 feet perpendicular by the violent gale from the South West. The Boats that were not sufficiently hauled up here got damaged. This day a feast given to all the Indians.*
> *July 29th "Part of this Detachment employed in loading the Schooner. This morning the lake fell to its former surface* [56]

Once again, the pressing need to complete the fort is indicated – Bradstreet's order providing only two more days to make it defensible. The list of troops at Fort Erie from August 19 indicates that equipment for 324 men of the 17th regiment had to be loaded together with other stores. The frenzied daily activity would not have gone unnoticed by the visiting delegation of 'Indians', and likely played a role in the upcoming negotiations at Niagara. It is also interesting to note the rise of the water. Referred to as seiche, the rise of water in Lake Erie can be as much as 3 metres within a few hours.[57] Sand deposits found in archaeological contexts high above the current water level in the 2019 excavation are likely due to this phenomenon.

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[54] Ibid., p. 276.
[55] Bates, Albert C., ed. (1903–1905). *Rolls of Connecticut men in the French and Indian war, 1755–1762.* Connecticut Historical Society.
[56] Ibid., pp. 276-277.
[57] URS Corporation, Gomez and Sullivan Engineers, 2005, *Niagara River Water Level and Flow Fluctuation Study Final Report,* Niagara Power Project RERC no. 2216, New York Power Authority.

July 30th Arrived 5 Boats and Long Boat with the Remainder of the Detachment of Artillery and Artillery Stores consisting chiefly of fixed ammunition, also some Batteaux with Provisions in Barrels. Came an order to load the Schooner Gladwin with ½ the Artillery Stores. Employed the working parties and artificers as before. 100,000 musket cartridges.
July 31st Two light 6 pounder Gun Carriages & 250 rounds, 3000 wt musket Ball put on board the Schooner this day for D'Etroit & 25,000 Musket Cartridges. Employed the artificers & working parties as before. Arrived Sloop Charlotte from D'Etroit. This last vessel had but 48 hours passage, brings advice that the Powtwattamies of St. joseph, the Miamis & some Ottawas on that River still decline making any terms of Peace. The Post now become defencible.[58]

Figure 46. Portrait of Col. John Bradstreet, 1764 by Thomas McIlworth. https://en.wikipedia.org/wiki/John_Bradstreet

The harried activity continued for the next two days until the fort was, if not finished, at least made defensible, presumably meaning a stockade, or palisade, had been erected. This is the first instance in which the artillery and ammunition are mentioned. The August 19th list indicates that 2289 men left Fort Erie on the expedition across the lake. Even though the numbers seem astounding, 100,000 cartridges distributed among even 2200 infantry would only amount to 45 rounds per soldier – about two filled cartridge boxes. The detachment of Royal Artillery amounted to 53 men according to the August list. There is no better indication that Fort Erie was on the fringes of the empire than the reference to the 48-hour voyage from Detroit at the opposite end of what often could be a capricious body of water. Communication with the western posts such as Detroit may have been regular but there was still a significant interval of time between dispatches. Bradstreet's expedition was for the purpose of bringing the western Nations into the new British dominion as allies if not conquered peoples.

August 1st The working parties and artificers employed as before, part of the Detachment employed in loading the Sloop Charlotte with Provisions, ammunition and other artillery Stores. The Gale still continues.
August 2nd The Gale still continuing from the same quarter. The Detachment and artificers employed in constructing the Post as before, part of the Detachment employed in loading the vessels with Provisions, ammunitions & Intrenching Tools. This evening saild the Sloop and Schooner for D'Etroit. Wind at N East, blew prodigiously violent. Finished the ovens of masonry. Flux prevailing among the men.[59]

After six days of wet, unsettled weather commencing on July 28, it is no wonder that the men fell ill. With hundreds of troops encamped around the fort, probably with inadequate latrines,

[58] Ibid., p. 277.
[59] Ibid., pp. 277-278.

conditions were ripe for contagion to spread through the ranks. Nonetheless, work continued in loading the vessels and construction – all in preparation for the upcoming campaign.

> *August 3rd I sent an Express to Col. Bradstreet to order up here Ox teams for hawling out the timber for the Piers and Wharfs of this Post. Begun to lay the foundations for the Officers and Soldiers Barracks with Masonry. Finished levelling the earth for the Parade and foundation of the Provision Store next the lake. Several of the Troops subject to agues and fevers. Batteaux arrived here loaded with Provisions.*[60]

Several important details are provided in this entry. The piers and wharfs are first mentioned and as shown on a 1766 plan (discussed below), this work was completed. Foundation walls of masonry for the barracks are another detail verified by this plan. Again, this is an indication of the permanence that Fort Erie was to have as the main entrepot on the lake. The fact that the parade had to be levelled is a fact that can be verified through archaeological excavation. In fact, evidence of a disturbed, or displaced clay layer overlying bedrock was found in one unit (Unit G) adjacent to the masonry foundation of the northwest bastion on the interior of the fort. Sickness, a common occurrence in military field encampments with inadequate facilities, continues to plague the troops.

> *August 4th Received dispatches from Col Bradstreet. This Fort named Fort Erie. Batteaux arrived with provisions. The working parties and artificers employed as before . . .*
> *August 5th Continued carrying my works as before . . . The Camp calling sick with Agues, Fevers, & Fluxes. Some Carpenters employed in repairing the Boats. My artificers consist chiefly of Carpenters, Masons, Brickmakers, Lime burners, Shinglemakers, & Sawyers. I sent an Express to Niagara for more materials for this Post.*[61]

Although noted on the July 10 plan by Bernard Ratzer, the fort is officially named Fort Erie. The variety of artificers, contracted men, is an enlightening detail as regards the archaeology at the site. In addition to the masons and carpenters, the fact that brickmakers are listed indicates that this operation was conducted on site. Several features are associated with this activity which leave an archaeological signature: 'winning' the clay would have been done by surface stripping/mining, horse- or man-powered pug mills (either a shallow pit or barrel) would have been used to mix the clay, and kilns were necessary for firing the bricks once formed. The lime-burners would have been essential to produce the material necessary to make mortar for the masons. This may have been done in a separate furnace/kiln. Once again, the 1766 plan by Francis Pfister depicts where brick and stone were used in the construction. Considering that squared timbers were being used (see July 24th entry), it is possible that a saw pit may have been employed to assist in the production of these. The easiest type of construction for this would have been a natural slope or ledge, such as that depicted on the 1764 Ratzer plan (Document 4), in order to provide an upper level and lower saw pit. Skilled tradesmen such as shingle-makers were necessary for proper roofing and their employment at Fort Erie is yet another indication that the fort and buildings were built with an eye to being permanent installations.

> *August 6th Arrived the Schooner Boston (arrived in 4 days). All quiet at Detroit., excepting one of our soldiers tomahawking a Wyandot Indian. Arrived 12 oxen from Niagara for drawing the wharf & Pine Timber out of the woods. Employ'd the party for fatigue and artificers as before, in carrying on the work. Arrived one Canoe with Indians from Niagara on their way express to*

[60] Ibid., p. 278.
[61] Ibid., p. 278.

> *Detroit to assemble the several Nations there to the Treaty. Employed a party of my company in repairing some of the long Boats being very leaky. The waters raised again by 18 inches by the violence of the wind. An Express boat sent off with the account of the arrival of the Schooner. Mornings and evenings begin to be cold. Heavy rains. Sailed the vessels with Sir William Johnson and the Indians for Ontario & Oswego Lake."*
> *August 7th "Continued my Party and Artificers as before on the construction of the Fort. Winds at S. W. strong & attended with rain. Waters raised 2 feet perpendicular. Heavy rain this night.*[62]

Montresor's consistent recording of the weather is important for the light it sheds on why the troops had fallen ill. The cold and wet conditions would have exacerbated the spread of the maladies as soldiers were likely less inclined to venture far from shelter to perform daily ablutions. This together with food spoilage noted earlier would have contributed to the ill health of the troops. Despite this, the necessity of pressing on with the works is clear in the daily correspondence. The urgency is due to the volatile situation with the western tribes, and the pressing desire to make peace with Nations in the eastern (Oswego and Lake Ontario) and western (Detroit) regions.

> *August 8th Arrived the Schooner Victory from Detroit. Employed the artificers & different parties of fatigue as before. Weather moderated. . . The Schooner Boston weighed & sailed into the new Channel & came to an anchor, embarked the remainder of the Engineers stores on board. Two of our Hunters in the woods meeting each other by accident & fired one of which is mortally wounded. Arrived the Troops this night from Little Niagara [Fort Schlosser] and encamped here. 4000 Barrels of Provisions left at Fort Schlosser.*[63]

Col. Bradstreet had already launched his expedition from Fort Schlosser to subdue those Nations in the Ohio territory who were still hostile to the British. The transport of the huge volume of supplies for so large a force is evident in the late July and early August correspondence leading up to the campaign. The logistics of moving the goods fell mostly to the few schooners and sloops on Lake Erie regularly sailing between Detroit and Fort Erie. The passing reference to hunters suggests that wild game augmented the standard salted and barreled provisions.

[62] Ibid., pp. 278-279.
[63] Ibid., p. 279.

Indians at the Congress at Niagara

July 1764. Mohawks.. 45
Caenawagues } ……124
Canyesadaguss }
Schahanies ……14
Canajoxeris ……57
Oneydas & Tusce –
roras ……120
Onendagas ……115
Aquagaws ……..117
Senecas ……178
Tenessess ……273
Cayugas …… 146
Menomenies ……99
Jibbeways ……..71
Ottawas ……173
Huron & Wyandots ….16
Foxes and Sacs ……27
Women and children.150

Total ……..1725

Strength of the Troops leaving Fort Erie August 19th 1764

	men
Royal Artillᵞ	*……..53*
Major Dalys Detachᵗ……	*323* (55th Regiment)[64]
Major LeHunter's do……	*351* (Wm. Hunter in 8th Regiment of Foot?)
17th Regiment	*……324*
80th do	*……146*
(Battle of Devil's Hole – J. Triggs)	
Canadian Battⁿ	*……179*
New Jersey do	*…… 151*
New York do	*……180*
Connecticut do	*…… 157*
Batteaux men	*…… 44*
Rangers	*……36*
Carpenters	*……17*
Staff	*……15*
Royal Highlanders (42nd Regiment) *&*	
Do Americans	*…… 3*
(60th Regiment of Foot)	
Indians	*…… 310*
Total	*…… 2289*

Terms of Peace . . . 2nd Liberty to build Forts all over their country and to send traders amongst all without molestation & any interruption whatever . . .[65]

The Niagara Treaty negotiated at the Congress was the first step to end hostilities in 1764. The strength of troops leaving Fort Erie must have been reported to Montresor second-hand as he was at that time with the lake fleet that was participating in Col. Bradstreet's larger expedition to the territory south of Lake Erie. The numbers reflect the troops that participated in this expedition and not those actually posted to Fort Erie, but the list does highlight the significance of the fort as a staging area for military expeditions south and west at this time. Notably absent from the Congress at Niagara are the Shawnees and the Delaware. Bradstreet's expedition to Detroit, and then south into Ohio territory, was led against these groups primarily. It is very likely that many of the Nations at the Niagara Congress would have been at Fort Erie at one time or another to conduct trade as indicated in the July 20th and 25th entries. The Terms of Peace clearly sets the stage for the new colonization of the western territory – establishing a military presence and a secure trade.

[64] Perhaps Captain Peter Dealy, 55th foot - in the 1767 army list. Senior captain in the regiment. Research by Richard Gerrard, Historian, City of Toronto, may have tracked down the elusive Major 'Daly'. Capt. Daly may have had a brevet rank of Major in America. There is a Major Daly in local politics in Galway about this time and the 55th was in Ireland in 1767. See *The Tribes and Customs of Hy-Many commonly called O'Kelly's Country*, Irish Archaeological Society, Dublin, Vol. 6, 1843, p. 173.

[65] Ibid. p. 275.

> *August 9th At 11 o'clock this morning the whole Troops, Indians &c proceeded in Boats on the Lake & arrived this night at a Cove on the North Shore, called the Traders Landing, 9 miles from the Discharge of the Lake & encamped there. This morning employed in loading the 2 vessels & in repairing the Boats sustained by the Damage of the Keels in the rapids & in hawling them on shore on a Rocky Beach, being loaded each with 15 Barrels of Provisions. The 17th Regt taking the opposite side of the Rapids towards Buffalo Creek got into the Surf and lost 2 boats & amongst them & and the rest of their boats suffered much. Carpenters were sent to repair them. . .* [66]

Trader's Landing is present-day Point Albino located 14 km west of the fort. The bay is protected from the west wind by a peninsula extending about 2.5 km into the lake, where today a lighthouse stands.

October 2nd A council was held with the Hurons of Sandusky. Detacht of 250 men commanded by a field officer & officers in proportion to unload & Ballast the 2 vessels which are to proceed directly after for Fort Erie for Provisions for Detroit.[67]

Montresor had been on expedition to the west country since August 9. His description of the council with the Hurons (or Wyandots) is important because they were one of the Nations who refused to make peace at the Niagara Congress in August. This represents yet another step towards ending the hostilities and opening up the western territory for the fur trade. The dispatch to Fort Erie once again illustrates the significance of the post for provisioning the expedition and Col. Bradstreet's campaign.

> *October 19th . . .This afternoon an Indian Officer, 2 White men & 3 Savages were dispatched Express to Fort Erie in a Birch Canoe with orders for 2 Batteaux loaded with Provisions to meet us as soon as possible.*[68]

The day before, on October 18, a disaster befell the forces under the command of Col. Bradstreet while encamped at Rocky River (14 km west of present-day Cleveland). Bradstreet was later accused of incompetence by William Johnson, Superintendent of Indians Affairs, and severely censured by General Thomas Gage, Commander-in-Chief of British North America. Montresor also blamed the disaster entirely on the conduct of the commanding officer – Col. Bradstreet. The loss of 20 boats – half of the expedition's complement – the lives of 3 officers and 70 men, provisions and artillery forced a huge number of the detachment to walk along the south shore of Lake Erie, through hostile country and difficult terrain, back to the Niagara frontier.[69] The call for provisions from Fort Erie signifies the vitally important role the fort played in the defensive strategy of the western country.

> *October 28th The Gale still Continuing at about West by North. 50 men consisting of the Battalions of Jersey and Canada set off through the woods to make the best of their way to Fort Erie.*[70]

[66] Ibid., p. 279.
[67] Ibid., p. 303.
[68] Ibid., p. 312.
[69] See *https://www.varsitytutors.com/earlyamerica/early-america-review/volume-10/colonel-bradstreet-and-his-missing-expedition* for further details.
[70] The Montresor journals, p. 316.

The reference is to the detachments that were essentially abandoned by Col. Bradstreet due to his alleged incompetence during the October 18th storm disaster. The first place of refuge between the western end of Lake Erie and the Niagara frontier was Fort Erie.

> *November 3rd . . . The works at Fort Erie ordered by Col. Bradstreet to be discontinued from this day being nearly compleated except the wharf, for the vessels.*[71]

Considering the questionable actions taken by Col. Bradstreet during the campaign west - the censures from General Gage and the criticism from Superintendent Johnson – not to mention the conduct witnessed by Montresor himself, it is not too difficult to envision how the orders to discontinue work on Fort Erie was received. The fort played a strategic role in Bradstreet's campaign and one has to wonder why the decision was made by him to discontinue the works. One reason may have been a shortage of men necessary to carry on the work as many were still making there way back to Fort Erie by foot from south of Lake Erie. Morale among the ranks must have been abysmally low, and with winter closing in, the work may have been deemed impractical.

> *March 4th 1765 Directed by the Chief Engineer to make an Estimate of the works necessary to be carried on, Repairs &c at Detroit Fort, Fort Erie, Niagara &c for the present year, also an estimate for Number of Men, Time, Materials and Expenses. Completed the former and delivered it this night the latter to be got ready to proceed by the Packet . . .*[72]

After a winter of inactivity, Capt. Montresor must have been heartened to see that work was to resume at Fort Erie.

David Owen includes other references from 1764 that fill in further details of activity during the fall of 1764. On September 2, 1764, Joshua Loring, a British naval commander on the Great Lakes during Pontiac's uprising wrote to General Gage that Col. Bradstreet had denied him carpenters to construct a proper wharf and storehouse at Fort Erie. On September 9 in another letter to Gage Loring noted that the carpenters had resumed work on the barracks and storehouse under the direction of Lt. Pfister. [73]

In spring 1765 morale was a problem at the fort and desertion, always a problem, may have been exacerbated by sickness among the troops as the returns of the 46th Regiment indicate – 27 of 180 soldiers were deemed sick. In May 1765, the commanding officer at Fort Erie was concerned that deserters would not be pursued by the Indians, even with the promise of reward, as apparently used to be the case.[74] Other sources describe work continuing and the completion of the stockade by July 1765. The issue of constructing a wharf and evaluating the effectiveness of securing vessels there in the winter, protected from the ice.[75]

[71] Ibid., pp. 318.
[72] Ibid., p. 323.
[73] Owen 1986, pp. 21-22.
[74] Ibid., p. 23.
[75] Ibid.

DOCUMENT 6

The 1766 plan by Francis Pfister can be considered the earliest, most accurate and comprehensive plan of Fort Erie (Figure 47). The plan is remarkable in detail with buildings identified and cross-sections showing construction materials and technique. The overall plan is drawn at several scales with the rectangular – not square – 4-bastioned fort itself at a scale of 100 feet to an inch; the with three cross-sectional insets at 15 feet to an inch; and the lower right section showing the situation

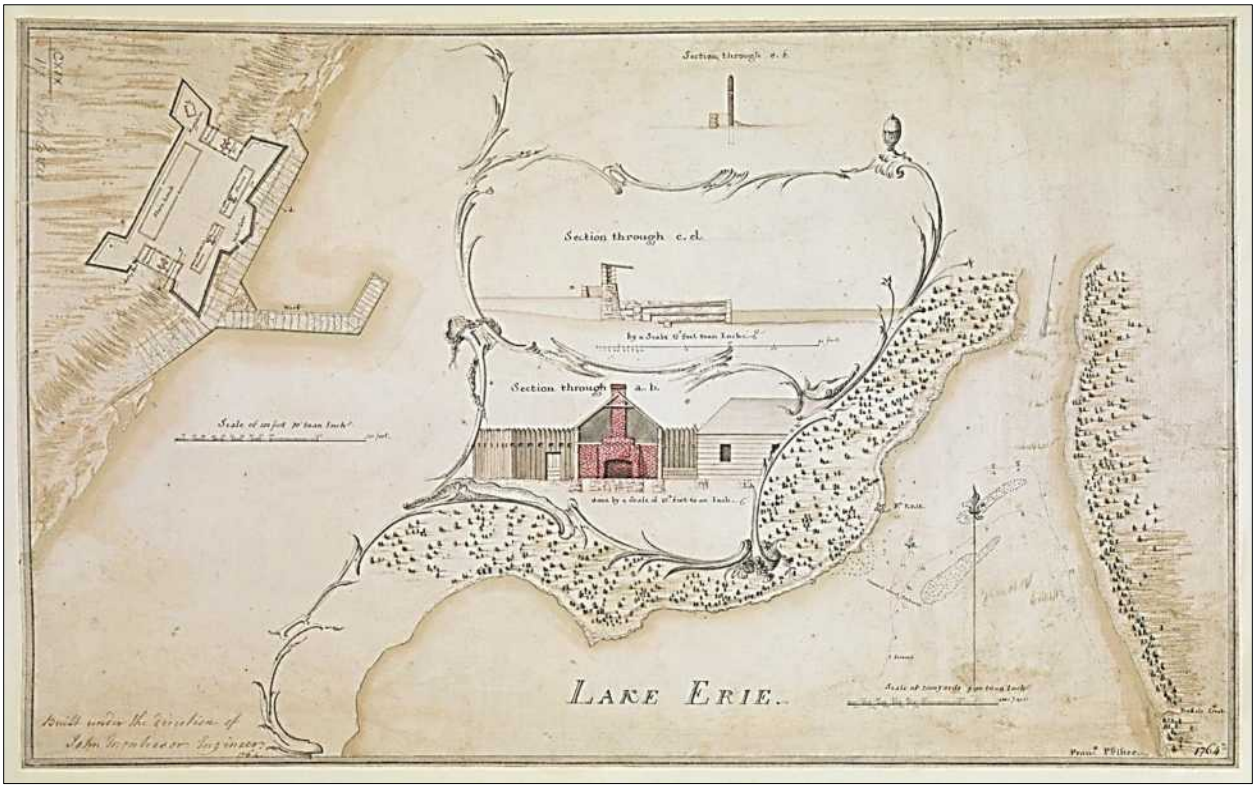


Figure 47. Plan of Fort Erie*, Built under the Direction of John Montressor, Engineer, 1764*. By Francis Pfister, 1766. Copy from map in British Library, King's Maps, CXIX, 17. (Cartographic Items Maps K.Top.119.17.)

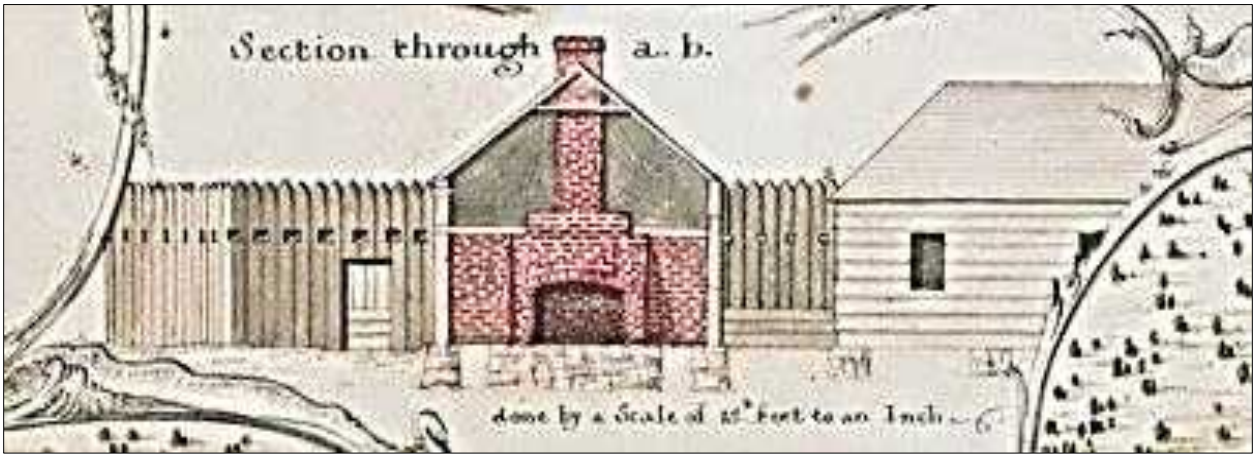


Figure 48. Detail of Plan of Fort Erie*, Built under the Direction of John Montressor, Engineer, 1764*. By Francis Pfister, 1766 showing cross-section with stockade/palisade, sally port, stone piers, brick fireplace and chimney, and squared timber construction.

of the fort within the context of a 700 yard-wide (640 metre) channel, shoals and soundings at a scale of 2000 yards to an inch. Sounding for the channel began on July 20th continuing July 26th and July 28th.

The cross-section at the south end of the fort (Figure 48) corroborates other details that are provided in Montresor's journal of 1764. The construction of the masonry barracks foundation walls is mentioned on August 3rd. These appear to have been full-perimeter foundations while the storehouse was built of squared log sills laid on masonry piers spaced around the perimeter. Reference to the squared timbers used for the barracks, storehouse, and stockade can be found in the July 24th entry. The pointed stockade represents the initial construction of the fort as penned by Montresor on July 20th two days after beginning the work of clearing the ground. The banquette or firing step to gain access to the loopholes is shown as a platform faced with squared timbers three-high (Figure 50). On August 4th Montresor lists the tradesmen at work at the fort, among whom are the masons and brickmakers. Evidence of the latter is clearly visible in the construction of the fireplace and chimney – four of which can be seen in the plan of the fort itself (Figure 49). In general, Fort Erie was initially a well-constructed fortification built using skilled tradesmen and designed by an accomplished engineer.

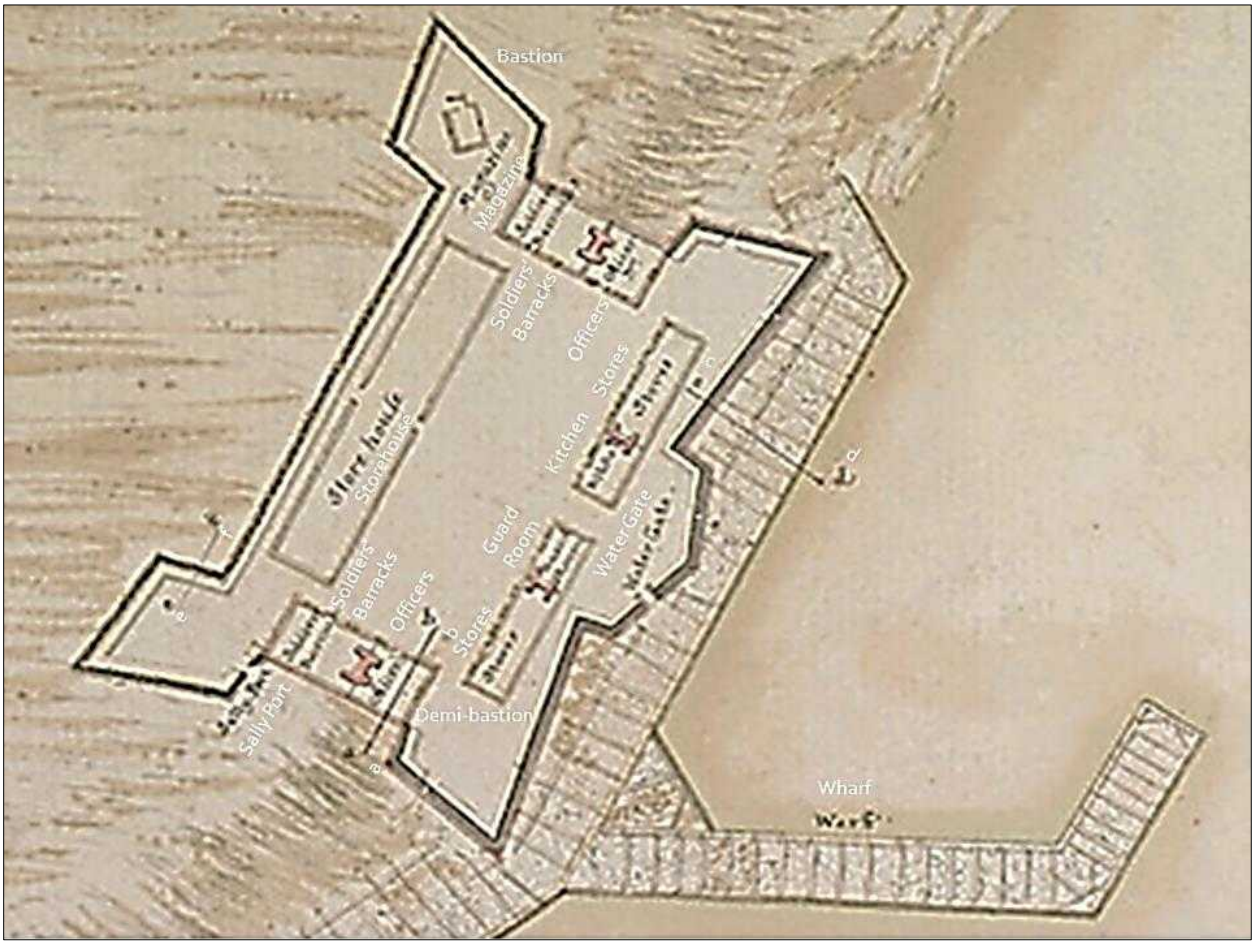


Figure 49. Detail of Plan of Fort Erie*, Built under the Direction of John Montressor, Engineer, 1764*. By Francis Pfister, 1766 showing rectangular trace of fort and labelled buildings within. The wharf and waterside pier are drawn in detail.

In Figure 49, the internal organization of the fort is as described in part by Montresor in summer 1764 but with additional details depicted on the plan. The soldiers' and officer's barracks are adjoined

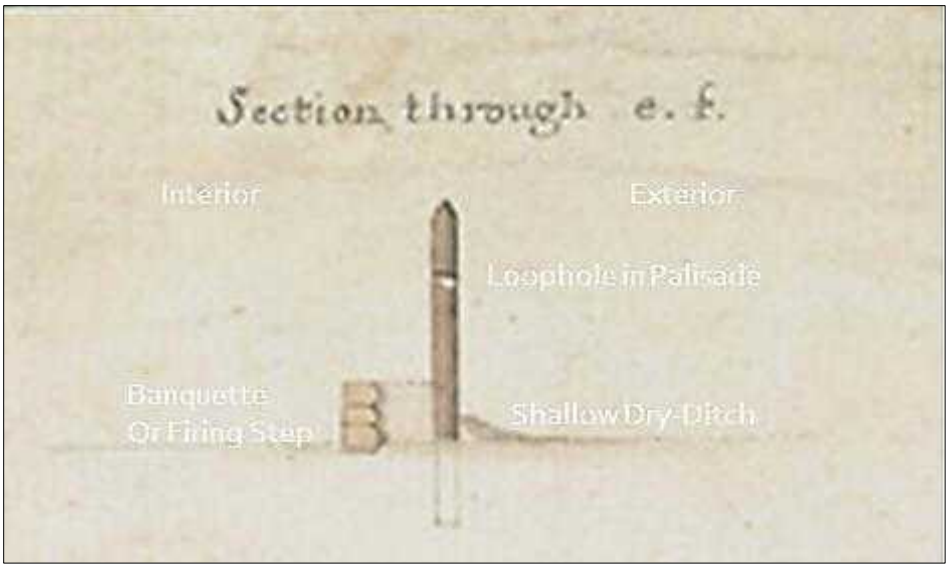


Figure 50. Detail of Plan of Fort Erie*, Built under the Direction of John Montressor, Engineer, 1764*. By Francis Pfister, 1766 showing details of perimeter.

by a common wall with fireplace. These are found on the short walls of the fort – the north and south curtains. The large storehouse situated along the west curtain wall – with a break evident in the long walls - is only one of three, the other two on the opposing east curtain. The disproportionate amount of space occupied by the storehouses is further evidence of Fort Erie's role as an entrepot serving other posts on Lake Erie. Other essential elements of any fort are the magazine, here in the northwest bastion, the guardhouse and kitchen. The masonry ovens mentioned in the August 2nd entry were likely in the latter. A sally port in the southwest bastion provided egress that could easily be closed in case of attack. Four gun ports are positioned in the demi-bastions on the east or lakeside.[76] The main gate of the fort is the 'Water Gate' on the east side, opening onto the decked pier along the water's edge.

The details of the wharf and pier construction in front of the water gate is provided in the section 'c-d' (Figure 50a). From left to right - the banquette is seen along the east curtain with the same

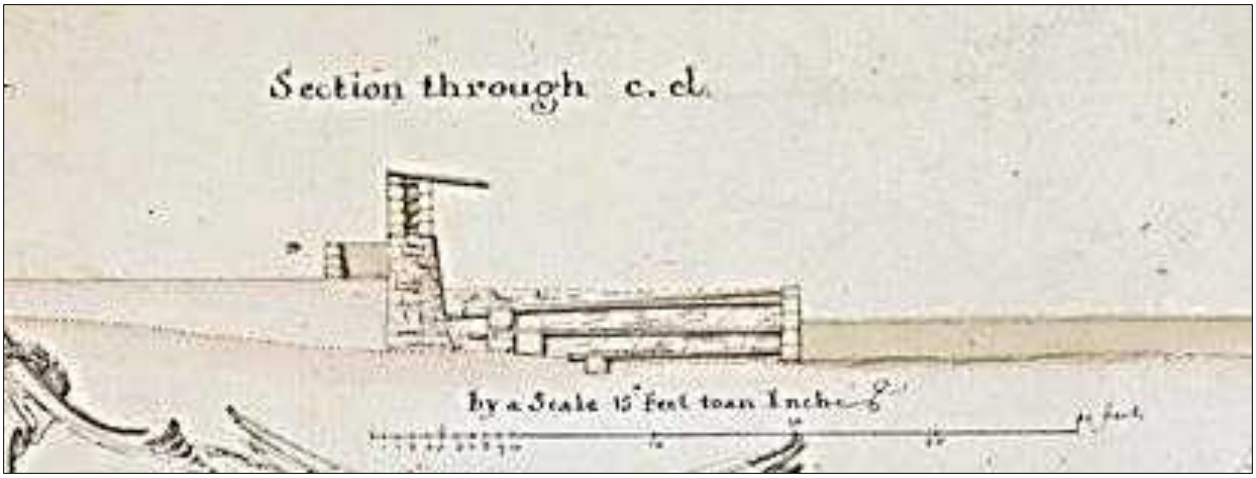


Figure 50a. Detail of Plan of Fort Erie*, Built under the Direction of John Montressor, Engineer, 1764*. By Francis Pfister, 1766 showing lakeside masonry wall and crib construction for pier and decking.

[76] These were likely for guns larger than the light 6 pounders mentioned in connection with Bradstreet's campaign, although there is no specific reference to the size of cannon. The Royal Regiment of Artillery was present at the fort various times in July and August as Montresor mentions in his journal.

construction technique and height as elsewhere, indicating a level parade within the walls of the fort. On August 3rd Montresor describes the levelling of the parade and one of the stores on the east curtain. The left side of the section appears to show the extent of fill needed to accomplish this. Today, the height of the bluff/slope above the lake where the archaeological excavations took place in the parking lot is more than 2 metres. This corresponds well with the scale which shows approximately 6 feet of fill adjacent to the interior side of the curtain wall. The masonry wall foundation sits upon bedrock at the same level as the lake bottom. The footings of the wall were protected apparently by a stone-filled crib for the 20- to 25-foot-wide pier skirting the entire east side of the fort. The masonry retaining wall of the pier is located on the lakebed which is made up of limestone bedrock with no overlying sediment. In later years it was the proximity of the fort to the lakeshore that contributed to its gradual destruction by winter/spring ice flow and the many severe storms that Montresor mentions in the summer and fall of 1764.

David Owens again provides important details to the work carried out in 1766. In the summer of that year, an entry in the Gage Papers indicates that "*Thos. Sowers to direct. . . the addition to Fort Erie . . .*"[77] A historical happenstance, in June as Major Robert Rogers was on his way to Michilimackinac as the King's appointed governor of that regained territory, he met with Pontiac who was traveling in the opposite direction to Fort Oswego on Lake Ontario to negotiate terms of peace. The two men, both of whom would soon find themselves in a much-reduced position, smoked a ceremonial pipe, and shared a bottle of wine. The War Chief had reason to be distrustful of the British and when soldiers began firing their muskets at wild pigeons "*Pontiac started up in evident trepidation, and it was not until many assurances from the officer commanding, that he was divested of the idea of treachery*."[78]

Figure 51. Only known portrait of Rogers. A mezzotint engraving of this was published by or after Thomas Hart, London, 1776.

Figure 52. There are no known portraits of Pontiac. This interpretation was painted by John Mix Stanley more than 80 years after Pontiac's death in 1769.

[77] David Owen, Old Fort Erie, 1986, p. 23.
[78] Ibid., p. 23.

Frontier forts built of wood and stone were frequently in need of repair as the elements took their toll on the works. David Owen notes several instances found in the Gage Papers where repairs were requested, and permission granted to conduct those.

> *August 20th, 1770 . . . the Disrepair that it [Fort Erie] was in . . .*

Permission was asked for minor repairs and clearing brush around the fort.

> *June 13, 1771 . . . the Pickets or Stockades are almost entirely Rotten and many of them may be push'd down by Single Man, In short that Fort wants considerable repairs, which will be almost yearly the case of all stockeded (sic) Forts. The bake house at that place is entirely ruinous. . .*

Other references in 1771 to rotten stockades and their replacement and brush clearing are noted in the Gage Papers. A *"Return of the several Repairs now wanting at Fort Erie"* dated June 8, 1772 notes:

> *To new Stockadeing (sic) all the Front & c behind the Provision Storehouse.*
> *To Picketing all the Front towards the Water side.*
> *To repairing the Shingles of the Roof of the Officers Barrack.*
> *To new building of the oven.*
> *N.B. a small repair of the Wall towards the water side may be wanting such as a little pointing, & a few number of Stones.*[79]

Over the next two years various pieces of correspondence refer to the need to repair the stone wall next to the lake and shingle the officers' and soldiers' barracks. In November of 1773, a letter reported that all work had been completed.

[79] Owen, p. 24.

DOCUMENT 7

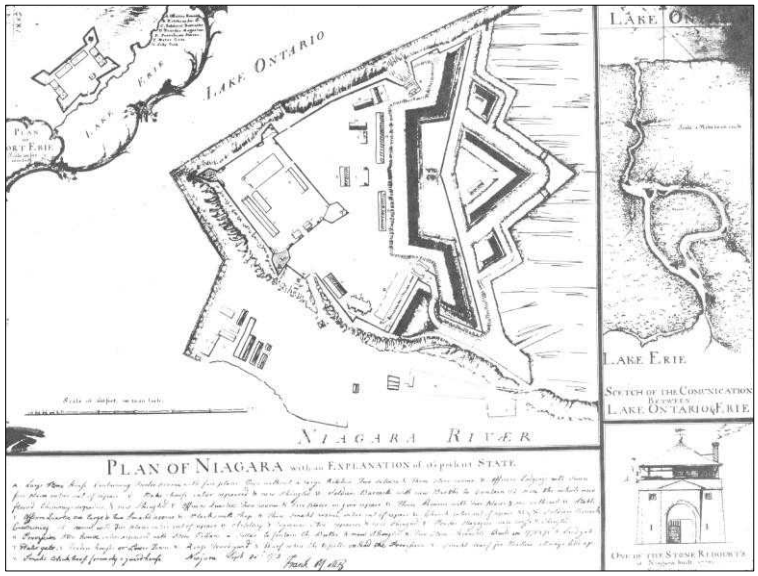


Figure 53. *Plan of Niagara*, Fort Erie Inset, 1773, Francis Pfister, British Library, Crown Maps, cxxi, 76.

Seven years after drafting the first plan of Fort Erie, Francis Pfister produced another version of the fort as an inset on the larger Plan of Niagara, 1773, but drawn at the same scale as the 1766 plan, 100 feet to an inch (Figures 53 and 54). Several changes are apparent compared to the earlier map. The most obvious difference is the absence of the wharf and pier. Contemporary sources describe the damage done to the wharf and the fort itself due to it having been built too close to the lake. Other changes are the storehouse along the west curtain which has been made into two separate structures.

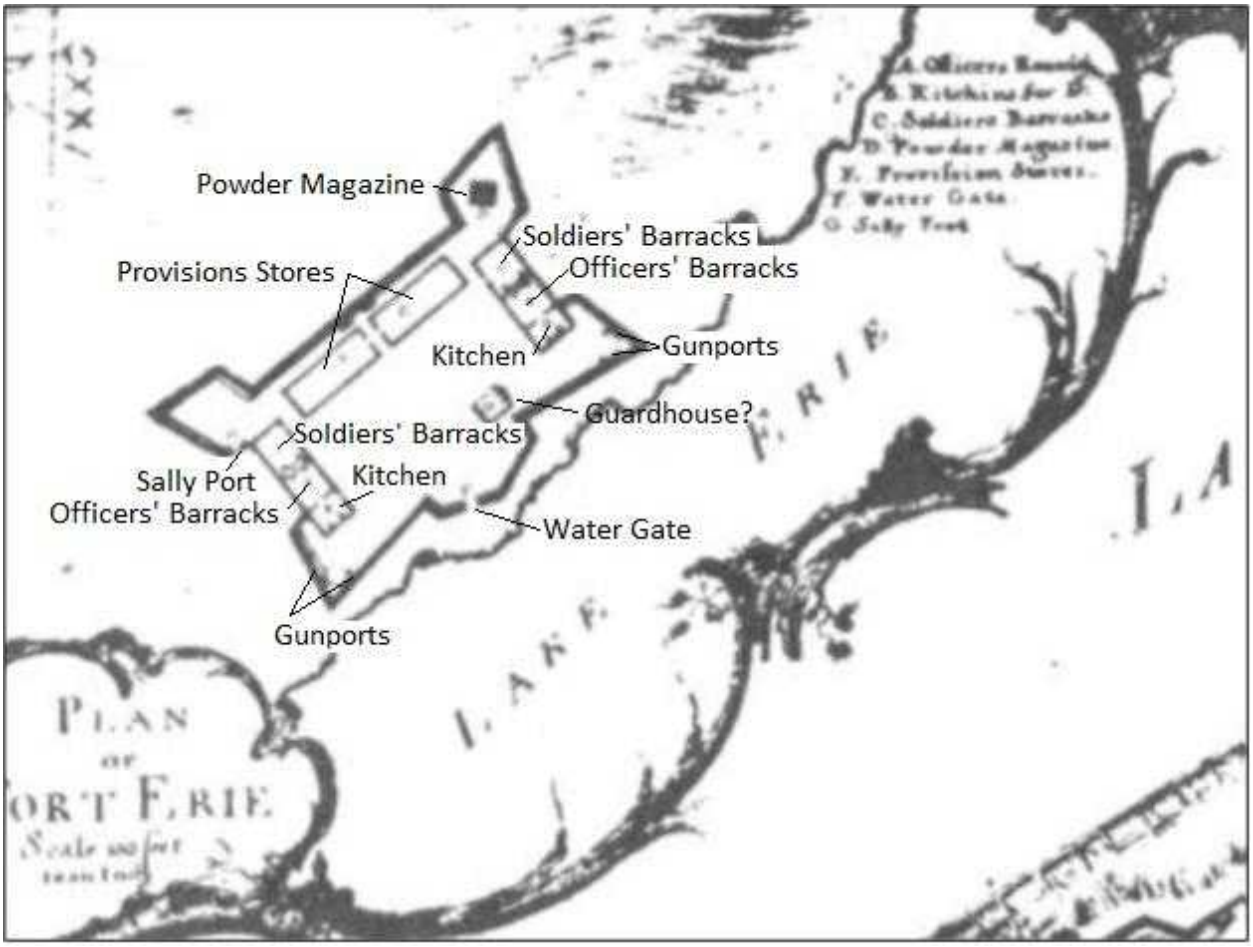


Figure 54. Detail of *Plan of Niagara*, Fort Erie Inset, 1773, Francis Pfister, British Library, Crown Maps, cxxi, 76.

This is an accurate depiction corroborated by later sources. The stores along the east curtain are also gone as is the former kitchen which may now have been used as a guardhouse. New kitchens are associated with both officers' quarters on the north and south curtain walls. Within the larger barracks buildings on the short curtain walls are the soldiers' and officers' barracks although the double fireplace may have been moved in response to the new officers' kitchens. The powder magazine is located within the northwest bastion as before and the gun ports are still evident within the lakeside demi-bastions.

There is little reason to doubt the accuracy of the 1773 plan as it corresponds in many ways to the earlier 1766 plan. Changes evident within the fort may reflect the evolution of the fortification in response to external pressures and natural forces. The loss of the wharf and pier due to ice and storms, and the absence of the two storehouses is perhaps linked. The suggestion is that Fort Erie's role as an entrepot may have been in decline during the new era of peace with First Nations. Trade was still important as later sources consistently report on the First Nations who were at the fort at various times. However, during the decade of peace between 1766 and 1776/77 the immediate military function of the fort as a provisioning depot for western troops may have been diminished compared to the period of heightened tensions of Pontiac's uprising. If so, this may have set in motion a chain of related events. Any reduction in provisioning would have resulted in less space being devoted to stores. A consequence may have been lesser emphasis on waterside access to the fort for shipping goods, especially if the shoreline facilities were constantly being threatened by natural forces. In other words, there may have been no need to devote the resources necessary to maintaining wharves and extensive storehouses in times of peace.

DOCUMENT 8

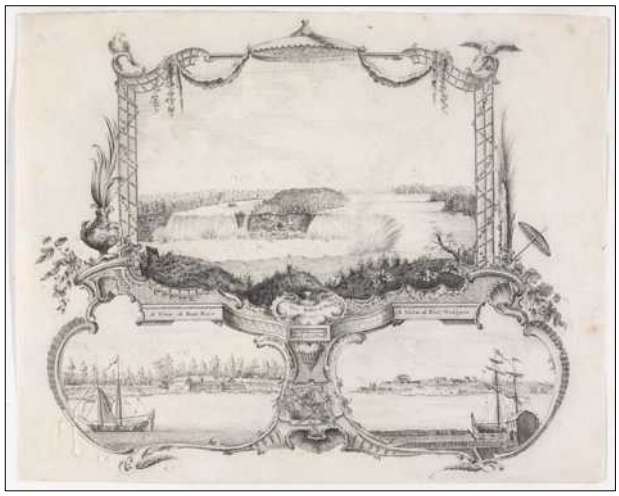


Figure 55. *The Falls of Niagara, and a View of Fort Erie and Fort Niagara*, by Henry de Berniere, Ensign 10th Regiment of Foot, 1773. National Army Museum 1960-07-214-1.

The pen and ink sketch completed in 1773 by Ensign Henry de Berniere of the 10th Regiment, is a fine depiction of the fort showing landscape features and structural details that correspond to earlier descriptions. In July 1768, a journal entry from John Lees:

. . .This small fort . . .built as a Depos (sic) for provisions, about four years ago . . .part of the Works, that fronts the Water is of stone, and the upper Works, Square Wood and Piquets the rest of the Fort is Stockaded round, mounts but a few guns and can serve only as a Defence against Savages.[80]

The drawing shows showing the masonry east curtain wall and the barracks along the north and south curtain walls. The wharf is no longer there and the water gate is shown. The barracks are built

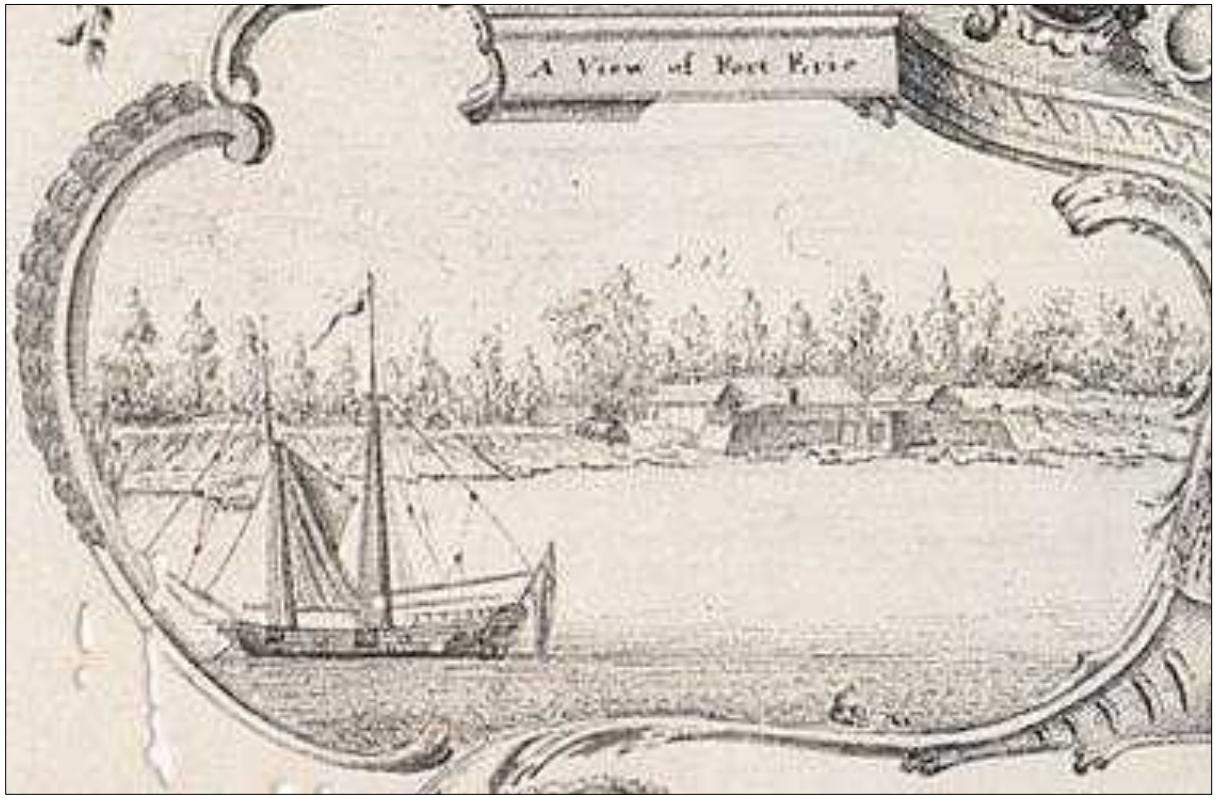


Figure 56. *Detail of The Falls of Niagara, and a View of Fort Erie and Fort Niagara.*,

on the high ground and the eastern half of the fort is directly on the shoreline A building is shown to the south of the fort and the land directly opposite the fort is still heavily forested.

[80] Owen, p. 24.

OTHER FIRST-HAND ACCOUNTS 1773/1774

In summer of 1772, Jeremy Lister, an ensign (lowest rank of a commissioned officer) in the 10th Regiment of Foot was posted to Niagara.

> *. . . arrived at Niagara the sixteenth of July* [1772], *about ten o'clock at night. I believe we shall stay here and at Fort Erie two or three years. We shall make ourselves as happy as we can, as there is no inhabitants here excepting two or three such sutlers and commissaries besides ourselves. I suppose music will be the most of our employment here. When you write to me you will be kind enough to send your letters by way of New York and not by any vessel to Quebec, as they are generally neglected and are three weeks or a month longer in coming*[81]

Lister spent more than a year at the sparsely populated Fort Niagara before he was sent to Fort Erie where he was placed in command of the garrison in fall 1773. His observations on life at the fort at this time are insightful, including the reference to music as a pastime, as they occur around the time that Francis Pfister drafted his second plan of the fort in the same year. In an interesting journal entry Lister laments that he gave up his tour of duty the previous year to another ensign by the name of Mitham. In so doing he regretted the loss of extra pay (2/6 per day) for carrying on the King's work (repairs and construction) at Fort Erie. This may refer to the changes seen on Pfister's 1773 plan of the fort.[82]

> *September the 29th [1773] I left Niagara and went to Fort Erie to take command of a detachment there and care of the Fort in place of Mitham, who returned to Niagara. As soon as I got to Fort Erie I set myself to work to lay in my winter stock of fuel and, notwithstanding the lateness of the season, I accomplished pretty well, owing to my own diligence and attention. Great numbers of Indians came in to me at Fort Erie, who was after troublesome, though of great use to me and my party in bringing in provisions such as venison, ducks and other wild animals. The (hunters) of whose help I was tolerably well provided, having killed a bullock, a boar and three hogs. I bought a cow and three sheep, but on the winter commencing my cow gave up giving milk ; the sheep I killed.*[83]

The references to wild game provided by the 'great numbers of Indians' speaks to the dependence the British garrison had on the First Nations and their continued presence at the fort. In the faunal analysis completed by a Laurier undergraduate student (Appendix D) a white-tailed deer bone was identified along with sheep, pig and cattle.

> *In April 1774 there was two Indians killed over the river opposite the Fort, which was brought over and buried with great solemnity. I was a spectator to the last kind offices paid those two poor mangled objects, which was performed with the greatest solemnity and order. One of their elders or counsellors made a very long speech. He spoke in their own language and very sensibly much to the purpose, far beyond what anybody could have supposed a savage capable of. He*

[81] Jeremy Lister, 10th Regiment, 1770-1783 Author(s): R. A. Innes Source: Journal of the Society for Army Historical Research, Vol. 41, No. 165 (March 1963), pp. 31-41 Published by: Society for Army Historical Research, p. 40.
[82] Ibid., p. 38.

[83] Ibid., p. 38.

> *spoke against rum, which he said, and very justly, was the principal cause of almost all their misfortunes.*[84]

Although no human remains have been uncovered during five seasons of excavation at Fort Erie the reference is a reminder that people living in a frontier society were fraught with accidents owing to the hardship of life in (see Montresor's journal entry of July 20th). Death was probably a common occurrence for that small community.

> *About this time my cow calved and I got a second one and also three or four sheep. That stock I thought pretty tolerable. The men were set to work in the gardens and all now became alive. I enclosed a large piece of fresh ground in addition to the old gardens, which we planted with vegetables of the most useful kind. Our gardens flourished and the fruits of our labour was beginning to come to perfection when we had orders to leave that part of America and return to Quebec, the 8th Regiment to relieve us*.[85]

The reference to gardens provides a picture of life at the post not often captured in official correspondence. Gardens planted with vegetables would have been a welcome complement to a diet consisting largely of salted meat rations over the winter. The enlargement of garden plots from the previous year seems like an energetic initiative that abruptly ended with the arrival of the 8th Regiment. Lister elaborates on his interactions with officers from this and another regiment who attempted to give him orders for provisioning and working for their companies because of the hardships they had suffered while en route to Fort Erie from Detroit and Michilimackinac. Lister's response indicates his concern for the men under his command who daily experienced the rigours of living on the frontier.

> *. . .but the Major* [Bassett] *still persisted in his demands being granted. I was under necessity of informing him that, consistent with my duty in the station I was then in, I could not possibly comply with a requisition of that nature. If he was in necessity I would grant him one day's provisions but not further, and also gave him to understand that, although an Ensign, I was Commanding Officer of that garrison and should not give it up to anybody without proper authority, nor allow myself to be imposed upon knowingly by complying with things which was not by any means consistent . . . Captain Vatass came down from Michilimackinac with two Companies. He pretended also to give directions to me, but I soon gave him to understand I was not under his command. He was pretty surprised I had not my boats up from Fort Schlosser which had not returned from carrying Major Bassett's party down. He insisted I should send men to bring them up. I told him he might do that. I should let him have pilots but nothing further. The men under my command had sufficient duty to do. I had no occasion to lay an additional burden upon them. He began then to be a little more mild when I told him he had no command of that garrison, and represent to me the hardship his men suffered, which had no weight with me well knowing their suffering was not nearly equal to what the men under my command underwent daily*[86]

[84] Ibid.
[85] Ibid., pp. 38-39.
[86] Ibid., p. 39.

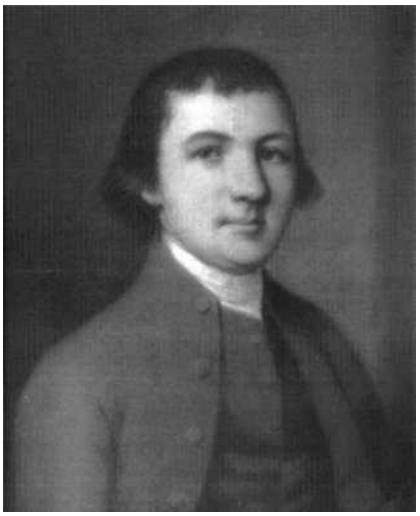


Figure 57. Jabez Maud Fisher, frontispiece in A Quaker's Tour of the Colonial Northeast and Canada: The 1773 Travel Journals of Jabez Maud Fisher of Philadelphia.

In 1773, Jabez Maud Fisher, a young Quaker man, travelled extensively in parts of the new British territory created by the Royal Proclamation of 1763. Departing from Philadelphia he made his way via New York and Albany to Fort Erie, the most western point on his itinerary. He would have preceded Ensign Lister's posting to the fort by a couple of months. Although not entirely clear, he and a companion, or companions, embarked on a boat, probably at the end of the Niagara portage (Fort Schlosser) and travelled upriver towards Fort Erie. On the way he met with Ensign Mitham (10th Regiment), who is mentioned in Lister's journal. Mitham, described as a gentleman, did not reside at the fort but in a 'commodious' tent some distance away (1 mile). After dining, Mitham took the party to the 'small' but orderly fort. The party made their way back to Fort Niagara. The next day Fisher relates dining with Lt. Pfister, who, it is interesting to speculate, may have been currently drafting his plan of Fort Niagara and Fort Erie (1773, Document 7).

July 18th Having last Night fix'd on going to Fort Erie we rose early this Morning & Stedman having provided us his Men & Battow to take us there first drinkg some Milk Punch & eating some Bread we went on board & the Stream being strong against us, our Progress was slow were however well entertained with the Beauty of the River in going up [The Banks of the River are low & level the Bottom mostly sandy in some Places Rocky] [.] It is in some Places 1 in others 2 in others 3 Miles Wide a Number of large & smaller islands are pleasantly situated when we had got abt. half Way up we met a Boat whereon was Capt: Mitham of 10th Regt. who having heard of our coming, immediately got into our Boat & turn'd back to accompany us. his Conversation was very entertaining, he is a Man of Letters & the Gentleman, as soon as we landed we was a Mile from Fort Erie, we went up to his tent (his Apartment being now repairing) wh. was large & commodious, he very soon got us a genteel Dinner & shew'd us every Mark of Civility & Respect there, & after Dinner took us to view the Fort <Src. which is small but the greatest Order & Regularity among the People, & is well adapted as a terrorim [?] for the Indians, which is very necessary, after this we went on board the Kings Schooner which carries 18 Guns, on our leaving the Shore we were saluted with a Cannon & on our Arrival on board the Schooner were again saluted, from hence on board a Merchant Sloop who saluted us & our having them we were again saluted from the Fort, the Capt. was polite enough to accompany us to Niagara, which we reach'd abt. 11 O Clock at Night, there are in Lake Erie two Kings Ships & three Merchantmen, they have all very convenient & pretty Accomodations [sic] for Passengers & the Provisions to supply the Different Garrisons on the Lakes & the Peltry Trade, together with the Wet & Dry Goods which are sent to Detroit & Mishalymackinet [Michilimackinac] keep them in constant Employ, they go thro Lake Erie to Detroit & to & beyond Lake Huron [400 Batteaus this Spring], there are in Lake Ontario but 2 Topsail Vessels, these go as Occasions require from Niagara to Oswego & Otswegotchy, & are pretty constantly employ'd tho so many Batteaus ply up & down this Lake that the far greater Part of Goods & carried in them — Lake Ontario is very deep & no Anchoring Ground near the Middle which give Lake Erie a very great Advantage

19th July This Morning (having gone to bed late last Night) we slept pretty sound till we were waited for at Breakfast after which went to see the Indians & purchas'd some of ther Toys as we set off for the Fort, but one of the horses we had borrow'd having run off we were supplied by Stedman with one of his — took Leave thankful for their kindness, we set off, & tho the Road we had travell'd before, it had too many Beauties to miss of entertaining us — we got to the Fort abt. 2 O Clock & immediately after receivd a Card from the Col. to dine with him & soon after one from Lt. Phister the Engineer to dine with him tomorrow, both wh. we accepted[87]

The masonry east curtain wall was a constant source of concern as the water and ice scoured the stone each winter and spring. In 1774 and 1775, sun and wet weather were also cited as causes for deterioration of the stockade, planks used in the platforms – presumably the gun platforms in the bastions and possibly the surface of the banquettes – as well as masonry, especially next to the lake. It was recommended that lime had to be burnt for the masonry repairs, suggesting that a lime kiln needed to be built. Timber was in short supply and in February 1775 it was noted that the work had been delayed.[88]

In mid-March 1779, the fort was in especially bad repair as noted in the Haldimand papers.[89]

To your Orders, In obedience to your orders I take the first opportunity to lay before you the State in which I found this place owing to the late Storm and Flood. The wall upon which the log work and Picketting was erected on the side next the River is almost entirely destroyed, there being four Breaches made quite through it, one of 24 Feet long from within 3 Feet of the salient angle of the East Bastion towards the water Port, another of 12 Feet under the Water Port, and two smaller ones there and several others, but not through the Wall, and the parts of it that remain standing are considerably shaken.

In this season of the year, nothing more can be done than to make up the Breaches in the most expeditious manner possible to preserve the Bastions from falling. In the Summer it will be absolutely necessary to pull the whole down and rebuild it properly with Stone and Lime, or (what I think would answer better) with a very stout frame filled with dry stone work. The situation is upon flat solid Rock where a Foundation of a Wall cannot be sunk. Masonry therefore, unless well executed and very solid, must always be subject to Injury from the very violent surf that rolls in against it from the Lake with strong westerly winds, which prevail most here, and always occasion very high water.

The Place, in other respects, is in much need of Repairs – the Pickets are become very rotten and the Barracks and Store House must be new shingled. . .I am in the mean time cleaning the Breaches and making other preparations for the work.

[87] A Quaker's Tour of the Colonial Northeast and Canada: The 1773 Travel Journals of Jabez Maud Fisher of Philadelphia, Jack Campisi and William A. Starna Source. Transactions of the American Philosophical Society, New Series, Vol. 104, No. 4 (2014), pp. 27-29.
[88] Ibid., p. 26.
[89] Ibid., p. 27.

During the American Revolutionary War, in spring of 1779, Capt. Dietrich Brehm, Sir Frederick Haldimand's aide-de-camp, was sent to inspect the line of communication between Montreal and Detroit. He wrote the following to Haldimand on May 12:

> *I have been to Fort Erie and examined the State of said Fort, and found it in a bad condition; the Pickets which surround it are decayed, the Barracks and Storehouse Roofs wants almost (sic) new covering, and the whole irresistable (sic) against the smallest canon (sic) brought against it. Said Fort does not Command the ground surrounding it, but still is not commanded by any ground near it, and therefore might be made defensible (against such canon (sic) as would possibly be brought against it) by a Facheen (sic) & Earth Work being made, to cover three sides of it. This post having no more Men then (sic) necessary to carry out the indispensible (sic) repairs. . . to be made at Fort Erie, until Your Excellency will be enabled to send a reinforcement. Except an abatic (sic) . . . there to began (sic) as soon as I return to said Post in my way to Detroit.*[90]

Preparations to strengthen Fort Erie during the revolutionary war speak to its strategic value in the line of communications to forts further west. This was still a frontier within a small population and limited number of forts to control a vast territory. Three days later Brehm wrote that the works had begun with a detachment of the 47th Regiment of Foot. There are no plans indicating the specific location of an earthwork around the fort and abatis would leave no archaeological signature. However, an 1804 view of the fort by Edward Walsh (Document 13) does appear to show a ditch and an earthwork on the northwest corner of the fort in association with a blockhouse – the King's Store (discussed below). To further strengthen the position reinforcements were bought into the Niagara frontier and Haldimand wrote that

> *. . . it will be therefore necessary to make some provision . . . by Building rough Log Houses . . . at Fort Erie. . . the Provision Store at Fort Erie. . . will hold a number of men.*[91]

The reference to the provision store, perhaps the building along the west curtain, is important because this alteration is something that will have archaeological implications. The 1773 plan by Pfister already indicates that the long storehouse along the west curtain had been converted into two separate structures – perhaps as early as 1766 as shown by a discontinuous east and west wall. Archaeological evidence of the change would be visible as structural evidence, and if the change in function from a storehouse to a barracks occurred within this building this should be reflected in the material culture.

[90] Ibid., p. 30.
[91] Ibid.

DOCUMENT 9

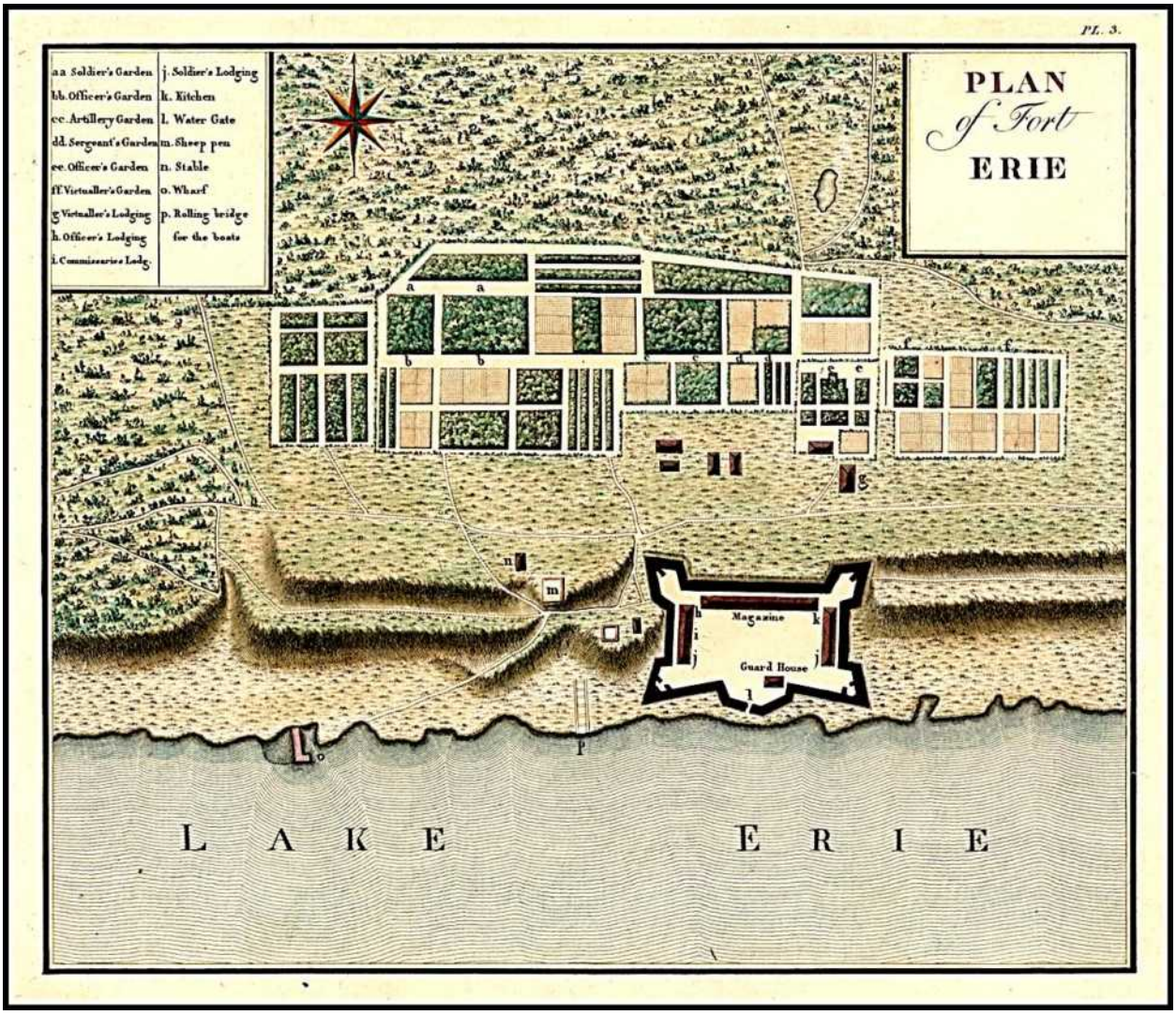


Figure 58. Plan of Fort Erie, attributed to George Henri Victor Collot, dated 1796 - probably in error. Research by J. Triggs suggests this plan dates ca. 1779/1780 during the revolutionary war period. Map available in *The First American West: The Ohio River Valley, 1750-1820* http://memory.loc.gov/ammem/award99/icuhtml/fawhome.html, part of the American Memory collection hosted by the Library of Congress.

The Plan of Fort Erie attributed to Collot is the most detailed rendition of the fort. Not only are architectural details within the fort depicted, but the landscape around the fort is drawn in exquisite detail. The accompanying legend renders the map all that more valuable. Within the fort the building on the south wall accommodates the officers, commissary, and soldiers. The north wall building is for an additional soldiers' barracks and a kitchen. Gun embrasures and associated firing platforms appear in all bastions. Interestingly, the powder magazine in the northwest bastion is not depicted and instead a 'Magazine' is shown on the west curtain wall. The 'Magazine' in this instance likely refers to the *magasin* or storehouse that was situated along this wall in the 1766 and 1773 plans by Pfister. The powder magazine or *magasin de poudre* would probably have been labelled as such, which begs the question as to where this facility would have been located. Possibility one of the unlabelled structures

outside the south curtain wall served this purpose. The guardhouse is located just inside the water gate, depicted as it is in the 1773 Pfister plan.

Outside the fort walls to the west are extensive gardens, apportioned for soldiers, officers, a sergeant, the Royal Artillery, and a victualler. The soldiers' gardens are the most extensive followed by the officers, the victualler, the artillery, and the sergeant. Six buildings are shown in the vicinity of the gardens, one of which is labelled as the Victualler's Lodging. (Archaeological excavation by WLU in 2013 may have exposed the latter structure, and the other buildings to the south in 2015 and 2017. This is discussed further in the Overlay Analysis below.) A sheep pen and stable are shown to the south of the fort as is a boat slip. The two unidentified structures on the bluff directly south of the south curtain wall are not labelled and as mentioned above, one of these may be the powder magazine. A small wharf is depicted some distance to the south of the fort.

In all reference to the plan, the date is cited as 1796, drawn when George Henri Victor Collot was commissioned by the French Minister to the United States, Pierre Adet, to reconnoiter the interior on the continent. Collot travelled with a small party (including French military cartographer Joseph Warin) to the head of the Ohio River in Pennsylvania, down the Ohio to the Mississippi, up the Missouri and Illinois Rivers, eventually ending his journey at New Orleans. Importantly, his travels did not take him to Lake Erie. Along the way plans were made of military installations. Collot was arrested by Spanish authorities in October 1796 in New Orleans and sent out of the country a few weeks later. Collot has been described as a spy for the French government, a charge which is convincingly substantiated by Neil Hamilton.[92] The Americans were suspicious of his activities and Zebulon Pike even shadowed his expeditions and arrested him in Illinois, where he was later released due to a lack of evidence against him. Ironically, during the Revolutionary War, Collot had served as an aide-de-camp for French General Rochambeau whose troops fought alongside George Washington. Afterwards he was promoted to Major-General and served as Governor of Guadeloupe in 1793. Collot returned to France and wrote up his extensive notes which were published in French and English in 1826.[93]

There are several problems with dating Collot's map to 1796. The most compelling evidence for this being an earlier date is that by 1794 the two bastions on the east side of the fort were no longer in existence having been washed away by the lake (discussed below in connection with Document 10). A 1790 reference does describe the bastions as still being extant but in a ruinous state. A much earlier date for the plan is suggested here based on a reading of the available evidence. Given that Collot did not actually travel as far north as Fort Erie, only as far as modern-day Pittsburgh and then west, the map must have been drafted by someone else who had an intimate familiarity with the fort. Features depicted are not only done accurately (discussed in the Overlay Analysis below) but also include details that correspond to descriptions of the fort in the 1770s.

Many similarities are apparent between the Pfister 1773 map and the Henry de Berniere view of the fort in the same year. For example, a building shown to the south of the south curtain wall on the outside of the fort shown in the Collot map is also shown on the de Berniere view, and the waterfront, east curtain and interior buildings correspond to the map. Additionally, the extensive gardens described

[92] See Hamilton, Neil A. "A French Spy in America." *American History* 1999 34(3): 22-28; and Lewis, Clifford M. "The Reconnaissance Expedition of Two French Navigators" *West Virginia History* 1981 43(1): 21-38.
[93] *Journey in North America, Containing a Survey of the Countries Watered by the Mississippi, Ohio, Missouri, and Other Affluing Rivers 1796,* A. Bertrand, 1826, Paris.

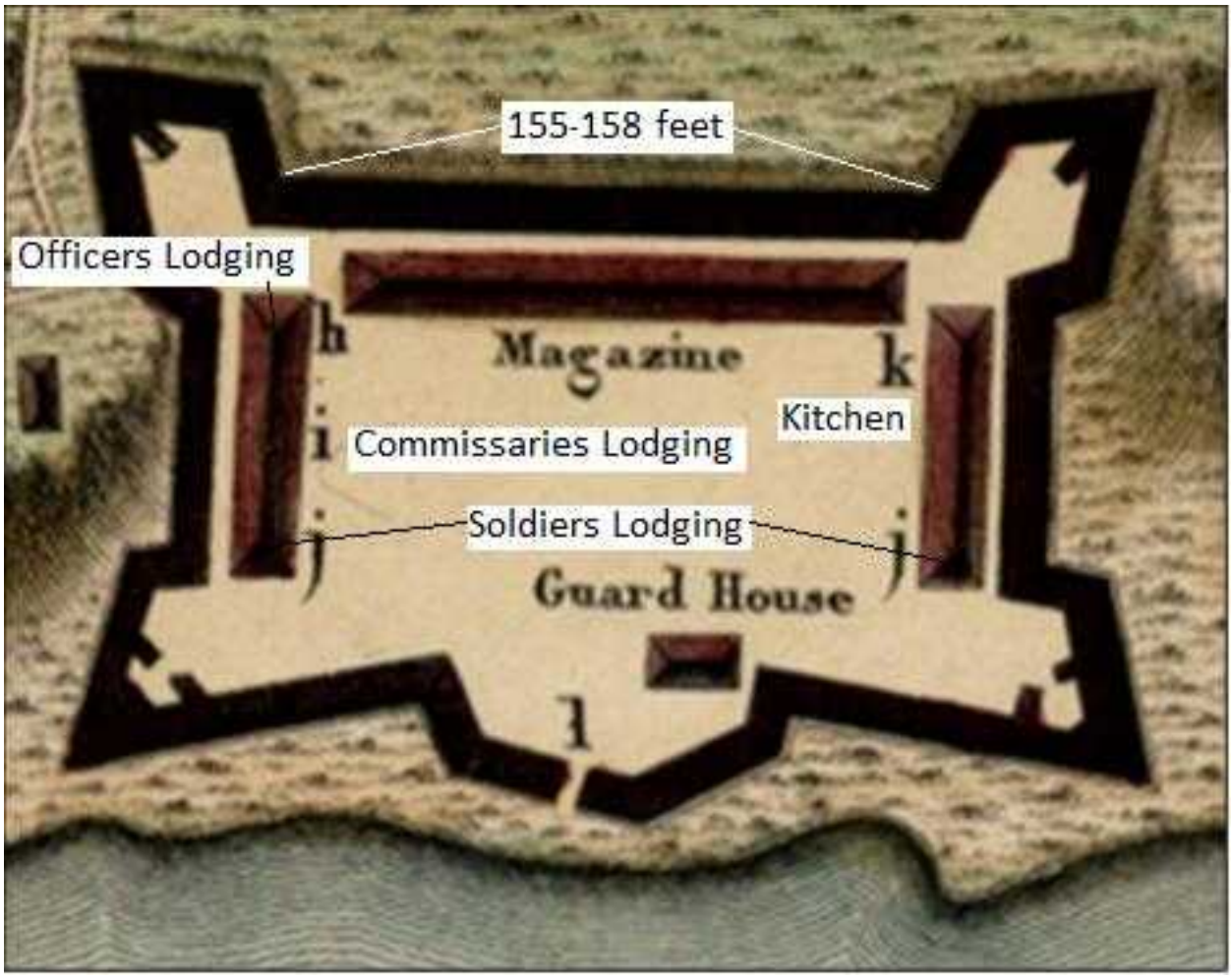


Figure 59. Detail of Plan of Fort Erie, attributed to George Henri Victor Collot, dated 1796 - probably in error. The suggested date is ca. 1779/1780.

by Ensign Lister in 1774 are clearly shown in apparent full bloom on Collot's plan (indicating it was drafted in the summer or fall months). The interior layout of the fort is also similar to Pfister's plan excepting that the accommodations for soldiers and officers in the buildings along the north and south curtain walls are slightly different, with a notable increase in the size of accommodations for soldiers within the fort. This is of interest because the need for additional space for a larger contingent of soldiers was noted by Brehm in 1779 in response to anticipated aggression by the Americans. A *Return of the Works done in the Engineer's Department at Niagara and it's Dependencies, between from 25th June to and 24th December, 1780 inclusive* describes the store having been made into a soldiers' barracks 48 x 21 feet.[94]

Later maps from the 1790s allow for an accurate calculation of scale. These show the west curtain as being consistently between 155 and 158 feet in length. The magazine or storehouse, always depicted along the west in all maps, is about 132 feet in length, or as the 1766 and 1773 plans show, two buildings that would have been about 59-60 feet long each with a 10 foot wide spacing between. The building that fits the description of the storehouse that had been refitted for a soldiers' barracks in

[94] Owen, p. 31.

1780, measuring 48 x 21 feet, is possibly the building on the north curtain. The Collot plan shows the footprint of this building as ca. 72 feet by 21 feet. If one third of this structure was used for the kitchen (about 24 x 21 feet) then the remainder would measure about 48 x 21.

The map probably does not date after 1781 as suggested by the following. On the 30 May 1781 Haldimand was informed of the construction of a storehouse for the merchants. This building may be the King's Storehouse later shown on the 1794 plan (Document 10 below) which was a square, two-story, fortified blockhouse situated adjacent to the northwest bastion.

> *The Detroit Merchants having no cover for their goods at Fort Erie, I desired the Engineer to mark out some ground for a Store house, and have given leave to Mr Garner, who came out from England last summer, to build one.*

Together, the evidence suggests that the Collot map dates to the period of the Revolutionary War ca. 1779 when more troops were garrisoned at the fort, and prior to 1794, when the east curtain or water side of the fort was no longer extant. More convincing is the reference to the construction of what may be the King's Storehouse in 1781, which is not depicted on the Collot plan. The preponderance of evidence seems to suggest that the Collot map shows Fort Erie as it stood ca. 1779/1780 when the fort and surrounding area was a neat, well-organized installation in a good state of repair – much as was described by Ensign Lister and Jabez Maud Fisher in 1773/74.[95] The issue surrounding the dating of the map may be attributable to the delay in publishing. The plan was originally published as one of 36 maps in *A Journey in North America*.[96] This work was based on the notes made by Collot during his 1796 expedition. Collot died before the publication of his journey, in 1805, but the work was engraved and printed in the same year. The actual publication date was some 20 years later in 1826 by M. Bertrand who published and English and French edition (100 English and 300 French copies).[97] The delay in publishing the posthumous work may have contributed to errors in dating some of the actual materials included in the work, specifically the map of Fort Erie, which was in all probability drafted by someone other than Collot.

Between 1781 and 1790 Owen provides various accounts of the fort that describe it as in a state of ruin, particularly the east curtain and demi-bastions, as well as other buildings in need of constant repair.

> 20 May 1781 *. . . Fort Erie. . .is in general in a bad state of defence. The face next the Lake is laid clear open by the late storms, and the whole Fort must be new picketed. The artificers are now repairing the works. . .*
>
> 20th June 1781 *. . . Fort Erie new picketed, and the Stonewall, next the Lake repair'd . . .*

[95] Alternatively, Owen (pp. 33-36) attributes the date of 1791 to the Collot plan, which he describes as simply the 'sketch' of the fort with no attribution as to the author. There is no reference as to how this date was determined.
[96] A Journey in North America, containing a Survey of the Countries watered by the Mississippi, Ohio, Missouri, and other Affluing Rivers; with Exact Observations on the Course and Soundings of these Rivers; and on the Towns, Villages, Hamlets, and Farms of that Part of the New World; followed by Philosophical, Political, Military and Commercial Remarks, and by a Projected Line of Frontiers and General Limits. Illustrated by an Atlas of 36 Maps, etc. By Gen. V. Collot, late in the French Service, and Governor of Guadeloupe.
[97] http://www.davidrumsey.com/maps5641.html; and https://www.raremaps.com/gallery/detail/29410/plan-of-fort-erie-collot

> June 25-December 24, 1782 . . .*At Fort Erie – A Barrack Room fitted up for two officers, new floored, glaz'd &c*
>
> December 23, 1783 . . .*22 logs cut, brought home, and sawn into boards -- Stones quarried to underpin the Storehouse, repair the chimneys, and make Lime – Necessary repairs done to the Officers and Soldiers Barracks.*
>
> 24 June 1784 . . . *Fort Erie – The Barracks, Oven and Chimneys repair'd*
>
> 15 July 1784 . . . *Major Ancrum reports the Pickets of Fort Erie to be in so rotten a State, that he expects to be laid quite open soon. I have desired him to support them in the best manner he can until I have Your Excellency's orders respecting that Fort . . .*[98]

During excavations in spring 2019, in unit G a post hole was found adjacent to the interior of the face of the northwest bastion in which there was evidence for repair to the original post placement through the addition of clay and stone around the perimeter of the hole. The hole is likely associated with the gun platform or banquette in that location.

> August 8, 1786 . . . *Fort Erie is a stockade (sic) now almost in ruins, situated at the entrance to Lake Erie . . .*
>
> August 10, 1786 . . . *the Fort is pleasantly situated and has a full view of the Lake, which opens gradually about half a mile below the fort . . . The Fort . . . is a miserable situation, most of the pickets decay'd and many quite down.*[99]

A report made to Lord Dorchester on 6 December 1788 by John Collins, the Deputy Surveyor General, who worked alongside Gother Mann (below) at this time describes the sad state of the fort.

> *The whole of Fort Erie is in so wretched a state and altogether so much in ruins that it is not easy to say which is the worst part of it. The picketing is altogether rotten and great part of it is gone and the front next the water which has a stone wall has been washed away by the encroachment of the Lake. The barracks by dint of patching and temporary repair has been kept habitable . . . The storehouse is in so bad a state that it is almost past repairing, it must be entirely new shingled or rather if it can be got a bark covering . . . the building is hardly worth the expense of new shingles. The weather boarding and underpinning is scarce in a better condition but it may be made to do for another season. It seems doubtful whether the bake house can stand the winter, but the oven may be repaired; the wharf and boarding place wants repair; this would have been better placed to the northward of the Fort where boats would have been much better sheltered.*
>
> *I cannot recommend re-establishing or making any alterations to the present Fort as it appears improperly placed; the rising ground behind would I conceive be the proper situation, the Harbour is a tolerably good one, and altho' there is sometimes a swell from the Lake, yet vessels*

[98] Ibid., p. 31.
[99] Ibid., p. 32.

may ride here in safety, taking proper precautions for preserving their cables as the bottom is rocky. There does not appear to me any other place equally eligible.[100]

The reference to the poor situation of the fort foreshadows the later development which saw the old fort abandoned and a new one built on the higher ground to the west 17 years later. That repairs and modifications were carried out at Fort Erie over the next several years points to the strategic importance of the fort within the line of British communications during the uncertain period between the Revolutionary War and the War of 1812.

May 1790 *[Fort Erie] . . . is on the British side, and at the foot of the Lake, and is well situated for the protection of Merchandie &c.*

July 1790 . . . *The work consists of four small Bastions, two of bad mason work washed by the lake, and two on the land side stockade, it is quite in ruin, and was originally very improperly placed, being commanded in turn [by] a short musket shot and exposed to injury from the Lake in Southerly and Westernly winds, if we keep that Country a good Post here will be indisensably (sic) necessary.*

fall 1792 . . .*The upper part of the blockhouse made use of as a provision and transport store* [the King's Store built in 1781] *will require to be weatherboarded and painted to preserve the building. It is 54 feet long and 30 feet wide and 10 (?) feet high. The upper floor projects two feet from the lower part which is built of stone. The door and window shutters require some repair, and sliding shutters for the loop holes wanted.*

The barracks for both Officers and men are so decayed and ruinous a state that they are not worth repair. There are quarters for one Captain and one Subaltern besides the commissary lodge in the barracks room that can be fitted for 36 men if proper berths are provided.

It will only be necessary to make the usual annual repairs to these buildings till a new barracks can be erected to contain the number of troops that may be judged to be expedient to occupy the post.

A new staff flag is required the present one is decayed and much too small to hoist the colours of the post. The excavation that was begun for the reception of the batteaus (sic) is filled up with sand – The timber provided for the wharf is decaying – It does not appear that this work can be continued with success, or that it will answer the purpose intended. A new Century (sic) box is wanted there being none at the post.

The bakehouse and oven require a thorough repair being unserviceable.[101]

The next set of plans dated 1794, 1798 and 1803 are all produced by Gother Mann, Commanding Officer of the Royal Engineers in Canada (1788-1805 -not continuous service). The three are similar in their

[100] Ibid., p. 32.
[101] Ibid., p. 34.

Figure 60. Gother Mann, Practitioner Engineer and Ensign, 1763 aged 16. Unknown Artist, Published Fonds of Library and Archives of Canada, Acc. No. MIKAN 2958032, C-020236.

depiction of the old Fort Erie, next to the lake, and the proposed, larger fort to be built on the high ground to the west – the current Fort Erie National Historic Site.

The earliest plan is a direct outgrowth of Gother Mann's recommendation for a new fort on 29th October, 1792.

Fort Erie is not in a more defensible state than Fort Schlosser, every part of it, both works and buildings, are nearly in ruins except the new wharf and storehouse lately erected for the accommodation of the transport of Government effects. I think . . .that the situation of this place, being at the head of the communication between the two lakes, having a tolerable harbour and as vessels cannot conveniently go such lower down the river, that, under all these circumstances, it certainly has a degree of importance and will, therefore, demand some attention whenever the system to be established for the security of the frontier and the necessary protection to the trade and settlements shall be under consideration. With respect to any works of defence which it may be proper to construct here, they ought to be placed on the rising ground at the back of the present fort.[102]

In July 1793, a visiting American representative on his way to a council of First Nations in the Northwest Territory described the gardens at Fort Erie.

> *While at Fort Erie, the commanding officer invited me into his garden, which was very handsomely laid out, and in excellent order, and vegetation in great forwardness. Besides having the common cherry, the currant &c, I found his potatoes in blossom, as also his cucumbers, his melons and his Indian beans ready to be eaten as stringed beans, and his Windsor beans fully grown. These observations are of no other importance than as they show the state of vegetation in this climate on the 2nd of July. [July 3rd]... I dined on shore with Captain Pratt. We had from his garden, peas, beans &c also new potatoes, which were planted about the middle of April, and were now as big as eggs.*[103]

A later reference by Capt. Pratt described the state of the works.

> *The barracks are in so bad a state as to render repair necessary, on the approach of winter. The store house within the fort in the same bad state as the barracks. The store house, or blockhouse, adjoining in perfect good condition. A good wharf for the loading and unloading of stores. . . necessary; also a place of security for the battoes (sic). A guard house wanting; also a necessary house for the men. The difficulty of procuring fuel is increasing as to leave room to*

[102] Ibid., p. 35.
[103] Owen, p. 36.

> *apprehend that the present mode of supplying the post with that article, may in a short time be attended with extreme labour to the troops.*[104]

Lieutenant-Governor wrote to Lord Dorchester in early December 1793 to report that a recent storm had almost completely carried away the wharf at Fort Erie. In August 1794 Capt. Pratt again reports that all previous works are still wanted, perhaps with the exception of the soldiers' necessary, which was not mentioned, and a wharf, and skids or planks for rolling barrels to and from the stores.[105] A plan completed by Gother Mann in summer 1794 (Document 10) provides a detailed depiction of the fort showing the state as described by Lieut. Governor Simcoe a few months earlier.

[104] Ibid., p. 36.
[105] Ibid., p. 37.

DOCUMENT 10

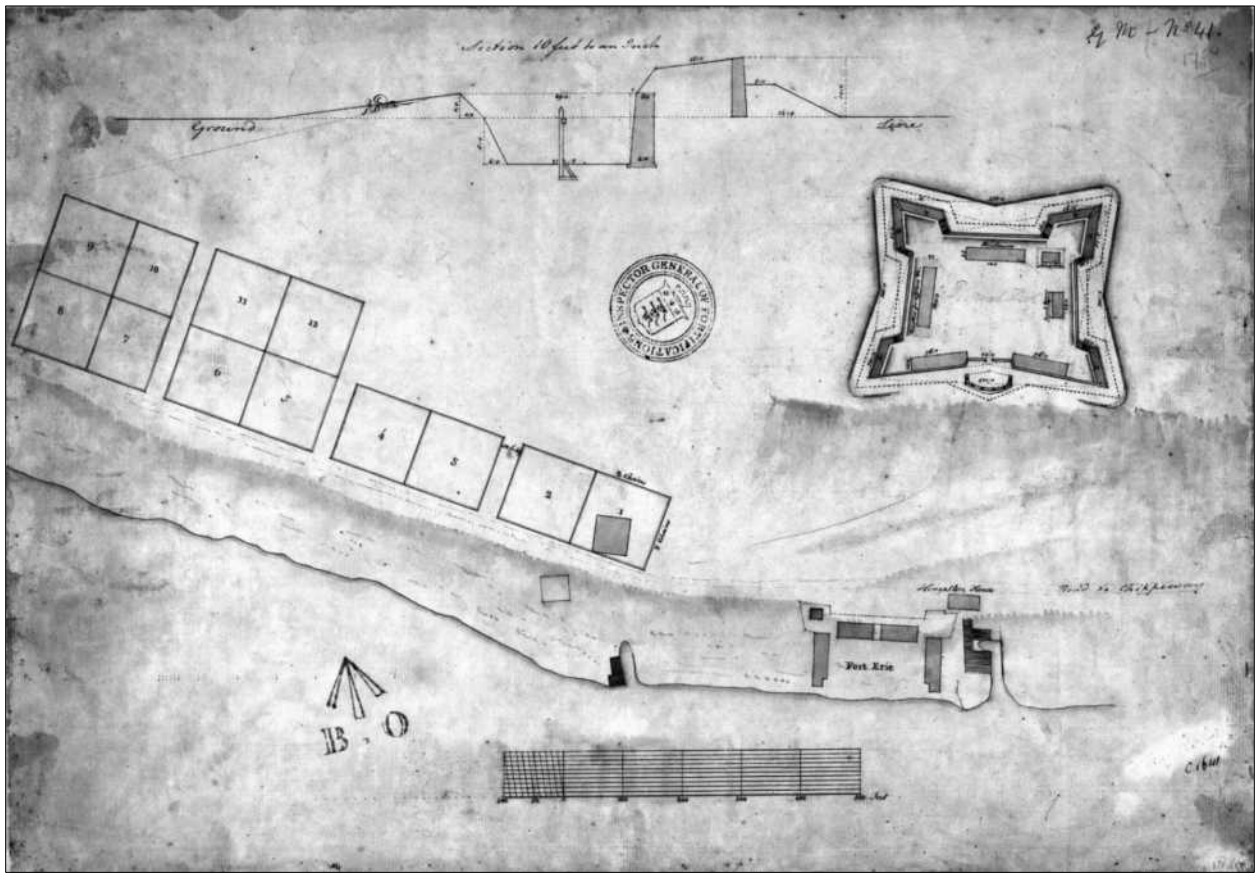


Figure 61. Plans of Proposed Fort Erie, 1794, (*GM 41* in top right corner – Gother Mann), NMC 5258.

Captain Gother Mann, Commanding Officer of the Royal Engineers in Canada was a well-trained cartographer and engineer who graduated from the Royal Military Academy at Woolwich (London) in 1763. In 1778 Capt. Mann was instructed by Lord Dorchester (Guy Carleton) to make an investigation of the fortifications between Kingston and St. Mary's (Sault Ste. Marie). He is credited with producing a 34-page report on the state of fortifications which he found sadly wanting in many regards, Fort Erie among these. His map of Fort Erie follows recommendation of October 29, 1792, for a new fort to be constructed on higher ground behind the present fort.

Drawn by recently promoted Lieutenant-Colonel Mann,[106] probably in the summer of 1794, the state of ruin at Fort Erie is apparent from the detailed plan. Based on the scale provided, and there is good reason to assume this is accurate given the credentials of the cartographer, the length of the west curtain wall between the shoulders (short side) of the bastions (Figure 61) is 155 feet. The most telling evidence of the decrepit state of the fort is the absence of the waterside east curtain and bastions. These had been described previously as being in disrepair and subject to constant, almost annual, maintenance for 25 years. The wharf to the north of the fort may be the one constructed on John

[106] Dictionary of National Biography, 1885-1900, Volume 36, by Robert Hamilton Vetch. https://en.wikisource.org/wiki/Mann,_Gother_(DNB00)

Collins' recommendations of 1788. The old wharf to the south of the fort is still in existence but probably of diminished importance and used by merchants only. The stockade around the west curtain and associated bastions is indicated as described in July 1790.

The 'King's Store House' situated on the 'Road to Chippeway' corresponds to the dimensions provided in the fall 1792 account – 54 x 30 feet. This may be the 'Store house' built and designed by the Royal Engineers for the merchants' use referred in the May 30, 1781 correspondence. The building shown on lot No. 1 (2 chains or 132 feet square) is shown on a later plan as that belonging to Robert Hamilton who came to Niagara in 1784 or 1785 and established his main operation in Queenston. Hamilton was one of the most important merchants in the province – financed by Todd and McGill of Montreal - serving as the main supplier to the British army in Niagara, and also one of a small number of fur traders operating in the province – many of whom were linked by family ties. His transportation infrastructure (wharfs, storehouses and portage routes, especially the Niagara portage) was built by the military which he continued to use for carrying out his own business. Hamilton, along with his partners, John Askin (Detroit), Richard Cartwright (Cataraqui), William Robertson (Detroit), and family (Thomas Clark and the Dickson brothers), formed an essential link in the chain of British communications, trade and defence of the province. Between 1786 and 1800 he supplied between 35 and 100 percent in total value of goods to the military.[107]

Figure 62. Portrait of Robert Hamilton, (*after) a miniature in the possession of grandson, Clark Hamilton, Kingston, Ont*. Toronto Reference Library, Baldwin Collection, JRR 1306 Cab.

Other features shown on the map are the two storehouses along the west curtain (which are depicted as two buildings as early 1773, and possibly 1766, by Francis Pfister. The soldiers' barracks, commissary's and officers' quarters shown on the Collot plan are also depicted with a small addition on the south end. The new appearance of the Fort Erie as a two-bastioned fortification, stockaded on two sides only, stands in sharp contrast to all earlier depictions. The proposed new fort, to the west and on higher ground, is larger and designed to answer to the new requirements of a stronger military presence on the Niagara frontier.

In September 1794 Gother Mann penned the following description:

The barracks and store house within the fort having for some time past received only such repairs as were absolutely necessary from year to year, no doubt something is again requisite to be done to them. A wharf is necessary, but from the nature of the shore and its being much exposed, it is difficult to construct one that may defy the surf and shoals of ice; it would . . . be better . . . to blow away part of the rock and excavate a small basin to answer the purpose of a wharf . . . if this cannot be done without too great expense, to make a strong floating stage or wharf such as is used in the naval yards in England. I cannot say how far the guard house mentioned as wanting is absolutely necessary.[108]

[107] Dictionary of Canadian Biography, Volume V, 1801-1820.
[108] Ibid., p. 38.

A description of the fort in the summer of 1795 by the Duke de Liancourt, identifies buildings within the fort as

> *. . . roughly formed of wood and surrounded with tottering palisades. The buildings, which are all of them blockhouses, are inhabited by the officers, soldiers, and a commissary of provisions [probably John Warren – see Document 11 below]. Without the precincts of the fort stand four similar houses destined for the habitation of the workmen, and a large magazine or storehouse belonging to the King. The upper story juts out beyond the ground floor, so that all who should attempt to approach the storehouse might be easily kept off with firelocks by means of openings made in the upper story. This fort is to be considered merely as a point of defence against the Indians for the British trade on the lake . . .*[109]

The description of the King's storehouse corresponds with earlier writings as does the description of the palisade which always seems to be in a dilapidated state in need of constant repair. The buildings described may be the ones that appear on the Collot plan of more than a decade earlier, and possibly those that show up on a watercolour done by Edward Walsh in 1804 (Document 13).

In August 1795, Lieutenant-Governor Simcoe arrived at Fort Erie with his wife, Elizabeth. While there the Lieut.- Governor held a conference with the Six Nations at the fort on August 28 and 29. Mrs. Simcoe, was quartered in an '*indifferent house, two miles beyond the Fort, kept by very dirty people, but it has the advantage of being very near the lake*.' She elected to spend most of the next two days in a tent pitched in some trees on a beach[110] in a '*very pleasant spot*', the house being '*too dirty to stay in*.'

Figure 63. Portrait of Elizabeth Postuma Simcoe, unknown artist, 1790. Toronto Reference Library, Baldwin Collection, Acc. No. JRR 3264 Cab.

Figure 64. Portrait of John Graves Simcoe, by Jean Laurent Mosnier, 1791. Toronto Reference Library, Baldwin Collection, Acc. No. 927-1 Fra.

[109] Ibid., p. 38.
[110] This is likely Crescent Beach based on the distance.

Figure 65. 'On Lake Erie near Fort Erie', August 28, 1795. Archives of Ontario, Elizabeth Simcoe loose sketches, F 47-11-1-0-172.

The conference held at Fort Erie with the Six Nations, and most probably other Nations, speaks to the continued importance of Fort Erie as a place of strategic military significance during a time of simmering hostilities with the United States. Encroachment on Indian lands in the Northwest Territory (Ohio and Michigan) by the United States had begun in the early 1780s and several conflicts between a new federation of united tribes and the newly formed United States had already taken place. The British were caught up in this conflict as they were allies, ostensibly, and trading partners of the various First Nations. The year before a detachment of militia from Forts Erie and Chippawa were sent to the Detroit frontier to counter American military action against the First Nations. The increased artillery supplies at Fort Erie listed in a September 1795 inventory[111] are probably in response to this ongoing conflict.

In October 1796 another description of Fort Erie paints a picture of a fort in decline.

> *Fort Erie stands at the eastern extremity of Lake Erie; it is a small stockade fort, somewhat similar to that at Cippeway (sic); and adjoining it, are extensive stores as at Chippeway (sic), and about half a dozen miserable little dwellings . . .*[112]

In September 1799 the situation seemed to be even worse.

> *All the quarters require pointing and plastering and the roofs require attending to. Six sashes wanting, being blown out from the old casing. The ceilings of one of the rooms in the Commanding Officers quarters required to be lathed and plastered. All the doors and shutters out of repair. All the bottoms and many of the sides of the berths wanting. The oven and bake chimnies to be repaired. The whole of the barracks rooms, even after the repairs will be barely habitable.*[113]

Owen further notes that in 1801 supplies for repairs included *'scantling, plank, boards, shingles, tin, bricks, nails, panes of glass, putty and hinges.'*[114]

[111] Owen, p.39.
[112] Ibid., p. 39.
[113] Ibid., p. 39.
[114] Ibid., p. 40.

DOCUMENT 11

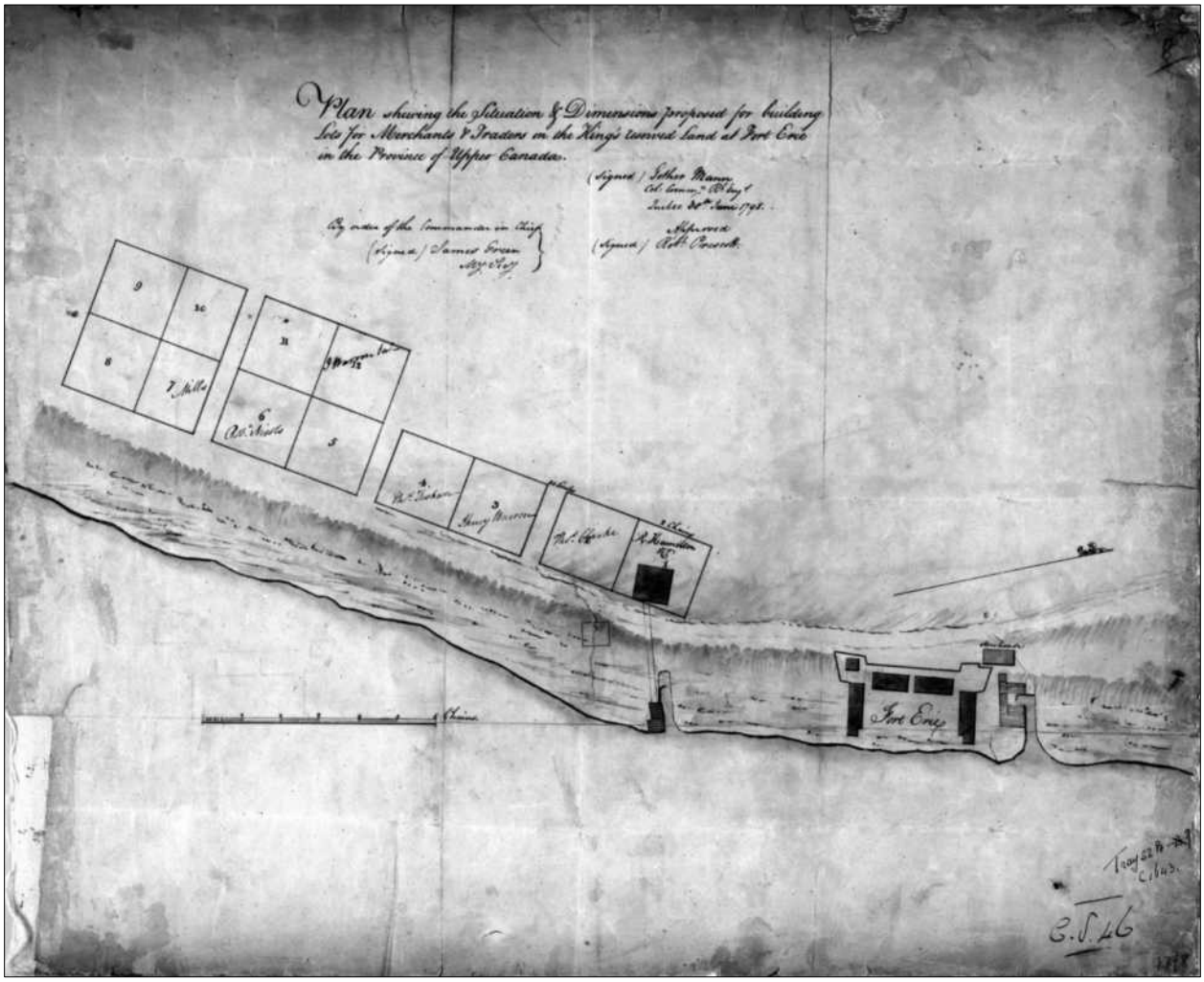


Figure 66. *Plan showing the Situation and Dimensions proposed for building Lots for Merchants and Traders on the King's reserved Land at Fort Erie in the Province of Upper Canada*. Gother Mann, 1798. NMC 3800.

Drawn by Colonel Gother Mann,[115] this plan dates four years after the first and is very similar in layout with a few additions. The plan was drawn at a time when tensions with the United States were increasingly worrisome to the British, two years after the signing of Jay's Treaty which returned British posts situated in American territory to the United States. The fort details as described in 1794 are indicated precisely as before including the wharfs to the north and south of the fort. The short bluff paralleling the lakeshore is shown with a greater emphasis on relief. The proposed new fort is not depicted. The 12 merchant lots on the 1794 plan now have seven inscribed names. Robert Hamilton is the only merchant with a storehouse. Other merchants include Thomas Clarke, Henry Warren, Thomas Dickson, Robert Nicols, J(ohn) Warren and (?) Mills. Everyone listed was part of Robert Hamilton's commercial enterprise based on extended family connections. Thomas Clark(e) arrived in Upper Canada

[115] Dictionary of National Biography, 1885-1900, Volume 36, by Robert Hamilton Vetch. https://en.wikisource.org/wiki/Mann,_Gother_(DNB00)

in 1791 to work for his cousin Robert Hamilton and he owned a wharf and store house at Fort Erie.[116] Henry Warren, may have been John Warren's father. John Warren began his career in the military and later was granted the position of commissary at Fort Erie in 1778. As commissary he oversaw supplies and military contracts for none other than Robert Hamilton and his partner John Askin of Detroit. In 1796 Warren received permission to occupy a lot on the military reserve upon which he subsequently constructed a frame dwelling. In a letter of 1797 to the Surveyor General of Upper Canada, David William Smith, Warren stated that his father had served the government for 18 years, and he himself had "served ever since the year Fifty five."[117] Thomas Dickson was another of Robert Hamilton's cousins who came to Queenston in 1789, apprenticed with Hamilton, and then opened shop at Fort Erie in 1793 where he sold goods to the garrison and received and forwarded goods for the military and the fur trade. He moved back to Queenston in 1796.[118] Robert Nichols was Thomas Dickson's Clerk at Fort Erie in 1794. He worked for Robert Hamilton as a sailor and lived in Hamilton's house in Queenston in 1792.[119] There is no indication of who the elusive 'Mills' on Lot 7 might have been but it is likely that he was another cog in the wheel of Robert Hamilton's business empire.

[116] Thomas Clark(e), Dictionary of Canadian Biography Volume VI, 1821-1835.
[117] John Warren, Dictionary of Canadian Biography Volume V, 1801-1820.
[118] Thomas Dickson, Dictionary of Canadian Biography Volume VI, 1821-1835.
[119] Dictionary of Canadian Biography Volume VI, 1821-1835.

DOCUMENT 12

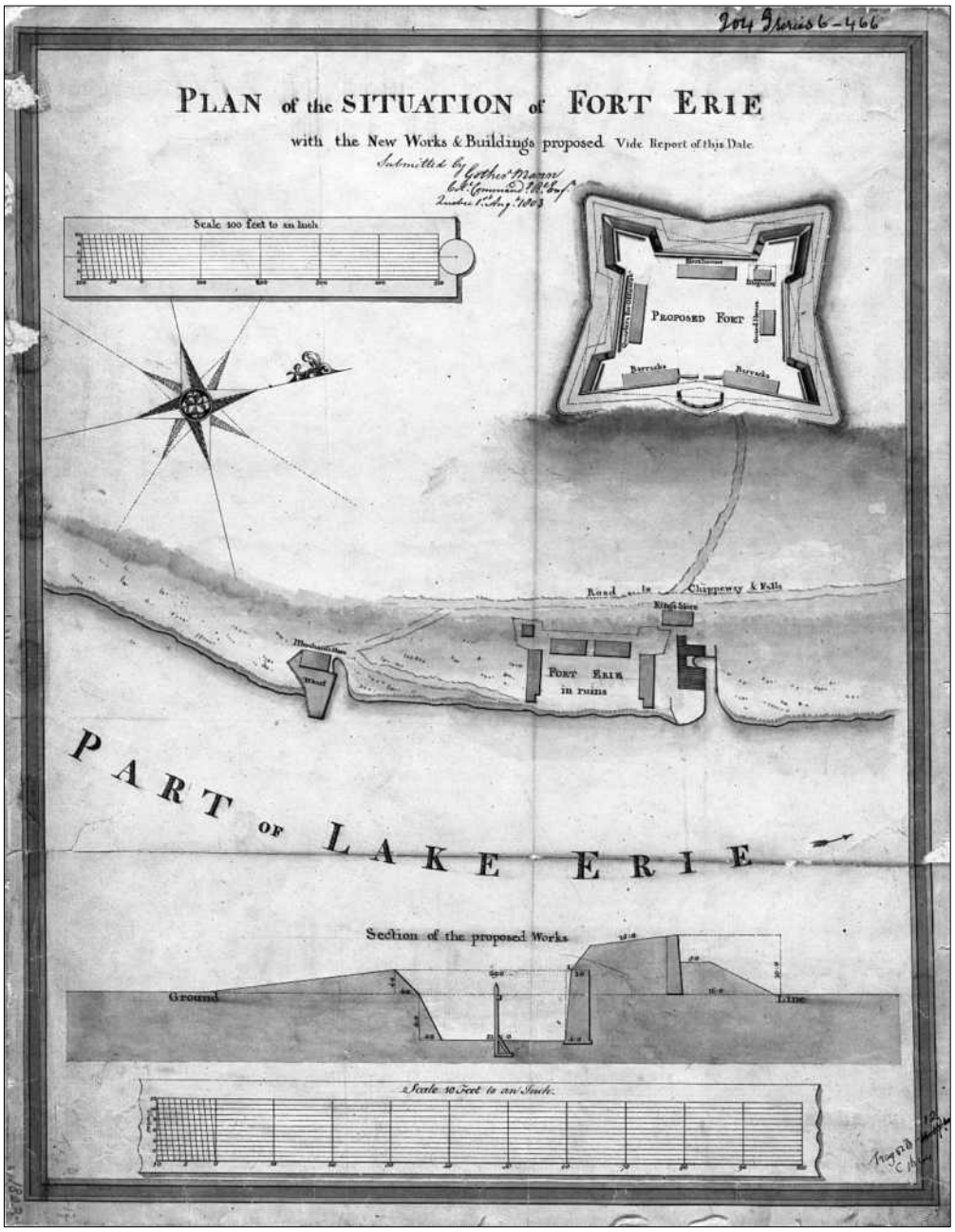


Figure 67. *Plan of the Situation of Fort Erie with the New Works & Buildings proposed,* Gother Mann, 1803, NMC Map number 3801.

Drawn by Major-General Gother Mann,[120] this is the last plan to depict the original Fort Erie built 39 years earlier. The plan is similar in many respects to the earlier 1794 and 1798 maps with a few exceptions. The interior layout of the fort is unchanged as is the wharf to the north of the fort. Although the merchant lots are not shown on this plan, the enlarged and improved 'Wharf' is shown to the south of the fort in the same location as five years earlier. The addition of the 'Merchants Store' next to the wharf indicates that the commercial enterprises at the fort were still significant. The King's Store at this point in time may have been exclusively for military use. The 'Proposed Fort' looks very much as it had on earlier plans.

The final blow to the fort may have occurred on January 6, 1803 when a storm washed away most of the barracks, with furniture, and the commanding officer's and commissary's quarters were

[120] Dictionary of National Biography, 1885-1900, Volume 36, by Robert Hamilton Vetch. https://en.wikisource.org/wiki/Mann,_Gother_(DNB00)

rendered uninhabitable. Gother Mann's description in 1803 is essentially the closing chapter of Fort Erie which would be replaced by a larger and better-situated fort in less than two years.

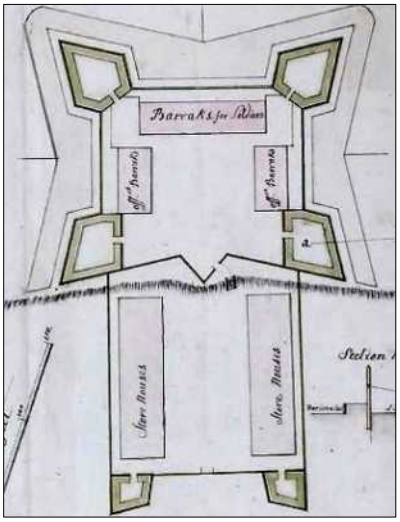
> *. . . [Fort Erie is] altogether of a temporary nature, being nothing more than an enclosure of strong picketing, containing several buildings serving as Quarters for Troops, Storehouses, etc., all of wood and equally perishable with the enclosure . . . last twenty years has been . . . a progressive course of decay and has been for some time scarcely tenable. The expensive mode of temporary repairs from year to year has kept part of the building from falling entirely to pieces; but what time and decay has not yet quite accomplished, was completed by a Storm which happened on the 6th of January last and the whole is now in ruins, except . . . Stone Building, which is a Store house and Blockhouse, constructed in 1797*[121] *and is in good condition.*

Two more views of Fort Erie (Documents 13 and 14) were produced before the fort was completely abandoned, and likely razed for the construction of the new fort, probably in the summer of 1805.

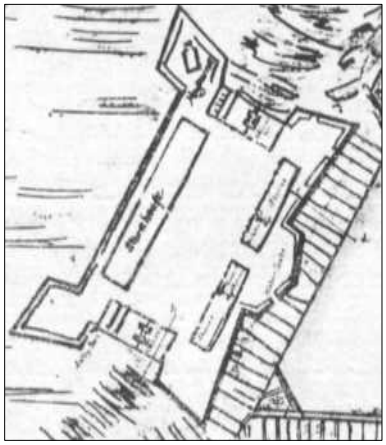
[121] This date is in error. The fall 1792 correspondence describes the blockhouse as a stone building with the top of wood and in need of repair at that time. Other correspondence points to the blockhouse being built for the merchants in 1781.

EVOLUTION OF FORT ERIE 1764-1803

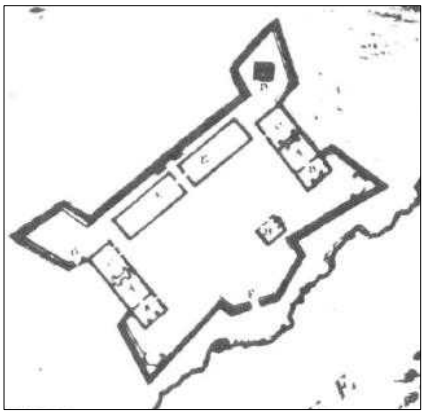
The figures below provide the structural evidence for the changes in Fort Erie from the 1760s through to 1803. Changes in interior layout and plan of the fort through time can be used to provide context for archaeological features found during excavation in 2019, and for future work at the site. The later maps indicate that the West Curtain Wall – measured 155-158 feet in length.



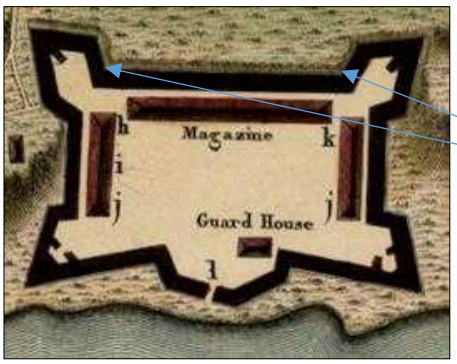
1764 (Bernard Ratzer) (proposed) West curtain = 87.5 feet



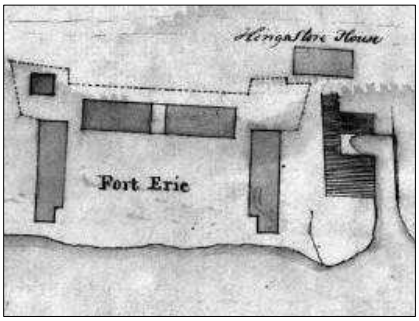
1766 (Francis Pfister) West curtain = 133 feet –probably in error



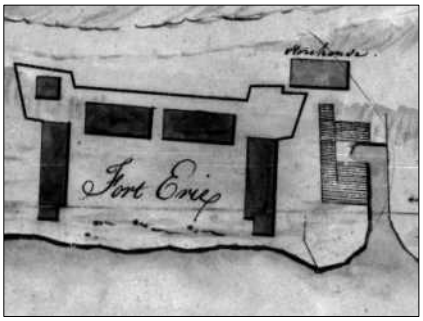
1773 (Francis Pfister) West curtain length cannot be calculated



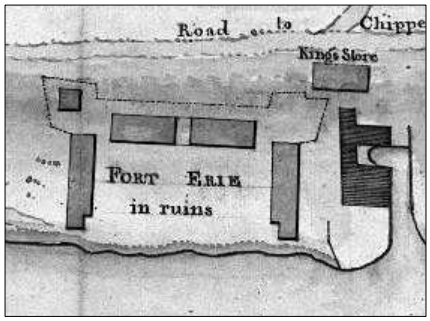
1780/1781 (G. H. V. Collot) West curtain = 155 feet (~ 47 m)



1794 (Gother Mann) West curtain = 158 feet



1798 (Gother Mann) West curtain = 155 feet



1803 (Gother Mann) West curtain = 158 feet

DOCUMENT 13

Figure 68. View of Fort Erie with Migration of Wild Pigeons, 1804, by Edward Walsh, Sigmund Samuel Collection, Royal Ontario Museum Acc. No. 952.218

Edward Walsh was the Surgeon in the 49th Regiment of Foot who painted extensively while posted to Fort George between 1803 and 1806. His paintings include wildlife, soldiers and often First Nations. In 1801 Walsh vaccinated the various groups living along the Grand River (Six Nations and Delaware primarily) against smallpox. He was acquainted with Tecumseh, the Shawnee chief who led a confederacy of united tribes against the Americans in the early 19th century and during the War of 1812. He also knew Thayendanegea (Joseph Brant), the Mohawk liaison with the British.

His watercolour of Fort Erie in 1804 is a quaint snapshot of the post about a year before the fort was replaced by the new Fort Erie. Under a flock of now extinct migratory passenger pigeons being brought down by birdshot-loaded, musket-bearing, soldiers, the buildings in the fort appear as described by Gother Mann in spring 1803. The blockhouse, with a lower story built of stone and upper of weatherboard, is located behind a small rise, possibly one of the defensive earthworks that were recommended by Brehm in May 1779. The buildings described in 1803 appear to have been made habitable as they seem to be in good repair, perhaps newly shingled. The detail or the buildings is extraordinary even showing the shuttered and paned windows described in earlier reports. The Road to Chippewa, as it was described at the time, runs in much the same alignment as present-day Lakeshore Road. Mrs. Simcoe recounts taking a coach from her 'dirty' lodgings 2 miles further along the road (in the opposite direction to Chippawa) back to Fort Erie on August 29, 1795. The garden pictured in the

Figure 69. View of Fort Erie with Migration of Wild Pigeons, 1804, by Edward Walsh, showing identified buildings based on map analysis and comparison with Sempronius Stretton painting.

foreground is mentioned as early as 1773 by Ensign Lister who refers to working the old gardens at that time, suggesting that these were a landscape feature from the very earliest days of the fort.[122]

Several structures are shown alongside the road and on the upper ground where the new fort was to be constructed. Different numbers of buildings are mentioned in documents for at least 15 years prior to the watercolour and are shown on the Collot (ca. 1781) and Mann (1798) plans. These were often described as accommodations for soldiers in various pieces of correspondence, however archaeological excavations in 2015 and 2017 revealed that some of these were officers' quarters as well.[123] In all instances, the archaeological evidence indicated the existence of later buildings overlying earlier structures associated with regiments who were at the fort in the 1770s. One structure was identified as a smithy complete with a stone hearth. The most distant frame house is in the approximate location of John Warren's Lot 12 as shown on G. Mann's 1798 plan. As mentioned above, Warren, the fort's commissary, was given permission to erect a frame house in 1796.

[122] Archaeological excavations in 2013 revealed evidence of garden trenches in association with a domestic structure. Wilfrid Laurier University, Archaeological Investigations at Old Fort Erie, John Triggs (2015b), License Report P048-060-2013 submitted to the Ministry of Heritage, Sport, Tourism and Culture Industries.
[123] Wilfrid Laurier University Field School at Old Fort Erie: 2017 Investigations. John Triggs (2020), License Report submitted to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, P048-0103-2017.

Figure 70. *A view of the Lake and Fort Erie, from Buffalo Creek*. 1811. By Edward Walsh, engraved by John Bluck. Aquatint from Mabel Brady Garvan Collection, Acc. No. 1946.9.1747, Yale University Library.

Another watercolour by Edward Walsh in 1811 shows the new Fort Erie on the higher ground from the opposite shoreline at the mouth of Buffalo Creek, New York State. Note the First Nations encamped on the riverbank in the foreground. Walsh appears to have inserted himself into the image on the right bank. The detail from the image shows the two barracks buildings on the east curtain of the fort.

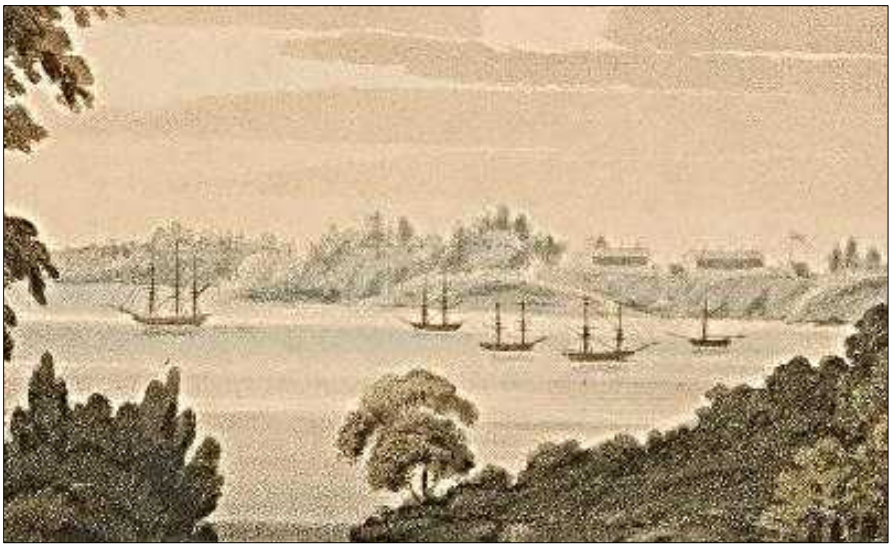


Figure 71. Detail of *A view of the Lake and Fort Erie, from Buffalo Creek,* 1811, by Edward Walsh, showing the newly built barracks on the high ground above the old fort.

DOCUMENT 14

Figure 72. *View of Fort Erie & the Town at the Mouth of Lake Erie, Upper Canada*, *March 28, 1805*, by Sempronius Stretton, Sigmund Samuel Collection, Royal Ontario Museum Cat no.1593 Acc. No. 951.117.1

Figure 73. Portrait of Sempronius Stretton, 1836, by William Salter, National Portrait Gallery.

When he painted the view of Fort Erie, in spring 1805, Sempronius Stretton was a Lieutenant in the 49th regiment, later serving as then Col. Isaac Brocks' aide-de-camp. The frontier fort which had stood from summer 1764 was soon to be razed and replaced by the new fort. Stretton's view shows the few buildings comprising the 'Town' that had grown up around the fort, which are also indicated in the Walsh watercolour the previous year. Archaeological investigations in 2015 and 2017 revealed evidence of one of the buildings and even a fence-line such as that depicted in the detailed views opposite.[124] The house with barn and outbuilding in Figure 76 may be the framed residence of John Warren, fort commissary, and agent for Robert Hamilton. The small building on the lakeshore in front of the house may be a storehouse for operations. The middle picture (Figure 75) shows the wharf to the south of the fort with a boarded decking in front of a warehouse which is depicted on the Gother Mann plan of 1803.

The upper detail (Figure 74) shows the fort itself. The barracks for officers and soldiers are on the left and right sides with the extension and chimney shown in the Mann plans of 1794, 1798 and 1803 on the north building. The stone building on the south wall may be the ones requiring underpinning as mentioned in various pieces of correspondence. The situation of the building constructed on the edge of the ledge corresponds to the building depicted on the 1773 de Berniere sketch. The building with the garrison flag is the long storehouse referred to in correspondence from the 1770s onward. The separation of the long structure into two equal-sized buildings, hinted at in the Pfister 1773 plan, and every map thereafter, is seen here as an infilled two-story structure with dormer, and a tower with flagpole on the west side. This is also depicted in the Walsh watercolour. The King's storehouse is seen on the northwest corner of the fort. The building on the opposite corner – what would have been the southeast bastion – is shown just to the west of the building on the south curtain. The Stretton drawing should be regarded as one of the most accurate and detailed depictions of the first Fort Erie.

[124] Wilfrid Laurier University Field School at Old Fort Erie: 2017 Investigations. John Triggs (2020), License Report submitted to the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries, P048-0103-2017.

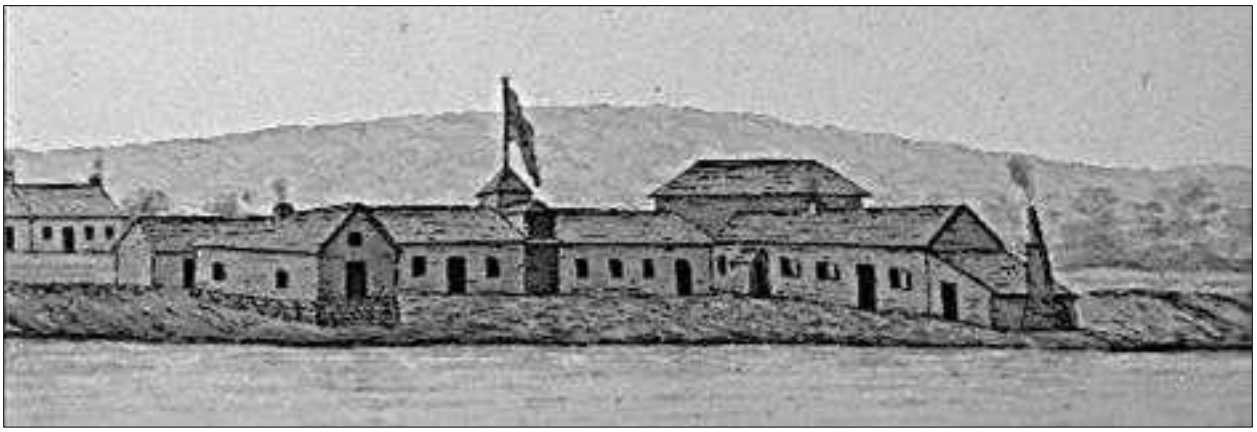


Figure 74. Detail of *View of Fort Erie & the Town at the Mouth of Lake Erie, Upper Canada*, *March 28, 1805*, by Sempronius Stretton, showing the fort at the right (north) end of the painting. Structural details can be verified with the Walsh 1804 watercolour and the Gother Mann plans between 1794 and 1803.

Figure 75. Detail of *View of Fort Erie & the Town at the Mouth of Lake Erie, Upper Canada*, *March 28, 1805*, by Sempronius Stretton, showing the wharf to the south of the fort as depicted on the Mann 1803 plan. Buildings and fence-lines are situated on numbered lots shown on the same plan.

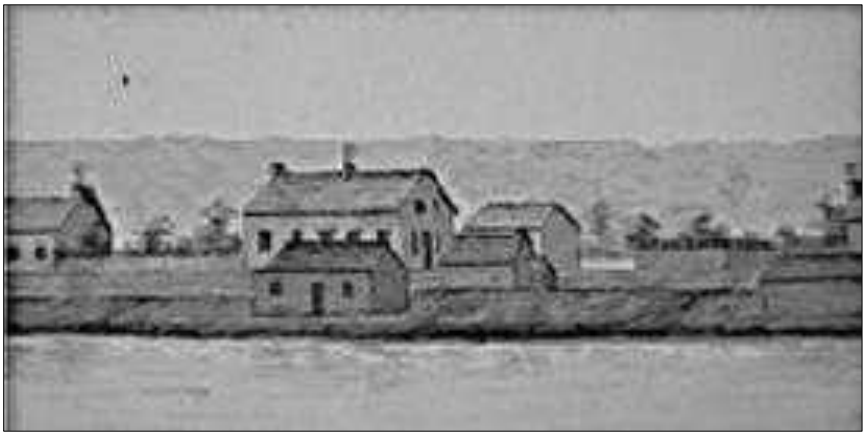


Figure 76. Detail of *View of Fort Erie & the Town at the Mouth of Lake Erie, Upper Canada*, *March 28, 1805*, by Sempronius Stretton, showing the large frame house and outbuildings that may be those of John Warren, commissary at Fort Erie from 1788.

Summary of Regiments, etc. at Fort Erie and Vicinity (1764-1805) Based on Documentary Evidence	
Year	**Regiment/Detachment/Officers/Civilians**
1764	8th Regiment of Foot
1764	17th Regiment
1764	42nd Regiment - Royal Highlanders
1764	55th Regiment
1764	80th Regiment of Light Foot
1764	Artificers: sawyers, brick-layers, lime-burners, masons, shingle-makers
1764	Canadian Battalion
1764	Connecticut Provincials
1764	New Jersey Provincials "Jersey Blues"
1764	New York Provincials
1764	Rangers - (Robert Rogers' Rangers, disbanded 1763/1764)
1764	Royal Navy (Schooners *Gladwin, Victory* and *Boston*)
1764	Royal Navy (Sloops *Charlotte)*
1764	Royal Navy carpenters
1764	Royal Regiment of Artillery
1764-1765	46th Regiment
1764-1770(?)	60th Regiment "Royal Americans"
1771(?)-1774(?)	10th Regiment
1775-1783	8th Regiment of Foot
1783-1786	34th Regiment of Foot
1786-1789	53rd Regiment of Foot
1788-1790	65th Regiment of Foot
1790-1792	26th Regiment of Foot
1792-1796	5th Regiment of Foot
1796-1802	Queen's Rangers
1796-1802	Royal Canadian Volunteers
1802-1805	49th Regiment of Foot

6.0 Managing Heritage Resources at Fort Erie, N.H.S.

GEO-REFERENCED MAPS – 1766, C. 1781, 1794 AND 1803

The cartographic and documentary analysis indicates that the plans by Francis Pfister in 1766; Georges Henri Victor Collot, ca. 1781; and Gother Mann 1794 and 1803, are accurate contemporary depictions of the fort. The Pfister plan shows the fort as it was originally built, and details are corroborated with various pieces of documentary evidence. The Collot map, although problematic, can be dated ca. 1779/1780 (and possibly 1791 according to Owen [1986]). The landscape details, particularly the extensive gardens, on the Collot plan are not shown on previous or subsequent maps, and for that reason the document should be regarded as an important, unique depiction of the fort and surrounding landscape. The Gother Mann plans are equally accurate with a consistency in scale and with corroborating documentary evidence. The depiction of wharves and outbuildings, and a merchant storehouse provide additional landscape details not seen on earlier maps. Together, the series of maps provides a means whereby archaeological resources at Old Fort Erie, National Historic Site, can be identified on the modern landscape with a high degree of confidence and accuracy. Going forward, the overlays should be used as a first step in managing those heritage features in the context of any future development which could result in an impact to buried archaeological resources.

The overlays are based on the 'best fit' with archaeological features exposed in the spring of 2019, namely, the face of the northwest bastion in the south end of the parking lot (exposed in units E, F, and G). A procedure was used whereby the length of the face of the northwest bastion - a common feature on all plans - was fitted to the architectural remains found during the archaeological excavation to arrive at the proper scale. During this process, the 2019 excavation grid established in the parking lot was used to adjust the overlays to achieve the best fit by moving the image north-south or east-west. The orientation of each overlay was adjusted, or rotated, to achieve the correct alignment. The base image is dated 2018, the most recent Google Earth satellite image available at the time of writing.

Features shown in all overlays include the fort itself with interior buildings enclosed within the masonry/stockade curtain walls and bastions. Built features outside the fort include residential buildings, lakeside wharfs and warehouses, storehouses, animal pens/stables and several unidentified structures. Landscape features consist of gardens, fence-lines, roads, and pathways. All features depicted in the overlays should be considered as Level 1 heritage features because of their direct association with the first Fort Erie – 1764-1805.

1766 OVERLAY

Figure 77. Overlay of Pfister 1766 plan on the modern Old Fort Erie, N.H.S. landscape. Georeferencing is based on features found during the 2019 archaeological excavations in the parking lot.

1781 OVERLAY

Figure 78. Overlay of Collot ca. 1781 plan on the modern Old Fort Erie, N.H.S. landscape. Georeferencing is based on features found during the 2019 archaeological excavations in the parking lot.

1794 OVERLAY

Figure 79. Overlay of Gother Mann 1794 plan on the modern Old Fort Erie, N.H.S. landscape. Georeferencing is based on features found during the 2019 archaeological excavations in the parking lot.

1803 OVERLAY

Figure 80. Overlay of Gother Mann 1803 plan on the modern Old Fort Erie, N.H.S. landscape. Georeferencing is based on features found during the 2019 archaeological excavations in the parking lot.

7.0 Excavation – Observations, Stratigraphy and Archaeological Chronology

Eight 2 x 2 metre units, one 1 x 3 metre square unit and two 1 x 2 units were laid in on May 7 and 8 (Figure 81). These were designated alphabetically from north to south across the parking lot. All units were situated in larger areas in which the asphalt surface had been cut prior to laying in the units.

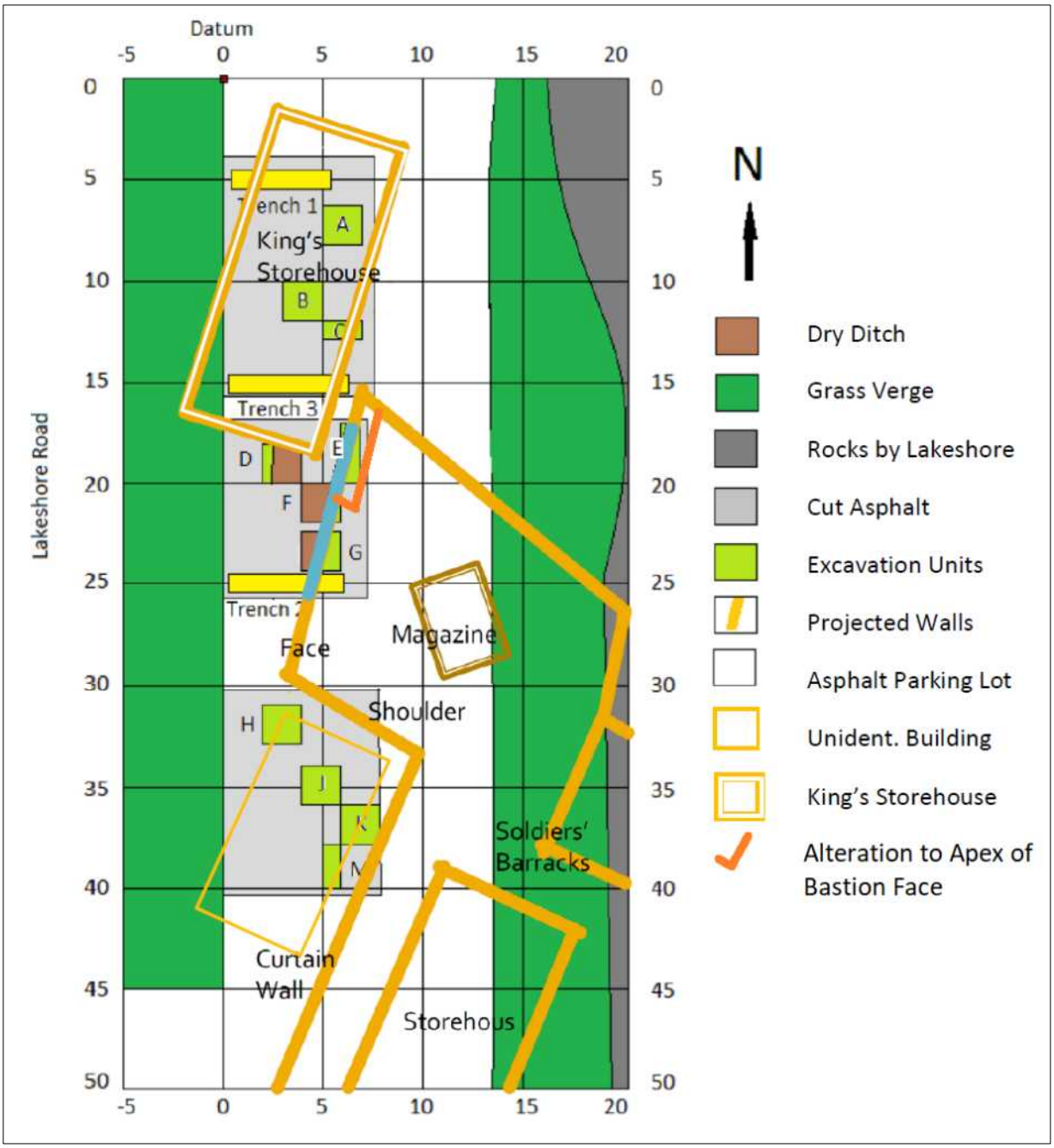


Figure 81. Site map showing excavation units and projected footprint of buildings based on the historical and archaeological analysis discussed in the report.

Excavation began by removing the gravel bedding for the asphalt parking lot. Figure 81 indicates is the interpretation of structural evidence after excavation.

There are 86 Phases grouped into seven Periods for the 2019 excavation. Periods represent significant episodes in the history of the site in general, such as construction and destruction episodes, landscapes associated with historical events and others as discussed below. Periods defined below are common across the entire Fort Erie landscape and correlate with all excavations: 2012, 2013, 2015, and 2017.

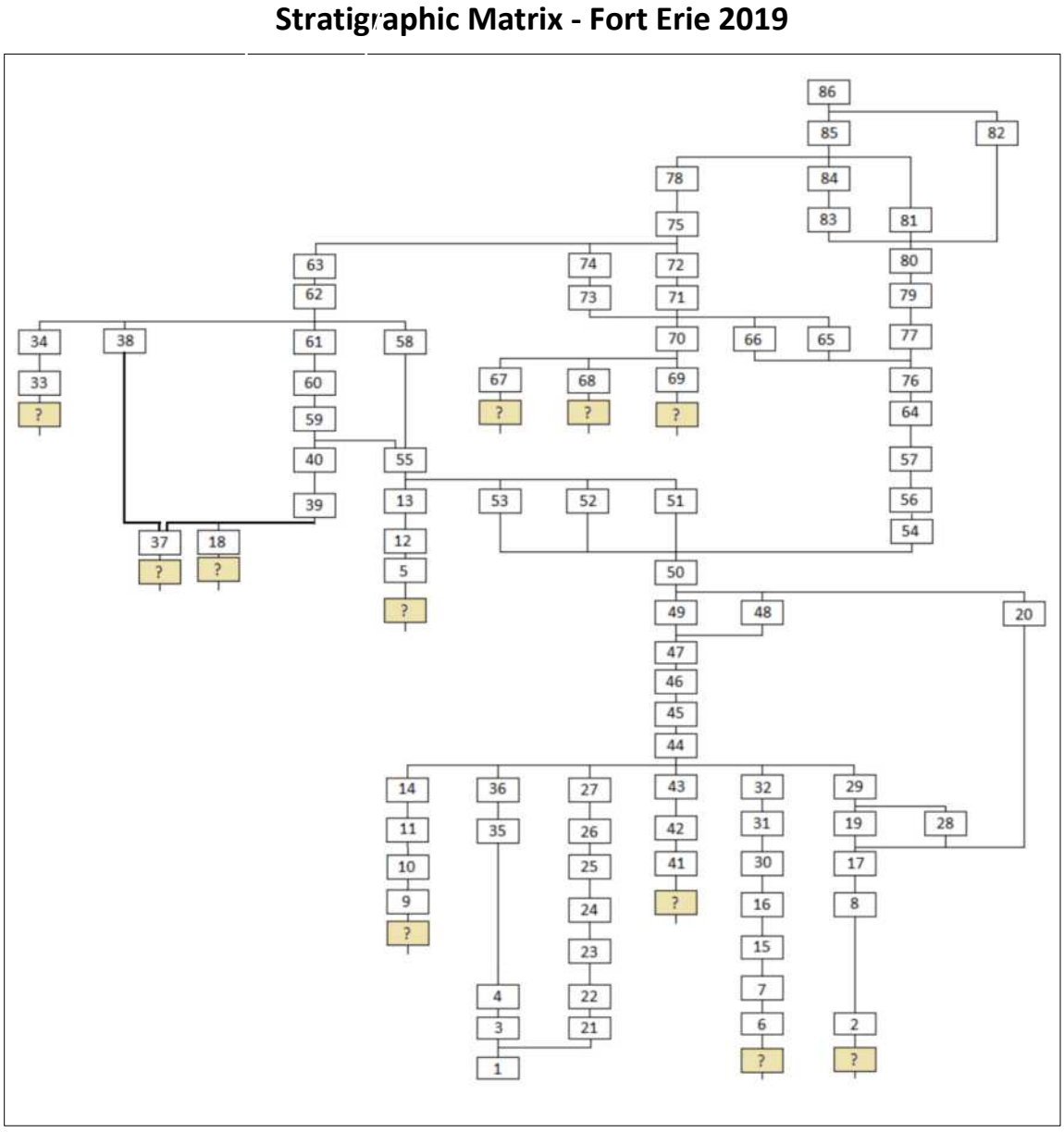


Figure 82. Harris stratigraphic matrix for Fort Erie 2019 Excavations. This is based on superposition of all layers, features and interfaces defined during excavation. The Phases, represented by numbered boxes, are arranged in relative chronological position and grouped according to major episodes in the history of the site, some of which can be dated using historical documentation.The boxes with '?' represent the end of excavation in various unfinished units. Refer to the correlation chart to see specific units where excavation remains to be done.

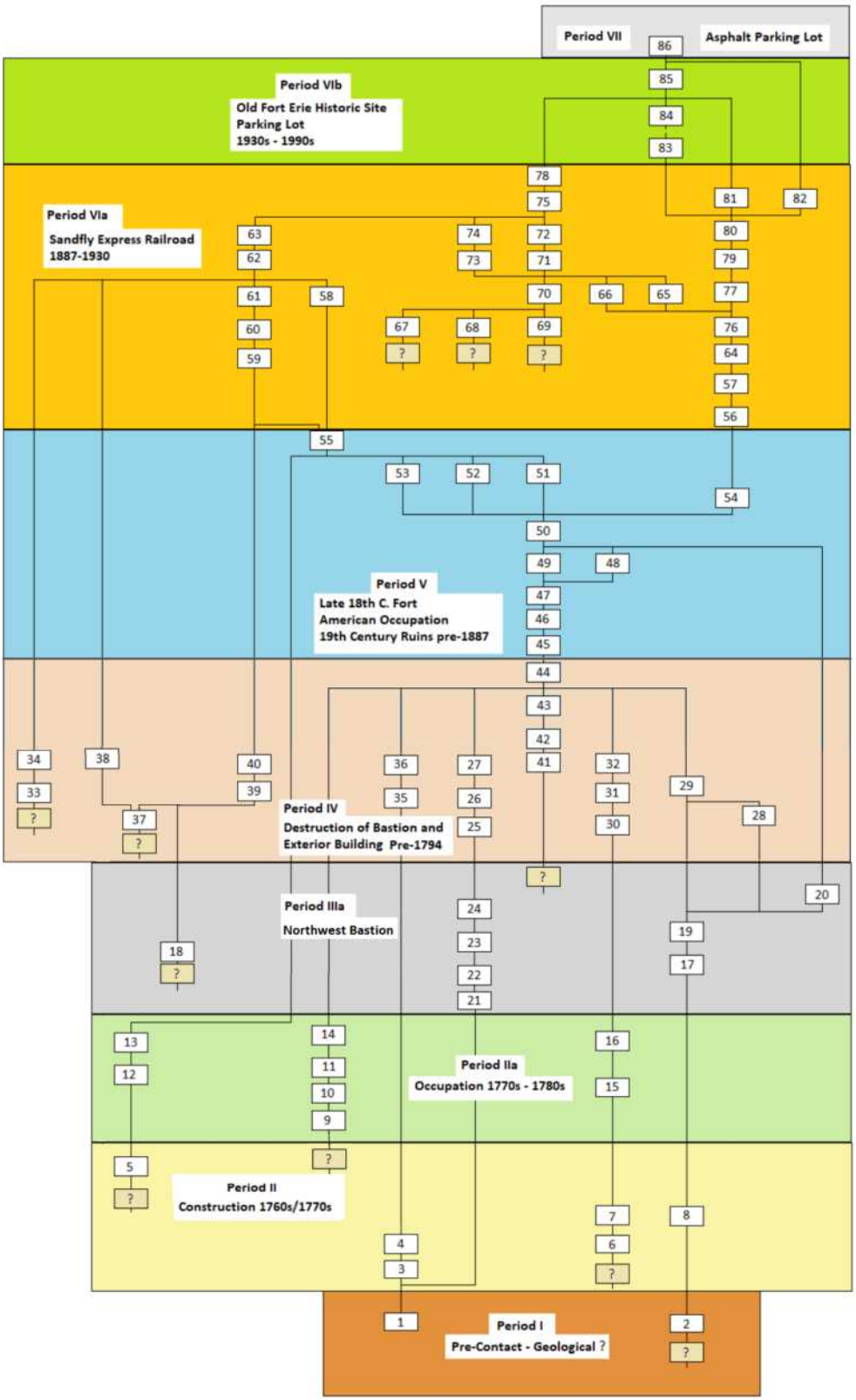


Figure 83. Period Matrix for Fort Erie 2019 Excavations. The Periods are cross-referenced to the correlation chart which indicates specific contexts within each unit. Periods are as defined for all previous years' WLU excavations.

Correlation Chart Fort Erie 2019														
Stratigraphic Description	**Historical Period**	**Period**	**Phase**	**19A**	**19B**	**19C**	**19D**	**19E**	**19F**	**19G**	**19H**	**19J**	**19K**	**19M**
Gravel	Asphalt Parking Lot	VII	**86**	1	1	1	1	1	1	1	1	1	1	
Mixed dark sandy loam fill with pebbles	Post-1930 Parking Lot	VIb	**85**		2	2	2	2	2	2	2	2	2	1, 2, 3
Rusty brown deposit		VIb	**84**			5		3						
Feature - Backhoe scars below asphalt surface	Post-1930 Parking Lot	VIb	**83**			7								
Reddish clay compact	Sandfly Express - 1887 - 1930	VIa	**82**	2										
Reddish brown sand		VIa	**81**				3					4		
Sandy clay loam with stones, with modern artifacts, 18th and 19th century material		VIa	**80**	3?		3				3		3	2	4
Sandy loam dark brown small pebbles, brick, charcoal and slag		VIa	**79**			4								
Very compact clay loam with lots of stones about 5-10 cm avg.		VIa	**78**		3				3		3			
Dark brownish black sandy clay loam - very compact		VIa	**77**			8								
Mottled dark clay with rusty veins - 10YR2/1 - no artifacts		VIa	**76**			9								
Compact clay, dark brownish-black with mottles of light-coloured sand		VIa	**75**	3	4	6		4			4			
Dark brown sand underlying lot 3 -		VIa	**74**	4										
Greyish black sand with no inclusions		VIa	**73**	5										
Shallow trench on west edge unit J and east edge H feature/interface		VIa	**72**								11/12	5/7		
Displaced subsoil sand with lots of stones - about 10 cm avg. with modern artifacts - 2 net sinkers in Unit J		VIa	**71**				4		4	4	5	6	3	5

Railway bed with spikes		VIa	**70**	6				5	5/7					
Railway tie with spike in situ		VIa	**69**	7										
Dark sand with lots of slag and coal and charcoal		VIa	**68**	9										
Railway bedding - sand and cobbles		VIa	**67**	8										
Reddish clay - very compact - with stones		VIa	**66**				5							
Sand layer with larger brick pieces - almost complete - and stones 2-20 cm range		VIa	**65**										4	5
Dark brown sandy layer with stones and some dark loamy inclusions- raised platform on west side of unit in unit G		VIa	**64**		5	10	6	6	6	6			5	6
Feature semi-circular feature - dark grey sandy loam with charcoal and ash - late 19th century - railway spike		VIa	**63**			12/13								
Dark brown sandy loam overlying large stones and possible wall/rockfall in unit E		VIa	**62**		6	11		7						
Depressions for railway ties - interface		VIa	**61**					8						
Small fist-sized cobbles on top of HFI (Horizontal Feature Interface)		VIa	**60**					10						
Light yellowish-brown mottled clay below railway tie depression interface		VIa	**59**					11						
Dark brown sandy loam on east side of unit - not many cobbles		VIa	**58**		7									
Dark brown sand with slag and coal, cobbles - in 3 separate areas		VIa	**57**						8					
Dark sand with a few cobbles on west edge of unit - tar paper	Sandfly Express - 1887 – 1930	VIa	**56**						11					
Dark yellow brown sand with some stones - avg. 10-15 cm. - George II coin found on surface -	After Fort Destruction 1805-1885	V	**55**		8		7	12		5	6			

layer above wall foundation in unit G														
Dark sand with more cobbles running through centre of unit - US Infantry button		V	**54**						10					
Duck boards - east-west plank depressions and interfaces		V	**53**								7/8, 9/10			
Cobble filled shallow depression		V	**52**								13/15			
Yellow brown sand with cobbles covering some large stones - 20-30 cm - some vertical and some flat-lying - on east side of unit - sand from high water		V	**51**				8							
Light yellowish brown sand - accumulation in ditch in unit D - sand from high water - railway artifacts on surface in unit J		V	**50**				9		14		14	8		
Dark brown loamy sand in northeast corner of unit		V	**49**								17			
Dark brown loamy sand in southeast corner of unit		V	**48**								19			
light yellowish-brown sand under lots 17, 19 sand from high water		V	**47**								18			
Brown sand with inclusions of mortar - heavily mottled		V	**46**								16	9=10	6	7
Cart track impression - filled with orange brown sand - sand from high water - and interface	After-Fort Destruction 1805-1885	V	**45**								21/22	11a/11b		
Dark brown loamy sand to dark grey sand overlying crushed mortar layer in units G - with mortar flecks - cobbles and limestone frags in unit A, B and C		V	**44**	10, 11	9, 10, 11	14				7	20	11	7	8
Light brown loamy sand on west side of unit, no inclusions		V	**43**		12									
Dark brown sandy loam loose-med compaction with lot of cobbles and 2 pieces of small brick		V	**42**		14									

Medium greyish brown sandy loam with large pieces of brick, mortar and some pieces of limestone	Pre-1794 Destruction of curtain wall, bastion, building on exterior side of west curtain and bastion face, and King's Storehouse –ca. 1805	IV	**41**		13									
Shallow trench on east side of wall - and same fill on top of lot 13 on east side of wall in unit E		IV	**40**					14	12/13					
Dark mortar layer overlying rockfall from bastion destruction		IV	**39**					13						
HFI for King's Storehouse – ca. 1781/1805(?)		IV	**38**			21a								
Rockfall from bastion destruction & King's Storehouse foundation unit C		IV	**37**			21		9b						
Destruction layer of mortar with brick and charcoal inclusions directly overlying HFI for wall		IV	**36**							8				
HFI of Curtain Wall(?) with mortar/light sand on top		IV	**35**					9a	9	12a				
Sandy loam with clay inclusions, dark greyish brown overlying wood feature		IV	**34**			16								
Destruction episode - may be pinned timbers that have toppled over - from upper story of King's Storehouse		IV	**33**			18								
Thick wall plaster layer - ceiling and wall collapse		IV	**32**								23	12	8	
Orange brown sand very mottled with dark brown sand inclusions - and lot of mortar inclusions		IV	**31**								24	13	9=10	
Post hole fill with limestone rocks and nails with mortar and brick inclusions		IV	**30**									15		
Rockfall - destruction layer on west side of wall		IV	**29**						16	10				

Rockfall on west side of wall - light yellowish-brown sand and mortar		IV	**28**							11				
Destruction layer on east side of wall		IV	**27**							9				
Rockfall on east side of wall		IV	**26**							13				
Post hole fill - east side of wall	Pre-1794 Destruction of curtain wall, bastion, building on exterior side of west curtain and bastion face, and King's Storehouse –ca. 1805	IV	**25**							16				
Clay 'lining' for inside of palisade post hole - east side of wall – repair	Gun platform in NW bastion; change in bastion footprint	IIIa	**24**							16a				
Interface for post hole beside wall - east side		IIIa	**23**							17				
Rockfall on east side of wall within dark sandy loam with mortar flecks		IIIa	**22**							15				
Dark loamy clay on the east side of the wall below lot 15		IIIa	**21**							18				
Ditch fill - light brown sand with light yellowish-brown sand patches		IIIa	**20**				10							
Lower rockfall - destruction layer on west side of wall		IIIa	**19**						18					
Thin layer of sand with brick, charcoal and stone from wall destruction associated with change in footprint of bastion due to King's storehouse construction		IIIa	**18**					18						
Ditch fill - dark loamy sandy clay loam (with patches of sand near the top) - ditch fill on west side of wall	Gun platform in NW bastion; change in bastion footprint	IIIa	**17**				11		15	14				
Post hole interface for lot 15 – structural		IIa	**16**									16		

Occupation deposit - interior of structure outside bastion- dark brown loamy sand - mortar inclusions – remains of planks in situ floorboards	Occupation - post - 1760s – early 1780s King's Storehouse and unidentified SW building	IIa	**15**								24	14	11	
Occupation deposit? Very dark greyish brown sandy loam with inclusions of mortar		IIa	**14**			15								
Sand overlying wood		IIa	**13**					16						
Wood 'floor' and sand		IIa	**12**					15						
Occupation deposit? Dark brown sandy layer on east side of wall with lots of nails in unit C		IIa	**11**			17								
Occupation deposit – mottled sand		IIa	**10**			19								
Features exposed in NW and SW corners of unit under 19, not excavated - pink inclusions - fire? 22	Occupation - post - 1760s – early 1780s King's Storehouse and unidentified SW building	IIa	**9**			20,22								
Interface for ditch on west side of wall	Construction – 1766	II	**8**				13							
Sandy loam with cobbles below occupation layer- sub-floor layer - dark sandy loam very mottled		II	**7**									17	12	
Clay and cobble layer with lot of mottling - below the floor layer		II	**6**									18		
Mortar layer adjacent to wall and overlying some foundation stones		II	**5**					17						
Wall foundation – northwest bastion		II	**4**						17	12				
Builder's trench interface for wall - trench-built	Construction – 1766	II	**3**							12b				
Possible A-horizon - dark sandy patches overlying light yellow brown sand - not excavated – exposed only		I	**2**				12						13	
Clay layer overlying bedrock? - depth with probing indicates at least 15 cm of clay still remaining	Pre-Contact Geological?	I	**1**							19				

Observations and Stratigraphy

The following is a Period-by-Period synopsis of the stratigraphic sequence of the entire site with descriptions of excavated lots within the relevant excavation units for each Phase. The lots and units for each Phase can be found on the Correlation Chart. Phases on the Correlation Chart correspond to numbered boxes on the Stratigraphic Matrix diagrams. Accompanying the discussion are descriptions of the artifact assemblage focusing on Group and Object and the proportions these make up for each Period, in addition to descriptions of small finds. A more detailed description of the artifacts for each layer within each unit is found in the Artifact Catalogue, Appendix F, and the artifact analysis section 8.0.

Period I – Pre-Contact [Phases [1] and [2]

This Period is defined by two Phases. Phase 1 is found on the west side of the foundation wall in unit G. This is a clay layer below the lowest layer of excavated sediment in this location. The layer was

Figure 84. Unit G, view looking west, showing the surface of Lot 19 on the west side of the foundation wall. The lot was exposed but not excavated. The surface was found at a depth of about 80 cm below the gravel surface.

not excavated and only the surface was exposed although a few artifacts were recovered: 1 wrought nail, 1 piece of window glass, 9 fragments of faunal bone, 1 sherd of white salt-glazed stoneware, 2 sherds of pearlware, and 30 pieces of chert debitage. The sediment was comprised of a heavy brown clay with some inclusions of mortar visible. Probing indicated that the layer was at least 15 cm thick and may possibly overlay bedrock. Until excavation is completed the layer has been assigned to the Pre-Contact period, as a deposit of geological origin. It is possible however, that the layer represents the 'levelling' fill that was used for the parade of the fort in 1766 as suggested by an entry in Capt. John

Figure 85. Unit K, view looking north, showing the surface of Lot 13. The lot was exposed but not excavated. The layer is composed of brown sand similar to that found in unit D below but with stone fragments in the surface.

Figure 86. Unit D, view looking north, showing the surface of Lot 12 (unexcavated) and 11, dry-ditch fill. Lot 12 appears to be the buried A-horizon (dark brown) overlying the natural soil (light-coloured sand) which was truncated by the defensive interface (Phase 8, Period II).

Montresor's journal on August 3. '*Finished levelling the earth for the Parade and foundation of the Provision Store next the lake...'* [125]

In unit K at the close of excavation for the unit a layer of dark brown sediment was exposed but not excavated. The deposit may represent the buried A-horizon although it is also possible that this is an early fill layer comprised of displaced subsoil associated with a disturbance yet to be identified. At the close of excavation in unit D the lowest layer of fill in the defensive ditch had been exposed. The ditch itself had truncated the natural soil marking the contemporary ground surface visible on the left side of the image. Lot 12 was not excavated. No artifacts were found associated with any of the lots in Phases 1 and 2.

[125] The Montresor journals; by Scull, G. D. (Gideon Delaplaine), 1824-1889, ed. P. 278, Internet Archive https://archive.org/details/montresorjourna00montgoog/page/n2/mode/2up

Period II – Construction of Fort Erie 1764-1766 Phases [3] to [8]

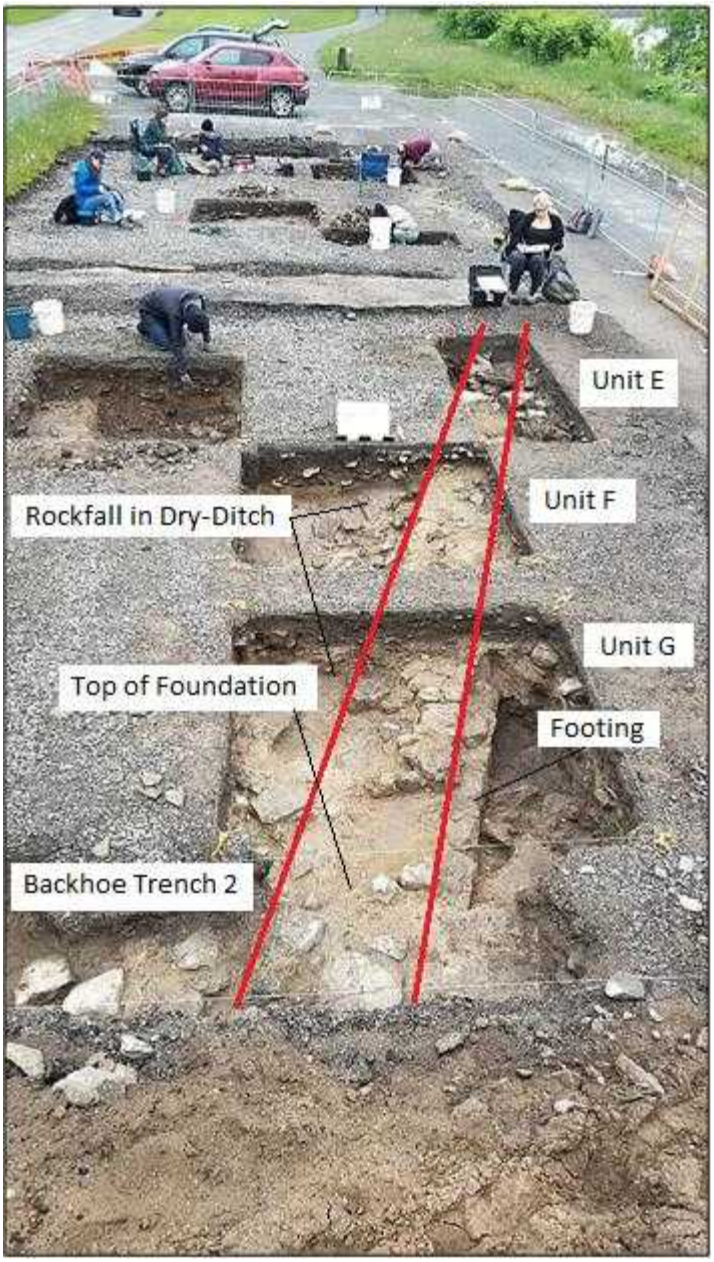


Figure 87. View looking north, showing the wall foundation of the face of the northwest bastion.

Period II is defined by six events, or Phases, related to the construction of Fort Erie in the 1760s. The first of these is the masonry wall foundation found in units E, F, and G. Based on the overlay analysis and GPR survey discussed above, the wall is thought to be the face, or long side, of the northwest bastion. About 8.5 metres of the wall was exposed in these units and in Backhoe trench 2 at the very south end. Phase [3] is the builder's trench for the wall visible in unit G where the lower layer of clay over bedrock appears to have been truncated for the placement of the lowest course of stones. The wall [Phase 4] measures about 90 cm in width with a 15 cm wide footing/sill projecting from the east face – on the interior of the fort. In unit G the west side of the wall is visible with three neatly laid courses rising to a height of 50 cm from the base of the unit where excavation was terminated. At least one more course is present below this depth. In unit F two to three courses are visible. The largest stones are about 50 cm long and average 20 cm in thickness. All stones are limestone, probably quarried directly on site according to the contemporary references. Mortar is lime-based and still has integrity where it can be seen between the stone courses. In plan the upper course of stone is rough and irregular in appearance owing to the destruction of the feature decades after it was built. The projecting sill on the interior, or east side, is composed of neatly laid stones which are incorporated or keyed into the wall itself. Both sides of the wall are plumb and show no signs of displacement except in unit E. Here, the northernmost section of the wall has been partially toppled towards the east. This is thought to be related to a later event, the construction of the King's Storehouse ca. 1781. As discussed in the map analysis, plans dated 1794, 1798 and 1805, all show a new footprint for the northwest bastion in which the alignment of the very northern part of the face was shifted eastward resulting in a 'notch' at the apex of the bastion.

Figure 88. Unit F, view looking east, showing the wall foundation of the face of the northwest bastion and the dry-ditch in foreground.

Figure 89. Unit G, view looking west, showing the wall foundation of the face of the northwest bastion, post in foreground and dry-ditch in background.

Figure 90. Unit D, view looking north showing the lowest layer of dry-ditch fill excavated in the trench defined by Phase 8, the interface which cut through the natural soil on the left.

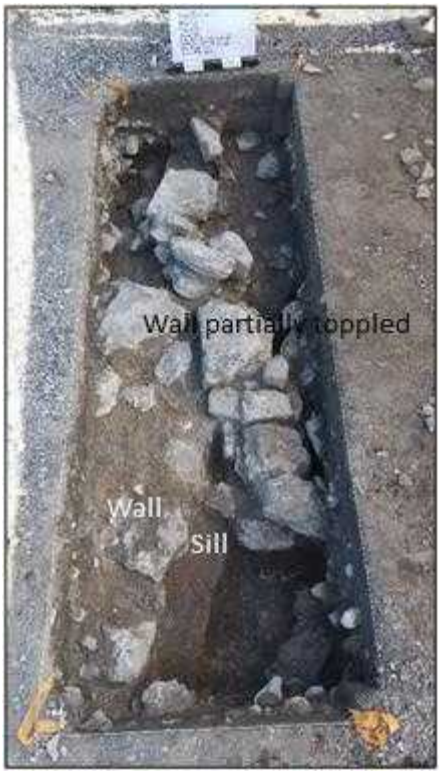


Figure 91. Unit E, view looking north, showing the wall foundation of the face of the northwest bastion. Footing visible middle foreground and partial destruction (discussed in Phase [18] Period IIIa).

On the west side of the wall is a dry-ditch found in units D, F and G. The east edge of the ditch, or the interface [Phase 8], originally cut through the natural sand subsoil at a steep angle. In units F and G, the edge of the ditch appears to have been defined by the west face of the wall itself. The width of the ditch is approximately 3 metres as measured from the west face of the wall to the east side of the ditch in unit D. Excavation was terminated at the close of the season and the true depth is still unknown. At present the depth ranges between 40 and 55 cm. The feature was never intended to be a moat and was instead a dry-ditch.

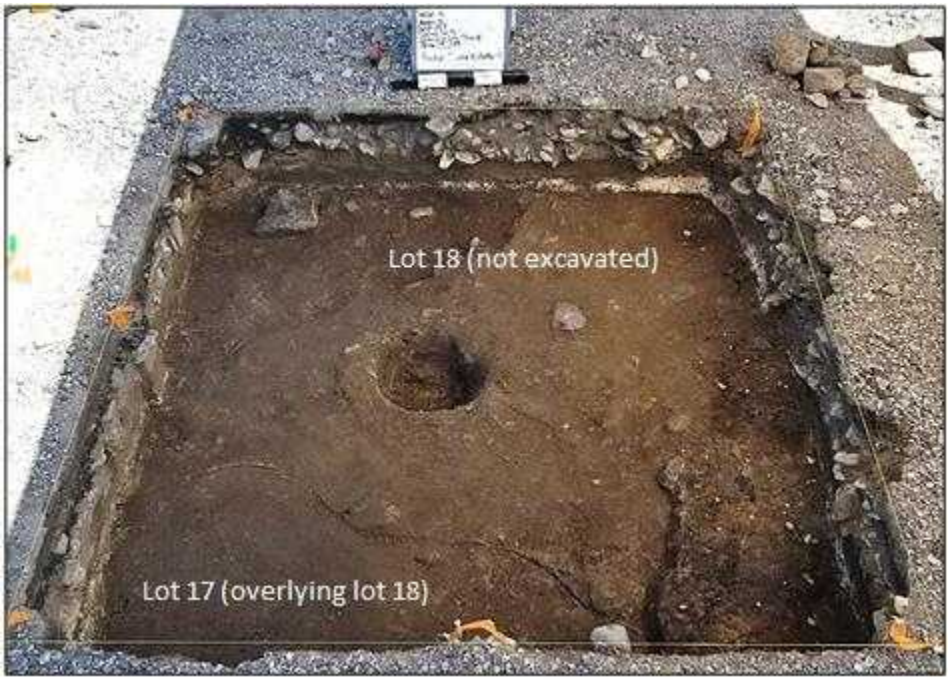


Figure 92. Unit J, view looking north, showing lots 17 and 18, subfloor layers.

Other Phases found in this period include a layer of mortar on top of the wall in unit E, Phase [5]. The deposit consists of pure mortar and was found overlying the wall foundation in this location. It is more properly viewed as part of the construction rather than a destruction deposit. In units J and K two superimposed subfloor deposits were found. Phase [6] is a brown clay layer with some cobble inclusions. Excavation was terminated when the surface of this layer was exposed. Phase [7] is a mottled brown sand layer which partially overlay Lot 18 in unit J and overlay lot 13 in unit K. Both Phases [6] and [7] were found below a floor layer described in the next Period.

Artifacts found in this Period are from Phases [6] and [7] only. Of the 105 artifacts found in Phase [6] most of those are unidentified bone fragments. The next most numerous class is lithic debitage. Five wrought nails and 8 pieces of window glass make up the Architectural items. A .46 calibre rifle ball was also found on the surface. Ceramics consist of unglazed earthenware, and undecorated pearlware. Container glass makes up the remainder of the assemblage. In Phase [7] a greater quantity of artifacts was

Figure 93. Unit K, view looking north, showing lots 12 and 13 (partially exposed).

recovered - 166 in total. Almost 50% of the assemblage is composed of small fragments of faunal bone, bird, fish and mammal. Lithic debitage makes up about 25% of the total number of items found. Ceramics include a few sherds of undecorated creamware. A few sherds of container glass were also found. Two straight pins represent the less common type of artifacts. The small size of many of the recovered items supports the interpretation of this as a subfloor deposit comprised of many items that may have fallen between floorboards as discussed in Period IIa below.

Period IIa – Occupation Late 1760s-Early 1780s Phases [9] to [16]

All Phases in this period relate to the early occupation of the fort. Phase 9 represents two apparent post holes with possible evidence of burning in the northwest and southwest corners of unit C. These were exposed below Lot 19 (Phase [10]), a mottled sandy loam with some mortar inclusions. The layer below lot 19 was not excavated or labeled in the field and represents the close of the unit. Artifacts found in Phase [10] include a single sherd of edged creamware, a free-blown bottle base or 'kick-up', 4 fragments of brick and 12 pieces of lithic debitage. The 5-8 cm thick layer is found in an area measuring about 1 x 1 metres on the west side of a feature thought to be the remains of the upper story of the blockhouse or King's Store (Figure 95), discussed in Period IV below. Phase [11] overlies the Phase [10] deposit in the same location. This is a dark brown loamy sand about 4 cm in thickness with inclusions of brick and mortar. The small size of the artifacts recovered, and the location of the lot (Figure 95) suggests this may be an interior floor deposit, or sub-floor layer, associated with the King's Storehouse. Figure 95 shows rubble from the foundation of the building running through the unit bisecting it into east – exterior – and west – interior – halves. Artifacts found in this Phase include 3 pieces of brick, a single wrought spike, 7 fragments of small fish, bird and mammal

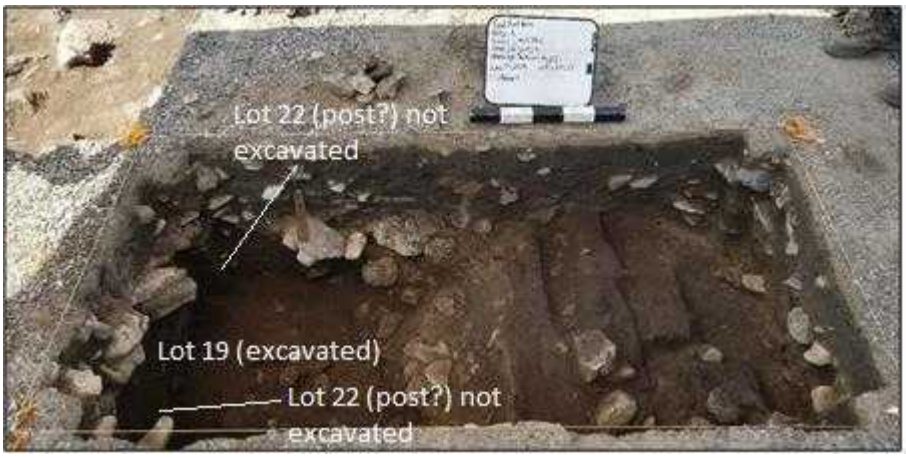


Figure 94. Unit C, view looking north, showing lots 19-22.

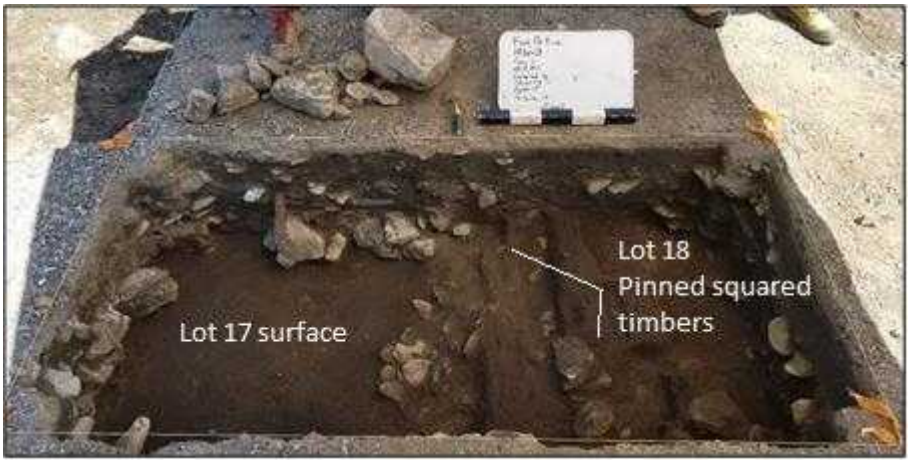


Figure 95. Unit C, view looking north, showing Phase [11], lot 17 on west side of unit.

bone, a smoking pipe stem, 2 shards of machine made bottle glass, probably intrusive, and 19 pieces of lithic debitage.

Figure 96. Unit E, view looking north, showing location of lots 15 and 16 on east side of wall, north end of unit.

A thin layer of sand in Unit E (Phase [13] overlay the remains of what appeared to be a wood plank running parallel to the east side of the foundation wall (Phase [12]). The wood may be *in situ* – a floorboard – but further excavation was not possible as this was located in the very northeast corner of the unit (see Appendix B, Unit E plan view, p. 228). Sand found under the wood may be from repeated sweeping/scouring the floor with sand. The wood and sand overlay the mortar layer described above in Period II. Five wrought nails found in the sand lends further support to the idea that this may be a floor layer. One sherd of brown transfer print creamware and a furniture tack represent the other materials found in the same Phase.

In unit C a deposit of dark greyish brown sandy loam (Phase [14]), about 20 cm thick, was found on the west side of the unit overlying the earlier Phase [11] deposit. The layer is thought to be on the interior of the King's Storehouse and may be a floor layer. Artifacts found in the layer include 7 wrought nails, a wrought staple, 6 pieces of pane glass, brick and mortar, 3 silver-plated copper straight pins with wound heads, a steel knife blade, 6 sherds of pearlware and creamware, a modern glass jar (intrusive), 25 fragments of bone (fish, bird and mammal), a fragment of a white clay smoking pipe bowl, and 22 pieces of lithic debitage. The variety of items suggests that this is an occupational deposit.

Figure 97. Unit C, view looking north, showing Phase [14], lot 15 on west side of unit partially covering lot 17.

The final phase in the Period, Phase [15], is found in three units on the south end of the site. Physical evidence of a wooden floor and subfloor deposit associated with an unidentified building on the west side of the west curtain wall was found in units J and K. A contemporary deposit and possible floor

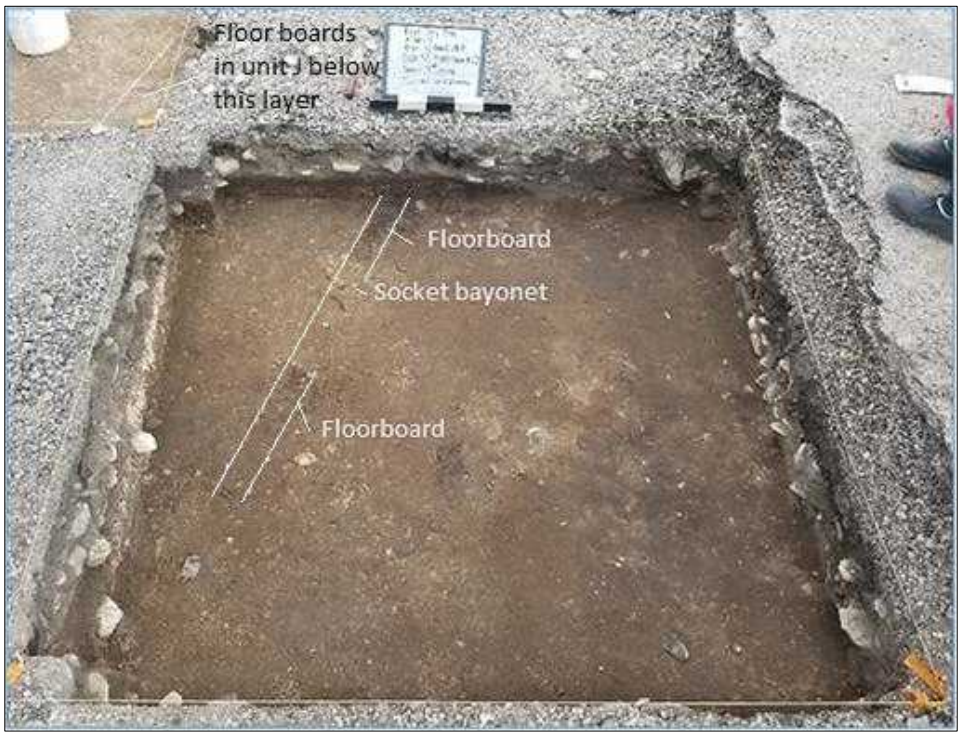


Figure 98. Unit K, view looking north, showing lot 11 surface.

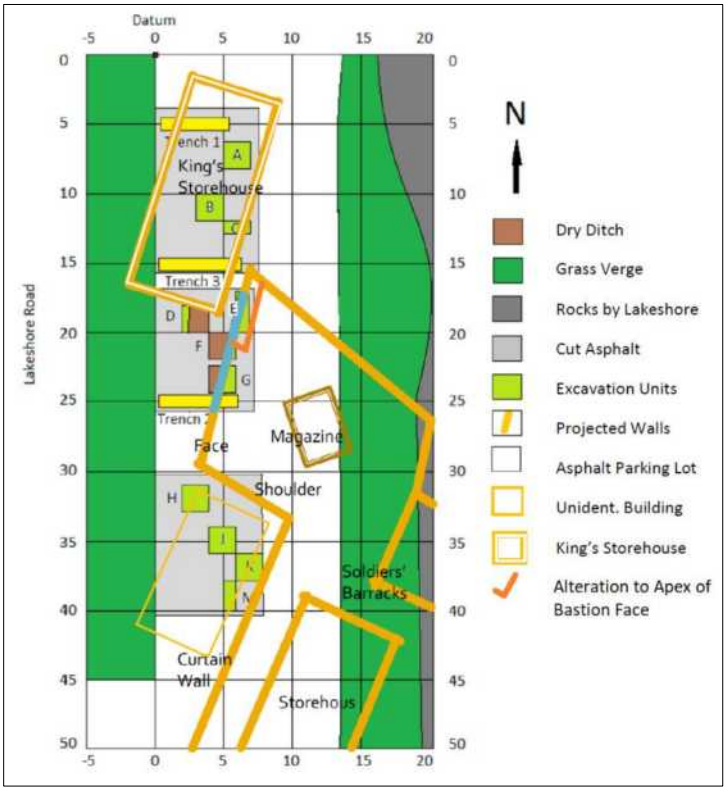


Figure 99. Plan showing excavation area and footprints of buildings.

were found in unit H. In unit K remains of an *in situ* floorboard were found running at an angle across the unit. The angle was very close to that of the of the face of the bastion found in units D, F, and G. More than 1000 items were recovered from the subfloor deposit below the floorboards in this unit. A bayonet found on the surface of the lot, close to the floorboard in the north end of the unit, together with a musket ball and bone-backed military button, provided initial indications that the lot probably represented a floor level with objects in primary context. Surface artifacts were plotted in plan-view and excavation of the lot was then done by trowel with all sediment taken back to the lab where it was examined by water-screening the sediment through window-screen size wire mesh. Consequently, the items recovered represent close to a 100% sample of all objects in the deposit. Faunal bone was by far the most numerous class accounting for almost 70% (797) of the items found. Small fish bones, and fish scales, bird, mammal and unidentified bone were recovered. Chert debitage, an awl, two scrapers and a piece of native ceramic make up 5% of the assemblage. Nails and pane glass together with pieces of brick comprise 6.1 % of the collection. In the Arms and

Military Group, besides the bayonet, several pieces of lead shot of different calibres were recovered. A mortar bomb shell was also found in the layer. This may have been intrusive as another fragment found in unit E suggests that these may be attributable to the War of 1812 period, specifically the summer of 1814 when the British were laying siege to the American encampment. Ceramics include undecorated creamware and a sherd of 18th century tin-glazed ware. Stemware and container glass were also present in relatively high numbers. The two military buttons are unfortunately unidentifiable as to regiment. Two non-military buttons, seven straight pins and one fragment of a smoking pipe were also found. The large quantity of bone, together with items such as glass tableware, ceramics and an apparent officer's button, suggest that the deposit may be an officers' quarters. Artifacts found are those which could have fallen between floorboards or been deposited in this context when floor repair was carried out. In Period IV evidence of a collapsed plaster ceiling and walls is discussed. This is an architectural detail that might have been associated with a building used by officers.

Artifact Group and Object	Freq.	%
IIa	**1157**	
19K	**1157**	100.0
11	1157	
Architectural	**71**	6.1
Brick	20	
Nail	14	
Pane Glass	32	
Rose Head	2	
Wrought Fragments	3	
Arms and Military	**15**	1.3
Bayonet	1	
Bird Shot	3	
Buck and Ball Shot	2	
Cartridge Base	1	
Military Button	2	
Mortar Shell	1	
Musket Ball	5	
Clothing	**2**	0.2
Button	2	
Commercial/Industrial Activities	**5**	0.4
Coal Fuel/Cinder	5	
Domestic Activities	**8**	0.7
Other	1	
Straight Pin	7	
Faunal/Floral	**797**	68.9
Articular Ends of Long Bones	9	
Bird	169	
Fish	113	
Mammal	160	
Shell	3	
Small Bone Shards	16	
Unsorted	13	
Unsorted Bone	314	
Food Preparation and Consumption	**76**	6.6
Bottle	5	
Bowl	1	
Glassware	7	
Jar	1	
Tableware	39	
Wine Bottle	23	
Fuel	**8**	0.7
Charcoal	8	
Native	**173**	15.0
Awl	1	
Chert/Lithics	10	
Flake	1	
Misc. Debitage	140	
Native Ceramic	1	
Other	18	
Scraper	2	
Smoking	**1**	0.1
White Clay, Plain Stem	1	
Unassigned Material	**1**	0.1
Wire	1	
Grand Total	**1157**	

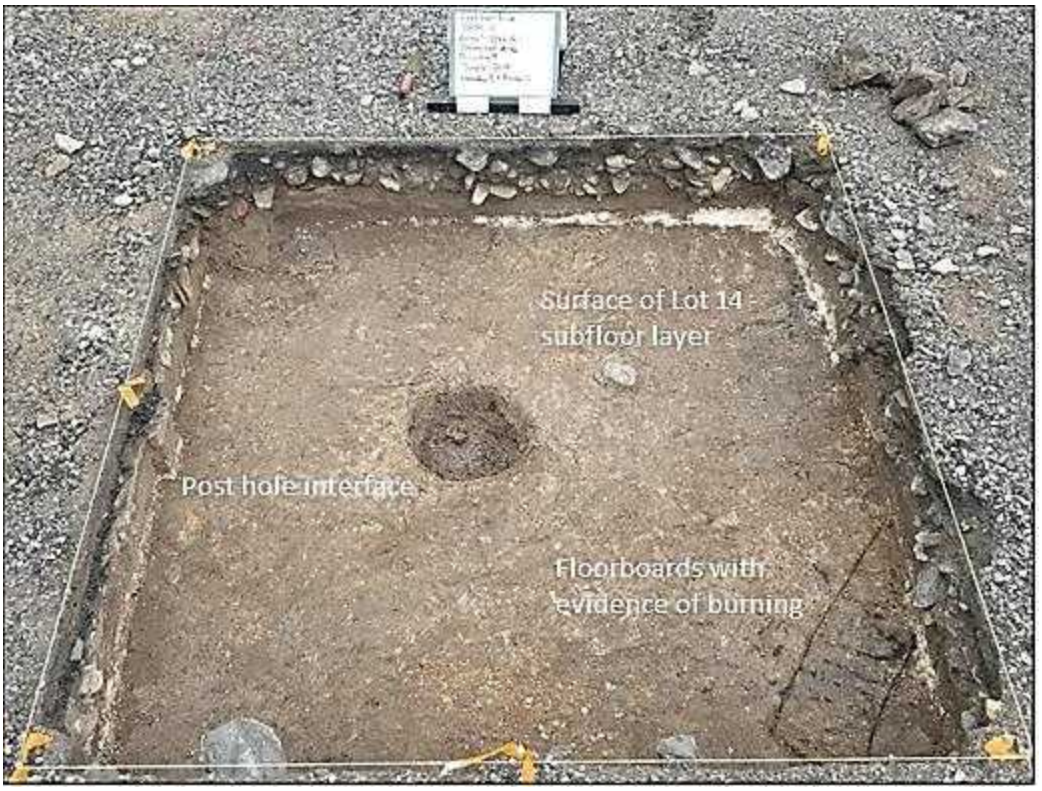


Figure 100. Unit J, view looking north, showing lot 14 surface.

In unit J more evidence was found of *in situ* floorboards running in the same orientation as those found in unit K, adjacent and to the southeast. These showed evidence of burning with inclusions of ash, reddened soil and charred wood remains. These overlay a subfloor deposit as in unit K. A further structural detail is provided by a 30 cm diameter post hole found in the centre of the unit which was intrusive into the subfloor layer. Based on the size of the post it was likely a main structural timber for support of the plastered ceiling – discussed in Period IV. As with unit K, all sediment from the layer was water-screened through window screen wire mesh. About half as many artifacts as found in unit K were found in Unit J (n=580). Artifacts found include almost 60% faunal bone where mammal and fish predominate followed by bird bone. In contrast to unit K, more ceramics were found in this unit including creamware (banded and painted), pearlware (painted and transfer printed), one sherd of 18th century whieldon ware, stoneware and earthenware. Some glassware and container glass were also found. Nails and pane glass along with brick and mortar make up the Architecture Group. Similar to unit K, a variety of lead shot, clothing buttons, straight pins and a single piece of a white clay smoking pipe were found. A relatively large quantity of chert debitage was also recovered.

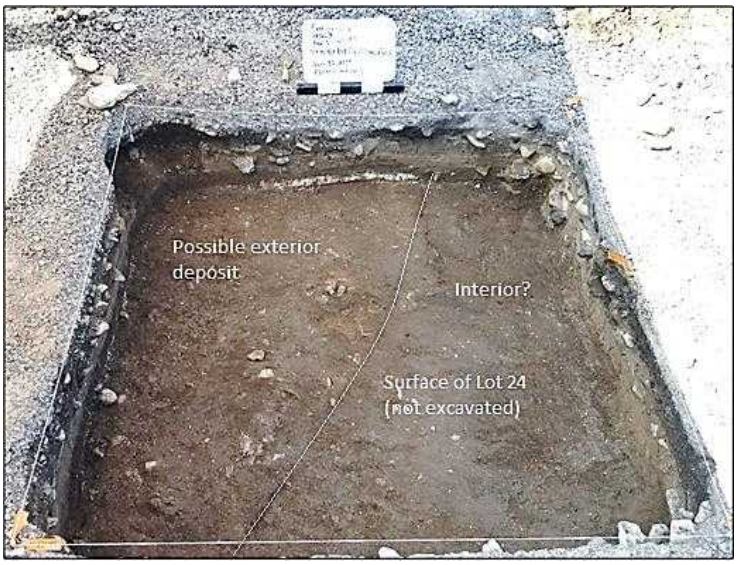


Figure 101. Unit H, view looking north, showing lot 24 surface – not excavated. Close of unit.

Excavation was terminated at the close of the season before Lot 24 could be

excavated in unit H. No features were visible in the surface of lot 24, although the overlying deposit of plaster from the wall and ceiling point to the presence of the structure. Based on this evidence the east-west width would be about 24 feet as depicted in Figure 99. The north-south dimension is speculative until further excavation is carried out. The north wall can only extend as far as the shoulder of the northwest bastion to the north. The south wall is approximated giving the building a length of 48 feet. The rectangular shape in this estimate corresponds roughly to the footprint of King's Storehouse but with slightly scaled down dimensions.

Artifact Group and Object	Freq.	%
IIa	**580**	
19J	**580**	100.0
14	580	
Architectural	**60**	10.3
Flooring Material	9	
Glazed Brick	3	
Nail	10	
Other	2	
Pane Glass	35	
(blank)	1	
Arms and Military	**23**	4.0
Bird Shot	12	
Buck and Ball Shot	5	
Musket Ball	6	
Clothing	**4**	0.7
Button	4	
Commercial/Industrial Activities	**1**	0.2
Other	1	
Domestic Activities	**3**	0.5
Straight Pin	3	
Faunal/Floral	**295**	50.9
Bird	37	
Fish	80	
Mammal	172	
Shell	6	
Food Preparation and Consumption	**102**	17.6
Bottle	7	
Glassware	8	
Hollowware	5	
Liquor Bottle	1	
Tableware	72	
Unidentifiable	8	
Unknown	1	
Fuel	**6**	1.0
Charcoal	5	
Coal	1	
Native	**75**	12.9
Misc. Debitage	75	
Smoking	**1**	0.2
White Clay, Plain Stem	1	
Unassigned Material	**10**	1.7
Other	3	
Scrap Metal	7	
Grand Total	**580**	100.0

Period IIIa – Alterations to the Northwest Bastion (ca. 1781-pre-1794) Phases [17] to [24]

Figure 102. Unit D, view looking north, showing ditch fill, lot 11, Phase [17].

Figure 103. Unit F, view looking west, showing ditch fill, lot 15, Phase [17].

Figure 104. Unit G, view looking west, showing ditch fill, lot 14, Phase [17].

This Period is marked by several Phases associated with the modifications that occurred to the face of the northwest bastion. The first event is the infilling of the dry-ditch. Adjacent to the wall in units E and F, the ditch was filled with large building stones and mixed sand. Further away from the wall on the opposite side of the ditch in unit D, the fill consisted almost entirely of a dark loamy sand with a few pieces of rubble. The stones and fill are thought to be related to the change in the bastion footprint that first appears on a 1794 plan of the fort by Gother Mann (Document 10 above). The apex of the bastion was shifted to the east a few feet, presumably as a consequence of the construction of the King's Storehouse which appears to be situated within the 'notch' created. Evidence of this alteration is found in unit E where the wall has been partially destroyed at the north end of the unit (Phase [18]). Destruction such as this, while it did not result in the entire wall being removed, did apparently result in the displacement of some stones and perhaps the removal of some of the stone from the bastion-face foundations. Contemporary descriptions of the fort in the 1780s and 1790s frequently refer to the need for masonry and stockade repair, not to mention the tearing down and re-building of walls.

Artifacts found in the ditch fill include a wide variety of items numbering more than 2100 in the three units. In unit D, 50% of the artifacts are from the Food Preparation group. Most of these are tableware ceramics represented by a variety of types: creamware – edged, feather edge, painted; pearlware – painted, transfer printed; sgrafitto slipware; white salt-glazed stoneware; tin-glazed earthenware, and porcelain. Also found in this group was glass tableware, stemware, and bottle glass. Faunal bone makes up more than 30% of the assemblage comprised of mostly mammal with bird and fish also.

Architectural materials such as nails, window glass, and brick were also found in significant numbers. Small finds include silver-plated copper straight pins with wound heads, a George II coin Hibernia half-penny – illegible but dating between 1727 and 1760 and a smoking pipe piece. A horseshoe was also found as well as a railway spike which is considered intrusive. Based on the ceramic types, particularly the pearlware, the assemblage would date after ca. 1780 although earlier types date to the establishment of the fort in the 1760s. The ditch may in fact have been a place where refuse was disposed of for a period spanning a couple of decades or more.

Artifact Group and Object	Freq.	%
IIIa	**732**	
19D	**732**	100.0
11	732	
Activities	**1**	0.1
Horseshoe	1	
Architectural	**70**	9.6
Brick	11	
Foundation Material	6	
Nail	12	
Pane Glass	41	
Commercial/Industrial Activities	**2**	0.3
Railroad Spike	2	
Domestic Activities	**3**	0.4
Straight Pin	3	
Faunal/Floral	**230**	31.4
Bird	21	
Fish	57	
Mammal	151	
Mammal Bone Vertebrae	1	
Food Preparation and Consumption	**372**	50.8
Bottle	4	
Flatware	31	
Glassware	4	
Hollowware	3	
Other	4	
Stemware	11	
Tableware	221	
Tea bowl	40	
Unidentifiable	52	
Unknown	1	
Wine Bottle	1	
Medicinal Hygiene	**1**	0.1
Mirror	1	
Native	**14**	1.9
Flake	2	
Misc. Debitage	12	
Personal	**2**	0.3
Coin	1	
Smoking	**2**	0.3
White Clay, Plain Stem	2	
Unassigned Material	**35**	4.8
Scrap Metal	35	
Grand Total	**732**	100.0

Artifacts found in units F are also numerous and include a greater proportion of architectural items such as nails and window glass. The proximity of the unit to the wall, and thus to the buildings on the interior of the fort, may be the reason for the higher number of these items. References to repair of buildings such as the officers' and soldiers' barracks, and storehouses throughout the 1780s and 1790s could account for the high quantity of architectural debris. Faunal bone makes up almost 20% of the artifacts recovered. Food-related items include tableware ceramics, predominantly creamware (Royal pattern, plain, banded), and pearlware, tin-glazed, white salt-glazed stoneware. Stemware and other

Artifact Group and Object	Freq.	%
19F	**942**	100.0
15	942	
Architectural	**664**	70.5
Brick	11	
Decorative Glass	3	
Nail	108	
Other	21	
Pane Glass	206	
Plate Glass	315	
Arms and Military	**4**	0.4
Musket Ball	2	
Shako Scale	2	
Clothing	**2**	0.2
Buckle/ Buckle Part	2	
Faunal/Floral	**184**	19.5
Bone	23	
Fish	16	
Mammal	145	
Food Preparation and Consumption	**80**	8.5
Baking Dish	1	
Bottle	6	
Crock	2	
Cup	2	
Glassware	2	
Hollowware	4	
Jug	6	
Other	40	
Plate	6	
Stemware	8	
Tableware	2	
Unidentifiable	1	
Furniture	**2**	0.2
Furniture Tack	2	
Native	**4**	0.4
Flake	3	
Smoking	**2**	0.2
White Clay, Plain Bowl	2	
Grand Total	**942**	100.0

glass tableware are also present. Interesting items were also recovered such as a .63 cal. musket ball, a shako chin-strap plate, brass tack, and a shoe buckle.

In unit G fewer items were found than in the other two units in this Phase. More than half of the items in the assemblage are faunal bone – mostly mammal with some bird and fish. Lithic debitage was also present in large numbers, suggesting disturbance to earlier deposits and re-deposition.

Artifact Group and Object	Freq.	%
IIIa	**275**	
19G	**275**	100.0
14	275	
Architectural	**28**	10.2
Brick	9	
Nail	15	
Pane Glass	4	
Arms and Military	**2**	0.7
Ramrod	1	
Shako Scale	1	
Domestic Activities	**1**	0.4
Button Blank	1	
Faunal/Floral	**152**	55.3
Bird	3	
Fish	2	
Mammal	141	
Shell	1	
Food Preparation and Consumption	**25**	9.1
Bottle	13	
Tableware	12	
Native	**53**	19.3
Misc. Debitage	53	
Smoking	**3**	1.1
White Clay, Plain Bowl	1	
White Clay, Plain Stem	2	
Unassigned Material	**11**	4.0
Scrap Metal	10	
Grand Total	**275**	100.0

Figure 105. Unit E, view looking north, showing Lot 18 associated with wall destruction, Phase [18].

Architectural items include a few nails and pieces of pane glass. A shako chin-strap scale and ramrod represent the military items. Tableware ceramics include types such as undecorated creamware and pearlware.

Phase [18] is associated with the partial wall destruction visible in unit E. A layer found in the southeast corner of the unit contained a high percentage of charcoal and mortar indicative of destruction. The small number of objects found in this lot include 13 wrought nails, 1 piece of pane glass, a shoe buckle, 3 faunal bone fragments, and a few pieces of unidentifiable ceramic along with some bottle glass shards.

Phase [19] is the rockfall found in unit F partially overlying the sandy loam ditch fill from Phase [18]. Artifacts associated with the rockfall are few in number and include only a few pieces of brick, pane glass, and a what may be a pendant fashioned out of stone with a small perforation.

Another layer of ditch fill (Phase [20] overlying earlier fill was found in unit D on the west side of the dry-ditch. The sandy loam deposit, less than 10 cm thick, was on the edge of the dry-ditch interface partially covering the lower deposit. A few pieces of iron scrap sheet metal were the only artifacts found in the deposit.

Figure 106. Unit F, view looking west, showing Lot 18 rockfall in dry-ditch Phase [18].

Figure 107. Unit D, view looking north, showing Lot 10, Phase [20] overlying lower lot 11 ditch fill, Phase [17].

Figure 108. Unit G, view looking east, showing Lot 15, Phase [21] on interior (east) side of bastion face.

Figure 109. Unit G, view looking west, showing Lot 18 rockfall, Phase [22] after excavation of lot 15 (Phase [21]), and the post hole, Phase [23] reinforced with a clay lining, Phase [24].

The next four phases, [21] to [24], are all found in unit G adjacent to the east or interior side of the bastion face. Lot 15, Phase [21], was a loamy clay deposit with rockfall consisting of large limestone rubble on the east, or interior, side of the bastion face. The deposit covered another layer of fill, lot 18 (Phase [22] in the same area. Lot 18 was excavated to a depth of about 5-10 cm and excavation had to be terminated for the season. The lot may not have been completed. Intrusive into lot 15 and 18 was a post hole, Phase [23] about 35 cm in diameter and 15 cm deep. The post hole interface has been reinforced with a clay and mortar lining around the inside perimeter, Phase [24]. This appears to have been an attempt at repair or shoring up of the post. Numerous references from the 1770s to the 1790s describe the poor condition of the stockade which was always in need of repair. One reference in particular provides a clue that aids in the interpretation of the features found:

> 15 July 1784 . . . *Major Ancrum reports the Pickets of Fort Erie to be in so rotten a State, that he expects to be laid quite open soon. I have desired him to support them in the best manner he can until I have Your Excellency's orders respecting that Fort . . .*[126]

The post on the interior of the wall may have in fact been some type of *ad hoc* bracing for the stockade which itself rested upon the masonry foundation. Another reference from 1779 suggests that pickets were actually built on the masonry walls in some locations, probably due to the shallowness of the soil in the area in which the fort was located.

[126] Owen, p. 31.

> *To your Orders, In obedience to your orders I take the first opportunity to lay before you the State in which I found this place owing to the late Storm and Flood. The wall upon which the log work and Picketting was erected on the side next the River is almost entirely destroyed* [127]

The presence of the post hole found in unit G, on the interior, of the wall suggests that it is not part of the stockade itself, but rather a support for a palisade in a state of near collapse as all the contemporary references indicate. Another possibility is that this was associated with a gun platform such as is seemingly depicted in the northwest bastion in the Collot plan, ca. 1781. Further excavation is necessary to determine the precise context of the post.

Artifact Group and Object	Freq.	%
19G		
Phase [22] (Lot 15)	126	100.0
Architectural	**24**	19.0
Brick	13	
Foundation Material	4	
Nail Wrought	7	
Faunal/Floral	**57**	45.2
Fish	7	
Mammal	49	
Shell	1	
Food Preparation and Consumption	**7**	5.6
Plate		
Edged Pearlware	4	
Tableware		
Blue Transfer Pearlware	1	
Fine Earthenware	1	
Plain Creamware	1	
Native	**38**	30.2
Misc. Debitage	38	100.0

Artifacts found in Phase [21] (lot 15) include mostly faunal bone (mammal and fish), a few wrought nails and brick fragments, a few sherds of pearlware and creamware and a relatively large quantity of chert debitage. In Phase [24], the clay and mortar reinforcement lining around the perimeter of the post hole, 42 nails were found along with 8 fragments of faunal bone and a single sherd of creamware. That so many nails were recovered from such a limited context supports the idea that the deposit reflects repair and maintenance, possibly to the stockade.

[127] Owen., p. 27.

Period IV –Destruction of Bastion, Possible Officers' uarters (Pre-1794), and King's Storehouse (ca. 1805) Phases [25] to [41]

The first five events in this Period are found in units E and F where rockfall was deposited on both sides of the face of the bastion. Phase [25] represents the removal of the post on the east side of the wall described above in Period IIIa. Following removal, the post hole was filled with clay loam and limestone rubble and three artifacts: a fragment of bird bone, one sherd of creamware, and a piece of chert debitage. Two layers of rockfall and sandy loam, separated during excavation but likely part of the same fill episode, were found on the east and west sides of the wall covering all traces of the earlier post hole. These deposits raised the ground level on the east and west sides to within 5 cm of the top surface of the demolished wall, meaning that the wall itself was still visible with a slightly lower surface on both the east and west sides. Phases [26] and [27] are found in unit G. Artifacts found in the rockfall deposits on the east side include only 90 items – a small number for a deposit that was about 15-20 thick on average. Artifacts found include 15 nails and 1 large spike, 38 fragments of faunal bone, container glass, brick fragments, 1 sherd of coarse red earthenware, and 20 shards of a dip-mould blown case bottle. The meagre numbers suggest that the demolition was done in a short period of time and only items discarded immediately after use were deposited in the fill. On the west side of the wall

Figure 110. Unit G, view looking west, showing Lots 13 (Phase [26]) and 11 (Phase [28]) on the east and west sides of the wall foundation.

Phases [28] and [29] are also sandy loam fill layers with limestone rubble separated during excavation but likely part of the same destruction episode. These layers together are less than 10 cm thick on average. As with the east side fill, only a small number of artifacts were recovered. Of the 59 items, 15 were container glass representing a wine bottle and medicinal bottle, together with a lead crystal tumbler, one piece of pane glass, faunal bone and 3 ceramic sherds – creamware, pearlware and white

salt-glazed stoneware. In unit G the same episode is represented by a layer of rockfall and sandy loam. A single piece of corroded iron represents the only artifact found.

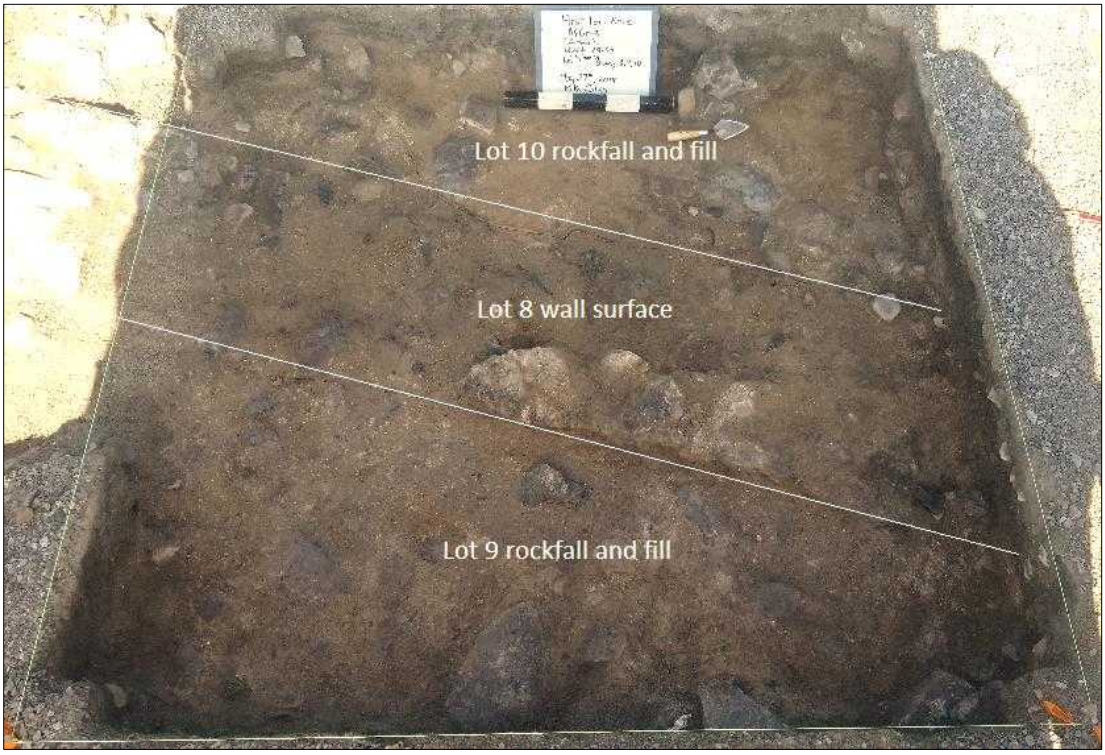


Figure 111. Unit G, view looking west, showing Lots 9 (Phase [27]) and 10 (Phase [29]) on the east and west sides of the wall foundation.

Figure 112. Unit F, view looking west, showing Lot 16 (Phase [29]) on the west side of the wall foundation.

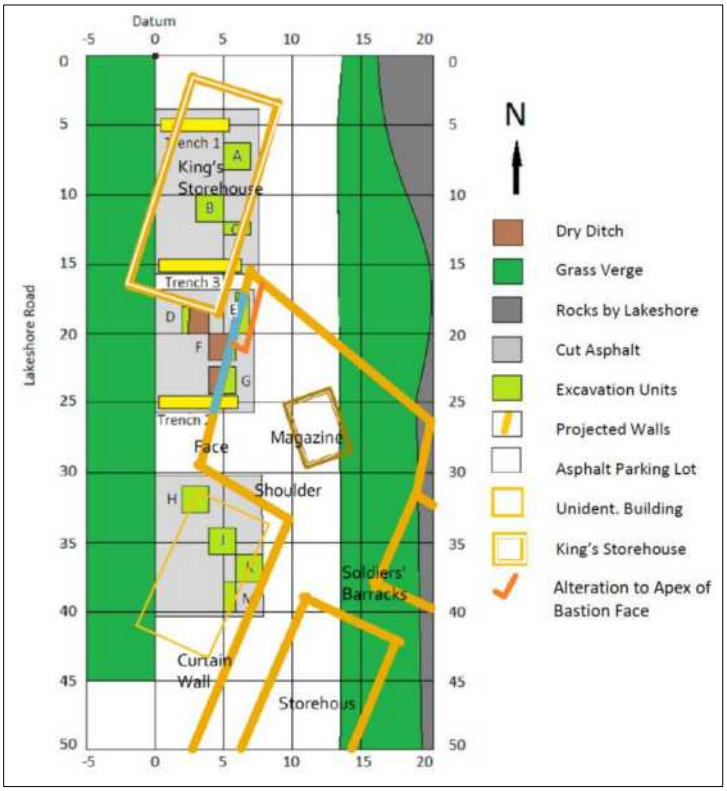


Figure 113. Plan showing excavation area and footprints of buildings.

Figure 114. Unit J, view looking north, showing the post hole fill, Phase [30].

The next three Phases are related to the destruction of the building, a possible officers' quarters, in the area between the west curtain wall and the space south of the shoulder for the northwest bastion. In units H, J, and K the events are marked by the filling of the posthole for an interior support [30], a floor layer [31] and a collapsed ceiling/wall [32]. The building is not identified on any maps or sketches and fits into the period between 1781, after the construction of the King's Storehouse, and before 1794 when the next map was drafted. Two references provide support for the dating of this building:

June 25-December 24, 1782 . . . At Fort Erie – A Barrack Room fitted up for two officers, new floored, glaz'd &c[128]

Fall 1792 - The barracks for both Officers and men are so decayed and ruinous a state that they are not worth repair. There are quarters for one Captain and one Subaltern besides the commissary lodge in the barracks room that can be fitted for 36 men if proper berths are provided.[129]

The post hole in the centre of unit J was about 10 cm deep and consisted of sand with plaster inclusions and a single piece of limestone. Artifacts found in the hold included only a single nail, 1 piece of window glass, and a sherd of creamware and pearlware with Willow pattern transfer print.

Overlying the post hole fill was a thin deposit of mottled sand – ranging in thickness from 1-2 cm. and discontinuous across the units. The layer may represent the latest floor

[128] Owen, p. 31.
[129] Ibid., p. 34.

Figure 115. Unit J, view looking north, showing the floor deposit, Phase [31] partially covered by the collapsed plaster later, Phase [32].

deposit overlying the earlier floor discussed in Period IIa. Artifacts found in the deposit in unit J include 5 wrought nails, 1 piece of window glass and two sherds of creamware and pearlware. Overlying this floor layer was a deposit of plaster ranging in thickness from 5-8 cm. The plaster is thought to be from a ceiling or floor collapse during the destruction of the building; evidence, perhaps, of the building not being worth repair as stated in 1792. Only two artifacts were found in the plaster layer, a nail and a mortar bomb fragment. The mortar bomb fragment is one of three such pieces found during the excavation and is probably not related to the destruction of the building, but likely intrusive from a later time period, most probably the British bombardment of the fort in the summer of 1814.

Figure116. Unit H, view looking north, showing the floor deposit, lot 24, Phase [31] partially covered by the collapsed plaster layer, lot 23, Phase [32].

The same sequence of deposition was found in units H and K. In unit H the plaster layer overlay the floor layer and was confined to mostly the west side of the unit. The deposit ranged in thickness from 1-7 cm. Based on the spatial extent the layer may represent a wall collapse rather than an overhead ceiling collapse as with Unit J. The slightly lower level of lot 24 on the east side of the unit further suggests that this may be a wall collapse towards the outside of the structure rather than inward. Only the surface of Lot 24 was cleaned, and the deposit was not excavated due to time constraints at the end of the excavation season. At present there is no means of determining whether lot 24 on the right is the same as the two separate sections

Figure 117. Unit H, view looking north, showing the floor deposit, lot 24, Phase [31] plaster layer, below lot 23, Phase [32].

labelled lot 24 on the left of the image. If the above hypothesis is correct the edge of lot 24 on the east side of the unit may indicate the western wall of the officers' quarters.

Artifacts found in the plaster layer, Phase 32, include bone with ceramics (pearlware & 18th century Whieldon ware), a few nails and fragments of what may be burned lime. In the underlying floor layer, Phase [31], the few artifacts include nails and pane glass, tableware ceramic (pearlware), food bone, 1 piece of .50 cal. shot, a blonde prismatic gun flint, and a pewter Royal Canadian Volunteer button, dated between 1796 and 1802.

Artifact Group and Object	Freq.	%
19H	**36**	
Lot 24, Phase [31]	**36**	100.0
Architectural	10	27.8
Glazed Brick	2	
Nail	4	
Pane Glass	2	
Wall Finishing	2	
Arms and Military	5	13.9
Buck and Ball Shot	2	
Gunflint	2	
Military Button	1	
Clothing	1	2.8
Button	1	
Faunal/Floral	6	16.7
Fish	2	
Mammal	4	
Food Preparation and Consumption	12	33.3
Flatware	4	
Tableware	8	
Unassigned Material	2	5.6
Wire	2	
Grand Total	**36**	100.0

Artifact Group and Object	Freq.	%
19H	**72**	
Lot 23, Phase [32]	**72**	100.0
Architectural	4	5.6
Nail	4	
Commercial/Industrial Activities	8	11.1
Limestone with green vitreous inclusions	8	
Faunal/Floral	32	44.4
Bird	10	
Fish	4	
Mammal	18	
Food Preparation and Consumption	22	30.6
Flatware	16	
Hollowware	6	
Native	2	2.8
Flake	2	
Unassigned Material	4	5.6
Other	4	
Grand Total	**72**	100.0

Figure 118. Unit K, view looking north, showing the plaster layer, Phase [32] almost completed – also visible in west profile – and floor deposit, lots 9=10 partially exposed below, Phase [31]. Lot 11 underlies both lots 8 and 9=10.

In unit K the plaster layer (Phase [32] was confined to the west side of the unit suggesting that this may be wall plaster as opposed to ceiling plaster in the adjacent unit J. The projected line of the west curtain wall is less than a metre to the west, just beyond lots 9=10. The plaster layer was from 2 to 9 cm thick. Artifacts found in the layer include 5 faunal bones, 1 piece of pane glass,8 nails and 2 sherds of creamware. The underlying Phase [31] layer had 27 pieces of mammal bone, 4 nails, 2 bottle shards, 20 sherds of plain creamware and a single sherd of black basalt ware.

The next event is found in unit C, Phase [33], where three pieces of squared timber with large iron drifts or 'pins' between them suggests that this is a remnant of the wooden second story in the blockhouse used as the King's storehouse. The last depiction of the

Figure 119. Unit C, view looking north, showing the three timbers and drifts, Phase [33], thought to be a remnant of the upper story to the blockhouse and King's Store. Rubble is from destruction of blockhouse lower story, Phase [37].

Figure 120. Unit C, looking north, showing lot 16 covering the squared timbers. Limestone rubble is thought to be from the destruction of the lower story of the blockhouse is in March 1805 in Sempronious Stretton's picture of the 'Town of Fort Erie'. The destruction of the building probably occurred shortly after this when the new fort was under construction.

Figure 121. Unit E, looking north, showing rubble from destruction of bastion, Phase [37]. Mortar on foundation is Phase [35].

A layer composed of sandy loam, about 10 cm thick on average, covered the timbers, Phase [34]. Artifacts found in this layer are 6 nails, 2 pieces of pane glass, 7 pieces of faunal bone, 1 sherd each of creamware, black basalt and refined white earthenware. On the west side of the timbers, limestone rubble, Phase [37], formed a ground surface level with the Phase [34] layer. The rubble is thought to be from the destruction of the blockhouse lower story which contemporary sources describe as being built of masonry. The upper surface of the rubble, Phase [38] may mark the moment in time when the foundation was destroyed if this is an actual remnant of the foundation wall. In unit E, another rubble deposit is associated with the destruction of the face of the bastion, also Phase [37]. The layer of mortar on the top of the bastion wall marks the actual destruction of the wall, Phase [35]. In units F and G, the same surface is visible on the top of the foundation walls, Phases [35] and [36]. The few artifacts found directly on top of the wall include 15 faunal bone fragments, 4 pieces of pane glass, 4 pieces of bottle glass, 1 sherd of porcelain and 3 sherds of refined white earthenware, a modern 'crown' bottle cap, and a pipestem marked McDougall, post-1846. The ground surface on both the east and west sides of the walls are roughly level with the top of the wall and rubble and small pieces of rubble are visible on the surface. This would have been the appearance immediately after destruction. The rubble was covered over in the next Period (V).

Artifact Group and Object	Freq.	%
19E	**57**	
Lot 13 Phase [39]	**57**	100.0
Activities	1	1.8
Horseshoe Nail	1	
Architectural	11	19.3
Brick	1	
Nail	8	
Other	1	
Pane Glass	1	
Arms and Military	1	1.8
Mortar bomb fragment	1	
Commercial/Industrial Activities	8	14.0
Scrap Metal	8	
Domestic Activities	1	1.8
Barrel Hoop	1	
Faunal/Floral	21	36.8
Bird	6	
Mammal	15	
Food Preparation and Consumption	8	14.0
Beverage Bottle	3	
Bottle	1	
Flatware	1	
Plate	1	
Tableware	2	
Native	3	5.3
Misc. Debitage	3	
Unassigned Material	3	5.3
Other	1	
Scrap Metal	1	
Wire	1	
Grand Total	**57**	100.0

Figure 122. Unit E, looking north, showing the dark soil and mortar on both sides of the wall.

In unit E (lot 13) a layer of dark brown sandy clay loam with a very high percentage of mortar overlay some of the rockfall on the east and west sides of the bastion foundation wall (Phase [39]). The deposit was about cm 20 deep and confined to the two opposite corners of the unit. The small number of artifacts found include mostly faunal bone a few nails and a few sherds of creamware and pearlware, along with a single sherd of white salt-glazed stoneware. Interesting items include a mortar bomb shell fragment, horseshoe nail, and a barrel hoop. A layer of very sandy soil, Phase [40] was found overlying lot 13 in unit E. The deposit ranged in thickness from a few centimetres to more than 20 cm where it filled voids on either side of the wall. The layer also directly overlay the uppermost stones of the wall foundation. Only a few artifacts were recovered including 5 nails and 4 ceramic sherds (creamware, pearlware and refined white earthenware).

Figure 123.1 Units G (left) and F, view looking west, showing the destruction surface of the bastion face, Phases [35] and [36]. A shallow trench is visible in the southeast corner of the wall in unit F, Phase [40].

Figure 124. Unit B, view looking north, showing the destruction layer, Phase [41] associated with the demolition of the King's Storehouse.

Phase [41] is the lowest of four superimposed destruction layers found in this unit, Phases [41] to [44]. All deposits contain limestone and brick rubble associated with the destruction of the blockhouse. Unit E is thought to be situated in the approximate centre of the building, also used as the King's storehouse. Excavation was terminated after only a few centimetres of lot 13 had been excavated. The relatively large assemblage (n=277) included mostly faunal with a sizeable number of nails and window-pane glass. A musket ball and lead foil for fixing the flint were also recovered in the lot. Food related items include a barrel hoop and several sherds of creamware and pearlware, and bottle glass. (See opposite page for table of finds.)

Artifact Group and Object	Freq.	%
19B	**277**	
Lot 13 Phase [41]	**277**	100.0
Architectural	80	28.9
Brick	1	
Nail	43	
Other	9	
Pane Glass	27	
Arms and Military	3	1.1
Bird Shot	1	
Gunflint foil	1	
Musket Ball	1	
Domestic Activities	1	0.4
Barrel Hoop	1	
Faunal/Floral	124	44.8
Bird	8	
Fish	13	
Fish Scale	2	
Mammal	101	
Food Preparation and Consumption	53	19.1
Bottle	11	
Flatware	24	
Glassware	1	
Hollowware	1	
Jug	1	
Tableware	13	
Unidentifiable	2	
Native	10	3.6
Misc. Debitage	10	
Smoking	6	2.2
White Clay, Plain Stem	6	
Grand Total	**277**	100.0

Of the 91 artifacts found in Phase [42] 62 are faunal bone. The few ceramics found included creamware and pearlware along with utilitarian salt-glazed stoneware and coarse red earthenware. Three nails and a piece of pane glass round out the small assemblage.

Figure 125. Unit B, view looking north, showing another destruction layer, Phase [42] partially overlying lot 13, Phase [41].

Figure 126. Unit B, view looking north, showing destruction layer, Phase [43] partially overlying lot 13, Phase [41].

Figure 127. Unit B, view looking north, showing uppermost destruction layer, Phase [44], in Period IV.

Artifact Group and Object	Freq.	%
19B	**145**	
Lot 12 Phase [43]	**145**	100.0
Architectural	8	5.5
Brick	1	
Foundation Material	1	
Nail	2	
Pane Glass	4	
Clothing	1	0.7
Bone Button	1	
Commercial/Industrial Activities	1	0.7
Other Hardware	1	
Faunal/Floral	108	74.5
Bird	3	
Fish	5	
Mammal	100	
Food Preparation and Consumption	20	13.8
Hollowware	1	
Tableware	19	
Native	2	1.4
Misc. Debitage	2	
Unassigned Material	5	3.4
Scrap Metal	5	
Grand Total	**145**	100.0

Artifact Group and Object	Freq.	%
19B	**270**	
Lot 9 Phase [44]	**270**	100.0
Architectural	19	7.0
Brick	2	
Foundation Material	1	
Glazed Brick	1	
Nail	7	
Other	4	
Pane Glass	4	
Arms and Military	4	1.5
Buck and Ball Shot	3	
Bayonet Lug	1	
Clothing	1	0.4
Bone Button	1	
Domestic Activities	3	1.1
Button Blank	3	
Faunal/Floral	186	68.9
Bird	1	
Fish	11	
Mammal	174	
Food Preparation and Consumption	50	18.5
Bottle	3	
Flatware	16	
Glassware	1	
Hollowware	1	
Plate	1	
Tableware	27	
Unknown	1	
Native	7	2.6
Misc. Debitage	7	
Grand Total	**270**	100.0

The artifacts found in Phases [43] and [44] are similar in type and proportions of the various classes, suggesting that the fill episode occurred probably at the same time. A considerable number of faunal bone fragments, mostly mammal, were found along with significant numbers of ceramics almost all of which was pearlware and creamware. Relatively small amounts of architectural items such as nails and window glass were recovered. Bone buttons were found in both Phases, as well as a bayonet lug in Phase [44].

Several excavation units had layers designated as Phase [44], which indicates a common ground surface across the site covering the remains of the first fort. In units close to the walls, rubble is present on the surface. In units farther away from the walls the amount of rubble is not as prevalent.

Figure 128. Unit A, lot 11, view looking north, showing uppermost destruction layer, Phase [44] in Period IV.

Figure 129. Unit C, lot 14, view looking north, showing uppermost destruction layer, Phase [44] in Period IV. The foundation for the King's Storehouse ran through this unit.

Figure 130. Unit G, lot 7, view looking west, showing uppermost destruction layer, Phase [44] in Period IV.

Figure 131. Unit H, lot 20, view looking north, showing uppermost destruction layer, Phase [44] in Period IV.

Figure 132. Unit J, lot 11, view looking north, showing uppermost destruction layer, Phase [44] in Period IV.

Figure 133. Unit KJ, lot 7, view looking north, showing uppermost destruction layer, Phase [44] in Period IV.

Artifacts found in the Phase [44] deposits in other units varied in quantity depending on the location vis-à-vis the walls and buildings. Unit A had only a single nail and railway spike which was intrusive likely from the overlying layer. Unit C, on the other hand, had a variety of items including a canister shot (fragmented into 42 pieces), a gun lock, straight pins, a spoon, mirror, and a gold-plated watch fob. These objects are indicative of an officer. Unit G had fewer items than C but also some interesting items such as a salt cellar and oi lamp font, also probably officers' possessions.

Unit C	**128**	100.0
Artifact Group and Object	**Freq.**	**%**
Lot 14 Phase [44]		
Architectural	33	25.8
Brick	4	
Foundation Material	3	
Nail	19	
Pane Glass	6	
Plate Glass	1	
Arms and Military	44	34.4
Canister Shot	42	
Cartridge Case	1	
Gun Lock Mechanism	1	
Domestic Activities	3	2.3
Straight Pin	3	
Faunal/Floral	12	9.4
Fish	1	
Mammal	3	
Shell	8	
Food Preparation and Consumption	22	17.2
Bottle	6	
Spoon	1	
Tableware	10	
Unidentifiable	5	
Medicinal Hygiene	1	0.8
Mirror	1	
Native	11	8.6
Flake	11	
Personal	1	0.8
Gold-plated Watch Fob	1	
Unassigned Material	1	0.8
Unidentifiable	1	
Grand Total	**128**	100.0

Unit G	
Artifact Group and Object	**Freq.**
Lot 7 Phase [44]	**23**
Architectural	3
Foundation Material	3
Faunal/Floral	4
Mammal	4
Food Preparation	13
Bottle	5
Box	3
Other, Salt Cellar	1
Tableware	3
Furniture	1
Oil Lamp Font/Base	1
Native	2
Modified Flake	1
Native Ceramic	1

Artifact Group and Object	**Freq.**
Unit H	
Lot 20 Phase [44]	**37**
Architectural	9
Brick	2
Glazed Brick	2
Nail	2
Commercial/Industrial	2
Burnt Limestone	2
Faunal/Floral	20
Fish	4
Mammal	15
Shell	1
Food Preparation	6
Bottle	1
Flatware	2
Tableware	3

On the southern end of the site a relatively small number of artifacts (n=138) was recovered from all combined – H, J and K. Faunal bone predominated in all units, followed by architectural debris such as brick fragments, and a few sherds of ceramic. The personal items found in the more northern units, closer to the bastion and King's storehouse, were not found here.

Period V – After Fort Destruction c. 1805 – 1885 Phases [45] to [55]

This Period is defined as the time after the fort and all associated buildings were destroyed and before the next major event, the small-gauge railway which ran across the site in 1887. During this time

Figure 134. Unit H, lots 21/22, view looking north, showing presumed cart/wagon tracks, Phase [45].

Figure 135. Unit J, lots 11a/11b, view looking north, showing presumed cart/wagon tracks, Phase [45], roughly parallel to those in adjacent unit H.

the area would have been a vacant space on the lakeshore with sand layers and some upper levels of rubble visible on the north part of the site. Because of the proximity to the lakeshore, the area would have been subject to periodic flooding as raised water levels and storm surge deposited debris and sediment over the site, eventually eradicating all traces of the former fort. Although long grasses and weeds were probably the ground cover, the lakeside zone would have been alternately wet and dry depending on the season.

The first events in the Period are tracks from what may be horse-drawn carts (two-wheeled) or wagons (four wheeled). The tracks are found in two adjacent units, H and J, and run in the same orientation, roughly parallel. The precise location of what is now Lakeshore Road is not known, but maps and the two sketches/paintings from 1804 and 1805 indicate that it is close to where the tracks appear – only 3-5 metres from the current edge of the road. The tracks themselves are about 5 cm wide and filled with a light-coloured sand, Phase [45] which may be wind- or water-born sediment.

The next four Phases [46] to [49] are in the south part of the site in units H, J, K, and M. These are alternating, superimposed layers of dark brown and light, yellow-brown sand, all of which are found in unit H and one of which is found in units J, K, and M. Phase [46] in unit J is the same ground surface that showed evidence of the cart tracks (Figures 134 and 135). The dark brown colour of the sandy loam sediment suggests that this was once a former ground surface with some type of vegetative covering. Items found in the layer include mostly faunal bone, a significant number of which is fish bone. Very few cultural artifacts such as ceramics and glass were recovered. The high percentage of faunal

Artifact Group and Object	Freq.	%
19J	**274**	
9/10	**274**	**100.0**
Architectural	19	6.9
Glazed Brick	8	
Other	11	
Faunal/Floral	219	79.9
Bird	8	
Fish	41	
Mammal	170	
Food Preparation and Consumption	6	2.2
Bottle	3	
Tableware	2	
Unidentifiable	1	
Fuel	9	3.3
Charcoal	9	
Medicinal Hygiene	1	0.4
Pharmaceutical Bottle	1	
Native	2	0.7
Misc. Debitage	2	
Unassigned Material	18	6.6
Scrap Metal	18	
Grand Total	**274**	100.0

bone – especially the fish – points to a natural origin for the material, which accumulated over an eight-decade period.

Figure 136. Unit K, lot 6, view looking north, showing ground surface, Phase [46] with few pieces of rubble.

In unit K, 36 items were recovered, 16 of which were small brick fragments. Ten sherds of refined white earthenware were also found, probably part of the same

Figure 137. Unit K, lot 6, view looking north, showing ground surface, Phase [46] with few pieces of rubble.

Artifact Group and Object	Freq.	%
19M	**117**	
7	**117**	100.0
Architectural	1	0.9
Pane Glass	1	
Arms and Military	1	0.9
Shako Plate	1	
Domestic Activities	1	0.9
Button Blank	1	
Faunal/Floral	106	90.6
Bird	53	
Mammal	53	
Food Preparation and Consumption	8	6.8
Grand Total	**117**	

vessel, a bowl, and 10 shards of container glass including a clear glass beverage bottle dating to the later part of the period.

At the very south end of the site, unit M also had a layer assigned to Phase [46]. Again, the surface of the sandy loam deposit was dark brown in colour suggesting vegetation once covered the ground surface creating a humic layer. As with unit J, most of the items recovered were faunal bone, suggesting natural deposition over time. One interesting item was a copper shako chin strap plate indicating that early period artifacts are still to be found in this Phase.

Figure 138. Unit H, view looking north, showing Phases [46] to [49] sand layers.

Four superimposed sand deposits, Phases [46] to [49], were found in unit H. These are light-coloured and dark brown sand layers ranging in thickness from 3 to 12 cm. Artifacts found in the layers are few and include a disproportionate number of faunal bones together with 10 ceramic sherds, a couple of nails and 1 piece of pane glass. The layers probably represent short term deposition due to raised lake levels or severe storms such as those mentioned in the documentary soures.

Artifact Group and Object	Freq.	%
19H	**117**	100.0
16	**81**	69.2
Architectural	18	15.4
Brick	5	
Glazed Brick	4	
Nail	2	
Other	1	
Pane Glass	2	
Wall Finishing	4	
Commercial/Industrial	1	0.9
Railroad Bedding	1	
Faunal/Floral	51	43.6
Bird	9	
Fish	4	
Mammal	38	
Food Preparation and Consumption	10	8.5
Dinner Plate	2	
Flatware	2	
Tableware	6	
Fuel	1	0.9
Charcoal	1	
17	**18**	15.4
Architectural	2	1.7
Foundation Material	2	
Commercial/Industrial	2	1.7
Railroad Bedding	2	
Faunal/Floral	12	10.3
Fish	2	
Mammal	10	
Fuel	2	1.7
Coal	2	
18	**4**	3.4
Architectural	1	0.9
Brick	1	
Commercial/Industrial	2	1.7
Railroad Bedding	2	
Fuel	1	0.9
Coal	1	
19	**14**	12.0
Faunal/Floral	14	12.0
Fish	8	
Mammal	6	
Grand Total	**117**	200.0

Figure 139. Unit D, lot 9, Phase [50] view looking north, showing water-born sand deposit.

Figure 141. Unit F, lot 14, Phase [50] view looking west, showing water-born sand deposit.

Figure 142. Unit H, lot 14, Phase [50] looking north, showing water-born sand & features described in Phases [52], [53].

Figure 140. Unit J, lot 8, Phase [50] looking north, showing water-born sand deposit partially overlying lot 9=10 Phase [46].

Phase [50] is another light yellowish-brown sand layer found in units D, F, H, and J. The surface of the sand has a swirled appearance indicating water-born deposition. This is likely due to a rise in lake levels caused by severe storms as noted above. Artifacts found in the layer in unit D include a high number of container glass shards, along with a few ceramics (coarse red earthenware and creamware), faunal bone and a projectile point. In unit F a few pieces of pearlware, creamware, hard paste porcelain and coarse earthenware were recovered together with scrap metal pieces and pieces of modern safety glass. In unit H 177 bone fragments out of 204 items recovered in lot 14 mimic the high proportions of bone found in earlier Phases. A few pieces of ceramic (pearlware and a tin-glazed sherd), a barrel hoop fragment and container glass were also found. In unit J lot 8, bone, scrap metal and a railway spike represent most of the items found.

Phase [51] is a deposit of yellow-brown sand with cobbles found in unit D overlying the Phase

Artifact Group and Object	Freq.	%
19D	**124**	
Lot 9 Phase [50]	**124**	100.0
Architectural	7	5.6
Nail	4	
Pane Glass	3	
Faunal/Floral	35	28.2
Bird	2	
Fish	5	
Fish Scale	22	
Mammal	5	
Shell	1	
Food Preparation and Consumption	48	38.7
Bottle	3	
Can	4	
Jug	2	
Tableware	3	
Unidentifiable Glass	35	
Unknown	1	
Medicinal Hygiene	1	0.8
Mirror	1	
Native	1	0.8
Projectile Point	1	
Smoking	1	0.8
Other Pipe Stem	1	
Unassigned Material	31	25.0
Other	1	
Scrap Metal	30	
Grand Total	**124**	100.0

Figure 143. Unit D, lot 8, Phase [51] view looking north, showing water-born sand deposit.

[50] layer. As with the earlier phase, the swirled appearance of the surface indicates water deposition during periods of high lake levels. It is likely that several episodes of high water and inundation occurred over the 80-year period between 1805 and 1885. Water-born debris and sediment is still a common occurrence on the site, the most recent episode in the winter of 2019/2020. A total of 49 items were found in this phase -11 nails and 2 pieces of window glass are new items found in the phase compared to the earlier Phase [50], as well as 20 ceramic sherds (creamware, pearlware and refined white earthenware) which did not occur in such high numbers earlier. A smoking pipe, pharmaceutical bottle, and mirror fragments are also new types of items.

The next two phases [52] and [53] represent features found in unit H. The first is a cobble-filled depression and the next is two parallel impressions in the underlying sand that appear to be from duckboards. The latter may represent a temporary walkway over the wet ground leading from the nearby road (to the west about 4 metres) down towards the lakeshore. The impressions are shown in Figure 142. These run in an east-west direction and are about 20 cm wide each or 8 inches – the width of a plank. There is a narrow gap between the two which suggests that these were not part of a permanent walkway but instead a temporary ad hoc means of traversing the wet ground. The depth of the features is about 3-4 cm on average, and they are infilled with dark sandy loam. No traces of wood were found suggesting that these were raised, and the impressions infilled naturally. No artifacts were found in association with the board impressions. In the cobble filled shallow feature adjacent to the boards, 50 pieces of faunal bone were found along with 2 nails, a few brick fragments and 2 sherds of creamware.

Figure 144. Unit F, lot 10, Phase [54] view looking west, showing dark brown layer running parallel to the wall, lot 9, and partially overlying Phase [50] lot 14, water-born sand deposit.

Artifact Group and Object	Freq.	%
19F	**132**	
Lot 10 Phase [54]	**132**	100.0
Architectural	87	65.9
Nail	12	
Unidentifiable Metal Frags.	63	
Pane Glass	12	
Clothing	2	1.5
Button – Ceramic, Mother-of-Pearl	2	
Faunal/Floral	8	6.1
Fish	1	
Mammal	3	
Shell	4	
Food Preparation and Consumption	35	26.5
Bottle	23	
Flatware	4	
Other	8	
Grand Total	**132**	100.0

Phase [54] is a dark brown sandy loam found in unit F. This sediment fills a slight depression adjacent to the wall and is localised to this unit only. Artifacts found include mostly unidentifiable sheet metal fragments, faunal bone, a significant number of bottle glass shards, a prosser button and mother-of-pearl button, nails and window glass, and a few ceramic sherds.

The final Phase in Period V is a dark yellowish-brown sand deposit found across the site from north to south in 5 units, Phase [55]. The layer has small pieces of limestone rubble on the surface which is from the demolition of the fort, although perhaps deposited at a later date, as a result of the construction of a light gauge railway which crossed the site in 1885 (discussed in Period VI). More than 1000 items were found in all five units combined. Most of these were found in units B and D at the north end of the site. Faunal bone was the predominant item found in most units accounting for about 50% of the finds on average. Architectural artifacts such as nails, window glass, and brick fragments were also found. Ceramic tableware was also quite common including wares such as creamware, pearlware, whiteware, yellowware, ironstone, and soft paste porcelain. Bottle glass was also found in relatively small numbers but include 18th century types such as a gin case bottle. A piece of a crystal decanter was also recovered. Interesting items include a silver-plated copper straight pin, a brass drawer pull, oil lamp font base, a .22 cal. shell casing, a comb fragment, a King George II Irish half penny – date illegible (1727-1760), and 2 pieces of lead shot – a musket ball and rifle ball.

Figure 145. Unit B, lot 8, view looking north, showing uppermost layer, Phase [55], in Period V.

Figure 146. Unit H, lot 6, view looking north, showing uppermost layer, Phase [55], in Period V.

Figure 147. Unit D, lot 7, view looking north, showing uppermost layer, Phase [55], in Period V.

Figure 148. Unit G, lot 5, view looking west, showing uppermost layer, Phase [55], in Period V.

To summarize, the artifact assemblage reflects a wide range of activities and includes items from the 18th century and 19th century. Ceramics such as pearlware and creamware are associated with the early fort, as are the case bottle, coin, drawer handle pull, and crystal decanter. Items dating from the later part of the 19th century include ceramics such as refined white earthenware and ironstone. The vulcanized rubber comb and modern clear, machine made glass bottles date from the second half of the 19th century and into the 20th century. Pre-contact period artifacts were also found such as chert debitage and stone net-sinkers made from locally available flat beach cobbles. The latter could date to the Late Archaic period. Such a diverse collection of items reflects contemporary activity – i.e., late 19th century, and disturbance to earlier deposits associated with the fort and the pre-contact period natural soil. This disturbance is a direct result of the activities that occurred in the next period, Period VI, the light gauge railway known as the Sandfly Express Railway that ran directly over top of the remains of the fort. Excavation for the roadbed for the railway, and for the rail ties, is well-documented in the archaeological record and discussed below.

Artifact Group and Object	Freq.	%
19B	**351**	
Lot 8 Phase [55]	**351**	100.0
Architectural	24	6.8
Brick	1	
Foundation Material	1	
Glazed Brick	2	
Nail	3	
Pane Glass	17	
Commercial/Industrial Activities	1	0.3
Other Hardware	1	
Faunal/Floral	235	67.0
Bird	14	
Fish	21	
Mammal	195	
Shell	5	
Food Preparation and Consumption	80	22.8
Beverage Bottle	1	
Plate	4	
Tableware	67	
Unidentifiable	8	
Native	2	0.6
Misc. Debitage	2	
Unassigned Material	9	2.6
Other	2	
Scrap Metal	7	
Grand Total	**351**	100.0

Artifact Group and Object	Freq.	%
19D	**308**	
Lot 7 Phase [55]	**308**	100.0
Architectural	33	10.7
Brick	2	
Nail	12	
Pane Glass	19	
Arms and Military	2	0.6
Cartridge 0.22 cal.	2	
Clothing	2	0.6
Grommet	2	
Faunal/Floral	16	5.2
Fish	2	
Mammal	5	
Shell	9	
Food Preparation and Consumption	93	30.2
Bottle	9	
Glassware	4	
Tableware	49	
Unidentifiable	30	
Utensil - Knife	1	
Medicinal Hygiene	1	0.3
Vulcanized Rubber Comb	1	
Native	1	0.3
Flake	1	
Unassigned Material	160	51.9
Scrap Metal	157	
Wire	3	
Grand Total	**308**	

Artifact Group and Object	Freq.	%
19E	**77**	
Lot 12 Phase [55]	**77**	100.0
Architectural	18	23.4
Nail	16	
Pane Glass	1	
Paving Material	1	
Arms and Military	2	2.6
Lead Shot	2	
Commercial/Industrial Activities	5	6.5
Railroad Bedding	1	
Scrap Metal	4	
Domestic Activities	1	1.3
Straight Pin	1	
Faunal/Floral	15	19.5
Bird	1	
Mammal	14	
Food Preparation and Consumption	16	20.8
Beverage Bottle	6	
Bottle	1	
Other	1	
Tableware	5	
Unknown	3	
Fuel	1	1.3
Coal	1	
Native	1	1.3
Misc. Debitage	1	
Unassigned Material	18	23.4
Scrap Metal	18	
Grand Total	**77**	100.0

Artifact Group and Object	Freq.	%
19G	**233**	
Lot 5 Phase [55]	**233**	100.0
Architectural	45	19.3
Brick	6	
Foundation Material	3	
Nail	19	
Pane Glass	12	
Plate Glass	5	
Commercial/Industrial Activities	11	4.7
Other Hardware	11	
Faunal/Floral	21	9.0
Mammal	12	
Shell	4	
Unidentified	5	
Food Preparation and Consumption	124	53.2
Bottle	62	
Box	21	
Carafe/Decanter	1	
Case Bottle	2	
Handle Pull	1	
Hollowware	7	
Plate	1	
Pots and Pans	1	
Tableware	27	
Fuel	1	0.4
Coal	1	
Furniture	1	0.4
Oil Lamp Font/Base	1	
Native	13	5.6
Misc. Debitage	11	
Net Sinker	2	
Personal	4	1.7
Coin George II	1	
Other	3	
Unassigned Material	13	5.6
Grand Total	**233**	100.0

Artifact Group and Object	Freq.	%
19H	**76**	
Lot 6 Phase [55]	**76**	100.0
Architectural	4	5.3
Brick	1	
Nail	1	
Pane Glass	2	
Commercial/Industrial Activities	1	1.3
Railroad Bedding	1	
Faunal/Floral	39	51.3
Bird	2	
Fish	16	
Mammal	21	
Food Preparation and Consumption	23	30.3
Bottle	8	
Flatware	8	
Gin Bottle	2	
Tableware	5	
Fuel	1	1.3
Coal	1	
Unassigned Material	8	10.5
Other	2	
Scrap Metal	6	
Grand Total	**76**	100.0

Period VIa – The Sandfly Express Railway 1885 – 1930 Phases [56] to [82]

This Period in the history of the site is defined by events related to the Erie Beach amusement park in operation between 1885 and 1930.[130] The park was founded by Benjamin & Edwin Baxter and W.B. Pierce as a recreational getaway for Canadians and Americans mostly from Buffalo. Once having crossed over on the Fort Erie ferry (located near the present-day Peace Bridge), the passengers embarked upon the Fort Erie, Snake Hill Pacific Railway for the short ride to the Erie Beach park (also known as Fort Erie Grove or Snake Hill Grove). The railway nicknamed the 'Sandfly Express' was probably narrow gauge (between 2 feet and 3.5 feet), smaller than the standard gauge of 4' 8.5" used for international railways in Canada and the U.S beginning in the 1870s. The postcard below (Figure 149) suggests that the railway might have been 3.5 feet, laid on an earthen ballast railbed. Like the narrow-gauge railway itself, this type of bed was one of the cheapest type of beds to construct, much less expensive than using stone, or cinder for ballast.

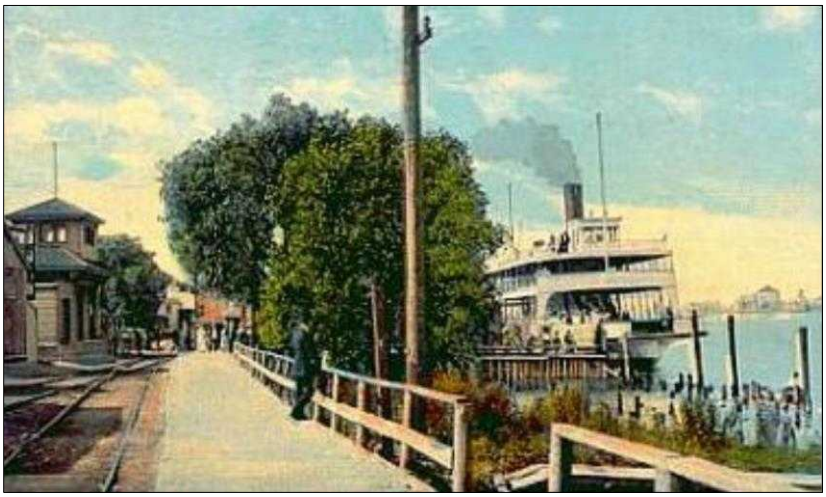


Figure 149. Turn-of-the-century postcard of the ferry terminal and the tracks of the Sandfly Express. Arcaheologoical evidence of the railway was found in severa excavation units during the 2019 season. Image from http://cec.chebucto.org/ClosPark/ErieBech.html

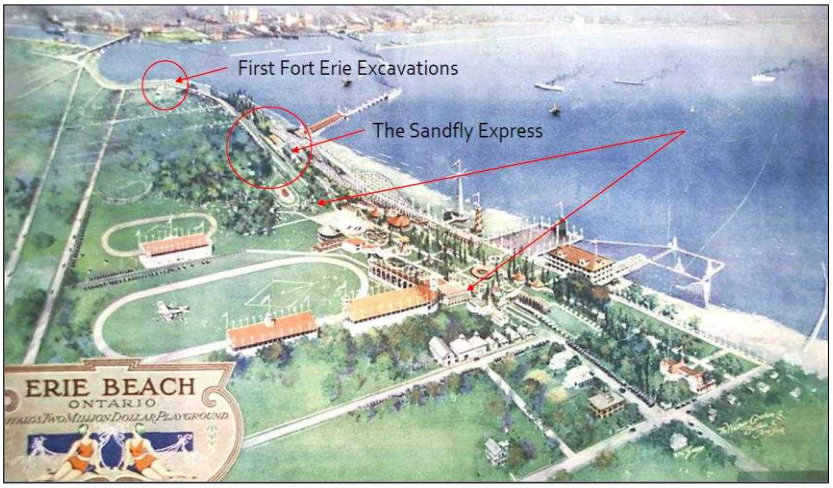


Figure 150. 1920s postcard showing the route of the Sandfly Express ahttp://www.exploringniagara.com/places_to_explore/forgotten_places/erie_beach_amusement_park.html

The Sandfly Express began operation in 1887 and ran from the ferry terminal along the lakeshore for about 2 miles (~3.3 km) to Erie Beach, present-day Waverly Beach. The route ran directly over top of the first Fort Erie. The first engine for the Sandfly Express was built in 1885 in Pittsburgh and the four coaches were built in London. According to the source, the first engine was replaced 'after a few years' with another 'Baldwin style locomotive' known as 'No.

[130] Information on the Erie Beach amusement park and the Sandfly Express is from http://cec.chebucto.org/ClosPark/ErieBech.html and https://www.skyscrapercity.com/threads/abandoned-ontario-erie-beach-amusement-park.2100299/

Figure 151. Turn-of-the-century photograph inside the amusement park. https://secretswithinthefog.wordpress.com/2012/10/26/former-erie-beach-amusement-park/

29'. This was used until 1902 when it derailed and hit a tree. Two more locomotives were used on the railway beginning 1901. In 1904, engine #271 was deployed and operated until 1930 when the park was closed, and the rolling stock cut up for scrap.

Figure 52. October 1934 aerial photograph showing approximate line of the Snake Hill Pacific Railway. The route runs to the east of the ruins of the second fort, across the vacant land between the fort and the lakeshore. The rails and rolling stock were sold after 1930 and the area was used as a parking lot as early 1934.

Artifact Group and Object	Freq.	%
19F	**114**	100.0
Lot 8 Phase [57]	**54**	100.0
Architectural	17	31.5
Corroded sheet metal	17	
Domestic Activities	2	3.7
Barrel Hoop	2	
Faunal/Floral	5	9.3
Mammal	5	
Food Preparation and Consumption	21	38.9
Baking Dish	1	
Bottle	11	
Flatware	9	
Fuel	2	3.7
Coal	2	
Organic	6	11.1
Other Hardware	3	
Unassigned Materials	1	1.9
Foil	1	

Figure 153. Unit F, view looking west, showing lots 8, Phase [57], and lot 11, Phase [56].

Lot 11 Phase [56]	60	100.0
Activities	4	6.7
Wedge	2	
Architectural	6	10.0
Brick	2	
Nail	2	
Pane Glass	2	
Arms and Military	2	3.3
Percussion Cap	2	
Commercial/Industrial Activities	4	6.7
Railroad Bedding	4	
Faunal/Floral	10	16.7
Mammal	4	
Mollusk	6	
Food Preparation and Consumption	30	50.0
Bottle	16	
Bowl	2	
Can	4	
Flatware	6	
Tea Pot/Coffee Pot	2	
Unassigned Material	4	6.7
Unidentifiable	2	
Wire	2	
Grand Total	**114**	

All phases in this Period are events related to the railway. Phases [56] and [57] are dark brown sand with inclusions of slag and cobbles. These are found adjacent to the top of the wall foundation which is at the same approximate ground level at this time. Pieces of tar paper were found in Lot 11 (Phase [57]). Artifacts found in the layers include a few nails and window glass fragments, corroded unidentifiable metal, a few sherds of creamware, a barrel hoop, container glass, a sherd of 18th century red jasperware (teapot) and a mid-19th century percussion cap. The assemblage together represents a mixture of 18th, 19th and 20th century materials and is likely the result of disturbance to earlier layers during the laying of the rails and construction of the railbed.

The next Phase [58] is found in unit B, a deposit of dark brown sandy loam with only a few cobbles. Of the 81 objects found in the unit, 58 of these are faunal bone, along with a few pieces of

Figure 154. Unit B, view looking north, showing lot 7, Phase [58] underlying lot 8.

Figure 155. Unit E, view looking north, showing lot 8 Phase [61] railway tie depressions.

brick, container glass, tableware ceramics (refined white earthenware, pearlware and creamware), and chert debitage.

Phases [59] to [61] are found in unit E. These are all related to several parallel depressions from railway ties running in an east-west direction across the unit, on the right-of-way of the tracks. A layer of mottled clay and sand, Phase [59] and cobbles [60] was found in association with the depressions. These likely represent maintenance and/or construction episodes during the time the railway was in existence. 'Maintenance of way' was done periodically, especially on railways where the tracks were laid directly on an earth roadbed and overlying ballast. Here the tracks ran over the bastion wall and to the east of that feature. The depressions, Phase [61] were about 25 cm wide and about 15 cm deep and ran on a slightly northwest-southeast direction across the unit (Figure 155). Of the 364 artifacts found in Phases [59] and [60] almost 300 are sheet metal fragments and scrap metal. However, a musket ball, silver-plated copper straight pin, creamware and a sherd of polychrome tin-glazed earthenware are all items that date to the period of the first fort. These highlight the type of disturbance to earlier deposits caused by the railway construction. Items contemporary with the deposit include a 1915 Canadian penny, railway tie spikes, and machine-made glass bottles (post-1903).

Phase [62] is a dark brown sandy loam deposit that covers some of the earlier rubble layers found in units B, C and E. The surface of the layer is still strewn with rubble which suggests the surface was not a much-used walking surface and instead is a track-side ground surface. Artifacts found in the deposit include a mixture of earlier material along with items deposited at the time the later was formed. In unit B, lot 6, 153 artifacts were found including a US 1899 Indian Head penny, a .22 cal. brass casing, railway spikes, nails and window glass, bottle glass and a few ceramic sherds dating from the early fort period – creamware – and the late 19th century – refined white earthenware. In

unit E, lot 11, 53 artifacts were recovered which included mostly faunal bone, a bone button blank – from the earlier fort period, 18th century creamware, a white clay smoking pipe stem and a sherd of post-1860s ironstone and whiteware. In unit E, lot 7, only 57 items were found including faunal bone, a few nails and window glass fragments, and ceramics such as pearlware, creamware and refined white earthenware. Many of the sherds were very small perhaps due to the constant maintenance of way activities and trampling.

Figure 156. Unit C, view looking north, showing lot 11, Phase [62].

Figure 157. Unit B, view looking north, showing lot 6, Phase [62].

Figure 158. Unit C, view looking north, showing lot12/13, feature Phase [63].

A semi-circular feature was found in the north part of unit C. This was intrusive into the earlier lot 11 and consisted of dark sandy loam with mottles of light brown coloured sand. A barrel hoop was found in the north profile of the unit associated with this feature of unknown function. Additional artifacts recovered include a lead .303 cal. bullet, pink transfer-printed whiteware, solarized manganese glass (20th century), a few nails, bone, and scrap metal.

Phase [64] is a widespread deposit found across most of the site. This is a dark brown sandy loam with a few stone and cobble inclusions found in units B, C, D, E, F, G, K, and M. (The lot numbers for these units can be found on the correlation chart.) Rubble is still present on the surface of this layer indicating that it was probably not a much-used walking surface and instead was a track-side ground surface. Artifacts found in the layer include late 19th /early 20th century materials such as bottle glass (beverage and condiment bottle), crown type bottle caps, ceramics – refined white earthenware – wire nails, and railway spikes. Earlier items such as creamware are also present indicating disturbance to earlier deposits. Some of the more interesting objects include bird shot, buck and ball shot, and a large portion of a cannister shot dating to the period of the first fort. Other items such as a mirror (fragment), a bone-handled knife, and a gunflint. A pewter button marked 'US' was found in unit F. This dates from the occupation of the site by U.S. forces in the summer and fall of 1814. More architectural debris such as nails and window glass were found in unit K at the south end of the site than in units farther north. These might be associated with the earlier building dating to the first fort and are likely in a disturbed context.

Figure 159. Unit B, view looking north, showing lot 5, Phase [64].

Figure 160. Unit D, view looking north, showing lot 6, Phase [64].

Figure 161. Unit F, view looking west, showing lot 6, Phase [64] and railway tie, Phase [70].

Figure 162. Unit K, view looking north, showing lot 5, Phase [64].

Figure 163. Unit K, view looking north, showing lot 4, Phase [65], partially overlying lot 5.

In Phase [65] a dark brown sandy loam deposit was found in units K and M. The layer had less rubble than the underlying lots. In both units a total of 37 artifacts were found including brick fragments, a few nails, container glass, 1 piece of faunal bone and a few sherds of creamware, refined white earthenware and coarse red earthenware. Brick was more common in this Phase compared to earlier Phases and the fragments were generally larger, with some almost complete bricks.

Figure 164. Unit D, view looking north, showing lot 5, Phase [66], partially overlying lot 6.

A thin deposit of very compact, reddish-brown clay with a few pieces of small rubble, was found in unit D, lot 5, along the west wall, Phase [66]. The location of the deposit, on the western edge of a unit situated on the western side of the side, may indicate that this is the edge of an early iteration of Lakeshore Road. The road was in existence from the earliest days of the fort in the 18th century and would have had many periods of re-surfacing. The compact surface with some clay and small rubble is reminiscent of 'metalling', a technique used to provide a durable surface in a locale where sandy loam is the natural soil type. Of the 61 artifacts found in the layer, 28 are bottle glass shards, together with a few small pieces of brick, 6 nails, 2 pieces of window and fragments of unidentifiable metal.

Phases [67] to [70] are all related to the railway bedding, tie placements in the railway bedding ballast and the actual remains of the ties. All Phases are found in units A, E and F. Phase [67] is a greyish black sandy loam with cobbles and some brick fragments. This is the railway bed or roadbed itself, lot 8, found on the west side of the unit. Phase [68], lot 9, overlies the roadbed on the east side and appears to be the eastern edge of the roadbed or right-of-way. Phases [69] and [70], lots 6 and 7, are actual railway ties – lot 7 has a railway spike *in-situ*. The ties run parallel to the right-of-way and not across the roadbed as would be expected. It is possible that these particular ties represent a track-side platform rather than the right-of-way proper.

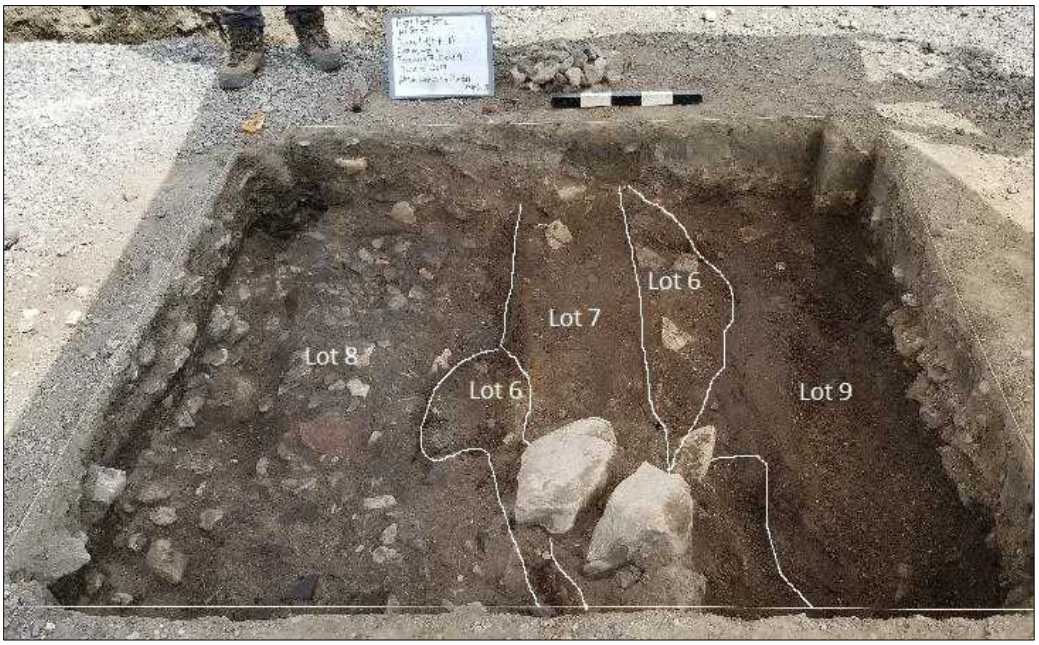


Figure 165. Unit A, view looking north, showing lots 6, 7, 8, and 9 -Phases [70], [69], [67], and [68] respectively.

In unit E, traces of a wooden tie - probably removed when rotten, and running in an east-west direction across the railbed - was found on the surface of a layer of dark greyish brown sand and sandy loam with a few

Figure 166. Unit E, view looking north, showing lot 5, Phase [70], with traces of wood in the upper right corner.

Figure 167. Unit F, view looking west, showing lot 5/7, Phase [70], railway tie and associated trench.

cobbles. A railway spike and tie plate were recovered from the layer. In unit F, the remains of a tie were found within a slight depression running across the railbed in an east-west direction.

Phase [67] artifacts found in Unit A include mostly unidentifiable metal, container glass and a few ceramic sherds, among which is a single sherd of 18th century white salt-glazed stoneware. This ceramic together with a few wrought nails indicates that the Phase is a disturbed context resulting from excavation associated with the construction of the railbed in the 1880s. Artifacts found in Phase [68] in unit A include mostly unidentifiable metal fragments, container glass and a couple of large threaded bolts for the railway tie plates. Similar items were found in Phases [69] and [70] where railway hardware and container glass are present in significant numbers. The presence of dozens of wrought nails suggests that there were displaced from earlier contexts during the excavation associated with the construction of the railbed in the 1880s.

Phase [71] is a displaced subsoil sand deposit with a high percentage of cobbles and small limestone fragments. This is found in most units from north to south across the site (D, F, G, H, J, K, and M). The layer was probably not a well-used walking surface in view of the many cobbles present and should instead be viewed as a track-side ground surface. Artifacts found in the layer are a mixture of pre-contact, 18th, 19th and 20th century materials. This Phase was best represented in unit J where more than 824 items were recovered. The precontact materials included chert debitage and two net-sinkers made from flat cobbles with opposing side-notches. Significant numbers of 18th century ceramics such as creamware, pearlware and black basalt were recovered. Nineteenth century ceramics include ironstone, refined white earthenware, flow printed whiteware, and porcelaineous stoneware. Other items found were a bucket bail/handle, wrought nails, window glass, a button, a slate pencil, and a large number of bottle glass shards. The materials in total span more than 2500 years of occupation and are clearly the result of excavation into earlier deposits and the displacement of these contexts into the later period. The matrix of the sediment itself suggests that the disturbance was to natural subsoil sand

characteristic of the sand subsoil found in WLU excavations on the west side of Lakeshore Road in 2013, 2015, 2017.

Figure 168. Unit D, view looking north, showing lot 4, Phase [71].

Figure 169. Unit G, view looking west, showing lot 4, Phase [71].

Figure 170. Unit H, view looking north, showing lot 4, Phase [75] and lot 5, Phase [71].

Figure 171. Unit J, view looking north, showing lot 6, Phase [71] and lot 5/7, Phase [72].

Figure 172. Unit K, view looking north, showing lot 3, Phase [71].

Artifact assemblages found in other units, in Phase [71], are not as large as in unit J and consist mostly of container glass and scrap metal with fewer numbers of ceramics, faunal bone and other miscellaneous items. In general, the materials support the notion that the Phase [71] deposit is the result of disturbance to earlier 18th century, 19th century deposits and to subsoil.

Artifact Group and Object	Freq.	%
19J	**824**	
Lot 6 Phase [71]	**824**	100.0
Activities	1	0.1
Graphite Pencil	1	
Architectural	59	7.2
Flooring Material	2	
Foundation Material	1	
Glazed Brick	17	
Nail	19	
Other	1	
Pane Glass	18	
Wire	1	
Clothing	1	0.1
Button	1	
Commercial/Industrial Activities	104	12.6
Coal Fuel/Cinder	11	
Other Hardware	5	
Railroad Bedding	5	
Scrap Metal-Sheet Metal	83	
Domestic Activities	4	0.5
Barrel Hoop	1	
Buckle/ Buckle Part	3	
Faunal/Floral	65	7.9
Bird	2	
Fish	1	
Mammal	39	
Shell	23	
Food Preparation and Consumption	359	43.6
Bottle	190	
Crock	20	
Dinner Plate	1	
Glassware	16	
Jug	4	
Plate	11	
Saucer	28	
Stemware	2	
Tableware	82	
Unknown	5	
Fuel	7	0.8
Coal	7	
Medicinal Hygiene	1	0.1
Toiletry/Perfume Bottle	1	
Native	21	2.5
Misc. Debitage	19	
Net-sinker	2	
Smoking	2	0.2
White Clay, Plain Stem	2	
Unassigned Material	200	24.3
Other	5	
Scrap Metal	191	
Sheet Metal	1	
Wire	3	
Grand Total	**824**	100.0

Phase [72] is a shallow trench about 75 cm wide, filled with dark brownish black sandy loam and small amounts of limestone rubble, found along the western edge of unit J and the eastern edge of unit H (Figure 171). The purpose of the trench is unknown. The small number of artifacts (n=34) found in the feature includes faunal bone, container glass, unidentifiable metal fragments, chert debitage and ceramic.

Phases [73] and [74] are layers of sand found in unit A, lots 5 and 4, respectively. These are related to the railway right-of-way and partially overlie the ballast and railways ties on the west side of the unit. Except for 22 objects (container glass and scrap metal mostly) found in lot 5, all other artifacts were found in lot 4. Most of the material is container glass and unassigned metal and hardware, which make up almost 2/3 of the 547 items. There is a wide assortment of objects such as buttons and buckles, a barrel hoop, nails, window glass, smoking pipes and ceramics from the 18th century (creamware, pearlware, white salt-glazed stoneware) and also the 19th century

Figure 173. Unit A, view looking north, showing lots 4 and 5, Phases [74] and [73].

(refined white earthenware and ironstone). Some of the container glass is 20th century and some is free-blown glass from the 18th century. As with other Phases in this Period the artifacts represent a mixture of early and late materials in a disturbed context. The disturbance is due to excavation that occurred in association with the construction of the railbed.

Artifact Group and Object	Freq.	%
19A Lot 4 Phase [74]	**547**	100.0
Architectural	95	17.4
Brick	5	
Decorative Glass	1	
Nail	74	
Pane Glass	13	
Plate Glass	1	
Spike	1	
Clothing	9	1.6
Buckle/ Buckle Part	5	
Button	2	
Braided cord	2	
Commercial/Industrial Activities	10	1.8
Railroad Bedding	7	
Railroad Spike	3	
Domestic Activities	1	0.2
Barrel Hoop	1	
Faunal/Floral	64	11.7
Fish	3	
Mammal	43	
Shell	18	
Food Preparation and Consumption	159	29.1
Beer Bottle	4	
Bottle	105	
Condiment Bottle	1	
Dinner Plate	11	
Flatware	12	
Glassware	7	
Hollowware	1	
Jar	3	
Liquor Bottle	10	
Plate	2	
Tableware	3	
Fuel	8	1.5
Charcoal	6	
Coal	2	
Native	16	2.9
Core	2	
Flake	2	
Misc. Debitage	12	
Smoking	2	0.4
White Clay, Plain Stem	2	
Unassigned Material	183	33.5
Bolt	3	
Cotter Pin	2	
Nail	6	
Other	2	
Scrap Metal	155	
Sheet Metal	3	
Wire	12	
Grand Total	**547**	100.0

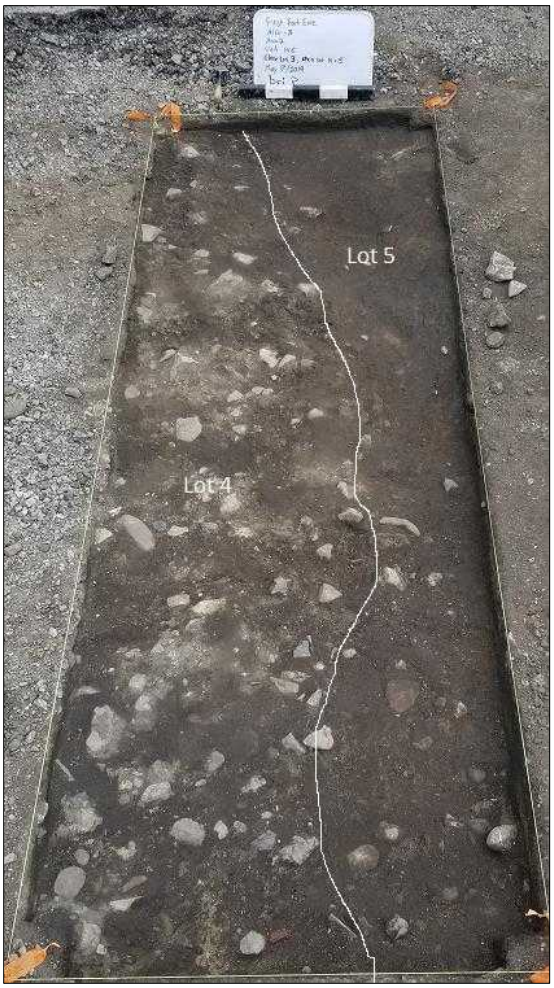


Figure 174. Unit E, view looking north, showing lots 4 and 5, Phases [75] and [70].

Phase [75] is a layer of dark brownish-black, compact clay with some limestone rubble on the surface, found in four units (B, C, E, and H). The layer is likely a track-side ground surface and not a well-used walking surface. About 330 artifacts were found in the lots from this Phase in the above units. Most of the items are container glass, with a few ceramic sherds dating from the 18th century (pearlware and creamware) along with 19th and 20th century types such as refined white earthenware and ironstone. Some faunal bone was also found. Railway spikes and machine cut nails reflect the late 19th century-early 20th century activities. A single silver-plated copper straight pin was found which further indicates disturbance to earlier layers associated with the first fort.

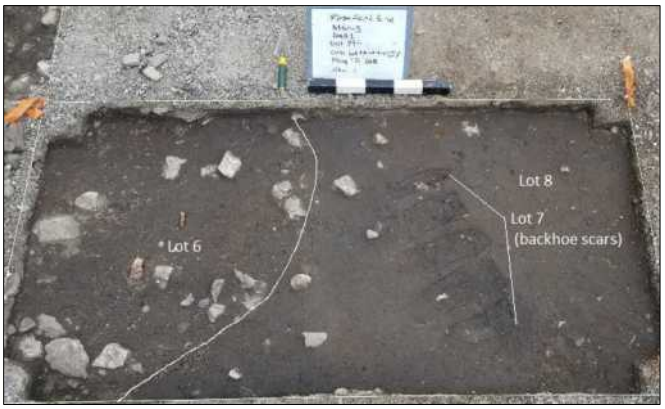


Figure 175. Unit C, view looking north, showing lots 6, 7 and 8, Phases [75], [83] and [77], respectively.

Phases [76] and [77] are found in unit C. These are compact layers of blackish brown clay and clay loam with some rubble on the surface, but less than the preceding Phase [75]. Rusty veins are also present in the Phase [76] layer. The surfaces are contemporary with the earlier Phase [75] and together these represent the track-side ground level. Artifacts were only found in Phase [77] and include 9 fragments of bottle glass, one each of brick, nail, pane glass and chert debitage.

Figure 176. Unit B, view looking north, showing lot 3, Phase [78].

Phase [78] is another very compact clay-loam layer found in units B, F, and H. The deposit contains a high percentage of cobbles and limestone rubble averaging 5-10 m in size. Artifacts found in the Phase total 1498 with the vast majority found in unit F.

Artifact Group and Object	Freq.	%
19F Lot 3 Phase [78]	**1096**	100.0
Architectural	108	9.9
Brick	6	
Drainpipe Tile	2	
Foundation Material	2	
Nail	40	
Other	36	
Pane Glass	6	
Plate	12	
Plate Glass	4	
Commercial/Industrial Activities	4	0.4
Railroad Bedding	2	
Railroad Spike	2	
Faunal/Floral	26	2.4
Bird	2	
Mammal	4	
Mollusk	20	
Food Preparation and Consumption	893	81.5
Beer Bottle	26	
Beverage Bottle	2	
Bottle	561	
Can	50	
Closure	23	
Condiment Bottle	4	
Cup	22	
Flatware	22	
Glassware	8	
Jar	2	
Milk Bottle	1	
Milk Pan	58	
Other	8	
Plate	4	
Pop Bottle	30	
Stemware	2	
Tableware	36	
Wine Bottle	34	
Fuel	4	0.4
Cinder	4	
Furniture	5	0.5
Lightbulb	4	
Other	1	
Medicinal Hygiene	10	0.9
Patent Bottle	10	
Native	11	1.0
Misc. Debitage	8	
Trade Silver	3	
Unassigned Material	35	3.2
Other	6	
Scrap Foil	3	
Scrap Metal	12	
Sheet Metal	6	
Wire	8	
Grand Total	**1096**	100.0

In unit F, lot 3, more than 80% of the assemblage is made up of Food Group items, and the majority of these are container glass. A few ceramics were also found including 18th century types, as well as 18th century wine bottle fragments and crystal stemware. A crimped piece of a silver mirror may be a piece of historic period Native jewellery. More modern items include a sherd of porcelaineous stoneware with a back-mark of Johnson Bros. dating to 1913, a bottle with a Dominion Glass mark dating after 1923, and 1950s era coke bottle glass. In short, the assemblage represents disturbance to earlier layers associated with the first fort, as well as items contemporary with the Sandfly Express during its latest phase.

Figure 177. Unit F, view looking west, showing lot 3, Phase [78].

The next Phase [79] is a thin deposit of dark brown sandy loam with inclusions of pebbles, slag and brick. The layer is found on the east half of unit C. Only 23 artifacts were found in the layer including a few nails, brick fragments, pane glass, container glass, ceramics, unidentifiable metal and pieces of plastic.

Artifact Group and Object	Freq.	%
19A Lot 3 Phase [80]	**684**	100.0
Architectural	69	10.1
Brick	2	
Decorative Glass	1	
Glazed Brick	5	
Nail	12	
Pane Glass	42	
(blank)	7	
Clothing	2	0.3
Braided cord	2	
Commercial/Ind. Activities	3	0.4
Railroad Bedding	2	
Railroad Spike	1	
Faunal/Floral	28	4.1
Mammal	5	
Mollusk	1	
Shell	22	
Food Prep. and Consumpt.	439	64.2
Beer Bottle	18	
Bottle	219	
Can	1	
Closure	1	
Condiment Bottle	6	
Flatware	24	
Glassware	12	
Hollowware	18	
Tableware	6	
Tumbler	2	
Wine Bottle	132	
Fuel	6	0.9
Coal	6	
Medicinal Hygiene	4	0.6
Other	1	
Toiletry/Perfume Bottle	3	
Native	7	1.0
Core	5	
Misc. Debitage	2	
Smoking	7	1.0
Other Pipe Stem	1	
White Clay, Plain Bowl	4	
White Clay, Plain Stem	2	
Unassigned Material	119	17.4
Hose/Tubing	1	
Other	12	
Scrap Metal	69	
Scrap Plastic	2	
Screw	4	
Wire	31	
Grand Total	**684**	100.0

Figure 178. Unit A, view looking north, showing lot 3, Phase [80].

Phase [80] is found in several units across the site from north to south (A, C, G, J, K, and M). This is a layer of sandy clay loam with some small stones on the surface. Artifacts found span the 18th to 20th centuries. Of the 1114 objects found most of these are in unit A. The greatest part of the assemblage is comprised of container glass followed by unidentifiable scrap metal and other materials. Nails and window glass are also quite numerous. Ceramics are quite varied and include 18th century types (creamware, white salt-glazed stoneware and porcelain) along with 19th and 20th century types (ironstone and refined white earthenware).

Phase [81] is a reddish-brown sand layer found in two separate areas of the site in units D and J, north and south ends, respectively. The layer may be water born sediment occasioned by high water levels which deposited sand in the lower elevations on the site at the time. Artifacts are few and consist mostly of container glass and unidentifiable metal.

Figure 179. Unit D, view looking north, showing lot 3, reddish brown sand on west side of unit. Phase [81].

Figure 180. Unit J, view looking north, showing lot 4, reddish brown sand in s.w. corner of unit, Phase [81].

Artifact Group and Object	Freq.	%
19A Lot 2 Phase [82]	**202**	100.0
Architectural	27	13.4
Brick	8	
Nail	6	
Pane Glass	13	
Food Prep./Consumpt.	125	61.9
Bottle	110	
Glassware	1	
Tableware	4	
Unknown	10	
Fuel	8	4.0
Charcoal	2	
Coal	6	
Native	21	10.4
Core	3	
Misc. Debitage	18	
Unassigned Material	21	10.4
Other	6	
Scrap Metal	6	
Scrap Plastic	6	
Unidentifiable	1	
Wire	2	
Grand Total	**202**	100.0

The final Phase in this Period [82] is a deposit of reddish-brown clay found only in unit A. The layer covers all earlier railway features and represents the final event in this chapter of the site's history. Most of the assemblage consist of container glass, with a few nails and window glass fragments. Unidentifiable scrap metal is present as in earlier Phases in this period as is chert debitage, of which 3 cores are included. In this location, the layer served as the parking lot surface prior to paving.

Figure 181. Unit A, view looking north, showing lot 2, reddish brown clay, Phase [82].

Period VIb – Mid-1930s to 1970s? Parking Lot Phases [83] to [85]

Figure 182. Unit C, view looking north, showing lot 7 feature, Phase [83] intrusive into surface of lot 5, Phase [84].

The first event in this Period is a series of regular shallow divots in the surface below the asphalt in unit C. The regular spacing and size suggests that these are the teeth from an excavator which scarred the ground surface during a shallow excavation, perhaps connected with the grading of the area prior to placing the asphalt. A single corroded nail was found in the fill within the divots.

Phase [84] is a brown sandy loam deposit with rusty inclusions throughout. The layer is only found in units C and E.

Figure 183. Unit E, view looking north, showing lots 3 and 4, Phases [84] and [75], respectively.

Artifact Group and Object	Freq.	%
19E Lot 3 Phase [84]	**121**	100.0
Architectural	8	6.6
Brick	1	
Nail	5	
Pane Glass	2	
Arms and Military	1	0.8
Gunflint	1	
Comm./Ind. Activities	5	4.1
Other Hardware	3	
Railroad Bedding	1	
Railroad Spike	1	
Domestic Activities	1	0.8
Straight Pin	1	
Faunal/Floral	1	0.8
Shell	1	
Food Prep/Consump.	38	31.4
Beverage Bottle	1	
Beverage Can	3	
Bottle	21	
Flatware	4	
Other	9	
Native	3	2.5
Modified Flake	3	
Smoking	1	0.8
White Clay, Plain Stem	1	
Unassigned Material	63	52.1
Other	1	
Scrap Foil	7	
Scrap Metal	55	
Grand Total	**121**	100.0

Artifacts found in the layer are predominantly scrap metal and container glass, although a silver-plated copper straight pin, smoking pipe fragments and a musket flint were also found. These are in a disturbed context, but the presence of these items in a later deposit, dating from after the 1930s indicates that artifacts dating to the period of the first fort have always been subject to displacement as a result of later construction and excavation activities.

Phase [85] is the final layer found in most units on the site before the asphalt parking lot was added. This layer was the ground surface from the mid-1930s, when the Sandfly Express was no longer in existence, up until ca. 1970s. The parking lot was directly across from the old fort entrance on Lakeshore Road, in place from the early 20th century.

Figure 184. Aerial photograph, 1934, showing the entrance to the fort off Lakeshore Road. The parking lot does not appear to be present.

Figure 185. Photograph dated 1939 showing the old parking lot by the lake across from the entrance to the fort.

Phase [85] is mixed layer of dark, reddish-brown sandy clay loam found in all units across the site except unit A. This is the first layer below the gravel parking lot bedding. Variations in colour of sediment were evident in units E and K which were directly on, or adjacent to, the former rail right-of-way. In this unit the sediment was blacker than other areas, probably due to residual coal and cinder in the roadway ballast, disturbed during the removal of the tracks in the 1930s.

Figure 186. Unit B, view looking north, showing lot 2 Phase [85].

Figure 187. Unit D, view looking north, showing lot 2 Phase [85].

Figure 188. Unit G, view looking west, showing lot 2 Phase [85].

Figure 189. Unit H, view looking west, showing lot 2 Phase [85].

Figure 190. Unit K, view looking west, showing lot 2 Phase [85].

More than 1300 artifacts were found in this layer. Most of these were container glass and unidentifiable metal. Nails and window glass were also found, as were ceramics ranging in age from the 18th century to the 20th century. Sardine cans and condiment jars speak to the types of activities that occurred in the parking lot during the first half of the 20th century.

Period VII – Modern Parking Lot 1970s-2019 Phase [86]

This marks the final Phase in the history of the excavation area. The modern parking lot was surfaced twice – two lifts – on top of a crushed limestone gravel bedding. The bedding varied in thickness depending on the location of the unit. It was thickest towards the southeast corner of the excavation and thinnest towards the centre and western edge. An average of 10-15 cm of gravel was removed by machine prior to beginning the field school in May 2019. Excavation units were surveyed in on May 7th and 8th. When the field school students began excavation the remaining 5-10 cm of gravel was removed by trowel. Aerial photographs show the parking lot was paved in asphalt sometime before 1995 when the next oldest aerial photograph on Google Earth appears to show a paved surface. The oldest aerial photograph for this area is 1934.

Figure 191. Unit B, foreground view looking southeast, showing lot 1, Phase [86] gravel being removed by trowel after the first 10-15 cm was removed by machine in May 2019 prior to the field school. (Students Tuesday Kaiser, Dan Garner and Abel Land from right to left.)

Figure 192. View looking northeast showing the upper 10-15 cm of gravel bedding below the asphalt being removed by machine.

Figure 193. View looking northeast showing units being laid in using grid points established with the total station. Unit B in progress – unit A in background completed.

8.0 Artifact Assemblage Analysis

DISTRIBUTION BY AREA AND UNIT		
Unit	**Freq.**	**%**
19A	2437	12.3
19B	2175	11.0
19C	706	3.6
19D	2505	12.7
19E	1441	7.3
19F	3288	16.6
19G	1429	7.2
19H	1374	6.9
19J	2149	10.9
19K	2071	10.5
19M	200	1.0
	19775	100.0

The following is an examination of artifact distribution within each excavation unit. Disparities between units are attributable to the location of the unit vis-à-vis the features and buildings found during the 2019 excavation and the associated human behaviour that created the assemblages in each area of the site. By far the greatest number of items came from unit F, located in the approximate centre of the excavation area. Unit D also has a high number of artifacts. Both units are situated in the dry-ditch that runs parallel to the face of the curtain suggesting that this was a commonly used area for refuse disposal – probably over decades as suggested by the stratigraphy characterized by several fill episodes. Unit A has the next highest number of artifacts but most of these are found in layers associated with the Sandfly Express railway from the late 1880s to the 1930s, and the later parking lot. Layers dating to the 18th century were not found in Unit A as work was terminated before early contexts were exposed. Unit B is located within the King's Storehouse and much of the material found is attributable to the 18th century fort and probably this building particularly. Excavation was terminated before interior building features were exposed. The earliest layers found relate to the destruction of the building after 1805. Relatively few artifacts were found in units C, E and G, largely because the masonry wall occupied much of the volume of the units in the latter two, and unit C was a 1 x 2 metre unit and not the standard 2 x 2 metre square unit. At the south end of the site units K and M are located within the presumed officers' quarters and much of the material relates to this building. Unit H is on the far exterior side of the face of the bastion – the unit most removed from the fort itself. The small number of artifacts found in unit M is due to the size of the unit and the fact that excavation was terminated before reaching 18th century deposits.

DISTRIBUTION BY UNIT AND LOT		
19A	**2482**	%
1	6	0.2
2	202	8.1
3	686	27.6
4	576	23.2
5	22	0.9
6	79	3.2
7	622	25.1
8	83	3.3
9	122	4.9
10	2	0.1
5	0	0.0
N/A	81	3.3
Wall Cleaning	1	0.0
		100.0

Within unit A the most well represented layer is lot 3 dating to the late 19th and early 20th centuries. Other lots with an abundance of material are those related to the railbed. The construction of the roadbed resulted in disturbance to earlier layers and much of the material is 18th century in origin although displaced to a later context. All remaining lots are associated with the Sandfly Express throughout its existence from 1885-1930.

DISTRIBUTION BY UNIT AND LOT		
19B	**2175**	%
1	27	1.2
2	144	6.6
3	265	12.2
4	188	8.6
5	41	1.9
6	153	7.0
7	81	3.7
8	351	16.1
9	270	12.4
10	7	0.3
11	53	2.4
12	145	6.7
13	277	12.7
14	91	4.2
Wall Cleaning	82	3.8
		100.0

Within Unit B the greatest number of artifacts are found in lot 8, the ground surface that was exposed for as many as eight decades following the destruction of the fort in 1805 and the construction of the railway bed in 1885. The material here represents the accumulation of debris probably from various activities when the area was on the periphery of the new fort in a little-used area bordering the lakeshore. The focus of the new fort was not on the water as the earlier fort, but on the landward side. Lot 13 is the latest destruction layer associated with the first fort and almost all artifacts from this lot are from the late 18th century fort. Together lots 9, 10, 11, 12, and 14 make up almost 20% of the assemblage and all are related to the 80-year period between the destruction of the old fort and the construction of the railway. Almost 1/3 of the entire assemblage (lots 3-7) is related to the railway period.

DISTRIBUTION BY UNIT AND LOT		
19C	**706**	%
1	45	6.4
2	78	11.0
3	12	1.7
4	23	3.3
5	5	0.7
6	42	5.9
7	1	0.1
8	16	2.3
10	42	5.9
11	128	18.1
14	128	18.1
15	83	11.8
16	24	3.4
17	33	4.7
18	1	0.1
19	20	2.8
12/13	25	3.5
		100.0

Once again, the greatest number of artifacts are found in lot 14, in a context dating to the eight-decade period after the fort was razed. Many of these objects date to the period of the fort and some represent an accumulation of debris throughout the 19th century. Lots 6-13, excluding 7, make up almost 1/3 of the assemblage and all are associated with the Sandfly Express railway between 1885 and 1930. This points to the amount of 'traffic' that was present in the area, perhaps because this may have been a 'station stop' to visit or view the new fort, especially after the 1890s when the entrance to the fort as a tourist attraction was on Lakeshore Road.

DISTRIBUTION BY UNIT AND LOT		
19D	**2505**	%
1	19	0.8
2	206	8.2
3	73	2.9
4	372	14.9
5	61	2.4
6	203	8.1
7	308	12.3
8	49	2.0
9	178	7.1
10	6	0.2
11	922	36.8
N/A	24	1.0
NW of Surface	4	0.2
Wall Cleaning	80	3.2
		100.0

DISTRIBUTION BY UNIT AND LOT		
19F	**3288**	%
1	11	0.3
2	362	11.0
3	1096	33.3
4	207	6.3
5	102	3.1
6	209	6.4
8	54	1.6
9	10	0.3
10	132	4.0
11	60	1.8
12	2	0.1
14	43	1.3
15	942	28.6
16	2	0.1
18	19	0.6
N/A	8	0.2
Wall Cleaning	23	0.7
9/10	6	0.2
		100.0

DISTRIBUTION BY UNIT AND LOT		
19E	**1441**	%
1	57	4.0
2	116	8.0
3	121	8.4
4	11	0.8
5	443	30.7
6	84	5.8
7	57	4.0
10	58	4.0
11	306	21.2
12	77	5.3
13	57	4.0
14	10	0.7
16	19	1.3
18	25	1.7
		100.0

In unit D the accumulation of debris within the ditch during the time the fort was in existence is represented by 37% of the assemblage – lots 10 and 11. Artifacts found in this context date to the period of the fort exclusively, excepting the ubiquitous chert debitage found in the displaced sand subsoil. Lots 7-9 make up more than 20% of the assemblage and these are all related to the 80-year period when this location witnessed minimal use compared to earlier and later periods. As in other units, a great number of finds – almost 30% - are in contexts dating to the railway period, lots 3-6.

In unit E fully 2/3 of the assemblage is found in railway contexts – lots 4, 5, 6, 7, 10, and 11. Lot 12, associated with the period after the fort, before the construction of the railway, is not as well represented as in other units. Interestingly the contexts associated with the parking lot make up a significant proportion of the finds. This unit was one of the closest to the lakeshore and the high number of items found here may simply reflect recreational activity due to its proximity to the lake and the vantage point offered by that location.

Unit F is again the unit with the highest number of artifacts. Although the most items are found in contexts associated with the railway period – more than 53% of the assemblage in lots 3-11 (excluding 9, 10), a significant number of items are found in lot 15. This is the earliest deposit within the dry-ditch and all artifacts found in the context relate to the period of the first fort.

DISTRIBUTION BY UNIT AND LOT		
19G	**1429**	%
1	26	1.8
2	71	5.0
3	178	12.5
4	82	5.7
5	233	16.3
6	55	3.8
7	23	1.6
8	20	1.4
9	41	2.9
10	24	1.7
11	35	2.4
12	6	0.4
13	49	3.4
14	275	19.2
15	126	8.8
19	44	3.1
16/17	3	0.2
16a	67	4.7
Wall Cleaning	71	5.0
		100.0

19K	**2071**	%
1	9	0.4
2	187	9.0
3	80	3.9
4	26	1.3
5	272	13.1
6	36	1.7
7	84	4.1
8	30	1.4
9	31	1.5
10	32	1.5
11	1168	56.4
12	107	5.2
Wall Cleaning	9	0.4
		100.0

In unit G a significant number of finds are from the ditch fill on the west side of the wall and the contemporary fill on the east side. Lots 14 and 15 make up 28% of the assemblage in these contexts with all material relating to the first fort. Lot 5, dating to the period of abandonment between 1805 and 1885, is the next most abundant context, indicating that the vacant area was still used for refuse disposal even with limited foot traffic. Lots 3, 4, and 6, dating to the railway period, make up 22% of all artifacts found.

DISTRIBUTION BY UNIT AND LOT		
19H	**1374**	%
1	16	1.2
2	129	9.4
3	137	10.0
4	87	6.3
5	30	2.2
6	76	5.5
13	66	4.8
14	204	14.8
16	81	5.9
17	18	1.3
18	4	0.3
19	14	1.0
20	41	3.0
23	72	5.2
24	36	2.6
Wall Cleaning	190	13.8
9/10	13	0.9
7/8	146	10.6
11/12	10	0.7
21/22	4	0.3
		100.0

At the south end of the site, unit H is located the greatest distance from the fort walls but in close proximity to the officers' quarters. The greatest number of artifacts are found in contexts dating to the 80-year period when the area was essentially an abandoned strip between the road and the lakeshore – lots 6-22. The number of finds from lots 23 and 24 are significant because these lots were not excavated and only the surface was exposed. These lots date to the period of the first fort and hold great potential for future excavation.

19M	**200**	%
1	16	8.0
5	11	5.5
6	56	28.0
7	117	58.5
		100.0

In unit J, lots 3-7 are railway period contexts which make up more than 42% of the entire assemblage. The significant number of finds in lots 14, 17 and 18 are associated with the construction and occupation of the fort, specifically the officers' quarters on the west side of the curtain wall.

Unit K is also associated with the officers' quarters in this area. The greatest number of finds – more than 56% of the entire assemblage – is found in the context interpreted as the interior floor deposit of this structure, lot 11. The next greatest number of artifacts is found in lot 5, the railway period.

19J	2149	%
1	2	0.1
2	34	1.6
3	53	2.5
4	16	0.7
5	15	0.7
6	824	38.3
7	9	0.4
8	52	2.4
9	14	0.7
11	17	0.8
12	5	0.2
13	19	0.9
14	580	27.0
17	59	2.7
18	105	4.9
15/16	5	0.2
Wall Cleaning	66	3.1
9/10	274	12.8
		100.0

Unit M was a 1 x 2 metre unit, half the area of most other units. Finds in the unit are therefore not as numerous as other units, but also because excavation was terminated before reaching the 18th century layers. Most artifacts are found in the lot associated with the 80-year period of abandonment.

Presented below are tables listing the Groups and Classes for each unit. Artifact Groups are intended to reflect a set of related activities and as such it is a functional classification. The composition of each Group is further broken down by Class which provides an indication of the specific item categories. The more detailed discussion of artifacts by Group and Object and Datable Attribute was done in Section 7.0 – Excavation and Observations on Stratigraphy. The Artifact Catalogue, Appendix F, provides further details in the Comments section.

GROUP AND UNIT		
19A	**2437**	%
Architectural	403	16.5
Arms and Military	1	0.0
Clothing	12	0.5
Commercial/Industrial Activities	49	2.0
Domestic Activities	1	0.0
Faunal/Floral	181	7.4
Food Preparation and Consumption	871	35.7
Fuel	22	0.9
Medicinal Hygiene	4	0.2
N/A	1	0.0
Native	87	3.6
Smoking	9	0.4
Unassigned Material	794	32.6
Other	2	0.1

Group and Class		
19A	**2437**	%
Architectural	**403**	**16.5**
Construction Material	56	2.2
Fasteners	1	0.0
Nails	226	9.3
Window Glass	81	3.3
Arms and Military	**1**	**0.0**
Musket and Rifle	1	0.0
Clothing	**12**	**0.5**
Apparel	4	0.2
Fasteners	8	0.3
Commercial/Industrial Activities	**49**	**2.0**
Railroad	49	2.0
Domestic Activities	**1**	**0.0**
General Storage	1	0.0
Faunal/Floral	**181**	**7.4**
Bone	118	4.8
Shell	63	2.6
Food Preparation and Consumption	**871**	**35.7**
Ceramic Cooking and Storage	35	1.4
Ceramic Tableware	182	7.5
Glass Beverage Bottles	500	20.5
Glass Storage Container	137	5.6
Glass Tableware	37	1.5
Metal Containers	1	0.0
Unspecified Glass Containers	18	0.7
Fuel	**22**	**0.9**
Cooking/Heating	22	0.9
Medicinal Hygiene	**4**	**0.2**
Grooming and Hygiene	1	0.0
Pharmaceutical Containers	3	0.1
Native	**87**	**3.6**
Lithics	86	3.5
Modified Other	1	0.0
Smoking	**9**	**0.4**
Pipes	9	0.4
Unassigned Material	**794**	**32.6**
Miscellaneous Hardware	40	0.9
Miscellaneous Material	752	30.8

GROUP AND CLASS		
19B	**2175**	%
Architectural	**291**	**13.4**
Construction Material	39	1.8
Fasteners	3	0.1
Miscellaneous Hardware	7	0.3
Miscellaneous Material	18	0.8
Nails	120	5.5
Window Glass	104	4.8
Arms and Military	**8**	**0.4**
Ammunition/Artillery	6	0.3
Edged Weaponry	1	0.0
Musket and Rifle	1	0.0
Clothing	**6**	**0.3**
Apparel	3	0.1
Fasteners	3	0.1
Commercial/Industrial Activities	**15**	**0.7**
Railroad	15	0.7
Domestic Activities	**7**	**0.3**
General Storage	1	0.0
Sewing	6	0.3
Faunal/Floral	**1000**	**46.0**
Bone	983	45.2
Other Organic, Non-Man Made	5	0.2
Shell	12	0.6
Food Preparation and Consumption	**699**	**32.1**
Ceramic Cooking and Storage	22	1.0
Ceramic Tableware	315	14.5
Glass Beverage Bottles	99	4.6
Glass Storage Container	198	9.1
Glass Tableware	9	0.4
Metal Containers	1	0.0
Metal Cooking Ware	1	0.0
Unspecified Glass Containers	54	2.5
Fuel	**4**	**0.2**
Cooking/Heating	4	0.2
Native	**37**	**1.7**
Lithics	37	1.7
Personal	**2**	**0.1**
Currency	1	0.0
Personal Items	1	0.0
Smoking	**8**	**0.4**
Cigarettes/Cigars	1	0.0
Pipes	7	0.3
Unassigned Material	**98**	**4.5**
Miscellaneous Hardware	47	2.2
Miscellaneous Material	51	2.3

GROUP AND UNIT		
19B	**2175**	%
Architectural	291	13.4
Arms and Military	8	0.4
Clothing	6	0.3
Commercial/Industrial Activities	15	0.7
Domestic Activities	7	0.3
Faunal/Floral	1000	46.0
Food Preparation and Consumption	699	32.1
Fuel	4	0.2
Native	37	1.7
Personal	2	0.1
Smoking	8	0.4
Unassigned Material	98	4.5
		100.0

GROUP AND UNIT		
19C	**706**	%
Activities	1	0.1
Architectural	163	23.1
Arms and Military	52	7.4
Commercial/Industrial Activities	11	1.6
Domestic Activities	6	0.8
Faunal/Floral	120	17.0
Food Preparation and Consumption	228	32.3
Fuel	8	1.1
Medicinal Hygiene	1	0.1
Native	88	12.5
Personal	1	0.1
Smoking	3	0.4
Unassigned Material	24	3.4
		100.0

GROUP AND CLASS		
19C	**706**	%
Activities	**1**	**0.1**
Fishing	1	0.1
Architectural	**163**	**23.1**
Construction Material	40	5.7
Fasteners	2	0.3
Nails	88	12.5
Other Hardware	2	0.3
Window Glass	31	4.4
Arms and Military	**52**	**7.4**
Ammunition/Artillery	50	7.1
Musket and Rifle	1	0.1
Uniform Insignia	1	0.1
Commercial/Industrial Activities	**11**	**1.6**
Railroad	11	1.6
Domestic Activities	**6**	**0.8**
Sewing	6	0.8
Faunal/Floral	**120**	**17.0**
Bone	99	14.0
Shell	21	3.0
Food Preparation and Consumption	**228**	**32.3**
Ceramic Cooking and Storage	3	0.4
Ceramic Tableware	58	8.2
Glass Beverage Bottles	108	15.3
Glass Storage Container	33	3.1
Glass Tableware	22	3.1
Metal Containers	2	0.3
Utensils	2	0.3
Fuel	**8**	**1.1**
Cooking/Heating	8	1.1
Medicinal Hygiene	**1**	**0.1**
Grooming and Hygiene	1	0.1
Native	**88**	**12.5**
Lithics	87	12.3
Personal	**1**	**0.1**
Personal Items	1	0.1
Smoking	**3**	**0.4**
Pipes	3	0.4
Unassigned Material	**24**	**3.4**
Miscellaneous Items	24	3.3

GROUP AND CLASS		
19D	**2505**	%
Activities	**1**	**0.0**
Stable/Barn	1	0.0
Architectural	**202**	**8.1**
Construction Material	39	1.6
Nails	81	3.2
Window Glass	82	3.3
Arms and Military	**6**	**0.2**
Ammunition/Artillery	6	0.2
Clothing	**2**	**0.1**
Apparel	2	0.1
Commercial/Industrial Activities	**7**	**0.3**
Railroad	7	0.3
Commercial/Industrial Activities	**4**	**0.2**
Railroad	4	0.2
Domestic Activities	**5**	**0.2**
General Storage	2	0.1
Sewing	3	0.1
Faunal/Floral	**391**	**15.6**
Bone	348	13.9
Other Organic, Non-Man Made	22	0.9
Shell	21	0.8
Food Preparation and Consumption	**1434**	**57.2**
Ceramic Cooking and Storage	40	1.6
Ceramic Tableware	660	26.3
Glass Beverage Bottles	189	7.5
Glass Storage Container	17	0.7
Glass Tableware	29	1.2
Metal Containers	8	0.3
Metal Cooking Ware	1	0.0
Unspecified Glass Containers	486	19.4
Utensils	4	0.2
Fuel	**10**	**0.4**
Cooking/Heating	10	0.4
Furniture	**4**	**0.2**
Lighting Devices	4	0.2
Medicinal Hygiene	**15**	**0.6**
Grooming and Hygiene	8	0.3
Pharmaceutical Containers	7	0.3
Native	**31**	**1.2**
Historic Period Artifacts	2	0.1
Lithics	29	1.2
Personal	**4**	**0.2**
Currency	4	0.2
Smoking	**5**	**0.2**
Pipes	5	0.2
Unassigned Material	**384**	**15.3**
Miscellaneous Hardware	7	0.3
Miscellaneous Items	5	0.2
Miscellaneous Material	372	14.9

GROUP AND UNIT		
19D	**2505**	%
Activities	1	0.0
Architectural	202	8.1
Arms and Military	6	0.2
Clothing	2	0.1
Commercial/Industrial Activities	11	0.5
Domestic Activities	5	0.2
Faunal/Floral	391	15.6
Food Preparation and Consumption	1434	57.2
Fuel	10	0.4
Furniture	4	0.2
Medicinal Hygiene	15	0.6
Native	31	1.2
Personal	4	0.2
Smoking	5	0.2
Unassigned Material	384	15.3
		100.0

GROUP AND CLASS		
19E	**1441**	%
Activities	**5**	**0.3**
Stable/Barn	5	0.3
Architectural	**173**	**12.0**
Construction Material	12	0.8
Nails	132	9.2
Window Glass	29	2.0
Arms and Military	**11**	**0.8**
Ammunition/Artillery	2	0.1
Buck/Ball Shot	1	0.1
Gunflints	7	0.5
Rifle Ball	1	0.1
Clothing	**2**	**0.1**
Fasteners	2	0.1
Commercial/Industrial Activities	**55**	**3.8**
Miscellaneous Material	12	0.8
Railroad	43	3.0
Domestic Activities	**6**	**0.4**
General Storage	3	0.2
Sewing	3	0.2
Faunal/Floral	**99**	**6.9**
Bone	87	6.0
Nuts	1	0.1
Shell	11	0.8
Food Preparation and Consumption	**300**	**20.8**
Ceramic Cooking and Storage	4	0.3
Ceramic Tableware	76	5.3
Glass Beverage Bottles	70	4.9
Glass Storage Container	125	8.7
Metal Containers	4	0.3
Unspecified Glass Containers	21	1.5
Fuel	**14**	**1.0**
Cooking/Heating	14	1.0
Furniture	**2**	**0.1**
Decorative Furnishings	1	0.1
Hardware	1	0.1
Native	**44**	**3.1**
Lithics	43	3.0
Worked Bone	1	0.1
Personal	**3**	**0.2**
Currency	3	0.2
Smoking	**1**	**0.1**
Pipes	1	0.1
Unassigned Material	**725**	**50.3**
Miscellaneous Hardware	8	0.6
Miscellaneous Material	717	49.8

GROUP AND UNIT		
19E	**1441**	%
Activities	5	0.3
Architectural	173	12.0
Arms and Military	11	0.8
Clothing	2	0.1
Commercial/Industrial Activities	55	3.8
Domestic Activities	6	0.4
Faunal/Floral	99	6.9
Food Preparation and Consumption	300	20.8
Fuel	14	1.0
Furniture	2	0.1
Native	44	3.1
Personal	3	0.2
Smoking	1	0.1
Unassigned Material	725	50.3
(blank)	1	0.1
		100.0

GROUP AND CLASS		
19F	**3288**	%
Activities	**6**	**0.2**
Hand/Maintenance Tools	2	0.1
Transportation	2	0.1
Writing	2	0.1
Architectural	**1052**	**32.0**
Construction Material	257	7.8
Cooking/Heating	5	0.2
Nails	205	6.2
Window Glass	585	17.8
Arms and Military	**6**	**0.2**
Ammunition/Artillery	4	0.1
Uniform Insignia	2	0.1
Clothing	**9**	**0.3**
Fasteners	7	0.2
Jewellery/Ornamentation	2	0.1
Commercial/Industrial Activities	**41**	**1.2**
Railroad	41	1.2
Domestic Activities	**2**	**0.1**
General Storage	2	0.1
Faunal/Floral	**259**	**7.9**
Bone	222	6.8
Shell	37	1.1
Food Preparation and Consumption	**1700**	**51.7**
Ceramic Cooking and Storage	119	3.6
Ceramic Tableware	257	7.8
Glass Beverage Bottles	855	26.0
Glass Storage Container	372	11.3
Glass Tableware	32	1.0
Metal Containers	64	1.9
Unspecified Glass Containers	1	0.0
Fuel	**8**	**0.2**
Cooking/Heating	8	0.2
Furniture	**8**	**0.2**
Hardware	4	0.1
Lighting Devices	4	0.1
Medicinal Hygiene	**13**	**0.4**
Ceramic Tableware	10	0.3
Grooming and Hygiene	1	0.0
Pharmaceutical Containers	2	0.1
Native	**24**	**0.7**
Historic Period Artifacts	3	0.1
Lithics	19	0.6
Worked Bone	2	0.1
Organic	**6**	**0.2**
Railroad	6	0.2
Personal	**3**	**0.1**
Personal Items	2	0.1
Toys and Leisure	1	0.0
Smoking	**3**	**0.1**
Pipes	3	0.1
Unassigned Material	**148**	**4.5**
Miscellaneous Hardware	2	0.1

GROUP AND UNIT		
19F	**3288**	%
Activities	6	0.2
Architectural	1052	32.0
Arms and Military	6	0.2
Clothing	9	0.3
Commercial/Industrial Activities	41	1.2
Domestic Activities	2	0.1
Faunal/Floral	259	7.9
Food Preparation and Consumption	1700	51.7
Fuel	8	0.2
Furniture	8	0.2
Medicinal Hygiene	13	0.4
Native	24	0.7
Organic	6	0.2
Personal	3	0.1
Smoking	3	0.1
Unassigned Material	148	4.5
		100.0

GROUP AND CLASS		
19G	**1429**	%
Architectural	**240**	**16.8**
Construction Material	62	4.3
Fasteners	5	0.3
Nails	138	9.7
Window Glass	35	2.4
Arms and Military	**2**	**0.1**
Musket and Rifle	1	0.1
Uniform Insignia	1	0.1
Clothing	**1**	**0.1**
Fasteners	1	0.1
Commercial/Industrial Activities	**19**	**1.3**
Blacksmithing	1	0.1
Railroad	18	1.3
Domestic Activities	**2**	**0.1**
General Storage	1	0.1
Sewing	1	0.1
Faunal/Floral	**329**	**23.0**
Bone	310	21.7
Shell	19	1.3
Food Preparation and Consumption	**531**	**37.2**
Ceramic Cooking and Storage	3	0.2
Ceramic Tableware	157	11.0
Glass Beverage Bottles	110	7.7
Glass Storage Container	193	13.5
Glass Tableware	22	1.5
Metal Cooking Ware	2	0.1
Other Containers	42	2.9
Utensils	1	0.1
(blank)	1	0.1
Fuel	**12**	**0.8**
Cooking/Heating	12	0.8
Furniture	**2**	**0.1**
Lighting Devices	2	0.1
Medicinal Hygiene	**1**	**0.1**
Pharmaceutical Containers	1	0.1
Native	**152**	**10.6**
Ceramics	1	0.1
Lithics	151	10.6
Personal	**5**	**0.3**
Currency	1	0.1
Toys and Leisure	4	0.3
Smoking	**4**	**0.3**
Pipes	4	0.3
Unassigned Material	**129**	**9.0**
Miscellaneous Hardware	16	1.1
Miscellaneous Material	89	6.2
Sheet Metal	12	0.8
Unidentifiable	12	0.8

GROUP AND UNIT		
19G	**1429**	%
Architectural	240	16.8
Arms and Military	2	0.1
Clothing	1	0.1
Commercial/Industrial Activities	19	1.3
Domestic Activities	2	0.1
Faunal/Floral	329	23.0
Food Preparation and Consumption	531	37.2
Fuel	12	0.8
Furniture	2	0.1
Medicinal Hygiene	1	0.1
Native	152	10.6
Personal	5	0.3
Smoking	4	0.3
Unassigned Material	129	9.0
		100.0

GROUP AND UNIT		
19H	**1374**	%
Architectural	149	10.8
Arms and Military	5	0.4
Clothing	3	0.2
Commercial/Industrial Activities	45	3.3
Faunal/Floral	518	37.7
Food Preparation and Consumption	424	30.9
Fuel	38	2.8
Native	15	1.1
Unassigned Material	177	12.9
		100.0

GROUP AND CLASS		
19H	**1374**	%
Architectural	**149**	**10.8**
Construction Material	106	7.7
Nails	33	2.4
Window Glass	10	0.7
Arms and Military	**5**	**0.4**
Ammunition/Artillery	2	0.1
Gunflints	2	0.1
Uniform Insignia	1	0.1
Clothing	**3**	**0.2**
Fasteners	3	0.2
Commercial/Industrial Activities	**45**	**3.3**
Pottery Manufacture Course Red Earthenware	10	0.7
Railroad	35	2.5
Faunal/Floral	**518**	**37.7**
Bone	515	37.5
Shell	3	0.2
Food Preparation and Consumption	**424**	**30.9**
Ceramic Cooking and Storage	1	0.1
Ceramic Tableware	149	10.8
Glass Beverage Bottles	186	13.5
Glass Storage Container	85	6.2
(blank)	3	0.2
Fuel	**38**	**2.8**
Cooking/Heating	34	2.5
Heating/Cooking	4	0.3
Native	**15**	**1.1**
Lithics	15	1.1
Unassigned Material	**177**	**12.9**
Miscellaneous Hardware	5	0.4
Miscellaneous Material	171	12.4
Nails	1	0.1

GROUP AND UNIT		
19J	**2149**	%
Activities	1	0.0
Architectural	207	9.6
Arms and Military	26	1.2
Clothing	5	0.2
Commercial/Industrial Activities	142	6.6
Domestic Activities	9	0.4
Faunal/Floral	719	33.5
Food Preparation and Consumption	576	26.8
Fuel	36	1.7
Medicinal Hygiene	2	0.1
Native	147	6.8
Smoking	4	0.2
Unassigned Material	275	12.8
		100.0

GROUP AND CLASS		
19J	**2149**	%
Activities	**1**	**0.0**
Writing	1	0.0
Architectural	**206**	**9.6**
Construction Material	75	3.5
Fasteners	1	0.0
Nails	56	2.6
Window Glass	74	3.4
Arms and Military	**26**	**1.2**
Ammunition/Artillery	26	1.2
Clothing	**5**	**0.2**
Fasteners	5	0.2
Commercial/Industrial Activities	**143**	**6.6**
Blacksmithing	112	5.2
Railroad	31	1.4
Domestic Activities	**9**	**0.4**
Cleaning	3	0.1
General Storage	1	0.0
Sewing	5	0.2
Faunal/Floral	**719**	**33.5**
Bone	683	31.8
Shell	36	1.7
Food Preparation and Consumption	**576**	**26.8**
Ceramic Cooking and Storage	34	1.6
Ceramic Tableware	251	11.7
Glass Beverage Bottles	105	4.9
Glass Storage Container	161	7.5
Glass Tableware	15	0.7
Unspecified Glass Containers	10	0.5
Fuel	**36**	**1.7**
Cooking/Heating	36	1.7
Medicinal Hygiene	**2**	**0.1**
Pharmaceutical Containers	2	0.1
Native	**147**	**6.8**
Lithics	147	6.8
Smoking	**4**	**0.2**
Pipes	4	0.2
Unassigned Material	**275**	**12.8**
Miscellaneous Hardware	1	0.0
Miscellaneous Material	274	12.8

GROUP AND UNIT		
19K	**2071**	%
Architectural	258	12.5
Arms and Military	16	0.8
Clothing	4	0.2
Commercial/Industrial Activities	13	0.6
Domestic Activities	9	0.4
Faunal/Floral	944	45.6
Food Preparation and Consumption	452	21.8
Fuel	15	0.7
Medicinal Hygiene	9	0.4
Native	226	10.9
Smoking	3	0.1
Unassigned Material	55	2.7
(blank)	67	3.2
		100.0

GROUP AND CLASS		
19K	**2070**	%
Architectural	**257**	**12.5**
Construction Material	96	4.6
Nails	91	4.4
Window Glass	70	3.4
Arms and Military	**16**	**0.8**
Ammunition/Artillery	13	0.6
Edged Weaponry	1	0.0
Uniform Insignia	2	0.1
Clothing	**4**	**0.2**
Apparel	1	0.0
Fasteners	3	0.1
Commercial/Industrial Activities	**13**	**0.6**
Pottery Manufacturing	5	0.2
Railroad	8	0.4
Domestic Activities	**9**	**0.4**
Sewing	9	0.4
Faunal/Floral	**944**	**45.6**
Bone	841	40.6
Fish Bone	13	0.6
Mammal	87	4.2
Shell	3	0.1
Food Preparation and Consumption	**452**	**21.8**
Ceramic Cooking and Storage	11	0.5
Ceramic Tableware	164	7.9
Glass Beverage Bottles	207	10.0
Glass Storage Container	33	1.6
Glass Tableware	37	1.8
Fuel	**15**	**0.7**
Cooking/Heating	15	0.7
Medicinal Hygiene	**9**	**0.4**
Pharmaceutical Containers	9	0.4
Native	**226**	**10.9**
Ceramics	3	0.1
Debitage/Lithics	30	1.4
Historic Period Artifacts	1	0.0
Lithics	192	9.3
Smoking	**3**	**0.1**
Pipes	3	0.1
Unassigned Material	**122**	**5.9**

GROUP AND UNIT		
19M	**200**	%
Architectural	9	4.5
Arms and Military	2	1.0
Commercial/Industrial Activity	3	1.5
Domestic Activities	1	0.5
Faunal/Floral	144	72.0
Food Preparation and Consumption	38	19.0
Medicinal Hygiene	1	0.5
Miscellaneous Items	1	0.5
Smoking	1	0.5
		100.0

GROUP AND CLASS		
19M	**200**	%
Architectural	**9**	**4.5**
Construction Material	1	0.5
Nails	4	2.0
Window Glass	4	2.0
Arms and Military	**2**	**1.0**
Ammunition/Artillery	1	0.5
Uniform Insignia	1	0.5
Commercial/Industrial Activities	**1**	**0.5**
Railroad	1	0.5
Commercial/Industrial Activity	**2**	1.0
Blacksmithing	2	1.0
Domestic Activities	**1**	**0.5**
Sewing	1	0.5
Faunal/Floral	**144**	**72.0**
Bone	144	72.0
Food Preparation and Consumption	**38**	**19.0**
Ceramic Cooking and Storage	6	3.0
Ceramic Tableware	23	11.5
Glass Beverage Bottles	3	1.5
Glass Storage Container	1	0.5
Metal Containers	1	0.5
Unspecified Glass Containers	4	2.0
Medicinal Hygiene	**1**	**0.5**
Grooming and Hygiene	1	0.5
Miscellaneous Items	**1**	**0.5**
Unidentifiable	1	0.5
Smoking	**1**	**0.5**
Pipes	1	0.5

Ceramic Analysis

Ceramic assemblages are presented below for each excavation Unit. The variety of ceramic types found is shown in the tables as well as dates for each unit. Dating is based on the calculation of the Mean Ceramic Date using the Mean Ceramic Dating formula for historic period tableware (South 1977). The formula uses the calculated mid-range manufacture date for ceramic types derived from historical information for each type. These mid-range dates are weighted by considering the frequency of occurrence of each type or the number of sherds. The Mean Ceramic Date is a value that is based on the weighted occurrence of all the mid-dates for each type found in the assemblage. The Mean Ceramic Date, or MCD, is a 'date' for the ceramic assemblage - Area or Unit - that reflects the mid-range of occupation that can best be conceived of as the peak in intensity of occupation.

$$MCD = \frac{\sum_{k=1}^{n} m_k f_k}{\sum_{k=1}^{n} f_k}$$

where m_k median date for type k
f_k frequency of type k
n total number of types

Although there have been many critiques of the method since its introduction several decades ago, it nevertheless continues to be applied as a dating tool for archaeological contexts. At the very least the method serves as a tool for comparing deposits on the same archaeological site, or for comparing entire sites, on a relative scale as 'earlier than' or 'later than'.

For the purposes of this analysis the method has been applied in the standard way using the manufacture dates to calculate the MCD_1. This provides a means of comparing the Fort Erie assemblages with other sites. Two modifications have also been used below. Both modifications apply the formula in the same way but change the terminal date from the end of manufacture to the end of occupation. The purpose of this is to provide a date that is specific to the site based on historical information. The first modification uses the terminal date of 1823, based on the abandonment of Fort Erie (MCD_2), and the second uses the date of 1805 based on the date the old fort was razed and the new fort constructed (MCD_3). The effect of this is to bring the MCD more in line with the actual occupation periods as documented historically.

Ceramic types found at Old Fort Erie range in date from as early as the late 17th century to the 19th century. Certain types dominate the assemblages from Areas and units in every instance. Creamware, manufactured generally between 1762 and 1820 is by far the most common type followed by pearlware (1780-1830). The predominance of these types is the best indicator of the site as the oldest British military fort in the province. In this sense the site is unique in Ontario. The presence of other types that are strictly 18th century in age further highlights the antiquity of the site in terms of the British presence in the province. Types such as tin-glazed, white salt-glazed stoneware, Whieldon ware, and black basalt are very rare on Ontario British (Loyalist period) sites and found in only a handful of locations: e.g., Hamilton, Kingston, Toronto and Niagara-on-the-Lake.

	Manufacture Dates MCD_1			Terminal Date = 1823 MCD_2		Terminal Date = 1805 MCD_3	
Ceramic Tableware	**Initial Date**	**Terminal Date**	**Mid-Date**	**Initial Date**	**Terminal Date**	**Initial Date**	**Terminal Date**
Black Basalt	1750	1820	1785	1764	1820	1764	1805
Blue Transfer	1779	1830	1830	1779	1823	1779	1805
Canaryware	1780	1835	1830	1780	1823	1780	1805
Creamware, Banded	1785	1820	1802.5	1785	1820	1785	1805
Creamware, Edged	1762	1820	1791	1764	1820	1764	1805
Creamware, Feather Edged	1762	1820	1791	1764	1820	1764	1805
Creamware, Industrial Slip	1785	1820	1802.5	1785	1820	1785	1805
Creamware, Lustre	1762	1820	1791	1764	1820	1764	1805
Creamware, Moulded	1762	1820	1791	1764	1820	1764	1805
Creamware, Moulded (No Colour)	1762	1820	1791	1764	1820	1764	1805
Creamware, Other Décor	1762	1820	1791	1764	1820	1764	1805
Creamware, Painted	1765	1815	1790	1765	1815	1765	1805
Creamware, Painted, Unknown Palette	1765	1815	1790	1765	1815	1765	1805
Creamware, Plain	1762	1820	1791	1764	1820	1764	1805
Creamware, Royal Pattern	1762	1820	1791	1764	1820	1764	1805
Creamware, Transfer Print	1783	1820	1801.5	1783	1820	1783	1805
Delftware, Tin Glazed, Faience	1700	1800	1750	1764	1800	1764	1800
Edged	1779	1830	1804.5	1779	1823	1779	1805
Fine Earthenware, Jackfield	1740	1790	1765	1764	1790	1764	1790
Hard Paste Porcelain, Other Décor	1790	1835	1812.5	1790	1823	1790	1805
Hard Paste Porcelain, Painted	1790	1835	1812.5	1790	1823	1790	1805
Ironstone, Transfer Print	1840	1900	1870	1840	1823	1840	1805
Pearlware	1780	1830	1805	1780	1823	1780	1805
Pearlware, Banded	1790	1830	1810	1790	1823	1790	1805
Pearlware, Blue Transfer	1780	1830	1805	1780	1823	1780	1805
Pearlware, Edged	1775	1820	1797.5	1775	1820	1775	1805
Pearlware, Lustre	1780	1830	1805	1780	1823	1780	1805
Pearlware, Other Décor	1780	1830	1805	1780	1823	1780	1805
Pearlware, Other Transfer	1780	1830	1805	1780	1823	1780	1805
Pearlware, Painted Early Palette	1775	1820	1797.5	1775	1820	1775	1805
Pearlware, Painted, Unknown Palette	1780	1830	1805	1780	1823	1780	1805
Pearlware, Plain	1780	1830	1805	1780	1823	1780	1805
Pearlware, Sponge/Spatter	1795	1830	1812.5	1795	1823	1795	1805
Plain	1780	1830	1805	1780	1823	1780	1805

Porcelain	1745	1800	1772.5	1764	1800	1764	1800
Porcelain, Soft Paste	1745	1800	1772.5	1764	1800	1764	1800
Porcelain, Soft Paste Painted	1745	1800	1772.5	1764	1800	1764	1800
Porcelain, Soft Paste, other Décor	1745	1800	1772.5	1764	1800	1764	1800
Porcelain, Soft Paste, Plain	1745	1800	1772.5	1764	1800	1764	1800
Refined Earthenware, Other	1820	1900	1860	1820	1823	1820	1805
RWE, Banded Marbleized	1820	1840	1830	1820	1823	1820	1805
Staffordshire-Type Slipware	1670	1795	1732.5	1764	1795	1764	1795
Tin Glazed, Blue on White, England and Holland	1650	1750	1700	1764	1750	1764	1750
Tin Glazed, Polychrome	1650	1750	1700	1764	1750	1764	1750
White Salt-glazed Stoneware, Scratch Blue	1720	1770	1745	1764	1770	1764	1770
White Salt-Glazed Stoneware	1720	1770	1745	1764	1770	1764	1770
White Salt-Glazed Stoneware, Barley Pattern	1720	1770	1745	1764	1770	1764	1770
White Salt-Glazed Stoneware, Scratch Blue	1735	1775	1755	1764	1775	1764	1775
Whiteware	1820	1900	1860	1820	1823	1820	1805
Whiteware, Banded	1820	1840	1830	1820	1823	1820	1805
Whiteware, Banded Mocha	1820	1840	1830	1820	1823	1820	1805
Whiteware, Blue Transfer	1820	1900	1860	1820	1823	1820	1805
Whiteware, Edged	1820	1900	1860	1820	1823	1820	1805
Whiteware, Flow Printed	1840	1900	1870	1840	1823	1840	1805
Whiteware, Late Palette Painted	1830	1900	1865	1830	1823	1830	1805
Whiteware, Moulded	1830	1900	1865	1830	1823	1830	1805
Whiteware, Other Transfer	1830	1900	1865	1830	1823	1830	1805
Whiteware, Painted Early Palette	1830	1840	1835	1830	1823	1830	1805
Whiteware, Painted Unknown Palette	1830	1900	1865	1830	1823	1830	1805
Whiteware, Plain	1820	1900	1860	1820	1823	1820	1805
Whiteware/Vitrified White Earthenware	1830	1900	1865	1830	1823	1830	1805
Yellowware, Plain	1830	1900	1865	1830	1823	1830	1805
Yellowware, Slip Banded	1830	1900	1865	1830	1823	1830	1805

MCD Calculation Entire 2019 Assemblage	MCD =	1811			
Ceramic Tableware	Initial Date	Terminal Date	Mid-Date	Freq.	Product
Banded Creamware	1785	1820	1802.5	11	19828
Banded Pearlware	1790	1830	1810	2	3620
Barley Pattern White Salt-Glazed Stoneware	1720	1770	1745	2	3490
Beauvais Stoneware	1700	1770	1735	1	1735
Black Basalt	1750	1820	1785	4	7140
Blue Painted Pearlware	1775	1840	1807.5	9	16268
Blue Transfer Pearlware	1780	1830	1805	65	117325
Blue Transfer Pearlware	1780	1830	1805	15	27075
Blue Transfer Print Creamware	1783	1820	1801.5	13	23420
Bone China Painted	1745	1800	1772.5	3	5317.5
Brown Transfer Print Creamware	1783	1820	1801.5	2	3603
Brown Transfer Print Whiteware	1840	1900	1870	1	1870
Cream Colour/Ivoryware	1880	1900	1890	6	11340
Creamware	1762	1820	1791	7	12537
Creamware Edged	1762	1820	1791	8	14328
Creamware Moulded	1762	1820	1791	45	80595
Creamware Painted	1765	1815	1790	24	42960
Creamware Transfer Printed	1783	1820	1801.5	6	10809
Creamware Unpainted	1762	1820	1791	9	16119
Creamware, Other Décor	1762	1820	1791	4	7164
Edged Creamware	1762	1820	1791	1	1791
Edged Pearlware	1775	1820	1797.5	9	16178
Feather Edge Creamware	1762	1820	1791	9	16119
Fine Earthenware	1820	1900	1860	58	107880
Fine Earthenware, Blue Transfer	1780	1830	1805	20	36100
Fine Earthenware, Jackfield	1740	1790	1765	2	3530
Flow-Printed Whiteware	1840	1900	1870	1	1870
Gilded	1880	1900	1890	2	3780
Green Transfer Pearlware	1780	1830	1805	1	1805
Hard Paste Porcelain	1790	1835	1812.5	5	9062.5
Hard Paste Porcelain Painted	1790	1835	1812.5	2	3625
Hard Paste Porcelain Plain	1790	1835	1812.5	5	9062.5
Jasperware	1775	1840	1807.5	2	3615
Late Palette Painted	1835	1900	1867.5	3	5602.5
Moulded Ironstone	1840	1870	1855	5	9275
Moulded Whiteware	1830	1870	1850	2	3700
Painted, Unknown Palette Pearlware	1780	1830	1805	21	37905
Pearlware	1780	1830	1805	54	97470
Pearlware Painted	1775	1820	1797.5	7	12583

Pearlware Painted?	1775	1820	1797.5	1	1797.5
Pearlware Transfer Printed	1780	1830	1805	20	36100
Pearlware Unpainted	1780	1830	1805	2	3610
Pearlware, Early Palette	1780	1830	1805	20	36100
Pearlware, Other Decor	1780	1830	1805	104	187720
Pearlware, Undecorated	1780	1830	1805	270	487350
Plain Creamware	1762	1820	1791	831	1E+06
Plain Ironstone	1840	1900	1870	39	72930
Porcelaineous Stoneware	1870	1900	1885	33	62205
Red Transfer Print Creamware	1783	1820	1801.5	1	1801.5
Refined White Earthenware, Black Transfer	1830	1900	1865	3	5595
Refined White Earthenware, Blue Shell Edge	1830	1850	1840	7	12880
Refined White Earthen. Blue-Green Transfer	1830	1900	1865	2	3730
Refined White Earthenware, Brown Transfer	1830	1900	1865	2	3730
Refined White Earthen., Dark Blue Transfer	1830	1850	1840	1	1840
Refined White Earthenware, Green Transfer	1830	1900	1865	3	5595
Refined White Earthen., Lilac-Purple Transfer	1830	1900	1865	1	1865
Refined White Earthenware, Pink Transfer	1830	1900	1865	6	11190
Refined White Earthenware, Plain	1830	1900	1865	290	540850
Refined White/Vitrified White Earthen.	1830	1840	1835	7	12845
Royal Pattern Creamware	1762	1820	1791	1	1791
Slip-Banded	1780	1850	1815	1	1815
Slipware Sgraffito?	1765	1795	1780	2	3560
Soft Paste Porcelain, Other Décor	1745	1800	1772.5	9	15953
Soft Paste Porcelain, Plain	1745	1800	1772.5	3	5317.5
Soft Paste, Painted	1745	1800	1772.5	1	1772.5
Sponge/Stamped, Blue	1840	1875	1857.5	9	16718
Tin Glazed	1700	1800	1750	1	1750
Tin Glazed Blue on White, England Holland	1700	1800	1750	4	7000
Tin Glazed Polychrome	1700	1800	1750	2	3500
Tr. Print Porcel. Stoneware, Maker's Mark	1880	1900	1890	1	1890
Undecorated Porcelain	1745	1800	1772.5	97	171933
Whieldon Ware	1740	1770	1755	7	12285
White Salt-Glazed Stoneware	1720	1770	1745	19	33155
Whiteware	1840	1900	1870	32	59840
Yellowware, Other Décor	1830	1900	1865	1	1865
Yellowware, Plain	1830	1900	1865	6	11190
Yellowware, Rockingham	1830	1900	1865	2	3730
Yellowware, Slip Banded	1830	1900	1865	1	1865
Yellowware	1830	1900	1865	2	3730
Grand Total				2290	4E+06

CERAMICS AND UNIT MCD (Tableware) =		1809
19A	**217**	**%**
Ceramic Cooking and Storage	**35**	**16.1**
Coarse Earthenware Glazed	17	7.8
Coarse Red Earthenware Glazed	6	2.8
Coarse Red Earthenware Unglazed	2	0.9
Coarse Stoneware	1	0.5
Course Stoneware	1	0.5
Rockingham	8	3.7
Ceramic Tableware	**182**	**83.9**
Barley Pattern White Salt-Glazed Stoneware	2	0.9
Beauvais Stoneware	1	0.5
Blue Painted Pearlware	1	0.5
Blue Transfer Pearlware	3	1.4
Creamware Moulded	22	10.1
Feather Edge Creamware	2	0.9
Pearlware, Undecorated	15	6.9
Plain Creamware	34	15.7
Plain Ironstone	17	7.8
Porcelaineous Stoneware	1	0.5
Refined White Earthenware, Green Transfer	2	0.9
Refined White Earthenware, Plain	37	17.1
Undecorated Porcelain	33	15.2
White Salt-Glazed Stoneware	11	5.1
Other	1	0.5

A thorough analysis of the Mean Ceramic dates is planned for a later date when all units have been excavated to subsoil or bedrock. Disparities between units seen in the tables below are due in part to the various stages of completion. Units A, B, C, H, and M have not been completed as excavation had to be terminated at the end of the season. Mean Ceramic dates for these units vary from 1798 to 1831:

A 1809

B 1805

C 1831

H 1811

M 1798

Until these units are completed they do not serve as a valid comparison with other units. Other units have MCD's ranging from 1801 to 1825. The variances here are more likely due to location of the unit on the overall site. Unit K saw the least disturbance due to the railway and this was also the unit with the floor layer of the presumed Officers' Quarters. The floor layer in units J and K represents one of the few primary contexts found in 2019; i.e., without disturbance from later events.

D 1812

E 1825

F 1820

G 1808

J 1812

K 1801

CERAMICS AND UNIT MCD (Tableware) =		1805
19B	**337**	**%**
Ceramic Cooking and Storage	**22**	**6.5**
Coarse Earthenware Glazed	3	0.9
Coarse Earthenware Other Colour	3	0.9
Coarse Earthenware Slipware	2	0.6
Coarse Red Earthenware Glazed	9	2.7
Coarse Red Earthenware Unglazed	2	0.6
Coarse Stoneware	1	0.3
Fulham/Lambeth	2	0.6
Ceramic Tableware	**315**	**93.5**
Banded Creamware	1	0.3
Banded Pearlware	1	0.3
Blue Transfer Pearlware	9	2.7
Creamware Moulded	11	3.3
Creamware Painted	9	2.7
Creamware, Other Décor	2	0.6
Edged Pearlware	6	1.8
Feather Edge Creamware	5	1.5
Fine Earthenware	1	0.3
Pearlware, Early Palette	2	0.6
Pearlware, Other Décor	1	0.3
Pearlware, Undecorated	55	16.3
Plain Creamware	166	49.3
Plain Ironstone	4	1.2
Porcelaineous Stoneware	5	1.5
Refined White Earthenware, Black Transfer	1	0.3
Refined White Earthenware, Brown Transfer	1	0.3
Refined White Earthenware, Plain	26	7.7
Salt-Glazed Stoneware	2	0.6
Soft Paste Porcelain, Other Décor	1	0.3
Transfer Print Porcelaineous Stoneware, Transfer Printed with Maker's Mark	1	0.3
Undecorated Porcelain	1	0.3
Yellowware, Other Décor	1	0.3
Yellowware, Plain	3	0.9

CERAMICS AND UNIT MCD (Tableware) =		**1831**
19C	**61**	**%**
Ceramic Cooking and Storage	**3**	**4.9**
Coarse Red Earthenware Glazed	2	3.3
Coarse Red Earthenware Unglazed	1	1.6
Ceramic Tableware	**58**	**95.1**
Black Basalt	1	1.6
Blue Transfer Pearlware	2	3.3
Creamware, Other Décor	1	1.6
Edged Creamware	1	1.6
Hard Paste Porcelain	1	1.6
Pearlware, Undecorated	8	13.1
Plain Creamware	9	14.8
Refined White Earthenware, Pink Transfer	6	9.8
Refined White Earthenware, Plain	21	34.4
Refined White Earthenware/Vitrified White Earthenware	5	8.2
White Salt-Glazed Stoneware	2	3.3
Other	1	1.6

CERAMICS AND UNIT MCD (Tableware) =		1812
19D	**700**	**%**
Ceramic Cooking and Storage	**40**	**5.7**
Coarse Earthenware Glazed	2	0.3
Coarse Earthenware Slipware	12	1.7
Coarse Earthenware Unglazed	7	1.0
Coarse Red Earthenware Glazed	2	0.3
Coarse Red Earthenware Unglazed	14	2.0
Course Earthenware Unglazed	1	0.1
Salt-Glazed Stoneware	2	0.3
Ceramic Tableware	**660**	**94.3**
Blue Transfer Pearlware	4	0.6
Bone China Painted	2	0.3
Creamware Edged	8	1.1
Creamware Moulded	2	0.3
Creamware Painted	8	1.1
Creamware Transfer Printed	5	0.7
Feather Edge Creamware	2	0.3
Fine Earthenware	52	7.4
Hard Paste Porcelain Painted	2	0.3
Moulded Ironstone	2	0.3
Moulded Whiteware	2	0.3
Pearlware	53	7.6
Pearlware Painted	7	1.0
Pearlware Transfer Printed	19	2.7
Pearlware, Early Palette	6	0.9
Pearlware, Other Decor	96	13.7
Pearlware, Undecorated	96	13.7
Plain Creamware	208	29.7
Plain Ironstone	4	0.6
Porcelaineous Stoneware	4	0.6
Refined White Earthenware, Plain	38	5.4
Slipware Sgraffito?	2	0.3
Soft Paste Porcelain, Other Décor	4	0.6
Unidentifiable	1	0.1
Whiteware	31	4.4
Yellowware	2	0.3

CERAMICS AND UNIT MCD (Tableware) =		1825
19E	**80**	**%**
Ceramic Cooking and Storage	**4**	**5.0**
Coarse Earthenware Glazed	2	2.5
Coarse Earthenware Other Colour	1	1.3
Coarse Red Earthenware Glazed	1	1.3
Ceramic Tableware	**76**	**95.0**
Blue Painted Pearlware	1	1.3
Blue Transfer Pearlware	1	1.3
Blue Transfer Pearlware	5	6.3
Creamware Moulded	8	10.0
Creamware Painted	1	1.3
Green Transfer Pearlware	1	1.3
Hard Paste Porcelain	2	2.5
Hard Paste Porcelain Plain	1	1.3
Late Palette Painted	2	2.5
Pearlware, Undecorated	2	2.5
Plain Creamware	16	20.0
Refined White Earthenware, Brown Transfer	1	1.3
Refined White Earthenware, Dark Blue Transfer	1	1.3
Refined White Earthenware, Plain	30	37.5
Soft Paste, Painted	1	1.3
Tin Glazed Polychrome	2	2.5
White Salt-Glazed Stoneware	1	1.3

CERAMICS AND UNIT MCD (Tableware) =		1820
19F	**376**	**%**
Ceramic Cooking and Storage	**119**	**31.6**
Coarse Earthenware Other Colour	2	0.5
Coarse Earthenware Tin Glazed	58	15.4
Coarse Red Earthenware Tin Glazed	2	0.5
Coarse Stoneware	6	1.6
Course Earthenware Glazed	2	0.5
Course Red Earthenware	1	0.3
Course Stoneware	2	0.5
Other	42	11.2
Rockingham	2	0.5
Salt-Glazed Stoneware	2	0.5
Ceramic Tableware	**257**	**68.4**
Banded Creamware	2	0.5
Banded Pearlware	1	0.3
Blue Transfer Pearlware	4	1.1
Blue Transfer Pearlware	2	0.5
Cream Colour/Ivoryware	6	1.6
Creamware Moulded	2	0.5
Creamware Painted	2	0.5
Gilded	2	0.5
Hard Paste Porcelain	2	0.5
Hard Paste Porcelain Plain	4	1.1
Jasperware	2	0.5
Painted, Unknown Palette Pearlware	18	4.8
Pearlware, Other Decor	6	1.6
Pearlware, Undecorated	7	1.9
Plain Creamware	109	28.0
Porcelaineous Stoneware	4	1.1
Refined White Earthenware, Black Transfer	2	0.5
Refined White Earthenware, Blue Shell Edge	1	0.3
Refined White Earthenware, Plain	66	17.6
Royal Pattern Creamware	1	0.3
Soft Paste Porcelain, Other Décor	3	0.8
Soft Paste Porcelain, Plain	3	0.8
Undecorated Porcelain	1	0.3
White Salt-Glazed Stoneware	4	1.1
Yellowware, Rockingham	2	0.5
Yellowware, Slip Banded	1	0.3

CERAMICS AND UNIT MCD (Tableware) =		1808
19G	**160**	**%**
Ceramic Cooking and Storage	**3**	**1.9**
Coarse Red Earthenware Glazed	3	1.9
Ceramic Tableware	**157**	**98.1**
Blue Transfer Pearlware	12	7.5
Blue Transfer Pearlware	2	1.3
Blue Transfer Print Creamware	3	1.9
Bone China Painted	1	0.6
Creamware Painted	1	0.6
Edged Pearlware	3	1.9
Fine Earthenware	1	0.6
Moulded Ironstone	1	0.6
Pearlware, Undecorated	9	5.6
Plain Creamware	83	51.9
Plain Ironstone	1	0.6
Porcelaineous Stoneware	5	3.1
Red Transfer Print Creamware	1	0.6
Refined White Earthenware, Blue Shell Edge	6	3.8
Refined White Earthenware, Green Transfer	1	0.6
Refined White Earthenware, Plain	17	10.6
Soft Paste Porcelain, Other Décor	1	0.6
Tin Glazed	1	0.6
Undecorated Porcelain	3	1.9
White Salt-Glazed Stoneware	1	0.6
Yellowware, Plain	2	1.3
Other	2	1.3

CERAMICS AND UNIT MCD (Tableware) =		1811
19H	**150**	**%**
Ceramic Cooking and Storage	**1**	**0.7**
Green Glazed Earthenware	1	0.7
Ceramic Tableware	**149**	**99.3**
Blue Painted Pearlware	6	4.0
Blue Transfer Pearlware	22	14.7
Blue Transfer Pearlware	1	0.7
Blue Transfer Print Creamware	6	4.0
Fine Earthenware, Jackfield	1	0.7
Painted, Unknown Palette Pearlware	3	2.0
Pearlware, Early Palette	10	6.7
Pearlware, Undecorated	6	4.0
Plain Creamware	45	30.0
Plain Ironstone	12	8.0
Refined White Earthenware, Plain	20	13.3
Refined White Earthenware/Vitrified White Earthenware	2	1.3
Undecorated Porcelain	7	4.7
Whieldon Ware	6	4.0
Other	2	1.3

CERAMICS AND UNIT MCD (Tableware) =		1812
19J	**285**	**%**
Ceramic Cooking and Storage	**34**	**11.9**
Coarse Earthenware Glazed	10	3.5
Coarse Earthenware Unglazed	1	0.4
Coarse Red Earthenware Tin Glazed	1	0.4
Derbyshire	1	0.4
Green Glazed Earthenware	14	4.9
Salt-Glazed Stoneware	7	2.5
Ceramic Tableware	**251**	**88.1**
Banded Creamware	8	2.8
Black Basalt	1	0.4
Blue Painted Pearlware	1	0.4
Blue Transfer Pearlware	10	3.5
Blue Transfer Pearlware	1	0.4
Blue Transfer Print Creamware	4	1.4
Brown Transfer Print Creamware	2	0.7
Brown Transfer Print Whiteware	1	0.4
Creamware Painted	3	1.1
Creamware, Other Décor	1	0.4
Fine Earthenware	2	0.7
Fine Earthenware, Blue Transfer	20	7.0
Fine Earthenware, Jackfield	1	0.4
Flow-Printed Whiteware	1	0.4
Late Palette Painted	1	0.4
Moulded Ironstone	1	0.4
Pearlware, Early Palette	2	0.7
Pearlware, Undecorated	28	9.8
Plain Creamware	102	35.8
Plain Ironstone	1	0.4
Porcelaineous Stoneware	14	4.9
Refined White Earthenware, Blue-Green Transfer	2	0.7
Refined White Earthenware, Lilac-Purple transfer	1	0.4
Refined White Earthenware, Plain	23	8.1
Slip-Banded	1	0.4
Sponge/Stamped, Blue	9	3.2
Undecorated Porcelain	7	2.5
Whieldon Ware	1	0.4
Yellowware, Plain	1	0.4
Other	1	0.4

CERAMICS AND UNIT MCD (Tableware) =		1801
19K	**175**	**%**
Ceramic Cooking and Storage	**11**	**6.3**
Coarse Red Earthenware Glazed	6	3.4
Coarse Red Earthenware Unglazed	3	1.7
Course Red Earthenware	2	1.1
Ceramic Tableware	**164**	**93.7**
Black Basalt	3	1.7
Blue Transfer Pearlware	2	1.1
Coarse Red Earthenware Glazed	5	2.9
Fine Earthenware	2	1.1
Moulded Ironstone	1	0.6
Pearlware, Undecorated	44	25.1
Plain Creamware	79	45.1
Refined White Earthenware, Plain	12	6.9
Tin Glazed Blue on White, England and Holland	4	2.3
(blank)	12	6.9

CERAMICS AND UNIT MCD (Tableware) =		1798
19M	**29**	**%**
Ceramic Cooking and Storage	**6**	**20.7**
Coarse Red Earthenware Glazed	1	3.4
Coarse Red Earthenware Unglazed	5	17.2
Ceramic Tableware	**23**	**79.3**
Creamware	7	24.1
Creamware Transfer Printed	1	3.4
Creamware Unpainted	9	31.0
Pearlware	1	3.4
Pearlware Painted?	1	3.4
Pearlware Transfer Printed	1	3.4
Pearlware Unpainted	2	6.9
Whiteware	1	3.4

9.0 Summary and Conclusions

The Wilfrid Laurier University archaeological investigations at Old Fort Erie, National Historic Site, in May/June 2019 was successful in revealing evidence of the oldest British military fort in the province. Fort Erie, constructed in 1764, played many roles during the formative years of Ontario. After the Royal Proclamation of 1763, the new British dominion included all the former French colony's territory from the Atlantic west to the drainage systems of the Missouri, Ohio, and Mississippi Rivers. To the north and west the territory included the entire drainage systems of Lakes Erie, Huron, Michigan and Superior. This land was home to a plethora of First Nations many of whom resisted the change in regimes. The fur trade economy had been operating for more than 200 years in North America at the time of the French surrender in 1763. The British colonial government was first and foremost concerned with ensuring that the lucrative trade continued. This was to be accomplished by negotiating with, and, when deemed necessary, waging war against First Nations who opposed the new colonial power. The history of Fort Erie has its beginnings in this era of conflict. The fort was established initially as a permanent military installation, but it was also a symbolic representation of the British crown – the new colonial power to be reckoned with in all interactions between the British military and First Nations. During times of peace the fort was a meeting place for First Nations, the British army, and civilian traders/merchants. During times of war, Fort Erie was a staging place for campaigns against those First Nations who chose not to succumb to British dominion of their lands.

The 2019 excavations uncovered the remains of the fort below the asphalt parking lot over a period of 5 weeks in May and June 2019. The team composed of Wilfrid Laurier University students, staff, and faculty, excavated in selected areas after first conducting a remote sensing survey and follow-up test excavation. Using the results from the investigative work together with historical research and map overlays 11 excavation units were laid out across the site from north to south across most of the parking lot. Within a week the masonry remains of a wall - the face of the northwest bastion of the fort - were revealed along with artifacts dating to the earliest period of the fort's occupation. Continued excavation found the remains of another contemporary structure at the south end of the site - an officers' quarters dating to the 1780s-early 1790s. By the close of excavation in mid-June almost 20,000 artifacts had been recovered, many of which dated to the late 18th century. Artifacts dating to the later 19th and 20th centuries were attributed to a time when a railway ran across the site 80 years after the first fort had been demolished to make way for the second Fort Erie after 1805.

The masonry wall found in three excavation units (E, F, and G) has been interpreted as the northwest bastion – specifically the face of the bastion – of the first Fort Erie. This may be the original bastion wall constructed in 1764 as depicted on a 1766 plan of the fort. Alterations to the wall and the associated palisade are evident in successive periods of occupation defined in the analysis of stratigraphy. A total of 86 Phases represent the archaeological history of the site, about half of which can be attributed to the early fort from 1764-1805. Additionally, the remains of a building not shown on any maps was found on the south end of the site (units H, J and K), situated in the space between the shoulder of the northwest bastion and the west curtain wall. Artifacts found in this context from 3 excavation units (H, J and K) suggest this is an officer's quarters constructed in 1782 and occupied for about a decade.

Analysis of maps and historical documents provided further information on the context of the archaeological remains. Overlays produced using a 1766, 1781, 1294 and 1803 map indicate that the excavation units at the north end of the site (A, B and C) were situated in the footprint of the King's storehouse, constructed after 1781 and in existence until at least 1805. These units were not completed to subsoil and future excavation is expected to reveal the masonry foundations and interior floor features of the building. Evidence of the wooden upper second story, and possible destroyed remains of the wall foundation were found in one unit. Alterations to the face of the bastion near the apex are also associated with the construction of the King's storehouse. In unit E the partially demolished wall is thought to be associated with a realignment of the bastion wall.

In three excavation units (D, F and G) evidence of the dry-ditch on the west side of the bastion face was also found. The ditch ran parallel to the west face of the bastion and extended as much as 3-4 metres west. Here the opposite side of the ditch had been cut into the natural subsoil for a depth of about 1 metre. Later periods in the fort's history saw the gradual accumulation of sediment and limestone rubble in the ditch such that by the time of the fort's destruction after 1805 the ditch had been mostly eradicated as a landscape feature. The gradual infilling was due to natural processes such as high-water levels depositing water born sand in the area. This evidence corroborates the historical record from the 18th century where severe storms were recorded as exacting a heavy toll on the fort. The rubble within the ditch is due to the episodic rebuilding of the fort mentioned in dozens of 18th century accounts.

Artifacts found in association with the first Fort Erie are plentiful and diagnostic. The ceramic assemblage is particularly useful for dating and includes a wide variety of types not commonly found on Ontario British military sites. Only Fort Frontenac in Kingston, and Fort York in Toronto have similar types that are exclusively 18th century in age (e.g., white salt-glazed stoneware and tin-glazed). Other 18th century items include free-blown bottle glass and George II coins. Pieces of artillery (mortar bomb fragments and cannister shot) as well as lead shot are likely attributed to the first fort, although a pewter US military button serves as a reminder that the fort was also the location of the American encampment during the summer and fall of 1814. Other items include faunal remains consisting of mostly domestic animals (pig, cattle, and sheep) provide important information on the diet of soldiers and officers of a remote garrison.

Evidence of First Nations during both the pre-contact period and the historic period is considerable in the archaeological record. Probably more than 99% of the material found is undiagnostic chert debitage. A few sherds of Late Woodland ceramic were also recovered as well as net-sinkers. However, the 2019 excavation did not encounter natural subsoil deposits to the same extent as in previous excavations, and evidence of the presence of First Nations on the site of the fort itself is expected to be greater in future excavations. In 2017, diagnostic projectile points and ceramics provided tangible evidence of successive occupations for millennia from the Late Archaic Period to the Late Woodland Period. Analysis of the 2015 lithic assemblage concluded that stone tool production and maintenance occurred here within the context of a permanent settlement as indicated by several pits and occupation layers. In the historic period, trade silver objects, glass beads, and other trade items found in small numbers attests to the presence of First Nations at the settlement in the decades after the first Fort Erie was established in 1764. Certainly, the documentary evidence is rich in references to First Nations visiting the fort and settlement while en route to other locations, but also for councils during times of heightened tensions and peace. The visibility of First Nations in the historic period at

Fort Erie is not as extensive as one might think based on the documentary evidence, but this may be due to sampling – we are just not excavating in the proper location to find that evidence. Depictions of contemporary settlements such as York and Kingston (Cataraqui) by British military officers often show native people on the outskirts of the settlements, on the geographic and social fringe of Euro-Canadian society. It is hoped that future investigation of the first Fort Erie will provide more evidence on this equally significant part of the province's earliest British community.

Future investigation of the first Fort Erie is planned for 2021. Map overlay analysis has provided a good sense of where the first fort and associated buildings are located on the landscape. Landscape features outside the fort such as gardens, outbuildings and wharves together form a rich heritage resource in this unique chapter of the province's history. These resources must be managed appropriately by ensuring their protection going forward. Archaeological investigation must precede any planned disturbance to the features indicated on the map overlays in Section 6.0. This should be done according to Ministry standards with the levels of assessment applied as appropriate.

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