MARINE ARCHAEOLOGICAL ASSESSMENT EAST HOLLAND RIVER ADJACENT TO LOT 118, CONCESSION 1, WEST OF YONGE ST. TOWN OF EAST GWILLIMBURY REGIONAL MUNICIPALITY

Prepared for:

Ministry of Heritage, Sport, Tourism and Culture Industries

ONTARIO MARINE HERITAGE COMMITTEE



Licence Holder: Scarlett Janusas

License #: 2021-16 October 29, 2021 ©Scarlett Janusas 2021

Executive Summary

Ontario Marine Heritage Committee member, Scarlett Janusas, was contacted on May 31st, 2021 by avocational archaeologist (A080), Dr. Glen Penoyer, (PhD Religious Studies) asking for advice on how to best remove artifacts from the East Holland River. It was suggested that the Ontario Marine Heritage Committee (with a marine licence) could assist with the investigation of the river in the area north of Queensville Sideroad, specifically adjacent to part of Lot 118, Concession 1 West of Yonge Street, Town of East Gwillimbury, Regional Municipality of York.

The project encompasses background research, an initial property visit to land abutting the East Holland River, canoe survey of possible eroding shorelines, sidescan sonar and a magnetometer survey. All fieldwork was conducted by Ontario Marine Heritage Committee members under the supervision of Scarlett Janusas, the licence holder (2021-16). Background research was largely the purview of Mr. Patrick Folkes.

As there was to be no impact to the bottom of the river (geotechnical survey and visual observations only), no permission was required to access the river. A walk out to the river, initially was conducted with the permission of landowner, Mr. Thomas To.

The initial visit to the area was conducted on June 25th, 2021 to meet with landowners and review access to the river and discuss possible project objectives. This visit was followed by a canoe survey of the river extending from 17T 619471.65E, 4887951.83N to the bend in the river at 17T 619009.09E, 4888075.78N. Only the east side of the river was subject to canoe survey as it was apparent from observations on the east side that the vegetation was very thick and often prohibited any view of the banks at all. The west side of the river had even heavier vegetation. Those areas of the bank that were open on the east side were georeferenced. In only one area was there a possibility of a cultural object (microsherd) observed – there were no additional cultural artifacts/features observed on the exposed areas of the east bank. The canoe survey was conducted on August 15th, 2021 under good weather conditions.

The second field visit was conducted on September 18th, 2021 and consisted of two passes along the main channel of the East Holland River using side scan sonar and a magnetometer. There was one target noted in the sidescan sonar, although this is likely non-cultural (a possible log). The sidescan imagery was not recorded, but showed evidence of a lot of anchor drag, and possibly even deep hull drag as the river is very shallow (less than 1.4 metres in the deepest part of the channel). There were a total of eight magnetometer hits noted, although at least two of these mark a distinct change in bottom contour as opposed to a definite magnetometer hit. The weather was considered good for survey purposes.

Based upon the marine archaeological assessment (previous researchers reports, background research, canoe survey, sidescan survey and magnetometer survey of the main river channel, the following can be stated:

- There is a known site, BaGv-42, located immediately adjacent to a portion of the East Holland River which has been the subject of a Stage 2 archaeological assessment (CIF 96-019);
- Approximately 2 hectares of the above survey of an area 600 m by 100 m in size was not tested by ASI, citing that the lands were too wet;
- The dirt driveway was subject to pedestrian transect methodology rather than test pitting –it is probable that buried remains exist under the driveway;
- Glen Penoyer has conducted recovery of artifacts that have "eroded" into the East Holland River from this archaeological site indicating that there is likely more cultural material that remains in this location;
- The East Holland River, in this location, has a high meander belt width of between 161 and 310 metres;
- Historic accounts suggest that the East Holland River, specifically adjacent to Lot 118, are most probably the Lower Landing, a terminus for a stagecoach run, possible shipbuilding area, a point of launch for excursion boats, and an area where cannons may have been deposited directly into the river;
- The adjacent land on the east side of the East Holland River may be impacted by the proposed "Bradford Bypass", and the river bed itself may also be either directly or indirectly impacted by the proposed development of the bypass;
- No archaeological investigations have been conducted on the west bank of the East Holland River in this locale;
- The East Holland River is a mud river and does not lend itself to any visual observations of the bottom;
- Any cultural material that has eroded or been either deliberately or accidently deposited into the river is buried in the bottom sediments;
- The cultural material, based on side scan sonar observations of drag marks and hull drag, is threatened by boaters and associated activities, by natural erosion accelerated by boat wake, etc.;
- A sub bottom profiler should be able to delineate any possible cannon and other large objects buried in the sediment;
- A building outline was identified by Anders Petersen in the water (north of the Penoyer investigation);
- There is also a strong likelihood of both Indigenous (prehistoric to historic) and Euro-Canadian artifacts being present (1793 to the present).

This locale is considered to be highly significant both from an archaeological and historic standpoint. This site should be protected and avoided, and if this is not possible, than archaeological mitigation of both the land and in-water areas must be undertaken under archaeological licence.

Based upon the marine archaeological assessment (background research, canoe survey, sidescan survey and magnetometer survey of the main river channel, the following recommendations are:

- 1.0 Avoidance and protection of the known registered archaeological site, BaGv-42, adjacent areas that have yet to be fully archaeologically assessed, including the East Holland River environs:
- 2.0 In light of information regarding flooding of the river; erosion of the site into the river; and wetlands holding key pieces of archaeological information; these areas are recommended for archaeological investigation, rather than being assessed as non-surveyable because of wet conditions (this refers to the Stage 2 archaeological land assessment);
- 3.0 It is recommended that test pitting be conducted on the "dirt driveway" to ensure that no buried remains lie beneath the driveway;
- 4.0 The entire river in this locale should be subject to continued marine archaeological assessment;
- 5.0 The west side of the East Holland River (land and water) has not yet been subject to any investigation. Archaeological assessment of these areas is recommended;
- 6.0 It is recommended that due to the threatened nature of the resource, a cofferdam be erected and the site excavated;
- 7.0 It is recommended, that if a cofferdam is not possible, that the area be gridded, and as excavation proceeds that vertical separators be put in place to isolate units.
- 8.0 It is unlikely that stratigraphic layering exists, and more that the site has eroded into the river, however, measures should be taken to excavate in arbitrary levels where possible:
- 9.0 It is further recommended that additional magnetometer survey be conducted from a small draft boat to cover off the very shallow parts of the river;
- 10.0 It is recommended that sub bottom profiler be conducted by a small draft boat to obtain additional information regarding buried objects in the river;
- 11.0 A conservation plan must be in place prior to any excavation and/or artifact recovery:
- 12.0 Indigenous engagement must be conducted as the site, BaGv-42, is Indigenous in nature:
- 13.0 Analysis of all materials must be part of any plan for recovery of cultural material; and,
- 14.0 Compliance legislation must be adhered to in the event of discovery of deeply buried cultural material or features.

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Acknowledgements

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The members of the Ontario Marine Heritage Committee who donated canoes, paddlers, survey boat and equipment, and their knowledge are very much appreciated. Thank you to Dr. James Connolly and his capable assistant, Kate Dougherty, Duncan Curd, Patrick Folkes, Bill Fox, and Dylan Morningstar.

Thanks are also extended to Andrea Williams and Robert von Bitter of the Ministry of Heritage, Sport, Tourism and Culture Industries for providing the project with past reports and documentation.

Project Personnel

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MARINE ARCHAEOLOGICAL ASSESSMENT EAST HOLLAND RIVER, WEST GWILLIMBURY SIMCOE COUNTY ORIGINAL REPORT

1.0 ONTARIO MARINE HERITAGE COMMITTEE PROFILE

In the spring of 1975, a group of avocational and professional marine heritage enthusiasts was brought together to conduct an underwater archaeological investigation of the naval slip structure at the Historic Naval and Military Establishments (now "Discovery Harbour") in Penetanguishene, Ontario. At a subsequent meeting in November of that year, the project participants gathered in Tobermory to prepare a report on the work and hold discussions concerning the protection of Ontario's marine heritage resources. As a result of that meeting, a submission to the Heritage Division of the Ontario Ministry of Culture and Recreation [now the Ministry of Heritage, Sport, Tourism and Culture Industries] was crafted, which included identification of issues and problems, a number of proposed solutions, and a list of recommendations.

Another event had taken place in the fall of 1975 which also was to have implications for the future association of the meeting participants: the discovery of a shipwreck near Hope Island, in Georgian Bay. It was decided that in keeping with recommendations made to the Ontario government in the submission, application would be made for an archaeological licence (the first application for underwater archaeology to be made under the province's Heritage Act) to do a survey of the wreck in the spring of 1976. Most of the participants in the naval slip investigation were also involved with the Hope Island wreck project.

With these two projects behind them, members of the group met again in Tobermory in November, 1976 to initiate the formation of an organization dedicated to Ontario's marine heritage. The following spring a meeting took place to formalize the organization. On March 12, 1977 the informal alliance of like-minded individuals officially became the Ontario Marine Heritage Committee (OMHC), "supporting the research, interpretation and preservation of Ontario's marine heritage." There were 11 charter members. As a first priority, members of the group undertook licenced surveys of the Hope Island wreck (1977 through 1980), providing the first documentary evidence of how unprotected Ontario shipwrecks quickly could be stripped by sport divers. In addition to project work, members met at meetings held in the fall and spring of each year. In October, 1979 a constitution and by-laws for the OMHC were adopted. The OMHC logo was adopted in 1987, based on the capstan cover – a compass rose – from the Port Stanley wreck, an OMHC project.

Since its formation, the OMHC has supported and been actively involved in over 30 research projects (some of these long term) around the province. Topics have been as varied as submerged prehistoric shorelines, caves and portage sites, shipwrecks,

comparative surveys, resource monitoring and early port documentation. Members have presented over 30 training workshops and seminars, and have been actively involved in government-sponsored reviews of heritage legislation and regulations. Communication and outreach has been enhanced by the OMHC website and Facebook page. Membership numbers have varied over the years between 15 and 30, and a number of the original participants are still active. Current membership (45) includes professional archaeologists, marine historians, and people with extensive experience in underwater technology/equipment, photography and mapping. The membership includes divers with experience on sites all over Ontario, other parts of Canada and internationally. Most recently, the OMHC worked with Bruce County Museum and Cultural Centre (BCM&CC) to arrange for acceptance of one of the founding members personal archival collections and to establish a Marine History and Underwater Archaeology Resource Centre at the BCM&CC.

The OMHC was founded to promote research, interpretation and preservation of Ontario's marine heritage. After more than 40 years, that commitment is as strong as ever!

2.0 PROJECT CONTEXT

2.1 Development Context

This project is a research and volunteer managed project, rather than one triggered by an environmental assessment or other similar mechanism. However, it came to light, early in the planning stages, that the adjacent land parcels had been part of an archaeological assessment triggered by the proposed Bradford Bypass.

The project was undertaken as a result of discussions between Glen Penoyer and Scarlett Janusas in late May of 2021. Janusas was approached by Penoyer and asked how best to remove artifacts from the river environment. It was suggested that this should not be happening without certain factors in play such as a marine archaeological licence, Indigenous engagement, conservation plan, etc. Janusas suggested that the Ontario Marine Heritage Committee might be able to assist in determining the extent of the site that presumably had been eroded into the river, its cultural affiliation and to ascertain if this was also the location of the Lower Landing.

The Study Area (Figures 1 and 2) illustrate the Study Area, a portion of the East Holland River, north of Queensville Sideroad and northeast of Bradford. There are two properties that abut the river in this area: 20938 Yonge Street East (Part Lot 118 Concession 1 West of Yonge Street, East Gwillimbury), owned by Her Majesty The Queen, in right of the Province of Ontario, as represented by the Minister of Transportation and 20866 Yonge Street (Part Lot 118, Concession 1 West of Yonge Street, East Gwillimbury, Parts 1 & 2, 65R-11336, ST B74151B, Town of East Gwillimbury, owned by Thomas Kar Shing To and Olivia Wai Mun Luu. The East Holland River flows adjacent to the west side of each of the above noted properties.

Scarlett Janusas applied for, and received, a marine archaeological licence (2021-16).

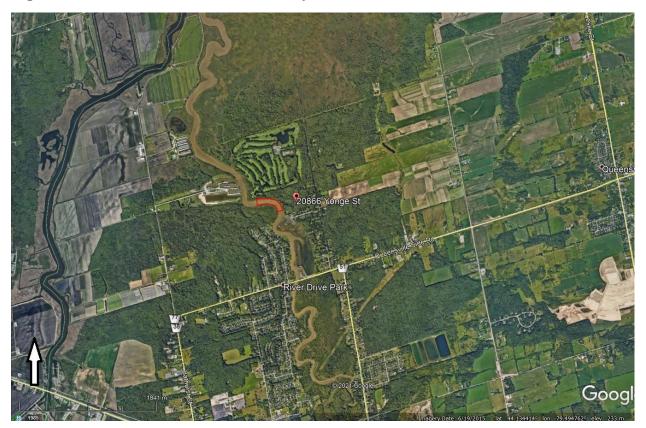
2.2 Current Environment

The Study Area was defined as lying between the west and east bank of the East Holland River running along the length (and buffered at either end) of Lot 118. Both east and west banks of the river were heavily vegetated with bulrushes and other wetland vegetation. There were also some trees that were partly in the river, and others that were totally submerged in the river, as well as the occasional deadhead. Exposed banks of the river showed a combination of both clay and sandy soils. The river itself is a mud river with zero visibility.

2.2.1 Geomorphology of the East Holland River

The nature of any river is important to understand in terms of marine resources or adjacent land archaeological sites and their integrity. The East Holland River watershed (Figure 3) is part of the larger Holland River watershed.

Figure 1: General Location of the Study Area

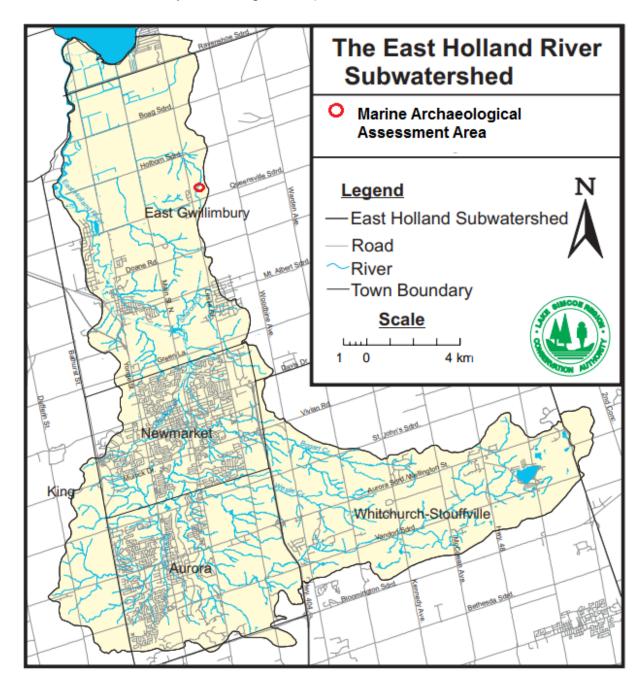


Google Earth



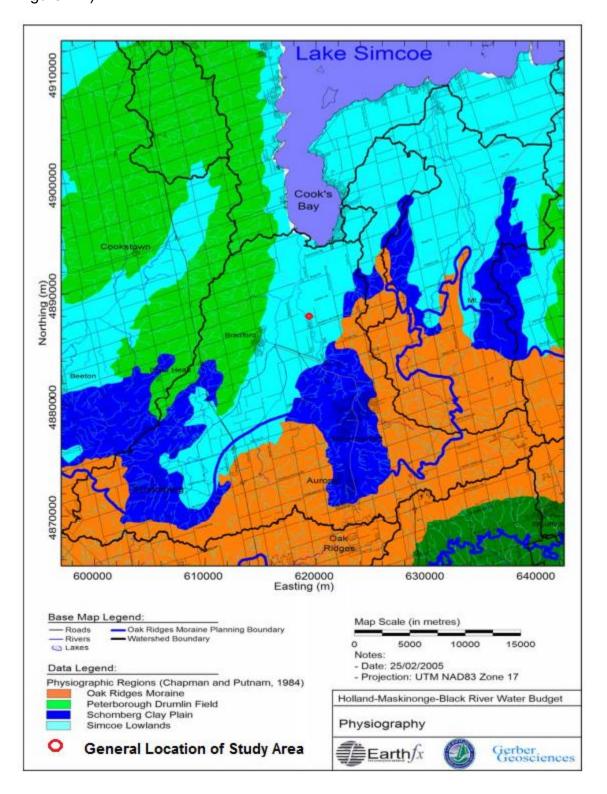
Figure 2: Marine Archaeological Assessment Area

Figure 3: East Holland River Subwatershed (The Lake Simcoe Region Conservation Authority 2000: Figure 3.1)



The Study Area lies in the physiographic region of the Simcoe Lowlands, which is known for its lower elevations and flat floored valleys. These areas were once flooded by glacial Lake Algonquin (Figure 4). Deposits left behind include sand, silt and clay.

Figure 4: Physiographic Regions (East Holland Subwatershed Plan (Isrca.on.ca): Figure 2-4).



The geomorphology of any stream or river is important in understanding the dynamics of the river and how they influence its flow, path, and the archaeological or cultural features that either border or are actually in-water.

"All streams and river systems are constantly in a state of transition, influenced by the flow of water and the amount of sediment entering into the system. The amount of water in a natural watercourse is influenced by both climate and geology. The amount of water delivered to the surface of a watercourse, as well as how and when it arrives is influenced by climate. Typical patterns are high flow events during the spring freshet. and low flow conditions during the winter and summer months. The surficial geology of an area influences the path of water once it reaches the ground surface. The underlying geology establishes the volume and proportion of groundwater and surface water available to flow through a watershed through its effect on infiltration. Geology also shapes the amount and type of sediment that enters a watercourse, and the strength and erodibility of the surficial material through which the watercourse flows. A complex underlying geology and topography can result in considerable variation in channel character, as well as sensitivity to potential impacts, within the same drainage system. Natural watercourses respond to continually changing conditions in flow and sediment supply with adjustments in shape and channel position. These changes take place through the processes of erosion and deposition. This ability to continually change is an inherent characteristic of natural systems that allows the morphology of the channels to remain relatively constant. The state in which flow and sediment supply are balanced to achieve this stable channel form is referred to as "dynamic equilibrium." While in a state of dynamic equilibrium, channel morphology is stable but not static, since it makes gradual changes as sediment is deposited and moved throughout the watercourse. For example, many natural watercourses can be seen to "migrate" within their floodplain over time. This is due to the erosion of the outsides of channel bends, but with corresponding deposition of material on the insides of bends. This process maintains the balance between flow and sediment supply in the system. Riparian and aquatic biota are adapted to and depend on the habitats provided by a system in dynamic equilibrium (East Holland Subwatershed Plan" (Isrca.on.ca: 195).

The ability for a river to migrate according to conditions suggests the possibility that adjacent archaeological sites can easily be part of the process, either being buried by river sediments, or being eroded directly into the river, and possibly also subject to burial in the river. The above migration of the site BaGv-42 is apparent from Penoyer's findings of cultural material in the river some 20 – 30 feet from the current shoreline. Given that the site material dates from possibly Paleo to early historic, the migrating river will have had sufficient time to have a causal effect on the archaeological site.

The planform of the East Holland River was not obtainable, due to poor quality aerial photographs dating from the 1930s to the present. Another way of measuring river movement is to identify the meander belt width. This represents the corridor of the river channel from the past, as well as predicting future width. Widths are obtained by measuring at right angles to the trend of the valley. The meander belt width was actually great (between 161 and 310 metres) in the Study

Area (Figure 5). This indicates that the river in this area moved between 161 and 310 metres from where the river channel occurs today (East Holland Subwatershed Plan (Isrca.on.ca): 198). The extreme movement of the East Holland River explains the erosion of the site BaGv-42, and also suggests that there may be burial of additional site elements on land. The ASI report (1996) did not test some areas as they were considered too wet. It is very likely, given that some of these areas occur adjacent to the river that cultural materials exist in these locations.

2.3 INDIGENOUS ENGAGEMENT

No Indigenous engagement was conducted for the background research of the marine portion of the East Holland River canoe survey or sidescan and magnetometer survey, as this was more a fact-finding investigation. A copy of this report has, however, been sent to Curve Lake First Nations.

2.4 RATIONALE FOR FIELDWORK STRATEGY

Scarlett Janusas was informed about this extension of the site BaGv-42 into the East Holland River by Glen Penoyer, but no artifacts were available for study, other than a few photographs. In addition, Penoyer suggested that this area might be the location of the Lower Landing, and that there might be cannons in the river. It was decided at this early stage of investigation that a non-intrusive methodology would be the best to assess the study area, and to determine additional possible mitigation measures. It was especially noted that as recovered materials by Penoyer were largely Indigenous in nature, that Indigenous engagement would have to be conducted prior to any work beyond the proposed canoe survey of exposed shorelines and a sidescan and magnetometer survey of the main channel. In addition, no recovery of any additional artifacts was to be conducted unless a conservation plan was first in place.

The current work, therefore, consisted of a review of past research in the area; some preliminary background research; a canoe survey of any exposed shorelines along the east bank, and a sidescan and magnetometer survey restricted to the main channel of the East Holland River (within the study area boundaries) due to very shallow depths.

Figure 5: Meander Belt Width in Study Area (East Holland Subwatershed Plan (Isrca.on.ca): Figure 7-1).



2.5 DATES OF FIELDWORK

Scarlett Janusas, Patrick Folkes and Bill Fox met with Glen Penoyer on the property of Mr. Thomas To (20866 Yonge Street), and neighbor Mr. Bill Foster was also in attendance on June 25, 2021. The purpose of this meeting was to view the river and discuss possible action. No archaeological work was conducted at this preliminary meeting.

The first field date was August 15th, 2021 and the crew consisted of Bill Fox, Scarlett Janusas, Duncan Curd and Dylan Morningstar. All are member of the Ontario Marine Heritage Committee. The weather was sunny with a high of 26 degrees C.

The second field date was September 18, 2021 and the crew consisted of Dr. James Connolly, Kate Dougherty and Scarlett Janusas. Dr. Connolly is also a member of the OMHC. The weather was sunny with a high of 26 degrees C.

3.0 FIELD METHODOLOGY

3.1 CANOE SURVEY

Two canoes, each manned by two individuals, were used to examine any open areas of riverbank along the east side of the East Holland River. Wherever there was an open area, a spot just offshore (as close as the canoe could go to the shore) was georeferenced and observations noted. Exposed treefall roots were also examined wherever possible.

3.2 SIDESCAN AND MAGNETOMETER SURVEY

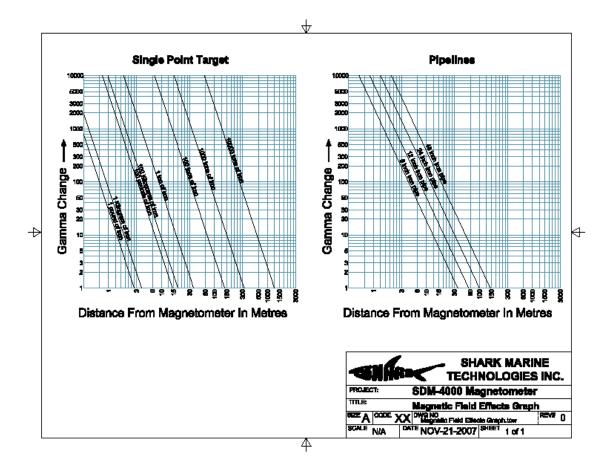
A second field trip consisted of conducting side scan sonar (not recorded – just observed on screen) and a magnetometer survey conducted in two directions in the center of the channel. The areas closest to either the east or west bank could not be entered with the 26' boat as the water depth dropped off dramatically from the channel. The channel itself, at its deepest point in the study area, was only 1.4 metres, and usually between 1.1 and 1.2 metres in depth. The survey was, therefore, restricted to the main channel. Any anomalies were marked and a screen shot taken of the target.

The magnetometer is an SDM-4000. Figure 6 illustrates the sensitivity chart of the magnetometer.

The sidescan sonar uses a Raymarine RV-100 600W 4-channel multibeam transducer (50-350 kHz).

No ground truthing was conducted in this survey.

Figure 6: Sensitivity Chart for Magnetometer



4.0 BACKGROUND RESEARCH

4.1 PREVIOUS ARCHAEOLOGICAL ASSESSMENT

Previous research is presented chronologically. Following the outline of activities conducted, there is a brief discussion of those activities, specifically possible deficiencies in background research, field, and/or recommendations, and/or succinct points about the locale/site.

Archaeological Services Inc. 1996

A Stage 2 archaeological assessment was conducted by Archaeological Services Inc. under CIF #96-109) in 1996 (Archaeological Services Inc. 1997). The Stage 2 archaeological assessment encompassed an area 600 metres in length by 100 metres in width located on part of Lot 118, Concession 1, West of Yonge Street (Figure 7). Approximately two hectares of the study area was not surveyed, the author ciiting wet conditions. In addition, the laneway was subject to pedestrian transect survey rather than test pitting.

A multi-component site, The East Holland River Site, BaGv-42, was discovered through test pitting:

"...appears to have been established sometime before A.D. 800 and continued to witness use through to the nineteenth century. The site extends from the western end of the study route at the East Branch of the Holland River, approximately 200 metres to the east, encompassing an area of almost one hectare" (Figures 8 and 9). It does appear that ASI extended their Stage 2 assessment beyond the Study Area portrayed in Figure 4, and continued southeast along the river (Figures 8 and 9).

The recovered artifact assemblage includes 65 prehistoric ceramic sherds, five prehistoric lithic artifacts, four historic period artifacts, 12 bone fragments and 46 amorphous lumps of fired clay daub" (Ibid.: 5).

The ceramic pieces were analyzed and those pieces with interior punctates (greatest frequency of occurrence) were considered to align with the latter part of the Middle Woodland period (400 B.C. – A.D. 800). Lithic tools included an end scraper, a bipolar core, and two retouched flakes - all manufactured from Onondaga chert. Historic material culture included thermally altered wares decorated with blue transfer and a "highly vitreous bluish glaze"; a hand-wrought spike; and, a partial bowl of a smoking pipe. Two test pits produced "amorphously-shaped fragments of fired, untampered, clay". ASI suggested that these might be from a wattle and daub structure, possibly a chimney.

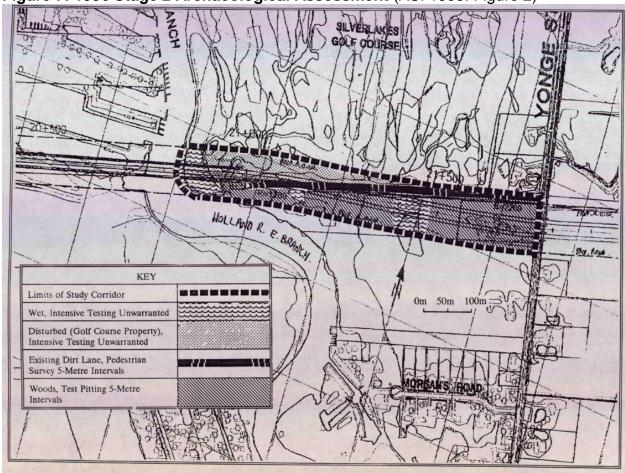
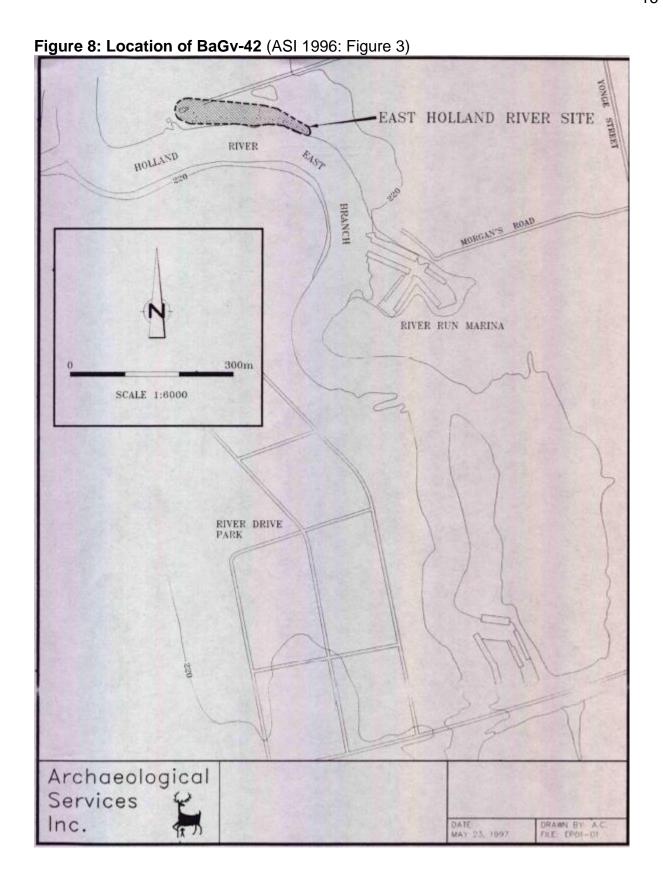


Figure 7: 1996 Stage 2 Archaeological Assessment (ASI 1996: Figure 2)



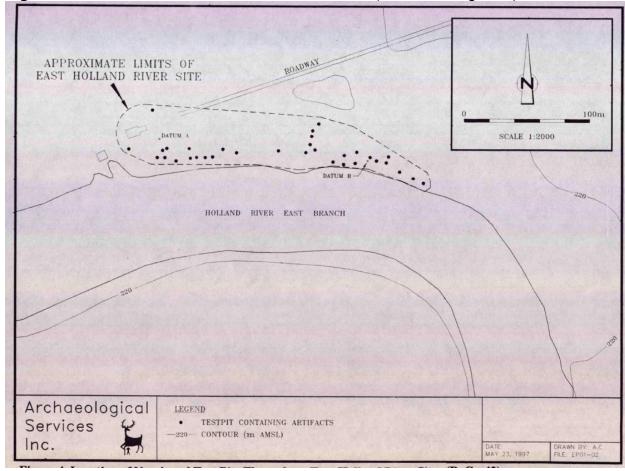


Figure 9: Location of Positive Test Pits BaGv-42 (ASI 1996: Figure 4)

Recommendations stemming from the 1996 report included the following:

- "1. If the East Holland River site (BaGv-42) cannot be protected within the proposed bypass development plan, the site should be subject to comprehensive salvage excavation. Such mitigation activities should commence with a detailed Stage 3 archaeological assessment in order to precisely determine the locations, character and extent of archaeological deposits within the right-of-way....
- 2. The remainder of the proposed right-of-way may be considered clear of any further archaeological concerns" (ASI 1996: 8).

Discussion

At the time of the archaeological assessment, the Ministry of Heritage, Sport, Tourism and Culture Industries Standards and Guidelines for Consulting Archaeologists in Ontario had not yet developed. These Standards and Guidelines did not come into realization until 2010/2011. The above explains why there was not a Stage 1 (background research) conducted for this property assessment, although elements of what now constitutes background research were included in the report.

Given the lack of Standards and Guidelines for this archaeological assessment, and the very important nature of the site, extending into the river, it is recommended that a thorough Stage 1 archaeological assessment be undertaken.

Approximately two hectares of the study area was not surveyed citing wet conditions. In addition, the laneway was subject to pedestrian transect survey. It is doubtful that any cultural materials or features would be detectable through pedestrian transect of a laneway.

Given the evidence of erosion, flooding of the river, and artifacts having been recovered from the river, there is a high probability of discovery of additional cultural materials/features not only in the river itself, but also in the wet areas that were not subject to archaeological testing in 1996.

In light of the two perceived inadequacies of the 1996 archaeological assessment, it is recommended that test pitting be conducted on the "dirt driveway" to ensure that no buried remains lie beneath the driveway, and that the wet areas, especially those closest to the river itself, be subject to Stage 2 archaeological testing using wet archaeology methodology.

New Directions Archaeology Limited 2004

New Directions Archaeology Ltd. conducted the 2004 Stage 3 archaeological assessment of the East Holland River site, BaGv-42 to determine site size, cultural affiliation, and determine site significance (New Directions Archaeology Limited 2005).

New Directions Archaeology expanded on the background research supplied by ASI in 1995, but also in a very limited way. Again, the Standards and Guidelines were not yet in place. The background research noted that the East Holland River was a significant transportation route for Euro-Canadians early in the 18th century. It also noted that the area was thought to be that of the Lower Landing, although no explanation of the Lower Landing or its history was presented.

The Stage 3 assessment extended 220 metres along the riverbank of the East Holland River. Stage 3 excavations were conducted by placing one square metre test units across the site at 10 meter intervals. Figure 10 illustrates the location of the test units and those with features located within them. There were 98 one mete square test units excavated in total with 85 positive test units within an area 230 metres by 60 metres. There were 3796 artifacts recovered, and seven possible cultural features and one post mould located in eight test units. Only the post mould was excavated.

Indigenous artifacts recovered from the positive test units included: seven cores; 384 pieces of debitage; 23 utilized flakes; two scrapers; nine bifaces; three drills; 13 projectile points; eight groundstone fragments; and 3028 ceramic sherds (80% body and neck sherds). Included in the analyzable rim sherds were representatives from the Middle Woodland and Princess Point periods.

Historic artifacts recovered from 26 of the 98 units included a total of 319 artifacts: a trade axe; cut nails; wire nails; window glass; brick fragments, mud and daub fragments; mouth harps; a utensil made from pewter; buckshot; four gunflints; button, ceramics; coal, smoking pipe fragments and miscellaneous artifacts.

In addition, there were 959 pieces of faunal material recovered, where domesticated animals were attributed to the Euro-Canadian period, but the remainder could not be assigned definitively either way (Euro-Canadian vs. Indigenous). There was also one human tooth recovered, although not confirmed in the Stage 3 to be part of a burial.

The site was identified as a multi-component site with representative artifacts from the Middle and Late Archaic periods, the Middle Woodland to early Late Woodland period, and 19th to 20th century artifacts. The early ceramics were located in one small area, east of the center of the site.

One of the goals of the assessment was to determine if the Lower Landing was located on the property. There was no evidence of any architecture found by New Directions, and they emphasize that "a detailed examination of the archival and historical documentation including mapping related to the location of the Lower Landing seems warranted."

Recommendations stemming from the Stage 3 excavation of BaGv-42 include:

- "1. The East Holland River site (BaGv-42) is a highly significant archaeological resource with both prehistoric and historic components. It is recommended that Stage 4 mitigation is required for this site. Mitigation can include avoidance, excavation or a combination of both, dependent upon construction requirements. Only areas to be impacted by construction will require excavation. The remaining portions of the site can be identified as Environmentally Sensitive Areas that must be avoided during construction. The Stage 4 excavation should include the hand excavation of topsoil one metre square and the plan, profile and excavation of all subsoil features.
- 2. A detailed examination of the archival and historical documentation including mapping related to the location of the Lower Landing seems warranted.
- 3. The results of the Stage 3 testing were inconclusive as to whether this site is the Lower Landing site. If more information is required to assist with this determination, it is recommended that a series of trenches be hand excavated across the early historic component to add to the artifact assemblage and to attempt to locate subsoil structural features" (New Directions Archaeology Ltd. 2005: 32).

Discussion

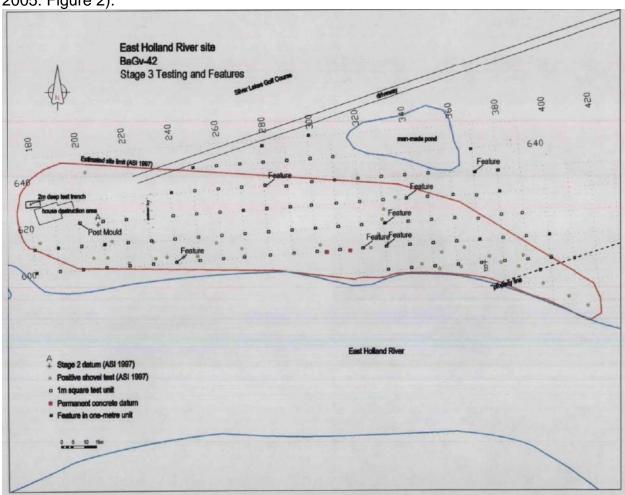
While noting that the East Holland River was a significant transportation route for Euro-Canadians, the 2005 report failed to note that the same might be said for the river as a transportation route for Indigenous peoples, and also as a resource, given that this type of river and marshy environment was ideal for water vegetation, shoreline vegetation,

and numerous fish, animals, and birds, providing both Indigenous and Euro-Canadians with ample bounty.

Analysis of the historic material does not specify any 18th century materials, although certainly some of the so-called early historic ceramics may have come from that period.

While indicating that there is no structural evidence to support that this location may be that of the Lower Landing, the consultant failed to consider erosion of former landfalls into the river, nor the possibility that areas that were not tested by Archaeological Services in 1995 may also have contained some, as yet, undiscovered cultural materials/features, that is, the "wet areas". The recommendation for background research into the Lower Landing was not remiss.

Figure 10: Stage 3 Test Unit and Features Locations (New Directions Archaeology 2005: Figure 2).



Willard Petersen and Dave Ladell 2010

Willard Petersen, Dave Ladell and Glen Penoyer met circa 2001 with regards to the archaeological potential of the Holland River area. Petersen and Ladell, living in the

area, were very concerned with proposed development of Highway 404, Highway 400 and the Bradford Bypass. Petersen produced two vimeo videos, which speak to the development but also of the historic importance of the East Holland River, including the current Study Area.

The first video, Simcoe's Yonge Street (Figure 11), can be accessed through the following link: https://vimeo.com/18471341, and the second, Save Farmland and heritage sites from being destroyed by the Bradford Bypass and the 404!!! (Figure 12), through https://vimeo.com/65206357. The first video about Simcoe was made 11 years ago (2010), and the second video, eight years ago (2013). What is obvious is the Willard had conducted his own research of the area, and that he was passionate about the archaeology of the area and deeply concerned that it would be destroyed through development of various transportation routes.

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Figure 11: Willard's Video – Simcoe's Yonge Street

Simcoe's Yonge Street: 1st take unedited. Narrated by Willard Petersen

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Figure 12: Willard's Video - Save farmland....

Save farmland and heritage sites from being destroyed by the Bradford Bypass and the 404!!!

8 years ago

Petersen, Lydall and Penoyer worked on the research of the Study Area, and were convinced that this was the site of the Lower Landing. In 2014, Penoyer, presumably with the aid of Petersen and Lydall, removed over 700 artifacts from the East Holland River. Petersen kept these artifacts, although Penoyer had arranged for the Sharon Temple to accept them, and "refused" to give the artifacts to Penoyer. Petersen passed away and his son, Anders Petersen inherited the collection. Penoyer again asked for the materials, but was again refused.

Anders Petersen passed all of his fathers' documents and research to a University of Toronto student named James Wright (see supplementary documentation). Wright, according to Petersen, is "actively working on proving" his father's thesis on the location of the naval depot, that is, Lower Landing. In an email communication (see supplementary documentation, October 16, 2021) Wright told Janusas that he had passed all of this material on to Tom Irvin. The Ministry of Heritage, Sport, Tourism, and Culture Industries (Andrea Williams) recommended that Tom Irvin be approached. He was emailed (supplementary documentation, August 8, 2021) and replied that he would scan and forward files. At the time of this report submission, no files were ever sent.

Anders Petersen goes on to say in personal communication to Bill Foster (Foster 2021) that "...the Naval depot is in fact in the river and I physically located it after my fathers

passing. It's my personal opinion that the entire shoreline intersect the proposed route is highly significant at this time."

Discussion

Willard Petersen was passionate about history, and as a property owner in the area, with neighbor Dave Ladell, the two set out to conduct historic research into the area, especially after Ladell found artifacts in the East Holland River. They were certainly prompted by the proposed highway corridor/bypass development, but this does not diminish their research.

Penoyer 2011, 2012 (A080)

Penoyer (2021a) was studying the Paleo shoreline of several areas, including that near the study area. With permission of Mr. David Ladell, occupying part of Lot 118 at that time, Penoyer conducted a metal detector survey.

Penoyer, in this report, cites the Archaeological Services Inc. report and the New Directions Archaeology Ltd. reports regarding the site BaGv-42, and their findings. One of the recommendations from the Stage 3 archaeological assessment by New Directions was to conduct some intensive background research and try and determine if this location was in fact the Lower Landing. In pursuit of this suggestion, Penoyer turned to research that had been conducted by landowners, Willard Petersen and David Ladell (former owner of part of Lot 118 now owned by Thomas To).

The following is a summary of this research.

An examination of the diary of Alexander MacDonnell provided some information.

"MacDonnell was a member of the John Graves Simcoe party who at this time, as is well known, was attempting to find a means of transportation to Lake Simcoe from York, and, accessibility north to Lake Huron (Cruickshank 1924: 70-79). We agree what is essential for our purposes is on the return trip from Cowan's fur trading post, the party went along the west shore of Cook's Bay and down the East Holland River. He writes that on 11th of October the party '... got to the landing place at the red pine fort.'

"MacDonnell tells us that once the party came to the entrance to the river, and, then, they paddled seven miles upriver to the landing. More specifically, he broke the distance down at least to one point. What is the easiest to discern is the distance from the 'forks' (where the East and West Holland converge) to the landing. This was approximately three miles (lbid.: 77)" (Penoyer 2021a: 12).

It was suggested by Penoyer that this would have led directly to Lot 118, on the East Holland River.

"MacDonnell's estimate is almost exact when one travels by the river waterway itself. Petersen [a local landowner], more interested in this point than Ladell [another former landowner], found it somewhat more difficult to understand the first four miles. This is because if one looks on a modern map, to go from the 'forks' to Lake Simcoe by river it is only three miles. How does one account for the other mile? The answer comes from another source. Samuel Wilmot, who surveyed the river in 1811, describes that it was eighty feet across and twenty feet deep at its mouth. We have not confirmed Petersen's point using Wilmot's measurements. The problem is solved, for Petersen, when one looks for the depth on a modern hydrographic map. Petersen noticed the depth of twenty feet is not met until one is approximately one mile out. MacDonnell's description, then, includes not just the shoreline but what Petersen believes were the mile of the rice fields and weeds which the party passed through and which have since been destroyed. Thus, seven miles is the true distance in the time of Simcoe if one looks at the entrance from the point of view of the vegetation and not the ground..." (Penoyer 2021a: 13).

"...Lieut. Pilkington, another member of the party, does not even put it [the red pine fort] on his map of the journey, it being so inconsequential (Pilkington: 1794). But, he does note where the 'Landing Place' is" (Penoyer 2021a:13).

"Simcoe himself would later call this the Old Indian Landing, thus, directly relating it to only the aboriginal's use of it. He, again, never mentioned the 'fort'. Lastly, Simcoe's wife, Elizabeth, did not appear to consider the 'fort' of any importance as on her map she made upon the party's return, nothing is shown of it" (Ibid.).

There are many other historic sources used by Penoyer, which are all explained as supporting the possibility of the Lower Landing occurring between Lots 116 and 118, leaning strongly towards the possibility of Lot 118. The discussion of these sources is not presented in this report, and readers are recommended to read the Penoyer report (2021a).

Penoyer's recommendation for the Study Area is that further investigation be conducted on Lot 118 and south of Lot 118.

Discussion

Although it is not mentioned in the report, Image 2 (below) is dated 2012 and shows removal of artifacts from the East Holland River.

Penoyer 2013 (A080)

Penoyer (2021b:4) and landowners, Petersen and Ladell, pursued some of the historic research of the area, presented in the summary below:

"The research into the various habitations of lot 118 has produced results which can never be underestimated. Research must continue along this whole shoreline. If further research and testing continues as it has, we feel the local government should acknowledge this location for the longevity of its historical relevance. Further archaeological testing is imperative to compliment what has already been done. This site should be protected from any and all outside influences until a full scale archaeological investigation has been concluded. This would include a marine archaeological investigation. We have not even yet begun to look into the possibility of the other side of the river which has not been built on."

Discussion

The three men were correct in their estimation of the significance of the locale and the need for more archaeological and historical investigations.

Penoyer 2014 (A080)

Penoyer (2021c) "returned" to the site of Lot 118, Concession 1, West of Yonge Street, having learned information from a previous owner of the site, a Mr. David Ladell. He had informed Penoyer that while swimming off his property in the East Holland River he had accidently encountered Indigenous artifacts. These artifacts were retained by Ladell and brought out for show for neighbours Lynn Emerson (daughter of Dr. Norman Emerson) and George McMullen (a personal friend and "intuitive" used by Dr. Emerson). This display of artifacts inspired Mr. Penoyer to actually enter the water "midpoint between the north half of the property, owned by the Ministry of Transportation, and Ladell's south half of the property" (Penoyer 2021c: 1). Penoyer obtained permission to enter the Ladell property by the new owner, Mr. Thomas To.

Penoyer explored the mud bottom of the East Holland River approximately 25-30 feet (~7-9 metres) from the bank of the east shore and expanded his search about 120 feet (~36 m) along the length of the shoreline. This was later expanded to about 135' (~41 m) along the length of shoreline. Penoyer conjectured that the artifacts had washed into the river through erosion of the shoreline. The banks were dense with vegetation so were not investigated. Penoyer found largely Indigenous materials but also some evidence of glass. He was unable to discern whether the glass was historic in nature, and left all of the glass shards and bottles he found close the northern extent of the inwater investigated area ("the northern tree").

Some of Penoyer's research reading through A.F. Hunter's notes, apparently referred to several archaeological sites in the area. Of note, was that a Mr. Granger, who once owned Lot 118, had found bullets, grape shot, and other artifacts on the lot. The collected Indigenous material was initially dated to 1000 A.D. by Dr. David Smith (University of Toronto).

Over 700 artifacts were recovered and preliminary piecing together of the large number of ceramics was done at the home of a Mr. Petersen, who was working with Mr. Penoyer.

Penoyer and Petersen tried to "put in" test holes downstream near the golf course. He noted that the further downstream he went, the deeper became the river bottom sediments. There were no submerged logs in the area that they tested. No artifacts were recovered from these test holes. They then put in three additional holes, "upstream from the southern boundary tree", which produced additional Indigenous ceramic material, suggesting that the site extended south. The testing in the river bed, where they "washed" the sediments to reveal artifacts continued westward past the 25-30' mark they tested, but the increasing depth made it more difficult for them to expand further into the channel.

Penoyer observed that the bottom was blanketed by "thin, long pieces of branches", that were located 8-10" (20-25 cms) below the surface of the bottom. A concentration of artifacts was located 18' (5.4 m) from the east bank and 18' (5.4 m) from the overhanging tree. An approximately 4' x '4 (1.2 x 1.2 m) square produced "several dozen artifacts". Approximately 31-32 rim sherds were located and recovered from this area.

Penoyer observed a "clay bank" extending from the river bank at an angle to the concentration of artifacts in the 4' x 4' area. Archaeologist Gordon Dibbs looked at the material for Penoyer sometime afterward and remarked on the large size of the sherds, and also suggested at date for them of 1000 A.D.

Penoyer located a second concentration of artifacts located approximately 40' (~12.2 m) from the "border tree" and about 20' (6.1 m) from the east shore. In addition to ceramic artifacts, lithic artifacts were also located in this concentration. The concentration was slightly larger than the first, coming from an area measuring approximately 5' x 5' (1.5 x 1.5 m). A Late Paleo Lancoleate point was apparently recovered from this location. Included in the assemblage from this area were a scraper/knife, flakes, another projectile point dating to the late Archaic period, a bone awl, ground stone axe, a bone harpoon, an antler tine, a bear tooth, in addition to many smaller objects. A single Euro-Canadian artifact was identified by Gordon Dibbs as a "bale seal", which was commonly used to attach to a bale of furs or something similar for trading purposes.

Penoyer did note that about 22-25' (6.7 - 7.6 m) from the east shoreline a continuous line of small rocks and pebbles were found paralleling the shoreline. He conjectures about this line suggesting possibly an earlier shoreline, possibly one related to a dock/pier associated with the Lower Landing.

One area of the search was obstructed by a drowned tree at the northern end of the investigated area. Ceramics were located in this area, however, the tree prevented Penoyer from exploring this area in the detail that he had along the rest of the in water area.

Just south of the southern boundary tree, Penoyer noted an area of sandy bottom. In this area, he found a large sheet of copper (suggested by Dibbs to be part of a cooking pot). Penoyer also noted that in a test hole located "at the boundary line between north

and south lot 118), he found several copper "arrowheads", as well as a beaver tooth. He conjectured that these might belong to a "Huron hunting camp".

Penoyer provided (to Scarlett Janusas in 2021) a sketch map of the area of in-water investigations (Figure 13a – Figure 13b is the corresponding Google Earth image in the supplementary documentation). There are no accompanying georeferences to the north and south tree, but Penoyer pointed these out at the preliminary on site meeting. Using Google Earth maps, two UTM coordinates were estimated for the location of the north and south trees. These are presented in the supplementary documentation.

Penoyer accompanied the sketch with the following notes:

- "1. An excellent bottom because it is free of any logs.
- 2. There was one concentration the late Paleo/Early Archaic. 25 feet from the south tree and 20 feet out from the bank. Any other talk of a concentration would be incorrect because the artifacts were consistent throughout!
- 3. Two to three feet out is a sandy beach. All banks are undercut by wave action.
- 4. Sediment very light except for a great many 'beaver sticks' have way down
- 5. Clay 'Ridge' out at an angle 15 feet up from south tree
- 6. All artifacts are on the bottom, some fust [sic] into a coarser sand.
- 7. I worked basically from south to north, the north end is the one least worked.
- 8. To the south of the south tree experimented did not find much in comparison but started to hit trees.
- 9. No terracing a very slow declination the middle of the river which is 10 feet deep in the middle.
- 10. Deer antlers every so often, but no other deer bones whatsoever" (email correspondence July 2, 2021).

Penoyer in his conclusions noted the significance of this site, and emphasized that additional work should be done in the area to: 1) determine the western limit of the site 2) recover additional in-water artifacts and 3) to possibly test the western bank, land portion of the river, where the site may have extended to, and possibly underwater. He continued to investigate on land sites at the request of Petersen on part of Lot 118, east side of Yonge Street. As this is not pertinent to the current study area, the results are not detailed in this report.

Sadly, Penoyer's association with Willard Petersen ended when Petersen refused to give the collection to Penoyer. Penoyer had made arrangements with the Sharon Temple to house the artifacts. Petersen has since passed away, and his son, Anders, also refused to give the collection to Penoyer (Penoyer personal communication 2021 to S. Janusas).

Discussion

Penoyer's reports of 2013 and 2014 dealt with paleo shorelines as well as the study location, and the possibility of the Lower Landing being located along the east bank of the East Holland River, specifically at Lot 118. Penoyer was introduced to Petersen and Ladell through an associate of Dr. Norman Emerson, George McMullin. The site was actually found originally by Ladell who had gone swimming in the river, and when sitting down in the water, brought up a chamber pot from the mud, as well as additional artifacts. Dr. Emerson and his daughter were actually visiting Ladell at the time (Penoyer 2021: personal communication).

The reports, in addition to historic research, attempt to fit the historic data into the location of the Lower Landing at Lot 118. It is clear that a great deal of research was conducted by Penoyer and his associates, Petersen and Ladell, a distinct advantage over previous archaeological reports, where little to no background research was conducted.

Figure 13a: Penoyer In-Water Investigations (not to scale) (drawn by Penoyer)

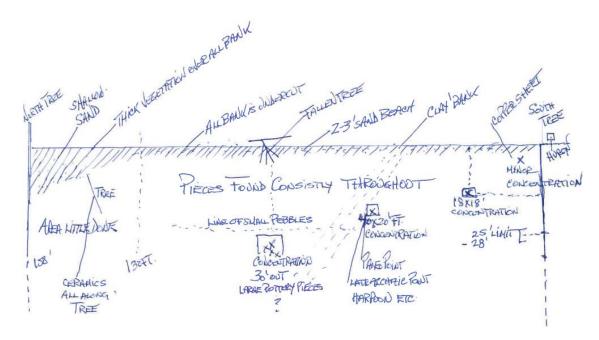


Figure 13b: Corresponding Google Earth Map – refer to supplementary documentation

Penoyer 2021

Penover contacted Scarlett Janusas in 2021, and updated her on events that had transpired when he was conducting investigations at the East Holland River. In the process of doing so. Penover supplied numerous images of both artifacts and activities. These area presented below. Image 1 shows the east bank of the river with a sandy shoreline. Penoyer and another individual are about 10 feet offshore recovering artifacts. Image 2 indicates that recovery in the river was occurring in 2012 (date stamp). Image 3 depicts a small cannonball (about 4.1" diameter) which would have been shot from an 8 pounder cannon (https://www.crt.state.la.us/), and the smaller, with about a 2" diameter, would have been fired from a four pounder cannon or carronade. The larger cannonball would have weighed between 8 and 10 lbs, and been fired from an 8 pounder cannon. According to Penover, these were recovered by former landowner Ladell, "off the end of the dock in the water". This latter statement suggests that there are the remains of a dock/pier/wharf in the water, and that these artifacts were found at the river end of the same. What is not indicated, however, is where this dock was/is, and how far out it ran. The image "is of the cannonball which David Ladell found off the end of his dock on lot 118. He told me that kids would roll these cannonballs [sic] off his dock. He never found out where they found them unfortunately" (email communication September 1, 2021).



Image 1: Recovery of Artifacts from the East Holland River

Image 2: Recovery Artifacts in 2012



Image 3: Cannon balls



Images 5 - 19 illustrate a selection of the artifacts recovered during the in-water investigations. The majority of these are ceramics (Image 5 - 15, however, there is also an example of a groundstone fragment (Image 17), a lithic scraper manufactured from Onondaga chert (Image 18), a bone/antler harpoon (Image 16, 19). These are among the artifacts that are no longer in possession of Penoyer, but provide evidence of the multi-component nature of the site (ceramics). These artifacts are but a small sample of the 700 plus artifacts recovered from the water. As noted before, the collection apparently still lies in the possession of the son of Willard Petersen (passed away in 2015), although the latter has not been confirmed.

<u>Discussion</u>

Penoyer was instrumental in drawing the attention of the Ontario Marine Heritage Committee to this site (BaGv-42) and the underwater associated site. It is through his assistance, as well as a host of others, that the OMHC has begun the arduous task of sorting the wheat from the chaff. But without a doubt, the significance of this site, both on land and underwater is very high.

Anders Petersen 2016-2021

Mr. Anders Petersen, son of Willard Petersen, provided some additional information via email to S. Janusas (October 18, 2021).

Anders Petersen noted that the cannonball in Image 3 was actually found in the woods, rather than originally as believed, from the water, and that it is in the possession of Mr. David Ladell.

"In 2016 I located a series of brick buildings between 10 - 15 feet from shore [in the water], and about 5 - 10 inches into the clay bed of the river in this area. I could clearly feel all the corners and [I] would estimate to be about 10 ft wide north to south and about 15 - 20 feet long east to west.

I could clearly feel a chimney with small charred bones in it on the north side of the building which was about 1ft x 1 ft wide. To the west of that building there seemed to be an old pier. The wood pilings are still preserved in the clay bed and are evenly spaced leading out into the river. On either side of that I found an incredible amount of nearly intact first nation pottery.

It is also worth mentioning that my dad believed there were 6 - 9 brass canon that had been positioned along the shore line around the naval depot. He believed that once the war ended, like the anchor in the park the canon were abandoned.

Specifically he believed they would have pulled them onto the thawing ice and simply let them sink into the river".

In an email to Bill Foster (September 7, 2021), Anders Peterson provided a bit of additional detail:

"The building is in the water about knee deep under a decent amount of clay silt (this was in 2016). I literally spent a day bent over with my hands in the clay looking for things. The building is definitely there. I traced its outline a few times and even found what felt like a small chimney on the easy wall opposite to what would have been the river back then. There were small charred bones of what I could only guess to be bird or squirrel. Next to that about 10 -15 feet away was a pier of some kind. We found several hand made clay pots almost intact near the old pilings."

Image 4 illustrates one of the pots recovered by Petersen in 2016.

Additional location information regarding the location of the building and the pier are in the supplementary documentation.

Discussion

Anders Petersen had grown up in the locale and through his father and neighbor Ladell, became more than acquainted with the site, and even entered the East Holland River himself to investigate. It is often through the auspices of unlicensed individuals that

great discoveries are made. This can certainly be said of Willard Petersen, Dave Ladell, Anders Petersen and Glen Penoyer that more attention has been shed on this highly significant locale and archaeological site.

Image 4: Reconstructed Bottom Portion of Indigenous Pot



Image 5: Indigenous Ceramics



Image 6: Fragmentary Rimsherd



Image 7: Rimsherd



Image 8: Rimsherd



Image 9: Rimsherd



Image 10: Juvenile Pottery Rim



Image 11: Rimsherd



Image 12: Castellation



Image 13: Rimsherd



Image 14: Front and Back, Juvenile Pot



Image 15: Fragmentary Rimsherd



Image 16: Bone/Antler Harpoon



Image 17: Groundstone



Image 18: Scraper (Onondaga Chert)



Image 19: Modified Bone/Antler



Bert Duclos

Additional support for this locale being recognized and protected as the Lower Landing came from a former MHTSCI staff member. Mr. Bert Duclos was a heritage outreach consultant with the Ministry for over 12 years (https://bertduclosheritage.ca/). After conducting his own research on the Lower Landing, Duclos drafted three letters for signing by Margaret Prophet, Executive Director, Simcoe County Greenbelt Coalition, to the government in July of 2021.

The three letters "were sent to Lisa MacLeod, Minister of Heritage, Sport, Tourism, and Culture Industries, copied to Caroline Mulroney, Minister of Transportation, and in one of them to Steve Clark, Minister of Municipal Affairs and Housing. One requests the minister use her ministry's influence to conserve the MTO property of the Lower Landing site through new marine and land archaeological assessments, the application of the *Standards and Guidelines for Conservation of Provincial Heritage Properties*, and the application of the *Provincial Policy Statement, 2020.* Another letter requests the minister use her ministry's influence to conserve the private property of the Lower Landing site through marine and land archaeological assessments and the application of the *Provincial Policy Statement, 2020.* The third letter specifically requests the minister use her authority to designate the private property of 20866 Yonge Street as *Property of Cultural Heritage Value or Interest of Provincial Significance* under the *Ontario Heritage Act*" (Duclos 2021: personal communication October 16).

Discussion

Mr. Duclos, who no longer works as an employee of the province, was kind enough to share the highlights of his research. This research, by a heritage expert, adds to the evidence of the Lower Landing being located in the Study Area. The letters to the Minister et. al. are also proof of the importance of this site, and that it should be recognized for its significance, but also protected and avoided when considering development of any kind.

Government Involvement

In a briefing note signed off by the Deputy Minister on April 12, 1998, prepared for the Minister's staff (now Ministry of Heritage, Sport, Tourism and Culture Industries), Malcolm Horne and Michael Johnson presented some notes on Heritage Resources Impacted by Hwy 400/404 Link (Horne and Johnson 1998). They indicated that the concern for the heritage resources was being led by the landowners who might be impacted by proposed development. They also indicated that, "Heritage resources will be addressed through the normal processes" (Ibid.). It was acknowledged that although some archaeological work had been done for the proposed development, "much remains to be done". The briefing note also indicates a joint protocol in place between the MHSTCI and Ministry of Transportation (MOT), and that the MHSTCI "are satisfied that MTO is consistently being responsible in managing the cultural heritage resources it is impacting".

The briefing note cites Tremaine's map as indicating that the lands on which the Indigenous site (BaGv-42) is located was in the same locale as that noted on the 1860 Tremaine map (Figure 17) as the "Old Indian Landing".

Letters from property owners were indicated in the briefing note in which they demanded "that the right-of-way be redirected to avoid their property and thus the site. The letter was copied to: the Prime Minister, several Federal Cabinet Ministers, the Ontario's Leader of Opposition, members of the heritage community, radio, television and print media members and many others." It is further recorded that the residents have "asked the Federal Government for a review, leading to a designation under that National Historic Sites and Monuments Board. The briefing note indicates that an incorrect statement has been quoting by "Staff saying in correspondence as stating that the site is more significant than 95 percent of the sites in Canada. The briefing note clarifies this apparent misstatement by indicating that what was said was "that the Lower Landing site is more significant than 95 percent of the historic and archaeological sites in Canada. However, it has not been shown that the new site is actually the Lower Landing." With recent and current research, this has been shown to be the actual case, that is, the site where BaGv-42 occurs is also the site of the Lower Landing.

Discussion

The Ministry was made aware at least as early as 1998 that there was an important site in this locale. Through work contracted by the Ministry of Transportation, BaGv-42 was located, but it was conducted prior to the implementation of standards and guidelines. The study, which the MHSTCI supported, in today's light, lacks the necessary background research and also dismissed areas because they were too wet to test and dirt driveways tested only visually.

The briefing note is in error, saying that ASI who conducted Stage 2 archaeological assessment found the site BaGv-42 but that it lay "approximately 1.5 miles away from what they understand to be the site of the Lower Landing". In the discussion of past work, specifically that of ASI, it was pointed out that there were inadequacies to their work given that the work 1) was not conducted under the 2011 Standards and Guidelines 2) there was no detailed historic research conducted for the property 3) that areas were not tested at all because they were "too wet". Fluvial geomorphology and the presence of the site BaGv-42 indicate that even these wet areas hold archaeological potential. In addition, a portion of the site, and also possibly of elements of the Lower Landing itself (building, pier) have been identified by previous investigators in the East Holland River itself, immediately adjacent to the shoreline of the site BaGv-42. Additional in-water survey in 2021 produced several good magnetometer hits in the main channel of the river, in the same vicinity. Certainly additional land and marine archaeological assessment is warranted for the locale.

From current research and from the research of other investigators (Petersen, Ladell, Penoyer, Duclos) it has been shown that the Lower Landing (Lot 118), as it was

commonly known, was also referred to as the Soldier's Landing (or Soldier's Bay), the Steamboat Landing, and as the "old Indian landing" shown on Tremaine's map of 1860.

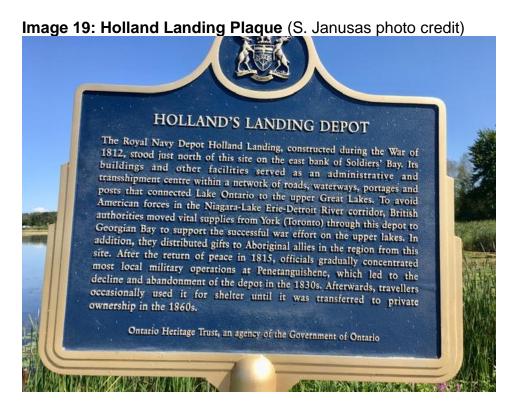
Recent and current research has demonstrated that the site of BaGv-42 is in the same locale as the site of the significant site of the Lower Landing.

Given the importance of the site, both as a multi-component Indigenous site, and the location of the Lower Landing here, the survey should include the wet areas, especially those adjacent to the site and adjacent to the river.

4.2 Historic Research

4.2.1 Plaques

There is one plaque that is relevant to the Study Area. It is located on the north side of Queensville Road, at a small roadway leading to a marina, on the east side of the East Holland River (Image 19).



It was unveiled in September of 2010 by the Ontario Heritage Trust. It is presented both in English and French, but only the English text is provided below. It should be noted, again, that the research suggests that the Lower Landing was elsewhere, when current and recent past research supports the fact that was, in fact, located on Lot 118.

"HOLLAND'S LANDING DEPOT

The Royal Navy Depot Holland Landing, constructed during the War of 1812, stood just north of this site on the east bank of Soldiers' Bay. Its buildings and other facilities served as an administrative and transshipment center within a network of roads, waterways, portages and posts that connected Lake Ontario to the upper Great Lakes. To avoid American forces in the Niagara-Lake Erie-Detroit River corridor, British authorities moved vital supplies from York (Toronto) through this depot to Georgian Bay to support the successful war effort on the upper lakes. In addition, they distributed gifts to Aboriginal allies in the region from this site. After the return of peace in 1815, officials gradually concentrated most local military operations at Penetanguishene, which led to the decline and abandonment of the depot in the 1830s. Afterwards, travelers occasionally used it for shelter until it was transferred to private ownership in the 1860s."

4.2.2 Current Research

As much as possible, primary sources were used to conduct research of the Lower Landing. Some of these resources were also used by previous researchers, but for the purposes of continuity, are presented in this section, as researched by OMHC members, Patrick Folkes and Scarlett Janusas. We wish to acknowledge the contributions of the many researchers who have put pen to paper regarding the Lower Landing and this area of Ontario.

This locale was certainly not unknown to early Indigenous people who would have used the Holland River as a transportation route to and from other locations, and also for its resources, including waterfowl, fish, herptiles, animals, and plants for both food and other uses. The images of artifacts presented above (Images 5 - 19, Section 4.1) are proof of Indigenous occupation and use at the site of the Lower Landing and adjacent areas.

The first Europeans in the locale may well have been Jesuit missionaries Fathers Jean de Brébeuf and Joseph Chaumonot, who would have passed this way on their journey back to the Wendat in the spring of 1641 (Duclos 2021, email communication, October 16). And, French explorer René-Robert Cavelier, Sieur de La Salle also used this route in August of 1681 on his way to the Mississippi. Included in this early group of explorers and entrepreneurs are those in the fur trade; the coureurs de bois, voyageurs and the North West Company, to access points north (Ibid.).

The 1745 map (Figure 14) by Jacque Nicholas Bellin provides a visual of Lac Toronto, which is today known as Lake Simcoe. Clearly delineated is the Holland River, although not named. This map section also shows that the area was frequented, in the 18th century, by the "Iroquois du Nord" – the Iroquois, and possibly also the "Pays Des Hurons" – the Hurons, indicating a history of Indigenous occupation and use of the area at this time, and definitely before the 18th century.

The Lower Landing (Lot 118), as it was commonly known, was also referred to as the Soldier's Landing (or Soldier's Bay), the Steamboat Landing, and as the "old Indian landing" shown on Tremaine's map of 1860 (Figure 17).

The Upper Landing (Lot 111) was also known as the Canoe Landing, and in the 1830s as Johnson's Landing.

The first written record of a visit to the Lower Landing is that of Lieutenant Governor John Graves Simcoe and his party in October of 1793. Various researchers (Penoyer, Petersen, Duclos) all note that the group stopped at this location returning from Georgian Bay to York (now Toronto). Through the accounts of Alexander McDonnell (Cruikshank 1924: 70-79) Home District Sheriff, who was part of the Simcoe party, he noted:

Figure 14: Section of Partie occidentale de la Nouvelle France ou du Canada (htpps://www.loc.gov/resource/g3310.ar001900/)

Lehelles



"11th - About 9 Oclock left our encampment, embarked and soon got out of the Lake, paddled up the River about three miles, then got in to another River, and about 2 Oclock got to the landing place at the red pine fort."

Figure 15 illustrates the Pilkington and Aitken Sketch from York (Toronto) on Lake Ontario to Lake Simcoe. Clearly marked on this 1793 map is the "Landing Place" which is located at the terminus of a route taken by Lieutenant Gov. Simcoe (now Yonge Street) and the intersection of the East Holland River. The river configuration matches closely with that of modern day East Holland River and the location of the known archaeological site, BaGv-42. This is the first known illustrated location of the Lower Landing.

Figure 16 illustrates the 1794 Chewett map of the road communications, however, this time, the landing is not marked on the map, although the East Holland River figures prominently on the map.

The name of Pine Fort was early fixed on the Lower Landing. It derives from the reference in Mrs. Simcoe's diary entry of December 28, 1795, relating that, "A party began to-day to cut a road from hence [York] to the Pine Fort near Lake Simcoe" (Robertson 1911:298). The published description of Upper Canada in 1799 records the "Pine Fort called Gwillimbury, where the road [Yonge Street] ends; from thence you descend into Lake Simcoe" (no author 1799: 154). The same description is given in the edition of 1813. The name "Pine Fort" in 1795 probably signifies the existence of a post, more properly designated a "trading Station" rather than a palisaded, armed "fort". And that it was a place of exchange between European traders and First Nations, with origins deep in the eighteenth century, perhaps even earlier.

The tradition that Yonge Street ended at the Lower Landing is borne out by the track shown on Tremaine's map of 1860 (refer to Figure 17) which crosses Lot 118 to the river.

The opening of Yonge Stret prompted the North West Company to use it as a route to the Upper Lakes. The Company contributed to its improvement and by the turn of the century was hauling batteaux and supplies over it from York to the Holland River (Guillet 1963: 143). Peter Robinson, settler, merchant, politician, and Crown lands official at Newmarket, later became an agent for the Company. He seems to have conducted his trading business at the Upper or Canoe Landing, where he met his First Nations customers.

During and after the War of 1812 the Holland River was the jumping-off point for military and naval supplies being sent north from York to the Nottawasaga River and Penetanguishene. Both the Upper and Lower Landings are seldom identified as such in the usual references to the river in the British Military Papers (LAC, RG 8, C Series). For example, a letter from Assistant Commissary General George Crookshank, York, to Lieut. Col. Foster, commanding at Kingston, of December 16, 1814, mentions that "shipwrights have been left at Holland River for Building the Boat required on lake

Simcoe" (Library and Archives Canada, RG 8, C Series, Volume 733: 166). And a letter from Captain Collier, York, to Commodore Sir James Yeo, of January 7, 1815, states, "Boats at Nottawasaga, was well as those at Holland River are getting on fast...and since the late fall of Snow, Guns, Anchors & Cables, are now on the move, the Season has been especially mild, but he Sleighing just now very good, which I hope will continue" (Ibid: Volume 734: 18).

Figure 15: Sketch of the Communication....1793 (by Lieut. Pilkington and Alexander Aitken)

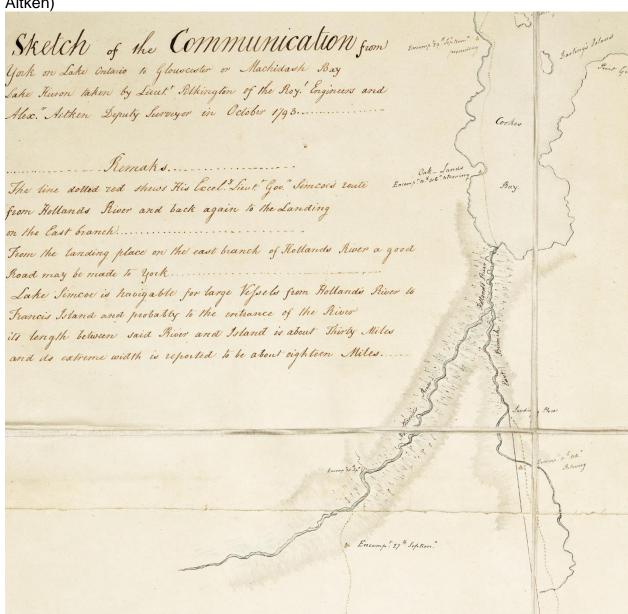
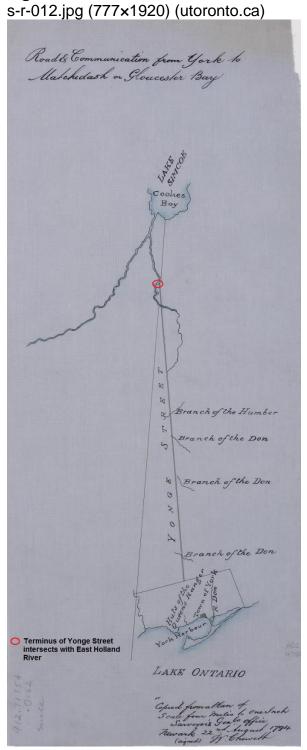


Figure 16: 1794 Chewett Rendition of East Holland River (1794-Chewett-ohq2-map-



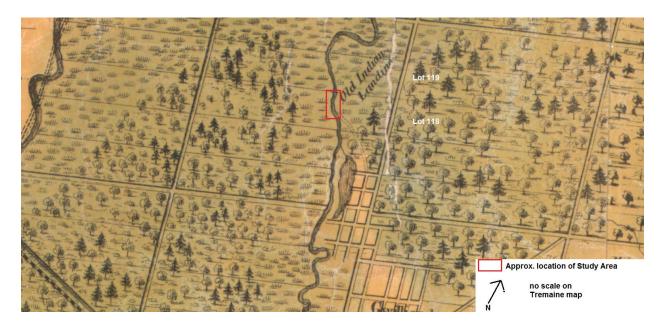


Figure 17: Tremaine's 1860 Map Showing the Lower Landing

At this time, on February 26, 1815, George Head arrived at the Holland River by sleigh from Newmarket (where he had visited Peter Robinson), but did not discriminate at which Landing in his memoir. He merely states that "there was a sort of public house established at the spot where we had arrived, and which was called the Landing, being the point from whence the river was considered navigable, in the summer." Then, journeying northward on the frozen river, "We had overtaken a party of English shipwrights at the public house we had just left, who were on their way to join the new station at Penetanguishene Bay, whither we were going; (they had been previously employed in building small boats for the navigation of the lake...)" (Head 1829: 129-30).

In June of 1818, a party headed by William Matthews, agent for the American Fur Company, bound for Lake Superior, tramped from York with goods-laden carts drawn by oxen up Yonge Street "to Lake Simcoe, where we encamped and remained some two weeks, until all our boats were hauled over and launched into that romantic little lake and reloaded" (Hubbard 1818: 13). They then coasted to the head of Kempenfeldt Bay and crossed the Nine Mile Portage to the Nottawasaga River and Georgian Bay.

Where this formidable group camped is not stated but the context certainly indicates the Holland River, and while either Landing is a possibility the deep water at the Lower Landing is most likely.

John Goldie, who arrived at the Upper Landing from York on June 27, 1819, and remained in the vicinity until July 5 before returning, left no useful description of his surroundings in his diary (Goldie 1897: 5-16).

A more instructive source is the report of T.F. Hawke, who was charged with inspecting the British naval establishments on the Upper Lakes in 1820. On September 22 of that

year he recorded at the Upper Landing fifty cannon – twenty-six 18-pounders and twenty-four 24-pounders – "lying here". These had been destined in 1815 for a frigate intended to be built at Penetanguishene. At the Lower Landing he reported the presence of a 35-foot barge and two batteaux, one 36-feet in length, the other 39-feet. All were noted as "unserviceble" (Library and Archives Canada, Admiralty 106, Volume 1999).

The frigate's large anchor (not mentioned by Hawke) had been abandoned in 1815 at the end of the War of 1812 at the Lower Landing, remaining there until, if a local tradition is correct, 1870 when it was removed to what is now Anchor Park. It was certainly at the latter location in 1874 (Toronto Globe, October 2, 1874).

The Lower Landing appears to have been the principal location for the annual distribution of government supplies and "presents" to some of the Lake Simcoe First Nations. When this began is not clear but was a summer event by at least 1826 when, on August 16 of that year, "about six hundred assembled at Holland Landing for that purpose" (no author 1926: 19). In July, 1827, Roayl Navy officer Captain Basil Hall witnessed the distribution. "the scene at Holland's Landing was amusing enough," he wrote, "for there were collected about three hundred Indians, with their squaws and papooses, as the women and children are called. Some of the party were encamped under the brushwood, in birch-bark wigwams, or huts; but greater number, having paddled down Lake Simcoe in the morning, had merely drawn up their canoes on the grass, ready to start again as soon as the ceremonies of the day were over. The Indian agent seemed to have hard work to arrange the party to his mind; but at length the men and women were placed in separate lines, while the children lay sprawling and bawling in the middle…" (Hall 1830: 265-266).

That the assemblage took place at the Lower Landing is evident in the August, 1828, journal entries of Peter Jones, the noted Indian missionary. On August 9 he wrote, "Arrived at the Landing about 8 o'clock, P.M., where the Indians had all collected to receive their presents." Then on the 13th, "Mr. Law and I went to the Lower Landing to see the distribution of the presents. Col. Givins had already arrived... It took the Commissary all day to divide the goods, which consist of blankets, cloths, calicoes, shirting, hats, guns, rifles, powder, shot, balls, tin and brass kettles, pots, axes, silk handkerchiefs, ribbons, thread, brooches, &c..." And the next day, "Colonel Givins commenced giving out the goods this morning. The mode of distribution was as follows: The men were seated in rows on the ground by themselves, the women and children in the same order – the Commissary then commenced giving one sort of goods to each individual until the whole of the various articles were disposed of..." (Jones 1860: 162-163). On this occasion Jones recorded the presence of 515 men, women, and children, comprising 390 "Christian Indians", 65 "pagan", and 60 individuals "connected with the French people."

A major reason for holding the distribution at the Lower Landing was the availability of buildings for storage and safe-keeping. These were suriving structures erected during and immediately after the War of 1812 and seem to have been in use into the early

1830s. And they may have been of some facility for the steamboat business, though their dilapidated state was apparent in that decade. Thomas Duncumb described "Holland's Landing, which is where the steamers which navigated Lake Simcoe land and receive passengers" as a "dreary place" with "a road-side tavern, log-built, and the most wretched description of entertainment. In the immediate neighbourhood of which is a range or two of wooden log-built hovels, formerly soldiers' barracks, as this landing place was a military station in the time of the last American war; however, they are now uninhabited, and in ruins" (Duncumb 1837: 268).

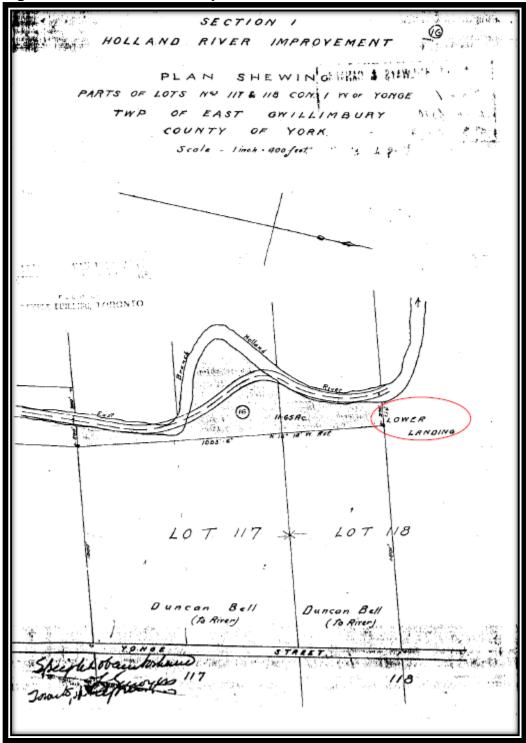
Henry Scadding, who appears to have been a member of the entourage accompanying Lieutenant-Governor Sir John Colborne on his tour to Penetanguishene in 1830, late wrote of the scene at the Lower Landing: "In a cleared space on the right, at the point where Yonge Street struck the stream, there were some long low buildings of log with strong shutters, usually closed. These were the Government depositories of naval and military stores, and Indian presents, on their way to Penetanguishene. The cluster of buildings here was once known as Fort Gwillimbury. Thus we have it written in the old "Gazetteer" of 1799" (Scadding 1873: 492).

Althought the date is illegible, a deed of land for the property includes a sketch of the property, clearly defining the "Lower Landing" (Figure 18).

The Lower Landing appears, at least by a later tradition (Hunter 1909: 70), to have been the site of the building in 1831 of Lake Simcoe's first steamer, the sidewheeler **Sir John Colborne** (of unknown dimensions), which connected the end of Yonge Street at Lot 118 to various settlements on the lake. Thereafter, the Lower Landing was commonly referred to as the Steamboat Landing. Thomas Vaux, accompanying the Rev. William Case on a tour of Indian missions in 1833 wrote: "We started from York at noon, on Tuesday, 28th May, in the stage for Holland Landing, arrived there about 7 in the morning. The next morning we took the steamer **Colborne** for the Narrows, but owing to the Captain having contracted to forward a detachment of the 66th Regiment on their way to Penetanguishene, he could only take us to Kempenfeldt Bay..." (Christian Guardian Volume IV, No. 33, June 26, 1833).

The **Colborne**, which may have been converted to a barge in 1835, was succeeded by the **Peter Robinson**, launched at the Upper Landing in 1834, also a sidewheeler of about 90-feet in length. The 'Christian Guardian' (Toronto), Wed., July 2, 1834, says: "Lake Simcoe Navigation. A beautiful and fast running steamboat, called the '**Peter Robinson'**, has lately been put in operation on Lake Simcoe, by Mr. Charles Thomson [sic, should be Thompson]. She is to ply on both sides of the Lake on alternate days. Such an accommodation will be of great advantage to new settlers and inhabitants of the Northern parts of the Home District, and will tend to facilitate their improvement. We hope the investment will be profitable to the proprietor, as well as beneficial to the public." The problem of the river depth at the Upper Landing was apparent when the **Robinson** had to be dragged through the muddy shallows to deep water (Scadding 1873: 493).

Figure 18: Deed of Land Map



Like its predecessor, the **Robinson** connected the Steamboat Landing to Lake Simcoe. Renamed in 1839 as **Simcoe**, it sailed until 1844 when it was replaced by the **Beaver** built near Orillia.

The **Beaver** ran from the Landing to Barrie and Orillia every Monday, Wednesday, and Firday, passengers coming and going by the stagecoaach connecting daily with Toronto. Because of the tortuous, marsh-fringed charcacter of the river, the route of the **Beaver** was changed in 1850 and the terminus shifted to Bradford from where the west branch of the Holland River offered an easier passage to the lake.

A little more information on the stage coach comes from Methodist missionary James Evans in 1836 (Christian Guardian 1836). He was travelling to Coldwater, Penetang, the French River and further afield:

"Tuesday morning, 19th July, at 9 o'clock, after loading the stage with our luggage and provision, we left Toronto for Holland Landing; stage half full of passengers, and half full of dust. The first few miles on Yonge Street speak much for macadamization.

After leaving the City a few miles however, the road is much after the old fashion, - not unfrequently lowest in the middle, or, if you please, turnpiked on each side. A beautiful country extends before us, with excellent crops of grass, wheat, and other grain... Arrived at Beverly [Holland Landing village], 34 miles from Toronto at 8 P.M. Wednesday, 20th. - Stage-house well kept. Breakfasted, and after shaking three miles in a lumber waggon we embarked at the Holland Landing on board the steamboat Peter Robinson. Beginning of our sorrows, - we found we had left 17 lb. of butter at the inn in the cellar: the landlord being on board kindly paid for the butter and pail, and we purchased six pounds in lieu from a woman on the wharf. Steamboat 'fitted' to the river, in some places filling [fitting?] it nearly from side to side. A marshy bog undulating with the motion of the water for several yards on each side. Nothing but navigation can prevent its encroachment on the stream in the course of time, and the consequent disappearance of this river. In some places the stream is so crooked and narrow, that the engine was obliged to stop in order to allow the vessel time to turn the short points without running into the marsh. The accommodations on board are excellent, and all hands appeared civil and obliging... In the afternoon we took a raft in tow; the poor engine labouring like an overloaded horse - making little headway, but never refusing to draw.

The sun sinking to rest now beautifully gilds the western horizon, and the cool refreshing evening breeze adds not a little to the enjoyment of the delightful display of creative power. Our heavy raft in turning down the Narrows run us hard on a sandy marsh. After allowing the engine a few minutes' rest, and a good feed of dry wood, she again tried her strength, but in vain. Hard on - anchor out - heave, heave - crack goes a handspike, but one more on board; rather a small sea stock. After manoeuvering about two hours we were once more afloat, and between 10 and 11 we reached the wharf at the Indian village, having been delayed about three hours by our disasters, and thankful that we had not been compelled to take up our lodgings among millions of mosquetoes.... Friday, 22nd. - This morning Br. Stinson went over to Cold Water, and I remained at the Narrows, in order to meet the steamboat and recover the box which we left behind...."

From this account, Holland Landing was the same as the Steamboat, or Lower Landing. The village known as Beverly is, in fact, now known as Holland Landing. In 1836, and no doubt earlier, Evan's account suggests that the stagecoach stopped at an inn in the village of Beverly, and from there passengers were taken to the Lower Landing by wagon.

This marked the end of the use of the Lower Landing by the Lake Simcoe passenger steamers (doubly bypassed by the opening othe Ontario, Simcoe & Huron Railway in 1953). Small vessels, however, may have found occasion to work up to the outskirts of the village of Holland Landing. Sources are silent until 1872 when a large schooner, the **Lucilla Bacon**, was launched into the river on May 1 of that year. Constructed by veteran shipwright G.N. Ault of Kingston, the **Bacon** was described as being of about 120 tons and of "a beautiful model and most substantially built" (Era, Newmarket, May 3, 1872).

The **Bacon** was built for Holland Landing resident Henry Bacon, mason and lime kiln owner, and named for this 27 year old daughter. It was intended to transport stone for the kiln from some distant point on Lake Simcoe. Precisely where on the river the **Lucilla Bacon** was built and launched is not known, but Henry is returned in the census of 1871 as the occupant of Lot 108. However, given the shallow character of the river at that location, it seems likely that the schooner was launched further downstream where previous navigators found deep water, perhapsin the vicinity of the Lower Landing. However, another possible location may have been Lot 115 which bears Bacon's name in the historic atlas of 1878 (Miles and Co., 1878: 51) (Figure 19).

It is unlikely that a schooner the size of the **Lucilla Bacon** – it was probaby 110-115 feet in length – could be easily sailed up the narrow and twisting Holland River without the aid of a steam tug.

Figure 19: 1878 Section of East Gwillimbury (Miles & Co. 1878: 50). Wm. Anderson allle .Wa. Wm Andersore Hy Nelo,4 WmDeverell Peter Belfry Rich Traviss Jos Johnson Jno Link Samt Martes Geo Holborn Alex Shields The Robinson Wm Marles Wm Roe Sam! Marles Tho Brandon Hy Bacon RP. Woodill Wm Latch Thos Reuben The Armstrong Thomson Draper Ch's Pearson Henry Bacons Ales Wm Sheppard Scale: 60 chains to 1 inch Swezie Silas Wright Sinner

5.0 FIELD SURVEYS

The first field date was August 15th, 2021 and the crew consisted of Bill Fox, Scarlett Janusas, Duncan Curd and Dylan Morningstar. All are member of the Ontario Marine Heritage Committee. The weather was sunny with a high of 26 degrees C.

The canoe visit was conducted on August 15, 2021. Two canoes set out from the bridge over the East Holland River and Queensville Sideroad and paddled north. Once joining the main channel, the two canoes followed each other along the shoreline. Wherever there was an opening in the heavy growth, the canoes would nose in and make general observations while also examining any exposed banks for possible artifacts eroding into the river. In only once instance was there a possibility of cultural material seen (Point A – see supplementary documentation), and this was tentatively identified by Mr. Bill Fox as a microsherd. There were very few approaches to the riverbanks noted. Figure 20 (supplementary documentation) illustrates the area traversed by canoe. As the vegetation was so thick, the west side of the East Holland River was not included in the visual observations.

Figure 20: Extent of Canoe Survey and Location of Possible Cultural Find (see supplementary documentation for cultural find location)



(Refer to Supplementary Documentation)

On the east bank, there were many downed trees (in and out of the water) and where root balls were exposed on land, they were examined for artifacts (by canoe) and fire cracked rock. None were observed. The banks, where exposed in very small areas consisted of a mixture of sandy sediments and clay.

The start of the canoe survey began at the north side of an extant boat house (Image 20) on the east bank of the East Holland River (17T 0619463, 4887952, +/- 3 metres) and ended at the north end at the point (17T 0618986, 4888097). The total length of the canoe survey was approximately 560 metres (Figure 20). In one instance, a possible microsherd was observed (Image 22) (see supplementary documentation for location information). Two other locations were georeferenced; the first at the location of the sandy clay overlain by organic debris (17T0619376, 4888092), and the second at the location of an exposed bank of sandy soils (17T 0619288, 4888108). All georeferences were collected with a GPS map 60 CXS.

This canoe survey was not considered successful due to the heavy vegetation along both banks of the East Holland River. It is doubtful, even in winter, if the approach along the river banks would be any more open, as the vegetation in some areas (bulrushes, etc.) were from two to several meters deep.

Images 20 to 25 illustrate the canoe survey and conditions.

Image 20: Southern End of Beginning of Canoe Survey



Image 21: East Bank of East Holland River facing N



Image 22: Area of Possible Cultural Find



Image 23: Sandy clay bank



Image 24: Sandy Bank



The second segment of the field work consisted of side scan survey and magnetometer survey. Dr. James Connolly, Trent University, (also an OMHC member) provided a boat and the equipment to conduct this portion of the survey. The boat, was a 26' research vessel (Image 25), with too deep a draft to allow it to go into the shallow areas beyond the main channel. The main channel itself was at its deepest only 1.4 metres and averaged 1.2 metres. The field work was conducted on September 18, 2021 under good weather conditions.

The side scan survey was not recordable, but observations of it were made during the two channel passes – one to the north and the return trip south. There was only one target noted, and that appeared to be a log (Image 26-27). The magnetometer survey was conducted to ascertain if there was any truth to the story by Willard Petersen that eight or nine cannon had been taken out on the ice, following the end of the War of 1812, and left to drop into the river once the ice had thawed. There were a total of eight recorded hits, although at least two of these were recorded as a change in bottom elevation rather than a metal hit (Targets S3 and S4). The change in bottom elevation occurred where the marina to the north entered into the East Holland River and at the point where the river turns. Target S3 may be an actual metal hit, but ground truthing is necessary for a definitive identification.

The survey vessel, equipment, and magnetometer hits, are presented below as images 25 to 36. Images 29 – 36 illustrate the intensity of each of the hits. It is unknown if these "hits" are indeed representative of actual cannon, as the side scan showed nothing standing proud off the bottom, suggesting that whatever these hits may be, they are buried in the mud. Given that cannon are quite heavy, it would not be surprising if (if that is in fact what they are) that they sunk into the riverbed sediments. Target S4 is probably more representative of the bottom change, than an actual hit. The remainder, however, appear to be good "hits". Targets S2, S6, S7 and S8 all lie off the area where Penoyer conducted artifact recovery. They are spaced closer together than are the other targets, possible suggesting a grouping of objects. Target S1 lies the furthest east and south, and may be an anomaly, however, only excavation will be able to provide a definite identification of the target. The same is true for targets S3 and S5. These two targets are closer to the point in the river where the lot boundary line between north and south Lot 118 occurs.

Each of the magnetometer hits were recorded in decimal degrees. These locations are presented in the supplementary documentation (Table 1).

Image 25: Survey Vessel



Image 26: Side Scan Sonar Screen



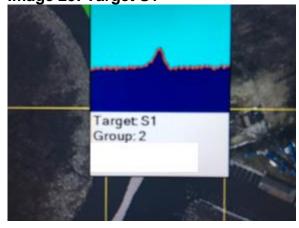
Image 27: Possible log



Image 28: Magnetometer Hits



Image 29: Target S1



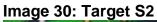








Image 32: Target S4

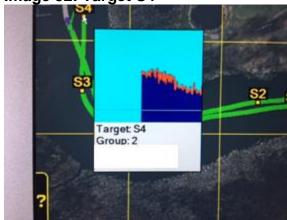
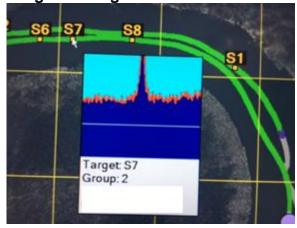


Image 33: Target S5





Image 35: Target S7





6.0 ANALYSIS AND CONCLUSIONS

While the results of the canoe survey were disappointing due to inaccessibility to the riverbank caused by heavy vegetation, there were observations made indicating a mix of both sand and clay riverbanks. One possible artifact was observed and noted, a microsherd, but this was not confirmed.

The sidescan sonar survey only detected one log, and no objects standing proud off the bottom, that is, above the sediments. It was noted, however, that there were a great deal of anchor marks on both sides of the main channel. The river is currently used for recreation, both oversized boats restricted to the main channel, and smaller watercraft, sometimes that are used by fishermen, and therefore anchored.

The magnetometer survey found seven "good" hits. The readings reflected metal objects, however, given that the sidescan showed nothing above the river bottom, it was most likely that these objects, whatever their identification, had been buried in the river bottom sediments. It must also be remembered that there is no guarantee that these seven objects are related to the Lower Landing, or the cannon specifically said to have been purposely left behind here (Petersen), as the river has been used by many over a long chronological period. Inevitably, garbage also enters the river, especially by recreational boaters. Water has always been considered a way to dispose of things.

The background research of past researchers and the current background research, the canoe survey and the sidescan and magnetometer survey of the main East Holland River channel has highlighted several things. There are:

- There is a known site, BaGv-42, located immediately adjacent to a portion of the East Holland River which has been the subject of a Stage 2 archaeological assessment (CIF 96-019);
- Approximately 2 hectares of the above survey of an area 600 m by 100 m in size was not tested by ASI, citing that the lands were too wet;
- The dirt driveway was subject to pedestrian transect methodology rather than test pitting –it is probable that buried remains exist under the driveway;
- Glen Penoyer has conducted recovery of artifacts that have "eroded" into the East Holland River from this archaeological site indicating that there is likely more cultural material that remains in this location;
- The East Holland River, in this location, has a high meander belt width of between 161 and 310 metres;
- Historic accounts suggest that the East Holland River, specifically adjacent to Lot 118, are most probably the Lower Landing, a terminus for a stagecoach run, possible shipbuilding area, a point of launch for excursion boats, and an area where cannons may have been deposited directly into the river;
- The adjacent land on the east side of the East Holland River may be impacted by the proposed "Bradford Bypass", and the river bed itself may also be either directly or indirectly impacted by the proposed development of the bypass;

- No archaeological investigations have been conducted on the west bank of the East Holland River in this locale;
- The East Holland River is a mud river and does not lend itself to any visual observations of the bottom;
- Any cultural material that has eroded or been either deliberately or accidently deposited into the river is buried in the bottom sediments;
- The cultural material, based on side scan sonar observations of drag marks and hull drag, is threatened by boaters and associated activities, by natural erosion accelerated by boat wake, etc.;
- A sub bottom profiler should be able to delineate any possible cannon and other large objects buried in the sediment;
- A building outline was identified by Anders Petersen in the water (north of the Penoyer investigations);
- There is also a strong likelihood of both Indigenous (prehistoric to historic) and Euro-Canadian artifacts being present (1793 to the present).

This locale is considered to be highly significant both from an archaeological and historic standpoint. This site should be protected and avoided, and if this is not possible, than archaeological mitigation of both the land and in-water areas must be undertaken under archaeological licence.

7.0 RECOMMENDATIONS

Based upon the marine archaeological assessment (background research, canoe survey, sidescan survey and magnetometer survey of the main river channel, the following recommendations are:

- 1.0 Avoidance and protection of the known registered archaeological site, BaGv-42, adjacent areas that have yet to be fully archaeologically assessed, including the East Holland River environs;
- 2.0 In light of information regarding flooding of the river; erosion of the site into the river; and wetlands holding key pieces of archaeological information; these areas are recommended for archaeological investigation, rather than being assessed as non-surveyable because of wet conditions (this refers to the Stage 2 archaeological land assessment);
- 3.0 It is recommended that test pitting be conducted on the "dirt driveway" to ensure that no buried remains lie beneath the driveway;
- 4.0 The entire river in this locale should be subject to continued marine archaeological assessment:
- 5.0 The west side of the East Holland River (land and water) has not yet been subject to any investigation. Archaeological assessment of these areas is recommended;
- 6.0 It is recommended that due to the threatened nature of the resource, a cofferdam be erected and the site excavated;
- 7.0 It is recommended, that if a cofferdam is not possible, that the area be gridded, and as excavation proceeds that vertical separators be put in place to isolate units.
- 8.0 It is unlikely that stratigraphic layering exists, and more that the site has eroded into the river, however, measures should be taken to excavate in arbitrary levels where possible:
- 9.0 It is further recommended that additional magnetometer survey be conducted from a small draft boat to cover off the very shallow parts of the river;
- 10.0 It is recommended that sub bottom profiler be conducted by a small draft boat to obtain additional information regarding buried objects in the river;
- 11.0 A conservation plan must be in place prior to any excavation and/or artifact recovery;
- 12.0 Indigenous engagement must be conducted as the site, BaGv-42, is Indigenous in nature:
- 13.0 Analysis of all materials must be part of any plan for recovery of cultural material; and.
- 14.0 Compliance legislation must be adhered to in the event of discovery of deeply buried cultural material or features.

8.0 ADVICE ON COMPLIANCE WITH LEGISLATION

According to the 2011 Standards and Guidelines (Section 7.5.9) the following must be stated within this report:

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

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

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

The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c. 33 requires that any person discovering human remains must notify the police or coroner and the Registrar of Cemeteries at the Ministry of Consumer Services.

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

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