



**ORIGINAL REPORT**

## Stage 1, 2 and 3 Archaeological Assessment

*Wm. Blyth Site (BhFw-126), Part Lot 23, Concession 1 Broken Front, Geographic Township of Gloucester, City of Ottawa*

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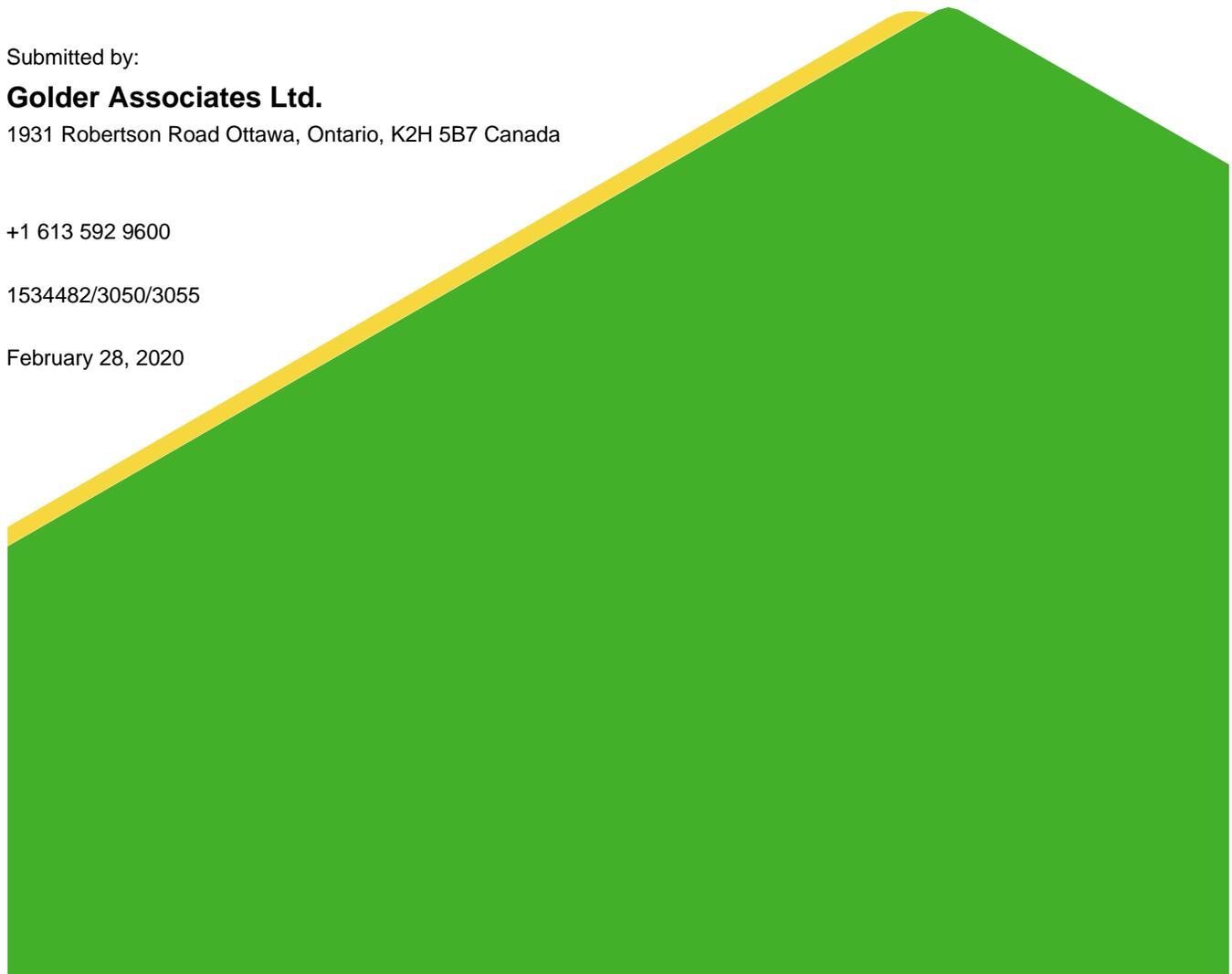
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## Executive Summary

*The Executive Summary highlights key points only; for complete information and findings, as well as the limitations, the reader should examine the complete report.*

Golder Associates Ltd. (Golder) was contracted by Nicolls Island Holdings Inc. c/o The Regional Group (Regional) to provide a Stage 1, 2 and 3 archaeological assessment for part Lot 23, Concession 1 Broken Front, Geographic Township of Gloucester, Ottawa, Ontario. The study area is an approximately 0.3 hectare area located west of River Road (Maps 1 and 2).

This Stage 1, 2 and 3 archaeological assessment was completed in advance of a proposed residential development and was triggered by the *Planning Act*.

The Stage 1 portion of this assessment included the review of available archaeological and environmental literature pertaining to the study area, consultation with the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) database for registered archaeological sites, and the review of aerial photographs. The study area was determined to have archaeological potential for Indigenous and historic Euro-Canadian archaeological resources due to its proximity to water sources, historic transportation routes, and three registered historic archaeological sites. A property inspection and Stage 2 test pit survey was conducted by a licensed archaeologist on 27 June 2019.

Evidence for human occupation of Eastern Ontario dates to at least 9,000 BP following the retreat of the Champlain Sea. During the Archaic Period (9,000 to 2,500 BP), the environment of Ontario approached modern conditions with the Ottawa River serving as a major transportation route that facilitated trade in copper mined from surface deposits near Lake Superior. The Woodland Period (2,500 BP to 400 BP) saw the introduction of pottery and agriculture, which led to the development of semi-permanent and permanent villages in southern Ontario. Within eastern Ontario, Woodland subsistence strategies were still based on hunting and gathering, and their migratory routes followed seasonal patterns to proven hunting locations.

European contact began in 1610 following the expedition of French explorer Étienne Brûlé who passed through the area that would become Ottawa. Gloucester Township was established at the end of the 18<sup>th</sup> century following John Stegman's survey beginning in 1791 with settlement acceleration following the construction of the Rideau Canal (1826-1832). The earliest historical Euro-Canadian land use within Lot 23 is suggested to have occurred during the Rideau Canal Construction Period (1827-1832), and the earliest reference to residential occupation within Lot 23 is the 1837 Gloucester Township census that lists William Blyth as occupying the 200 acre property with 20 acres under cultivation (GHS 2018).

The Stage 2 archaeological assessment resulted in the identification of two positive test pits producing historic artifacts. A total of 30 artifacts were recovered during the Stage 2 field investigation and analysis of the artifacts indicated that the Wm. Blyth site (BhFw-126) likely dates to the 19<sup>th</sup> century and has further cultural heritage value or interest (CHVI).

The Stage 3 archaeological assessment was completed over two days on 6 and 7 August 2019. The Stage 3 excavation grid was established around the two positive Stage 2 test pits. A total of eleven Stage 3 units each measuring one metre square were hand excavated to a depth of at least five centimetres into sterile subsoil and recorded by stratigraphic lot. Nine units were excavated on the five metre grid and two infill units were strategically located in an attempt to identify any additional archaeological resources within proximity to the original Stage 2 find location. The soils from each unit were screened through six millimetre mesh, with each stratigraphic layer examined for artifacts and features of archaeological interest. All soils from each excavated unit were backfilled upon the completion of all Stage 3 fieldwork activities.

A total of 33 artifacts were recovered during the Stage 2 and 3 archaeological assessments. No cultural features were identified. BhFw-126 is interpreted to be a small 19<sup>th</sup> century artifact scatter.

This archaeological assessment has provided the basis for the following recommendations:

- 1) No additional archaeological assessments are recommended for the Wm. Blyth Site (BhFw-126); and,
- 2) As the Wm. Blyth Site (BhFw-126) does not extend beyond the location of the initial Stage 2 find spot, no additional archaeological investigations are recommended for any portion of the study area shown on Map 2 in this report.

The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports.

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 (Government of Ontario 1990a).

## Project Personnel

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## Abbreviations

ASDB	Archaeological Site Database
BP	Before Present, taken to be years before 1950
CHVI	Cultural Heritage Value or Interest
Golder	Golder Associates Ltd.
Ins. No.	Instrument Number detailing land transfer information
m	Metre(s)
MHSTCI	Ministry of Heritage, Sport, Tourism and Culture Industries
PIF	Project Identification Form

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## APPENDICES

### APPENDIX A

Previous Archaeological Assessments

### APPENDIX B

Artifact Inventory

## 1.0 PROJECT CONTEXT

### 1.1 Development Context

Golder Associates Ltd. (Golder) was contracted by Nicolls Island Holdings Inc. c/o The Regional Group (Regional) to provide a Stage 1, 2 and 3 archaeological assessment for part Lot 23, Concession 1 Broken Front, Geographic Township of Gloucester, Ottawa, Ontario. The study area is located west of River Road and measures approximately 0.3 hectares (Maps 1 and 2).

This Stage 1, 2 and 3 archaeological assessment was completed in advance of a proposed residential development and was triggered by the *Planning Act*.

Permission to access the site to conduct all required archaeological fieldwork, including the recovery of artifacts, was granted by Taylor Marquis of Nicolls Island Holdings Inc. c/o The Regional Group.

### 1.2 Objectives

The objectives of the Stage 1, 2 and 3 archaeological assessments follow the MHSTCI *Standards and Guidelines for Consultant Archaeologists* (2011);

#### Stage 1

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

#### Stage 2

- To document all observed archaeological resources on the property;
- To determine whether the property contains archaeological resources requiring further assessment; and,
- To recommend appropriate Stage 3 assessment strategies for archaeological sites identified.

#### Stage 3

- To determine the extent of the archaeological site and the characteristics of the artifacts;
- To collect a representative sample of artifacts;
- To assess the cultural heritage value or interest of the archaeological site; and,
- To determine the need for mitigation of development impacts and recommend appropriate strategies for mitigation and future conservation.

## 2.0 HISTORIC CONTEXT

### 2.1 Regional Indigenous History

The Ottawa Valley was covered by the Laurentide ice sheet until approximately 11,000 years before present (BP). Following the period of deglaciation, the Ottawa Valley was inundated by the Champlain Sea, which is understood to have extended from the Rideau Lakes in the south, along the Ottawa Valley and St. Lawrence areas and terminating around Petawawa to the west. The exact western boundary is currently unconfirmed as contemporary elevation levels reflect the isostatic adjustment of the land following the melting of the glaciers and are not interpreted to accurately reflect the exact location of the Champlain Sea at the time of its existence. The eastern portion of the sea extended into the Atlantic Ocean.

The earliest possible settlement in the Ottawa area would have occurred following the recession of the Champlain Sea when the vegetation and wildlife had the opportunity to develop within the area and enable the sustainability of humans (Watson 1999a). The ridges and old shorelines of the Champlain Sea and early Ottawa River channels reflect areas most likely to contain evidence of Paleo Period occupation in the region. Archaeological and geological investigations in the Ottawa Valley have suggested these early sites may be identified within the 550 foot (167.6 metres) or higher contour topography, although additional research may be required to confidently assess this correlation (Kennedy 1976).

During the Early and Middle Paleo Periods (12,000–10,500 BP) Ottawa would have remained inundated by the Champlain Sea, although as the water receded during the Late Paleo Period (10,500–9,500 BP) it is possible that people migrated along the developing waterfront and eventually began occupying the Ottawa Valley (Watson 1999a).

Identifying the location and dates of the ancient Champlain Sea shorelines and possible Paleo Period archaeological sites that may have been associated with the evolving Ottawa Valley landscape has proved challenging. These boundaries are not marked by a continuous identifiable shoreline, especially along the western periphery where rocky conditions were not favorable to the formation of beach ridges (Chapman and Putman 1973). Attempts to use mollusk shells as a source for radiocarbon dates have provided unreliable results as shells absorb carbon at varying rates according to their depth below the surface and geological context (Robinson 2012). Additionally, earlier interpretations implying discrete stages of regression (Chapman 1937) have not been supported by the geological record. Unlike the catastrophic flood events during the Younger Dryas climatic period that led to the rapid formation of the Champlain Sea, its regression was a slow process occurring as sea waters drained during isostatic rebound (Robinson 2012). The interpreted presence of shorelines is further complicated by the fact that isostatic rebound may have raised the Ottawa region above its modern elevation before receding to its current level (Fulton and Richard 1987). As a consequence, only the margins of the Champlain Sea at its maximum extent, a time when the Ottawa region would have been fully submerged, have been reliably mapped due to the rapid inundation creating pronounced shoreline features (Loring 1980). Although recent studies using various dating techniques that do not rely upon deposits of mollusk shells have provided some favourable results (Tremblay 2008), considerable work remains in developing the chronology of the Champlain Sea's regression.

The identification of Paleo Period sites in the Middle Ottawa Valley region is also hindered by the erosion of accessible locations during the environmental changes associated with the transition from the Late Paleo Period to the succeeding Archaic Period (9,500-2,500 BP). The potential use of watercraft by contemporary inhabitants during the Paleo Period (Engelbrecht and Seyfert 1995; Jodry 2005) and evidence for the abundance of marine resources (Loring 1980; Robinson 2012) raises the possibility of occupation sites situated on isolated accessible landforms. For example, the Ottawa River delta that prograded eastward as the Champlain Sea regressed (Fulton *et al* 1987) would have been impacted by periods of overflow from glacial Lake Agassiz. The inundation of flood waters from the glacial lake may have eroded or buried archaeological remains within these potential occupation landscapes.

Inhabitants during the Paleo Period are typically characterized as highly mobile hunters and gatherers who primarily relied on a subsistence strategy based on caribou, small game, fish and wild plants generally found in the contemporary sub-arctic environment. The majority of the Paleo Period materials recovered in southeastern Ontario primarily represent isolated findspots supporting the interpretation of a nomadic lifestyle rather than extended occupation sites (Storck 1984).

Evidence suggesting limited occupation and land use during the Paleo Period in the Ottawa Valley includes two bi-facially fluted projectile points found near the Rideau Lakes that would have been located near the shoreline of the Champlain Sea during this period (Watson 1999b), a Late Paleo Period Dovetail point recovered in Ottawa South sometime around 1918 (Pilon and Fox 2015) and additional interpretations of Paleo Period material identified during archaeological investigations near Greenbank Road (Swayze 2003) Albion Road and Rideau Road (Swayze 2004).

The environment of Ontario began to approach modern conditions during the succeeding Archaic Period (9,500-2,500 BP). Stone tool technologies evolved during this time as a broader range of tool types were created, although the skill and workmanship is considered to have declined from earlier Paleo Period standards. Ground stone tools appeared, such as adzes, gouges, celts and axes, reflecting tool types associated with increased wood working and greater adaptation to evolving environmental conditions. The presence of these often large and not easily portable tools also implies there may have been some reduction in the degree of seasonal movement, although it is suspected that population densities were quite low with band territories continuing to travel across large areas.

During the Early Archaic Period (9,500 BP – 8,000 BP), the jack and red pine forests that characterized the Late Paleo Period environment were replaced by landscapes dominated by white pine with some associated deciduous trees (Ellis, Kenyon and Spence 1990). One of the more notable changes during the Early Archaic Period was the appearance of side and corner-notched projectile points, which were primarily utilized for hunting animals.

During the Middle Archaic Period (8,000 BP – 4,500 BP) the trend towards more diverse toolkits continued, as the presence of netsinkers and fish weirs suggests that fishing was becoming an important component of the subsistence strategy. It was during the Middle Archaic Period that stone tools specifically designed for the preparation of wild plant foods were crafted, and when ‘bannerstones’ were first manufactured, which are carefully crafted ground stone devices that served as a counterbalance for *atlatls* or spear-throwers.

Another characteristic of the Middle Archaic Period is an increased reliance on local, often poor quality, chert resources for manufacturing projectile points. While groups occupied larger territories during the Paleo and Early Archaic Periods, providing the ability to visit primary outcrops of high-quality chert at least once during their seasonal round, Middle Archaic Period groups traveled within comparatively smaller territories that did not always possess a source of high-quality raw materials. In these instances, lower quality resources that had been previously deposited by the glaciers in the local till and river gravels were utilized.

This reduction in territory size was likely the result of gradual region-wide population growth that led to infilling of the landscape. This process resulted in a reorganization of Indigenous subsistence strategies, as more people had to be supported from the resources extracted from a smaller area.

It was also during the latter part of the Middle Archaic Period that long-distance trade routes began to develop, spanning the northeastern part of the continent. In particular, copper tools manufactured from raw materials procured from the area northwest of Lake Superior were being widely traded (Ellis, Kenyon and Spence 1990).

During the Middle and Late segments of the Archaic Period, copper was being mined from surface outcrops around Lake Superior and traded into southern Ontario, with the Ottawa River acting as a significant transportation route facilitating this trade network (Chapdelaine *et al* 2001). These trade connections also brought marine shell artifacts from the eastern Mid-Atlantic coast, which are frequently encountered as items associated with burial deposits (Ellis, Kenyon and Spence 1990; Ellis, Timmins and Martelle 2009).

Sites with Archaic components that demonstrate this expanding trade network include Morrison's Island and Allumette Island in the Outaouais region of the Ottawa River (Chapdelaine *et al* 2001; Clermont 1999), as well as sites identified at Lake Leamy near the junction of the Gatineau and Ottawa Rivers and in the Rideau Lakes area (Watson 1982). Additional significant occupation sites with Archaic Period components along Ottawa Valley waterways that were likely influenced by these trade routes include Jessup Falls near the mouth of the South Nation River and at Spencerville near the source of the South Nation River (Daechsel 1980).

Trade connections across vast territories continued into the Late Archaic Period (4,500 BP – 2,500 BP), when the trend towards decreased territory size and a broadening subsistence strategy continued. Late Archaic sites have been discovered in greater numbers compared to Early and Middle Archaic sites, suggesting the local population was rapidly expanding. It was during the Late Archaic Period that the first defined cemeteries were established, as prior to this period individuals were regularly interred close to the location where they died. During the Late Archaic Period, when an individual died while their group was away from the territorial cemetery, the remains would be kept until the group returned to the home cemetery where they could be interred. Consequently, it is not unusual to find disarticulated skeletons, or even skeletons lacking minor elements such as fingers, toes or ribs, in Late Archaic Period burial pits.

The appearance of burial pits during the Late Archaic Period has been interpreted as a response to increased population densities and competition between local groups for access to natural resources. It has been theorized that cemeteries and burial grounds may have provided strong symbolic claims over a local territory and the surrounding resources. These burial grounds are often located within areas of elevated topography containing well-drained gravel and sandy soils adjacent to major watercourses.

The closest sites to the subject property with an interpreted Archaic Period component are the Munro site (BhFw-19) (Golder 2012) and registered site BhFw-110 (Golder 2017c), both located east of the Rideau River within 1.5 kilometres of the study area.

The Archaic Period was followed by the Woodland Period, beginning around 2,500 years ago in Ontario and lasting until 450 years ago. The Early Woodland Period is distinguished from the Late Archaic Period primarily by the addition of ceramic technology. The first pots were very crudely constructed, thick walled, friable vessels, and essentially imitated containers originally constructed out of steatite during the Archaic Period. These vessels were not easily portable, and their fragile nature suggests they may have required regular replacement. It has been theorized these early ceramic containers were used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil (Spence, Pihl and Murphy 1990). One example of this type of ceramic pot was discovered along the Ottawa River at registered site CaGi-1 in Hull, Québec (Watson 1999b). Over time, pottery became more refined and began to incorporate elaborate decorative patterns and styles distinct for specific regional populations as well as specific date ranges (Laliberté 1999).

There have also been numerous documented Early Woodland sites where no ceramics were observed, suggesting these poorly constructed, undecorated vessels had yet to assume a central position within the daily lives of Early Woodland peoples.

The trade networks that were established in the Middle and Late Archaic Periods also continued to flourish, although there does not appear to have been as much exchange of marine shell artifacts during the Early Woodland Period. Through the last 200 years of the Early Woodland Period, projectile points manufactured from high quality raw materials from the American Midwest begin to appear in southern Ontario (Spence, Pihl and Murphy 1990).

Towards the end of the Middle Woodland Period (approximately 1,500 years ago) agriculture was introduced and developed into a significant role in subsistence strategies. This evolution initially began with the cultivation of corn, beans and tobacco, which eventually led to the development of semi-permanent and permanent villages. Many of these villages were surrounded by palisades, suggesting increased hostilities between neighbouring groups, which was more common in regions with arable land such as southern Ontario. The impact of these changes did not appear to significantly influence people occupying areas north of the St. Lawrence Valley who continued to utilize the region as a hunting area and trade route with many groups retaining a semi-nomadic lifestyle. Middle Woodland Period sites have been identified in the South Nation Drainage Basin (Daechsel 1980), near Casselman (Clark 1905), within the City of Ottawa west of Bank Street (Golder 2014) and along the Ottawa River at Constance Bay (Watson 1972), as well as Marshall's and Sawdust Bays (Daechsel 1981).

During the Late Woodland Period, the South Nation River basin appears to have been a zone of interaction between Iroquoian speaking populations who relied primarily on domesticated crops to the south and Algonquian speaking groups who continued a primarily hunter-gatherer lifestyle to the north. The Huron peoples along the north shore of Lake Ontario had moved to the Lake Simcoe – Georgian Bay region, leaving the area of eastern Ontario, except for some small Algonquin groups, primarily unoccupied when early French explorers arrived around the beginning of the seventeenth century. Six St. Lawrence Iroquoian villages dating to ca. 1400 AD have been discovered in the Spencerville area documenting the significant contemporary occupation in this area.

Evidence of occupation and land utilization within the Rideau corridor between the project lands and the Ottawa River during the Woodland Period is evident at registered sites BhFw-6, BhFw-101, BhFw-110 and BhFw-118. Registered sites BhFw-101 and BhFw-110 both represent significant sites in the region with a Woodland Period component where archaeological excavations have produced evidence of prolonged habitation extending from the Late Archaic to Late Woodland Periods, documenting a sustained, although likely only seasonal, occupation over a period of almost 3,000 years within the Rideau River corridor (MHSTCI 2019a). The recovery of Woodland Period ceramics at registered site BhFw-118 (Paterson 2016), situated within the Rideau River corridor less than six kilometres south of the study area, also provides evidence of the importance of this waterway as both a navigable access route and preferred settlement landscape during the Woodland Period.

The Algonquin historical hunting territory may have extended as far east as the St. Maurice River in Quebec and into the lowlands south of the St. Lawrence River following the disappearance of the St. Lawrence Iroquois in the late 16<sup>th</sup> century (Trigger and Day 1994). Following contact with European explorers, Algonquin occupation along the river networks utilized by the French for transportation provided an opportunity to monopolize the early fur trade and the two entities developed close relations following Champlain's 1603 expedition. Competition for commodities such as furs and hides increased existing tensions between the Algonquin community and their neighbours including the Haudenosaunee Nations such as the Mohawk residing to the south in the modern New York State area. The 17<sup>th</sup> century saw a prolonged period of conflict known as the Beaver Wars between the Algonquin and the Haudenosaunee peoples resulting in the significant disruption to traditional lifestyles, with Mohawk raids against Algonquin villages in the upper Ottawa and St. Lawrence Valleys resulting in the abandonment or destruction of many Algonquin villages in these areas (Trigger and Day 1994).

The French brokered a peace treaty in 1701 at Montreal where the Algonquin, Haudenosaunee and French representatives agreed to peacefully share the lands around the Great Lakes (INAC 2011). In exchange for peace, the Algonquin gave the Haudenosaunee secure access to furs, which the Haudenosaunee used to develop their alliance with the British. Following the Seven Years' War, the defeat of the French and their Algonquin allies by the British and the Haudenosaunee resulted in the further loss of Algonquin hunting territories in southern Quebec and eastern Ontario as the British exerted control over former French colonies. The extension of Quebec's boundaries in 1774 through the Quebec Act and the use of the Ottawa River as the boundary of Upper and Lower Canada following the 1791 Constitution Act separated the Algonquin peoples between two government administrations (AOP 2012).

Britain's colonial policy differed from the French with the British Crown increasingly more interested in securing land surrenders from the Indigenous populations to facilitate settlement by European immigrants. The Royal Proclamation of 1763 issued by King George III enabled the Crown to monopolize the purchase of Indigenous lands west of Quebec. Although the proclamation recognized Indigenous land rights, it also provided an avenue through which these rights could be taken away (Surtees 1994). Land cession agreements increased following the War of 1812 as a new wave of settlers, primarily from Britain, arrived in Upper Canada. The Crown also implemented the annuity system in the purchase of lands from Indigenous peoples where the interest payments of settlers on the land would cover the cost of the annuity rather than pay a one-time lump sum. By the 1850s, Indigenous groups had become disenfranchised with these agreements and began to demand the retention of reserved land and preservation of hunting and fishing rights (Surtees 1994).

At a council held on 31 May 1819, Crown agent John Ferguson met with approximately 250 Mississauga community members of the Bay of Quinte and Kingston areas who claimed ownership of land within the Ottawa area. The Algonquin population who lived in the Ottawa Valley, a portion of which was negotiated and transferred to the Crown, were not invited and as a result never legally seceded their lands. The Rideau Purchase Tract, as it was known, included one million hectares of land, which the Mississauga agreed to sell for an annuity of £642 10s (Surtees 1994).

The absence of a treaty demonstrating the Algonquin sale of their lands to the Crown enabled them to achieve a historic land claim victory in October 2016. The Algonquin community and the Government of Canada signed an agreement in principle to transfer 117,500 acres of Crown land in eastern Ontario to the Algonquin community (INAC 2011; Tasker 2016) and includes a \$300 million monetary settlement from the Ontario and Federal governments.

## 2.2 Initial Euro-Canadian Occupation and Settlement in the Ottawa Valley

The St. Lawrence Iroquois essentially dispersed from the Ottawa Valley during the sixteenth century not long after initial contact with Jacques Cartier in 1535. Étienne Brûlé is reported to have been the first European to pass through the modern-day Ottawa area when he portaged at the Rideau Falls in 1610, followed by Nicholas de Vignau in 1611 and Samuel de Champlain in 1613. The Ottawa River served as a major transportation route for explorers, traders and missionaries throughout the seventeenth and eighteenth centuries, with a series of trading posts and forts being constructed by the French along the river in the early eighteenth century. Champlain's navigation of the Rideau and Ottawa River systems became a principal navigation route for succeeding explorers, missionaries and traders travelling from the St. Lawrence River to the interior of modern-day Ontario. This route also remained an important link in the French fur trade throughout the seventeenth and eighteenth centuries.

A seigneurie was established at L'Original in 1674, northeast of the study area, and granted to Nathaniel Hazard Treadwell, with a French trading post also established near the mouth of the Le Lievre River, close to the present community of Buckingham, Québec, during the eighteenth century. Although there was an increased European presence within the region, very few settlers arrived or established residences within the area during this period.

The majority of European contact with Indigenous populations was sporadic and primarily facilitated through trade and religious missionary excursions. The recovery of European trade goods such as iron axes, copper kettle fragments and glass beads from Indigenous sites throughout the Ottawa River drainage basin provides evidence of the extent of contact between the Indigenous population and the European explorers traversing the Ottawa River corridor during this period. The English also continued to utilize the Ottawa River as an important transportation route following French administrative withdrawal from New France resulting from the Treaty of Paris in 1763.

Settlement in the Ottawa area was not actively encouraged by the colonial government until the late eighteenth century. Within two years following the 1791 division of the Province of Quebec into Upper and Lower Canada, John Stegmann, the Deputy Surveyor for the Province of Upper Canada, surveyed four townships (Nepean, North Gower, Osgoode and Gloucester) straddling the Rideau River near its junction with the Ottawa River. This survey was coordinated under the initiative instituted by John Graves Simcoe, Lieutenant Governor of Upper Canada, and primarily associated with his proclamation aimed at attracting new settlers to the region.

Commonly acknowledged as the first permanent European resident in the area, Philemon Wright settled in Hull Township with five families and thirty-three men in 1800 (Bond 1984). This community grew over the next few years along the north shore of the Ottawa River and by 1805 Wright had established a significant lumbering industry in the area.

Settlement along the south shore of the Ottawa River was very slow through the early nineteenth century. In 1809, Jehiel Collins erected a store at what was to become known as Bellows and later Richmond Landing and in 1810 Ira Honeywell constructed a cabin west of the Chaudière Rapids (Bond 1984). Another early settler was Braddish Billings, who constructed a small cabin in Gloucester Township in 1812. Billings went into the lumbering business with Philemon Wright and developed his homestead into a large family estate along the banks of the Rideau River. The lumber industry created the impetus for early settlement in the area, providing employment for early settlers and contributed to the general economic stability through the mid-19<sup>th</sup> century.

### 2.3 General History of Gloucester Township

Originally surveyed as "Township B" in 1772, Gloucester Township was later named after William Frederick, second Duke of Gloucester and Edinburgh, and nephew of King George III. In 1792-3, Thomas and William Fraser petitioned Lieutenant Governor John Graves Simcoe for substantial land grants within the administrative boundary of Gloucester Township. William's petition provided a favourable result and on 13 July 1793 the Legislative Council ordered that "the township of Gloster (sic) be granted to him." Although William Fraser implied he represented a large number of families interested in settling in the area, there is no indication that anyone from his party actually came to the Township nor was the land ever officially transferred to Fraser.

Land registry records indicate patents for some of the township lots were issued as early as 1802, primarily to United Empire Loyalists, although many of the grantees never actually came to the area or ever settled within their granted property. The lack of established overland transportation routes to convey supplies to the area, coupled with the thick deposits of clay making agricultural cultivation difficult, persuaded many early settlers to explore other areas around the Ottawa Valley to establish their homesteads.

Commercial lumbering began on the Rideau River in 1810 when Braddish Billings, who had worked for Philemon Wright cutting timber and oak staves on the upper Ottawa River, built a shanty on the lower Rideau below the Hog's Back. Billings cleared some land for agricultural production, but this was primarily for personal consumption and was secondary to lumbering. Logs were squared with axes and adzes, then floated out on the spring floods for sale to Philemon Wright and Sons (Passfield 1982).

Billings was the only settler on the eastern bank of the Rideau River within Gloucester Township until circa 1819 when several families moved into the township. The earliest available assessment roll for Gloucester Township dates to 1823 and notes three families on lots immediately to the south of the Billings property including James Doxey on Lot 19, Junction Gore, Duncan McKenzie on Lot 20, Junction Gore, and Captain Andrew Wilson on Lot 2, Concession 1, Rideau Front (Kemp 1991).

Perhaps the earliest cut road in the area ran through Nepean Township from the Ottawa River to the Rideau River shore opposite Captain Andrew Wilson's property in Gloucester Township. This may have originally represented an Indigenous trail, possibly later bushed out by Ira Honeywell in 1814 to bring supplies from Prescott to his new homestead in Nepean Township. As early as 1815, a rough road had been cut from the Hull settlement on the north shore of the Ottawa River across the Chaudière Falls and then southeast through Nepean Township and crossed Gloucester Township near Dow's swamp. This road then followed the east bank of the Rideau River to Black Rapids, where it crossed back into Nepean Township and continued south to Merrickville (Elliott 1991). River Road, which is located directly east of the study area and likely provided access to the subject property, follows part of this early alignment. Another early forced road was built along a ridge from the Rideau River crossing on Captain Wilson's property through Bowesville and southeast to Johnston's Corners. Although the exact date of construction for this road is unknown, John Cunningham appears to have been operating an inn along the road by 1825 and the Bytown & Prescott Stage Company was also using the road in the 1820s.

The construction of the Rideau Canal (1826–1832) accelerated settlement in the region with additional roads constructed to connect outlying communities and facilitate the movement of supplies to maintain the construction efforts. As more people began to settle in the area, bridges were built connecting the Townships of Nepean and Gloucester, and a more concerted effort was made to construct roads to facilitate the movement of people and goods (Walker and Walker 1975).

In 1828, Braddish Billings initiated the construction of a bridge across the Rideau River to accommodate travel along the old 1815 road from the Chaudière Falls on the Ottawa River, which had previously required a ferry crossing. Subsequently, Metcalfe Road (Bank Street) was built from this bridge through the Rideau Front lots of Gloucester Township to the village of Metcalfe and on to the St. Lawrence River. Other roads developed in a rough grid pattern along the lot and concession lines as settlement expanded through the township during the nineteenth century.

In 1854, the first train of the Bytown and Prescott Railway travelled through Gloucester Township. This increased the mobility capacity for people and goods though the area facilitating the rapid growth of the township.

Gloucester continued to remain independent of the City of Ottawa until 1950 when a significant portion of the township was annexed into the City administrative boundary (Taylor 1986).

## 2.4 General Study Area Landscape and Occupation History

The first property owner within the study area vicinity may have been American Robert Randall, who travelled the Rideau corridor in 1807 accompanied by local Indigenous community members. Randall was attracted by the water power potential at the end of Long Island and acquired 450 acres within the area (Walker and Walker

1975). The Long Island area is suggested to have been primarily unoccupied when Randall made his visit and recognized the economic potential by utilizing the water capacity of both channels around Long Island. The rapids on the west side were non-navigable, dropping 23 feet, 11 inches (7.3 metres) over a distance of 4,266 yards (3,900 metres), while the rapids on the east side were navigable by canoe or batteau, extending 2,300 feet long (700 metres) with a drop of only a few feet (Watson 2001).

The potential for the Rideau River corridor to provide a secure navigable passageway connecting Montreal, Bytown and Kingston was strategically highlighted following the War of 1812 with the United States who had direct access to the primary route along the St. Lawrence River. Colonel Nicolls, commanding officer of the Royal Engineers in Canada, was instructed to investigate the feasibility of the Rideau route and directed Royal Engineer Captain Joshua Jebb to complete a survey and identify the viability of travel by canoe or batteau and document any obstructions within the waterway that would require mitigation (Price 1976). Jebb completed the survey in 1816 and produced the first known detailed map of the Rideau Route (Watson 2007; Watson 2006), which included Long Island and the general study area landscape (Map 3). Although this map does indicate known occupation areas within the surveyed portion of the Rideau corridor, the lack of structures within the study area vicinity may suggest the region around Long Island was unsettled at this time.

Although it is not a reliable source for documenting actual settlement and occupation, Coffin's 1825 Gloucester Township map does provide details regarding property ownership within the study area vicinity (Map 4). The Crown Patent for Lot 22 was granted to Captain Hugh Munro in 1799, although it is unknown if he actually resided on the property as the next land transaction occurred on 20 January 1817 when the entire 200 acres was sold by Lewis Grant to Caroline and W. F. Gates (Inst. No. 1130). South of the study area, Lot 24 was granted to Silas Hamblin in 1810 and it is also doubtful if he actually settled on the land as it became embroiled in a property dispute and was re-instituted to him in 1863 (Inst. No. 27). The 1825 map shows the study area within Lot 23 as vacant, which may suggest it was reserved for the Clergy or the Crown as the property fronting the Rideau was primarily granted to United Empire Loyalists or military veterans during the late 18<sup>th</sup> and early 19<sup>th</sup> centuries.

The earliest indication of Euro-Canadian occupation within the study area vicinity is generally attributed to Sylvester Hurlbert, who purchased the entire 200 acres comprising Lot 25 from Rice Honeywell on 19 September 1825 (Inst. No. 2298). Shortly after purchasing the property, Hurlbert constructed a sawmill, dam and sluiceway at the foot of Long Island, with the mill complex in full operation when Colonel John By traversed the area in 1827 while scouting the future Rideau Canal route (Price 1976). Hurlbert may have also been operating a farm on the east bank of the Rideau River (MacTaggart 1829). In addition to Hurlbert's occupation on the east side of the Rideau River, an Indigenous settlement is also suggested to have been situated at the "head of Long Island" where settlers took their fish and deer to be processed and the skins manufactured into moccasins and clothing (Gordaniér 1982).

Image 1 (p.45) represents a sketch dating to 15 June 1827, interpreted to correlate to the time Colonel By observed Hurlbert's dam at the foot of Long Island. The mill appears quite substantial with a solid stone foundation and upper wooden structure crossing the east channel of the Rideau River. The general landscape appears primarily forested and likely provided easily accessible raw materials required for the mill's operation. The May 1827 sketch map attributed to John Burrows shows the sawmill situated along the Rideau River east bank, with a mill pond directly south where the rapids had been located (Map 5). This map also shows Hurlbert's house north of the mill complex, which may suggest it was located near the property boundary between Lots 24 and 25.

Following Colonel By's field survey, a series of plans were prepared for the first forty-four miles of the proposed Rideau Canal covering the intended lock sites from the Entrance Valley to Long Island by July 1827. The individual site plans documented the proposed canal structures at each location (Passfield 1983a). The Long Island map segment shows the proposed three lock channel west of Hurlbert's house and an arched dam extending across the Rideau waterway to provide a slackwater corridor known as the "Long Island Reach" (Map 6). This map also shows the extent of land intended to be flooded following the completion of the dam, which would effectively inundate Hurlbert's mill structure along the eastern channel. Colonel By also identified a location along the western riverbank for a "proposed mill site", possibly with the intention to capitalize on the economic potential of the surrounding landscape.

To accommodate the proposed Long Island locks and dam, Hurlbert requested compensation for the loss of his sawmill which was located within the lands to be flooded. Colonel By ultimately compensated Hurlbert with £433 for his loss, which By "deemed a fair and just remuneration for such Damages including the Mill Privileges, and which is in full of the above Claims in consequence of the construction of the Canal as reported at the time" (Price 1976:144). Although Hurlbert lost his mill complex, the family retained ownership of land within Lot 25 until at least 1858 (Inst. No. 12404).

In preparation for the canal infrastructure development, Colonel By initiated construction of a road between Bytown (Ottawa) and Long Island in the fall of 1826, which was completed by 1827 (Passfield 1982; Price 1976). This road, commonly known as River Road, provided the ability to transport labour and supplies between the urban centre of Bytown and the proposed lock stations as far as Long Island, and effectively created the first rural overland route to the study area vicinity as the only previous access would have required waterborne travel along the Rideau River.

The contract for the Long Island section of the canal was awarded to Thomas Phillips and Andrew White on 5 June 1827 (Price 1976), both of Montreal (Passfield 1983a). When work commenced at the Long Island lock station later that year the only building documented in the area was the sawmill that had already been stripped of its materials (Humphreys and Carroll 1997).

A site plan dating to 5 May 1828 details Colonel By's proposed construction design at Long Island and includes a stone arched dam across the Rideau River and three combined locks adjacent to the dam in a shore canal cut (Map 7). Although this plan provides the concept drawing for the lock station features, the structures depicted within the drawing may represent the existing 1828 landscape and occupation as the construction team had been on site since the previous year. The remains of the former sawmill may have continued to be represented within the landscape, although it is believed to have been abandoned by this time. The structure across from the canal lock represents the future lock master's house, which had been built by the site contractors during construction at Long Island (Passfield 1980; Tulloch 1975). Although the exact function of the remaining structures depicted on the map cannot be confirmed, some likely represented living quarters for the construction team. Estimates during the peak periods of construction at Long Island suggest as many as 100 men were employed. While many were comprised of contract labourers who did the pick, shovel, hauling and pulling work, artificers (masons, carpenters, smiths, stone-cutters, coopers, etc.) were also supplied from the ranks of the Royal Sappers and Miners (Bush 1976). Members of the Royal Sappers were also instrumental in clearing the channel of the river between Black Rapids and the head of Long Island (Connolly 1857) and also provided skilled labour and guard duty of the stores at Long Island during the lock construction period (Turner and De Visser 1995). During construction of the Long Island Locks, the local quarry ran out of stone and additional stone required to complete the locks had to be taken from the quarry at Hog's Back (Watson 2019).

While workers were housed with the local population where available, the lack of previous infrastructure at Long Island necessitated the arrangement for shelter by the contractor likely consisting of several large log houses (Wylie 2008; Passfield 1982), with shanties erected by labourers existing side by side with those provided by the employers (Wylie 1983).

Image 2 (p.45) represents a watercolour prepared by James Cockburn documenting the contemporary landscape around the Long Island lock station in 1830. This image shows log structures, likely representing living quarters, as well as a woman and child. Many of the Royal Sappers and Miners had their families stationed with them, while some labourers are also suggested to have brought their families to the work sites and lived in rough shanty cabins (Watson 2007; Gourlay 1896). Image 3 (p.46) also dates to 1830 and depicts an Irish labourer at Long Island. The log structure in the background may represent a typical shanty constructed either by the contractors or labourers. The indication that this structure is situated within the woods may suggest it is not directly within the lock area and may represent another settlement area in addition to the area of occupation depicted in Image 2 (p.45), which also dates to 1830. The woman in the background provides additional evidence of families residing with the labourers during the Long Island Lock construction period.

Many of the shanties constructed along the Rideau Canal during the construction period were designed to house workers, and occasionally their families, in a communal setting composed of a single room with beds arranged around the walls. The shanties were also a place for food consumption and usually included a central fireplace with an opening in the roof to permit the escape of smoke (Wylie 1983).

A map attributed to Colonel By dated to 22 January 1831 shows the general contemporary landscape around the Long Island lock area (Map 8). This map illustrates the three-channel lock along the eastern bank of the Rideau River, the arched dam, and a waste weir that provided the ability to control water overflow through Mud Creek to the west. An explanation of the function for each structure depicted along the east side of the Rideau channel is shown on Map 9, which represents an interpretation documented in Clow *et al* (1976)<sup>1</sup>. The structures shown on the plan are inferred to represent Crown assets, which appears to be the primary function of the map as it does not depict occupation structures for the workers or additional structures not specifically associated with the government works.

The 1831 plan may essentially represent the as-built project landscape, as the Long Island dam was officially completed in February of the same year. The completion of the Long Island canal infrastructure provided an opportunity for celebration as many of the workers had endured long days and nights labouring at the site (Price 1976). To mark the occasion, the contractors, Thomas Phillips and Andrew White, secured the services of a piper and the grog flowed freely, with the Union Jack being hoisted and the skirl of the pipes emanating through the frosty air. As the early winter twilight approached the piper led the way onto the ice of the lock, where the happy celebrants danced the hours away until near dawn. It was said at the time that the Long Island site was known for the good relations between management and labour, in contrast to the disorder so frequently encountered at other Rideau construction sites (Bush 1976). In recognition for the exceptional work during the construction of the Rideau Canal, Thomas Phillips and Andrew White were two of the only five contractors to be awarded silver cups by Lt. Colonel By (Heritage Passages 2012).

By the time the Long Island canal construction was completed, a small settlement had developed on the mainland adjacent to the locks (Mitchell and Co. 1864), with many of the former workers settling in the area (Walker and Walker 1975). In addition to the lockmaster's house, there were several residential structures, as well as a

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<sup>1</sup> Although this specific Parks Canada report was not available for this study, a copy of the map was kindly provided by Parks Canada Agency.

carpenter's shop and a blacksmith's shop that continued in operation (Martin 2010; Humphreys and Carroll 1997). One of the first permanent residents may have been Andrew Gamble, originally from Ballemena, Ireland, who may have worked during the canal construction period at Hog's Back and Long Island (Fletcher 2004) and continued to reside in the Long Island lock area until his death (Walker and Walker 1975). Colonel By did not initially propose a lock master for Long Island in 1832, but a man named Houston may have been lockmaster sometime before 1837 with John Rogers, formerly of the Royal Sappers and Mines, being appointed lockmaster at the Long Island station around 1837 (Watson 2019; Tulloch 1981).

Although the 1832 map attributed to John Burrows may not accurately represent the small settlement developing around the Long Island lock station, it does show the lock master's residence, as well as a structure on Lot 23 which is identified as Clergy lands (Map 10). John Burrow's was appointed "Overseer of the Works" (Bush 1976) and was responsible for inspecting stations between Bytown and First Rapids (now known as Poonamalie) (Tulloch 1975) and this map may have been created during one of his inspection tours.

A post office was operating in the Long Island lock area by 1834, with a store and hotel constructed within the Long Island settlement around 1846. A Methodist Church and manse were built southeast of the lock along Rideau Road, while Anglicans and Presbyterians shared a small log building known as the "Union Church" located a short distance further south. These two congregations also shared the cemetery, with the Anglicans on the north and the Presbyterians on the south (Humphreys and Carroll 1997).

The 1837 Gloucester Township census documents William Blyth occupying Lot 23, Broken Front Concession, with 20 acres of the 200 acre property under cultivation (GHS 2018). The 1851 census lists William as a 64 year old stone mason originally from Scotland married to 62 year old Mary Blyth, with 36 year old Andrew and 21 year old Angus also residing in the family home.

The canal construction had raised the water level at Long Island between 8 and 10 feet (Watson 2006) providing the ability for the village to become a steamboat provisioning and forwarding centre for local farmers (Martin 2010) such as William Blyth who was living on the adjoining lot to the north. Image 4 (p.46) dates to 1835 and shows the types of vessels utilizing the Rideau corridor for trade and passenger transportation during this period, and Images 5 and 6 (p.47) document the landscape around the Long Island lock station in 1835 and 1842, respectively, with a number of structures situated along the east side of the Rideau River around the lock area. Image 7 (p.48) was produced in 1845 by William Clegg and represents a revised version of Burrow's 1835 depiction of the Long Island Village landscape (Image 5, p.47). Among the new features are the structures located on Nicolls Island and a second waste weir across Mud Creek that would have also acted as a traveled bridge and provided access across the Rideau River to Nepean Township.

In addition to the commercial and social enterprises, the economic stability of the Long Island Village may have revolved around milling operations. A map dating to 30 October 1845 indicates the presence of "2 mill sites" in the area (Map 11), although unfortunately it does not depict the specific location of these structures. During his voyage down the Rideau Canal in 1845 Sandford Fleming noted the three locks at Long Island, as well as "a few houses here & store" (Cole 2009:55).

In 1858, floods again washed out the dam and waste weir at Long Island (Tulloch 1975), which had been re-built following damage from a flood in 1836 (Humphreys and Carroll 1997). A new waste weir was constructed from the lower tip of Long Island to the embankment adjacent to the dam and an additional waste weir was built across the west channel of the river where a grist mill was immediately erected to utilize the waterpower it provided (Passfield 1982). The new stone grist mill, later known as Watson's Mill, was built by Moss Kent Dickinson and provided renewed economic opportunity for the area residents, many who re-located further upstream where the

Village of Manotick was developing. Among the early settlers who moved from the lock site were several blacksmiths, their numbers reflecting the importance of the trade as land transportation was entirely dependent on horses who had to be well shod to cope with the rough trails they were obliged to travel (Humphreys and Carroll 1997).

Around the same time Watson's mill was built in nearby Manotick, an Act of the Provincial Parliament was passed that effectively transferred control of the Rideau Canal and the accompanying Ordinance Lands from the Imperial Government (Tulloch 1975). The early Long Island Village had essentially developed within property controlled by the Crown, although following the acquisition of the Canal system by the Provincial Parliament there was an incentive to sell land along the waterway to help pay for operating costs and maintain the waterway in a navigable state. On 10 May 1860, the Crown Patent for the 75.5 acres comprising the south half of Lot 23 was granted to Alexander Dowie. A map dating to 1860 shows the "Old Waste Weir", as well as the lock masters house and other structures around the lock area (Map 12). This map also shows two structures within the south half of Lot 23.

On 9 January 1862 William Blyth officially purchased the entire 75.5 acres correlating to the south half of Lot 23 from Alexander Dowie (Inst. No. 18608), with Blyth selling 10 acres east of River Road to Allie Clothier on the same day (Inst. No. 18609). Tax assessment records dating to 1860 list William Blyth as the occupant of 75 acres on the south half of Lot 23 and based on the 1837 census records it is likely Blyth was residing on the property for at least twenty-five years before gaining legal ownership of the land.

Walling's 1863 map of Gloucester Township shows the settlement landscape around the Long Island lock station (Map 13). Wm. Blyth is shown associated with the structure on Lot 23 on the west side of River Road and another structure to the south near the northern limit of Lot 24.

The 1861 census lists William Blyth as a 73 year old farmer married to 71 year old Mary Blyth, with 49 year old Andrew Blyth, who is employed as a stone mason, also residing in the frame house. The 1861 census also identifies a log school house associated with the Blyth family entry, which likely correlates to the School House documented on Lot 23 on Walling's 1863 plan (Map 13). In addition to his farming operations, Blyth may have also continued to work as a mason as he is identified as a stone cutter and bricklayer in the 1857 Canada Directory (Lovell 1857) and as a stone mason in the 1864-5 Ottawa directory (Mitchell and Co. 1864) and the 1865-6 Classified directory (Mitchell and Co. 1865).

A pre-1871 map shows the two structures within Lot 23 (Map 14) with the label "Blythe's House". These structures are in the same general location as those represented on Map 12.

On 25 May 1866, the south half of Lot 23 passed from Wm. Blyth to Mary Blyth through a will transfer (Inst. No. 26541), and on 31 May 1866, William Blyth passed away at the age of 78, being recognized as one of the earliest settlers in the Ottawa Valley (Lewis 2016). Mary Blyth sold the family property on Lot 23 to Joseph Broose on 1 May 1867 (Inst. No. 27190), with Thomas May acquiring the property on 28 April 1870 (Inst. No. 431). Writing at the end of the 19<sup>th</sup> century, William Gourlay lists a number of families who had emigrated from the rural farmsteads to the city, including the Blyth's (Gourlay 1896).

The pre-1871 plan also documents the surrounding landscape, with a number of structures likely related to the maintenance of the lock station adjacent to the locks, a hotel and "old wharf" situated to the south and the "Village of Long Island Locks" shown within Lot 25. The Long Island village plan was surveyed in 1860 on property owned by Edmund Burrirt<sup>2</sup> possibly as a way to formalize and organize the occupation within the area in a discrete village

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<sup>2</sup> It is possible Burrirt established Village lots on Lot 25 before 1860, although a plan of survey completed on "Sept. 1860" depicts the village "laid out on Lot 25" and signed by Provincial Land Surveyor John Burchill, which suggests the formal registration of the Village was not official until 1860. The 1860 survey plan is available from Library and Archives Canada (NMC 0019141).

grid complete with settlement lots and access roads. Although the map does not depict each residential structure within the village, it does identify commercial and social infrastructure including a post office, smith shop, store, boot maker and wagon maker, in addition to the Methodist church with a cemetery and a parsonage on the adjoining lot, which were intended to support the area's residents.

Although the mill complex developing in nearby Manotick drew settlers from Long Island Village (Humphreys and Carroll 1997; Passfield 1982), the 1875 Directory describes the settlement of Long Island Locks as a post village "on the Rideau canal 5½ miles from Manotick" with a population of 350 (Crossby 1875:176), which suggests both communities were contemporarily inhabited at this time.

Belden's 1879 Gloucester Township map shows the Long Island Village layout on Lot 25, with two structures near the water possibly representing the Lockmaster's house and the Post Office (Map 15). Thomas May is depicted as owning the study area property within Lot 23, with his residence located east of Rideau Road. The two structures depicted on Lot 23 on Map 14 are not represented on Belden's 1879 plan, which may suggest they were no longer visible within the contemporary landscape.

Images 8 and 9 (pp. 48 and 49) both date to ca. 1880 and although they both focus on the Long Island lock structure, a portion of Lot 23 can be identified within the background. These images show a fence separating Lots 23 and 24 and do not depict any structures within the Lot 23 landscape that was likely utilized for agricultural production during this period.

The 1906 Gloucester Township topographic plan identifies the Long Island Locks on Lot 24, although the absence of the Village settlement suggests it also had been finally abandoned by this time (Map 16). This plan also shows the study area within Lot 23 as uninhabited, with a contour line leading from Rideau Road, continuing directly north of the study area and demarcating the ridge overlooking the canal within the westerly section of Lot 23. Image 10 (p.49) dates to 1910 and shows the general landscape had not been significantly altered since at least 1880, with a fence separating the structures associated with the Long Island Lock Station from the neighbouring agricultural lands on Lot 23.

The original Lockmaster's residence on Lot 24 was replaced with the current two-storey frame house in 1914 (Watson 2001; Tulloch 1975) and is visible in the 1936 and 1955 aerial images (Map 16). The structure situated directly east of the Lockmaster's house may correlate to the home of James Rowat who built a house just east of the locks in 1891, and besides farming the land, also occasionally worked at the lock station in the winter (Johnston 1991). The 1936 and 1955 aerial images also show the study area continued to be utilized for agricultural production with the farmhouse situated east of Rideau Road.

## 3.0 ARCHAEOLOGICAL CONTEXT

### 3.1 Study Area Environment

The environmental landscape within the region began to emerge following the retreat of the glacial ice during the Holocene Period. Immediately adjacent to the retreating ice sheets, meltwater lakes formed within the low lying Ottawa Valley that had depressed from the weight of the ice cap. Around 11,000 BP, the ice had sufficiently melted to allow sea water from the Atlantic Ocean to access the glacially lowered lands of eastern Ontario via the St. Lawrence (Cronin *et al* 2008). The marine inundation formed the Champlain Sea, which is represented within the sedimentary record by a change from laminated glaciolacustrine clays to marine deposited clays.

Isostatic adjustment gradually raised the topography within the Ottawa Valley, resulting in the reduction of the Champlain Sea eastwards. Large amounts of meltwater from the retreating ice sheets to the northwest flowed down through the Ottawa Valley, resulting in the freshwater fusion with the saline Champlain Sea producing a brackish environment, eventually producing the smaller freshwater Lake Lampsilis around 9,800 BP. Following the draining of Lake Lampsilis, the Ottawa River remained as a drainage channel to the Atlantic Ocean for larger glacial lakes and water bodies to the west, with occasional large release episodes. Based on the topographic contours within the study area region (Map 2), this area would likely have been inundated by Lake Champlain during the Early Paleo Period as it is situated below the 550 foot (167.6 metre) contour elevation (Kennedy 1976). Based on this interpretation, the study area vicinity would have drained and become habitable during the Late Paleo/Early Archaic Period.

The surficial geology and physiography within the study area represents the glacial and post-glacial depositional processes that have influenced the study area environment. The majority of the corridor consists of offshore marine sediments of clay, silty clay and silt deposited by the receding glacial lake.

The Ottawa Valley Clay Plains encompass the entire study area. Within the Ottawa Valley below Chalk River, the clay beds are irregularly stratified and not varved. Shells of prehistoric marine animals typical of saltwater environments have been identified within the region confirming this low-lying area was submerged under the Champlain Sea during and immediately after the recession of the glaciers (Chapman 1975).

The primary soil composition within the study area is classified within the Bainsville Series of the Castor soil association (Map 17). These poorly drained soils are derived from deltaic origins and tend to occur as transition soil areas between large sand plains and clay flats such as the Castor soil areas that occur within the majority of the study area. Within the northeast portion of the project area are loamy fine sand soils from the Stapeldon series of the Jockvale soil association. These soils generally occur adjacent to, or in close proximity to, the Rideau River and have good drainage capacity (Schut and Wilson 1987).

The study area lies within the Upper St. Lawrence sub-region of the Great Lakes/St. Lawrence Forest Region. The trees characteristic of this sub-region include sugar maple, beech, red maple, yellow birch, basswood, white ash, largetooth aspen, red oak and burr oak. Coniferous species include eastern hemlock, eastern white pine, white spruce and balsam fir. Poorly drained areas typically contain swamp adapted hardwoods, black spruce or white cedar (Rowe 1977). Historical settlement and agricultural development within the study area since the nineteenth century have left little, if any, of the original forest cover intact.

The Rideau River represents the largest waterway within the surrounding landscape and is located approximately 300 metres west of the study area (Map 2). The proposed development property is situated on a ridge approximately eight metres above the river, which provides the primary drainage for the area. The documentation of Archaic and Woodland Period components at registered archaeological sites BhFw-110 and BhFw-112 situated

on the east shore of the Rideau River, less than 1.5 kilometres north of the study area, as well as registered site BhFw-118 located within the Rideau River corridor south of the study area (Paterson 2016), documents the importance of this waterway as both a navigable access route and preferred settlement landscape prior to the arrival of European explorers (Golder 2017c).

The study area is approximately 0.3 hectares in size and primarily consists of manicured lawn associated with the adjacent residential structure. A dry stream bed extends along the eastern and northern edge of the study area, sloping from the upper eastern portion of the study area to the stream bed to the east. The western portion of the study area is generally flat.

### 3.2 Previously Completed Archaeological Assessments

The MHSTCI's Archaeological Report Database was searched on 10 July 2019 for previous archaeological assessments completed within 50 metres of the study area (MHSTCI 2019b). This search identified four previous archaeological assessments completed within 50 metres of the current study area, which are provided in Table 1.

**Table 1: Summary of Previous Archaeological Assessments within 50 metres of the Study Area**

PIF#	Date	Title	Consultant Company	Recommendation
P385-0018-2016	2017	Stage 1-2 Archaeological Investigation Wright Lands, Lot 23, Concession 1 Broken Front, Geographic Township of Gloucester (PIN 045890407) Ottawa, Ontario	Golder Associates Ltd.	Stage 3 Recommended
P369-0059-2018	2018	Stage 1 Archaeological Assessment 879 River Road Part Lot 23, Broken Front Concession Geographic Township of Gloucester Carleton County Ottawa, Ontario	Paterson Group	Stage 2 Recommended for Entire Study Area
P369-0064-2018	2018	Stage 2 Archaeological Assessment 879 River Road Part Lot 23, Broken Front Concession Geographic Township of Gloucester Carleton County Ottawa, Ontario	Paterson Group	Stage 3 Recommended
P369-0069-2018	2018	Stage 3 Archaeological Assessment: A Clothier Site (BhFw-123), 879 River Road, Part Lot 23, Broken Front Concession, Geographic Township of Gloucester, Carleton County Ottawa, Ontario	Paterson Group	No Further CHVI

The Stage 1-2 archaeological assessment completed by Golder in 2017 under PIF# P385-0018-2016 assessed the lands immediately to the south and west of the current study area (Map 18). Two archaeological sites were identified during this assessment (BhFw-119 and BhFw-120), which are described in Section 3.3.

The Stage 1, 2, and 3 archaeological assessments completed by Paterson Group (PIF #s P369-0059-2018, P369-0064-2018, and P369-0069-2018) were located on the opposite side of River Road to the east (Map 18). A summary of the archaeological site (BhFw-123) that was mitigated during these archaeological assessments is detailed in Section 3.3.

Appendix A provides information regarding the previous archaeological assessments known to have been completed within the general vicinity of the study area and provides general archaeological data derived from the assessments and relevant recommendations.

### 3.3 Known Archaeological Sites

The primary source of information regarding known archaeological sites within the province is the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries archaeological sites database (ASDB), which designates archaeological sites registered according to the Borden system. Under the Borden system, Canada is divided into grid blocks based on latitude and longitude. A Borden Block is approximately 13 kilometres east to west and approximately 18.5 kilometres north to south. Each Borden Block is referenced by a four-letter designator and sites within a block are numbered sequentially as they are found. The study area under review is located within Borden Block BhFw.

A search of the MHSTCI Past Portal ASDB for registered archaeological sites within two kilometres of the study area was completed on 10 July 2019, which revealed 12 sites within a two kilometre radius of the study area.

Table 2 provides information retrieved from the MHSTCI Past Portal ASDB and project specific reports for each registered archaeological site within two kilometres of the study area.

**Table 2: Registered Sites Within Two Kilometres of Study Area**

Borden Number	Site Name	PIF(s) Associated with Site	Spatial Relationship to Study Area	Temporal Context	Inferred Site Type	Development Review Status
BhFw-123	A. Clothier Site	P369-0064-2018 and P369-0069-2018	80 m northeast	Post-Contact	Farmstead	No Further CHVI
BhFw-108	Cameron Site	P366-0048-2015, P366-0056-2015 and P366-0061-2016	200 m northeast	Post-Contact	Farmstead	No Further CHVI
BhFw-119	Long Island Site	P385-0018-2016, P385-0024-2016 and P1077-0039-2017	215 m west	Post-Contact	Camp/Campsite	No Further CHVI
BhFw-120	Blyth	P385-0018-2016, P1077-0040-2017 and P1077-0058-2017	225 m southwest	Post-Contact	Farmstead	Further CHVI. Recommended for Stage 4 Mitigation
BhFw-109	Nixon Site	P366-0048 and P366-0054-2015	635 m northwest	Post-Contact	Farmstead	No Further CHVI
BhFw-19	Munro Site	P311-027-2010 and P311-063-2011	1,000 m northeast	Laurentian Archaic	Findspot	No Further CHVI
BhFw-115	n/a	P366-0049-2015	1,145 m north	Post-Contact	Farmstead	No Further CHVI
BhFw-25	Jockvale Site	P025-199-2010	1,200 m west	Post-Contact	Midden	No Further CHVI
BhFw-113	n/a	P366-0049-2015	1,250 m north	Post-Contact	Midden	Further CHVI. Recommended for Stage 3 Field Investigation

Borden Number	Site Name	PIF(s) Associated with Site	Spatial Relationship to Study Area	Temporal Context	Inferred Site Type	Development Review Status
BhFw-110	n/a	P366-0049-2015 and P366-0055-2015	1,300 m north	Late Archaic to Late Woodland	Findspot, Feature	Further CHVI. Recommended for Stage 4 Mitigation
BhFw-114	n/a	P366-0049-2015	1,300 m north	Post-Contact	House	No Further CHVI
BhFw-112	n/a	P366-0049-2015 and P366-0059-2015	1,350 m north	Pre-Contact	Lithic scatter	Further CHVI. Recommended for Stage 4 Mitigation

Four registered archaeological sites, represented by the A. Clothier site (BhFw-123), Nixon site (BhFw-109), Long Island site (BhFw-119), and the Blyth site (BhFw-120), are situated within 300 metres of the current study area.

The A. Clothier site (BhFw-123) represents a late 19<sup>th</sup> to early 20<sup>th</sup> century homestead that was archaeologically investigated in 2018. Following the completion of Stage 3 field investigation the site was mitigated of cultural heritage value or interest (CHVI) and no further work was recommended (Patterson 2018).

The Nixon site (BhFw-109) is located 130 metres north of the A. Clothier site on the east side of River Road, and approximately 200 metres northwest of the current study area. This site represents a late 19<sup>th</sup> to early 20<sup>th</sup> century homestead that was archaeologically mitigated during the Stage 3 archaeological assessment and was determined to have no further CHVI (Golder 2017f).

The Long Island site (BhFw-119) is located 215 metres west of the current study area and has been interpreted to correlate to an early 19<sup>th</sup> century occupation associated with the Long Island lock construction period (1827-1831) based on the Stage 3 (Golder 2018b) and Stage 4 (Golder 2019b) archaeological excavations at the site. Following the completion of the Stage 4 mitigation, no further archaeological fieldwork has been recommended for this site.

The Blyth site (BhFw-120) is located approximately 225 metres southwest of the current study area and is interpreted to comprise components dating to the Long Island lock construction period (1827-1831), in addition to post-1831 occupation correlating to the William Blyth family, which is interpreted to have lasted at this location until the mid-19<sup>th</sup> century. This site has been documented during Stage 3 archaeological investigations and has been recommended for Stage 4 mitigation prior to any further development activities within the site boundaries (Golder 2018b and 2019a).

### 3.4 Assessing Archaeological Potential

Archaeological potential is established by determining the likelihood that archaeological resources may be present on a subject property. In accordance with the MHSTCI's 2011 *Standards and Guidelines for Consultant Archaeologists* the following are features or characteristics that indicate archaeological potential:

- Previously identified archaeological sites;
- Water sources:
  - Primary water sources (lakes, rivers, streams, creeks);

- Secondary water sources (intermittent streams and creeks; springs; marshes; swamps);
- Features indicating past water sources (e.g. glacial lake shorelines indicated by the presence of raised gravel, sand, or beach ridges; relic river or stream channels indicated by clear dip or swale in the topography; shorelines of drained lakes or marshes; and cobble beaches);
- Accessible or inaccessible shoreline (e.g. high bluffs, swamps or marsh fields by the edge of a lake, sandbars stretching into marsh);
- Elevated topography (eskers, drumlins, large knolls, plateaux);
- Pockets of well drained sandy soil, especially near areas of heavy soil or rocky ground; Distinctive land formations that might have been special or spiritual places, such as waterfalls, rock outcrops, caverns, mounds, and promontories and their bases (there may be physical indicators of their use, such as burials, structures, offerings, rock paintings or carvings);
- Resource areas including:
  - Food or medicinal plants;
  - Scarce raw minerals (e.g. quartz, copper, ochre or outcrops of chert);
  - Early Euro-Canadian industry (fur trade, mining, logging);
- Areas of Euro-Canadian settlement; and,
- Early historical transportation routes.

In recommending a Stage 2 property survey based on determining archaeological potential for a study area, the MHSTCI stipulates the following:

- No areas within 300 metres of a previously identified site; water sources; areas of early Euro-Canadian settlement; or locations identified through local knowledge or informants can be recommended for exemption from further assessment;
- No areas within 100 metres of early transportation routes can be recommended for exemption from further assessment; and,
- No areas within the property containing an elevated topography; pockets of well-drained sandy soil; distinctive land formations; or resource areas can be recommended for exemption from further assessment.

### 3.5 Features Indicating Archaeological Potential has been Removed

Archaeological potential can be determined not to be present when the area has been subject to extensive and deep land alterations that severely damaged the integrity of any archaeological resources, including:

- Quarrying;
- Major landscaping involving grading below topsoil;
- Building footprints; and,
- Sewage and infrastructure development.

### 3.6 Potential for Archaeological Resources

Based on the historical context and proximity to landscape features indicating the potential presence of archaeological resources, the previously undisturbed portions of the study area are considered to possess high potential for both pre-contact and historic archaeological resources. This interpretation is based on several factors including the proximity to a small stream located within the study area running along the northern and eastern edge of the property and the proximity of the Rideau River located approximately 300 m to the west. River Road, which follows the alignment of a historic road cut dating to 1815, is located immediately east of the study area and the proximity to this historic transportation route also triggers the potential for archaeological resources.

Archaeological potential is also present due to the study area's proximity within 300 metres of four registered archaeological sites. The previously disturbed portions of the study area where archaeological potential has been negated include the existing building footprint and the gravel driveway.

## 4.0 STAGE 2 METHODOLOGY

### 4.1 Field Methodology

Due to the identified archaeological potential for the majority of the study area, a Stage 2 archaeological assessment was conducted for all subject area lands determined to possess the potential for archaeological resources in accordance with the 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) and the *Archaeology of Rural Farmsteads Technical Bulletin* (MHSTCI 2014). The Stage 2 archaeological assessment was completed on 27 June 2019 under favourable weather conditions consisting of clear sunny skies and a temperature high of 29 degrees Celsius.

As the study area comprised property that could not be ploughed for pedestrian survey, the Stage 2 archaeological assessment consisted of hand excavated test pits placed at five metre intervals and dug at least 30 centimetres in diameter and at least five centimetres into sterile subsoil. The soil from each test pit was screened through six millimetre mesh and backfilled upon completion. Each individual test pit was examined for stratigraphy, cultural features and evidence of fill or previous disturbance activities. A residential structure was located within the Stage 2 study area and test pitting was conducted to within one metre of the structure (Images 11 & 12, p. 50).

Where positive test pits were encountered, test pit excavations continued on the survey transect grid to determine the extent of additional positive test pits in the area. Where this process yielded insufficient archaeological resources to determine the necessity for a Stage 3 archaeological assessment, intensified survey coverage around the initial positive test pit at each location was performed, as per Standards 1 and 2, Section 2.1.3 of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011).

A field log was maintained for the duration of the Stage 2 field investigation detailing pertinent information and digital photographs were taken of the tested areas, general field conditions, specific representative test pits, general landscape and topography. The location and direction of each photograph collected during the Stage 2 field investigations is represented on Map 19.

A Garmin GPSMap 64s handheld unit was used to record spatial data of archaeological interest and photographic locations. The study area boundaries for the Stage 2 project area were also uploaded to the Garmin GPSMap 64s handheld unit to ensure the entire Stage 2 study area was assessed.

The Garmin GPSMap 64s handheld unit has a built-in 12 channel high sensitivity receiver (WAAS-enabled) capable of providing solutions utilizing the GPS and GLONASS satellite constellations. The accuracy of this unit is <10 metres 95% typical. Observations recorded during the Stage 2 archaeological assessment were typically accurate to three metres or less. All observations collected with the Garmin GPSMap 64s referenced the UTM coordinate system (Zone 18) and the NAD83 datum with each observation recorded as six digit easting and seven digit northing coordinates.

Permission to access the site to conduct all required archaeological fieldwork, including the recovery of artifacts, was granted by Taylor Marquis of Nicolls Island Holdings Inc. c/o The Regional Group.

## 5.0 STAGE 2 RECORD OF FINDS

The Stage 2 archaeological fieldwork was conducted employing methods described in Section 4.1 of this report. An inventory of the documentary record generated from the fieldwork is provided in Table 3, and the results of the Stage 2 archaeological fieldwork are described below.

**Table 3: Inventory of Documentary Record**

Document Type	Current Location of Document	Additional Comments
Field Notes	Golder Associates Ltd. Ottawa Office	Original field notebook with digital copies in project file. 3 pages.
Maps provided by Client	Golder Associates Ltd. Ottawa Office	Stored in the project file.
Digital Photographs	Golder Associates Ltd. Ottawa Office	Stored electronically in the project file. 31 photos.
GPS Data	Golder Associates Ltd. Ottawa Office	Stored electronically in the project file.
Artifact Assemblage	Golder Associates Ltd. Ottawa Office	Stored in one banker's box.

The study area consisted primarily of manicured lawn associated with the residence, which had not been previously cultivated and was not currently ploughable (Images 11 to 15, pp. 51-52). The northern and eastern extent of the property was sloped down to the bottom of the stream bed that runs along the eastern edge of the property (Images 16 to 18, pp. 52-53). As the slope measured greater than 20 degrees, these areas were not test pitted.

Soils primarily consisted of dark grey-brown silty loam topsoil with loose compaction measuring 15 to 25 cm thickness over orange-brown silty clay sterile subsoil with moderate compaction (Image 19, p. 54). On the west side of the house, soils consisted of approximately 15 to 20 cm of dark brown sand with loose compaction over brown sand sterile subsoil with loose compaction (Image 20, p. 54).

Two positive test pits were documented within the eastern portion of the study area. The first positive test pit consisted of five artifacts including two sherds of refined white earthenware with blue sponged decoration, one undecorated pipe stem, a brown glazed coarse red earthenware ceramic sherd, and one cut nail. The second positive test pit contained a single undecorated pipe stem. In accordance with Standard 2.1.3.2 of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011), intensified testing was completed at each positive test pit location to determine whether a Stage 3 assessment was required. The intensification at each positive test pit location was completed by the excavation of eight additional test pits at each cardinal direction and the excavation of a 1 m<sup>2</sup> test unit over each positive test pit (Image 21 and 22, p. 55). A five metre grid was established over the area with positive test pit #1 (PTP 1) established as grid unit E105 N105 and positive test pit #2 (PTP 2) correlating to grid unit E105 N110.

Although no archaeological resources were observed during the excavation of the eight additional test pits around positive test pit #1, an additional 25 artifacts were recovered during the excavation of the 1 m<sup>2</sup> test unit at E105 N105 (PTP 1). These artifacts consisted of a single shard of clear glass, one piece of iron wire, one cut nail, three wrought nails, three body sherds of coarse red earthenware with brown glaze, one sherd of yellowware and 15 sherds of refined white earthenware including five with blue transfer print, one with brown transfer print, one with aqua transfer print, one with moulded decoration and seven undecorated body sherds.

During the intensification around positive test pit #2 and the excavation of the test unit at grid location E105 N110, no additional archaeological resources were identified.

The majority of artifacts recovered during the Stage 2 field survey are interpreted to date to the 19<sup>th</sup> century. In accordance with Standard 2.2.1c of the *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011), the recovery of at least 20 artifacts interpreted to pre-date 1900 designates the site as possessing cultural heritage value or interest (CHVI) and requires a recommendation for a Stage 3 archaeological assessment.

In accordance with the Archaeological Site Form Bulletin (MHSTCI 2015), the recovery of more than ten artifacts interpreted to date to the 19<sup>th</sup> century within a ten metre radius requires the site to be registered with the Ontario Ministry of Heritage, Sport, Tourism and Culture Industries. Based on this requirement, the site has been designated as the Wm. Blyth site and assigned Borden Number BhFw-126.

A detailed analysis of all artifacts recovered from the Wm. Blyth site (BhFw-126) is presented in Section 8.1 of this report.

## 6.0 STAGE 2 RECOMMENDATIONS

The Stage 1 and 2 archaeological assessment provided the basis for the following recommendation:

- 1) The Wm. Blyth site (BhFw-126) is of sufficient cultural heritage value to warrant a Stage 3 site-specific archaeological assessment prior to any development impacts to the property;
- 2) The Stage 3 assessment should employ the hand excavated test unit methodology, as outlined in Sections 3.2 and Table 3.1 of the MHSTCI *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011). The test unit excavation should consist of one metre by one metre square test units laid out in a systematic grid;
- 3) All units should be excavated into at least five centimetres of subsoil unless a cultural feature is uncovered. Any features identified during the Stage 3 assessment should be drawn in plan view and each feature should be covered with geotextile fabric prior to backfilling. All soil excavated from the test units should be screened through six millimetre hardware cloth to facilitate the recovery of artifacts that may be present. The recovered artifacts will be tagged in the field by their provenience and returned to the laboratory for washing, cataloguing and analysis, and;
- 4) The Wm. Blyth site (BhFw-126) has been identified as a small post-1830 historic Euro-Canadian site where it is not clearly evident that Stage 4 mitigation of impacts will be required and the test unit excavation strategy should follow Table 3.1, Standards 1 and 2. Specifically, test units should be excavated at five metre intervals with 20% infill units placed in areas of interest around the site until the site boundaries are clearly defined.

## 7.0 STAGE 3 ARCHAEOLOGICAL INVESTIGATION

### 7.1 Stage 3 Field Methodology

Due to the cultural heritage value or interest (CHVI) identified for the Wm. Blyth site (BhFw-126) during the Stage 2 archaeological assessment, a Stage 3 archaeological investigation was completed over two days on 6 and 7 August 2019. The Stage 3 archaeological assessment was conducted in accordance with the 2011 *Standards and Guidelines for Consultant Archaeologists* (MHSTCI 2011) and the *Archaeology of Rural Historical Farmsteads Technical Bulletin* (MHSTCI 2014).

All Stage 3 archaeological fieldwork was completed under favourable weather conditions. On 6 August 2019, the temperature was 30 degrees Celsius and sunny skies in the morning, with work suspended in the afternoon due to a thunderstorm. On 7 August 2019, the weather was cloudy with a high of 24 degrees Celsius.

Following the discovery of the two positive test pits during the Stage 2 archaeological assessment on 27 June 2019, both find locations were marked in the field with orange flagging tape and the coordinates were collected using a Garmin GPS Map 64s handheld unit. The two positive locations identified during the Stage 2 assessment were relocated in the field at the beginning of the Stage 3 investigation and the additional test units were established using the grid and datums (E100 N100 and E100 N105) established during the Stage 2 fieldwork. As a steep slope was located immediately to the east of the Stage 2 positive locations, the establishment of test units five metres east of the Stage 2 positive find locations was not possible.

The Stage 3 units were excavated stratigraphically by hand in 1 m x 1 m square units as per the MHSTCI Standards and Guidelines (2011) (Images 23 & 24 p. 56). Each one metre square test unit was designated by a grid reference from its southwest corner, formatted in metres. Within each unit the individual layers of soil, or lots, were given identifying numbers and correlated across the site. All lot numbers were unique.

A total of eleven units measuring one metre square were hand excavated during the Stage 3 archaeological excavation at registered site BhFw-126, including two infills units in accordance with Section 3.2.3 of the MHSTCI Standards and Guidelines (2011) stating that additional infill test units representing 20% of the grid total be excavated. The locations of infill units were chosen to further investigate areas with high artifact counts.

A Trimble R10 Model 2 Global Navigation Satellite System (GNSS) unit and a Trimble S6 Robotic total station were used to collect all topographic survey observations, including the archaeological test units and the top of slope along the eastern limit of the archaeological site.

The Trimble R10 Model 2 GPS receiver has built-in Wide-Area Augmentation System (WAAS) and European Geostationary Navigation Overlay Service (EGNOS) capability and supports a wide range of satellite constellations, including GPS L1/L2C/L5, GLONASS L1/L2 and Galileo. The GNSS receiver is a dual frequency differential GPS (DGPS) capable of real time kinematic (RTK) corrections within the Can-Net Virtual Reference Station (VRS) network. The Trimble R10 unit was used to establish control datum points within the study area which were incorporated into the total station survey. The GPS data was differentially corrected using the Cansel base station network (CAN-NET) with the Ottawa base station representing the primary base station used for the topographic survey. All observations collected with the Trimble R10 GNSS unit were taken within a tolerance of 0.007m horizontal and 0.009m vertical (elevation). All geodetic elevations were collected referencing Geoid Model HT2\_0e.

Due to significant tree coverage and foliage within the study area, a Trimble S6 robotic total station was used to accurately survey the southwest corner of each Stage 2 and 3 test unit and the limits of the slope along the eastern edge of the site. The Trimble S6 total station is a robotic survey instrument with autolock capabilities.

The benchmarks used for the total station survey were established using the Trimble R10 GNSS unit and the survey traverse closed within 0.02m horizontal (distance) and 0.02m vertical (elevation), which represents the maximum error for all observations collected with the total station.

All surveyed locations are referenced to the Universal Transverse Mercator (UTM) projection and North American Datum (NAD) 83 (Zone 18). The collected coordinates for each Stage 2 and 3 excavation unit are provided in the Supplemental Documentation as a six digit easting with three decimal places, and a seven digit northing with three decimal places. Therefore, each survey observation can be considered a permanent and known datum point regardless of any future disturbance to the surrounding landscape.

All excavated soil was screened through six millimetre mesh and each unit was examined for artifacts and/or features of archaeological interest. Upon encountering subsoil, the surface was shovel shined for features before excavation continued for a minimum of five centimetres into sterile subsoil. Photographs were taken of excavation units at the completion of each unit and soil from the excavated unit was backfilled into each unit following their recording.

A field logbook was maintained for the duration of the Stage 3 field investigation detailing pertinent information and digital photographs taken of the tested areas, topography, and specific representative excavation units. A total of eight pages of field notes were generated by this work supported by 64 digital photos. These notes and photos, as well as the topographic survey data, are stored digitally on the Golder server. An inventory of the documentary record generated from the fieldwork is provided in Table 4.

**Table 4: Inventory of Documentary Record**

Document Type	Current Location of Document	Additional Comments
Field Notes	Golder Associates Ltd. Ottawa Office	Original field notebook with digital copies in project file. 8 pages.
Maps provided by Client	Golder Associates Ltd. Ottawa Office	Stored in the project file.
Digital Photographs	Golder Associates Ltd. Ottawa Office	Stored electronically in the project file. 64 photos.
Survey Data	Golder Associates Ltd. Ottawa Office	Stored electronically in the project file.
Artifact Assemblage Catalogue	Golder Associates Ltd. Ottawa Office	Stored with artifact collection in one banker's box.

Permission to access the site to conduct all required archaeological fieldwork, including the recovery of artifacts, was granted by Taylor Marquis of Nicolls Island Holdings Inc. c/o The Regional Group.

## 7.2 Artifact Analysis and Curation Methods

This report and the following artifact inventory (Appendix B) provide a record of the artifacts and other archaeological materials (samples) recovered from the study area/site. This information provides a basis for interpretation of the site. This report aims to offer enough basic artifact information that a future researcher may determine whether the study area/site is of relevance to their investigation.

### 7.2.1 The Inventory System

The artifact inventory was compiled in a Microsoft Office Access 2007 database system.

Each entry in the database contains the following information:

- an individual inventory number;
- spatial location (provenience) within the study area/site (operation, sub-operation, stratum);
- artifact analysis (see below); and,
- the quantity of any given entry.

### 7.2.2 Artifact Analysis

The artifact analysis was based upon the MHSTCI standard requirements, as set out in Tables 6.1 and 6.2 of the Standards and Guidelines (MHSTCI 2011). Every artifact entry in the database includes material composition, artifact type (object), and the function that it served and if any alterations had been made to the original artifact (e.g. burning). Additional artifact descriptions were based upon the type of artifact (see below).

### 7.2.3 Historic Artifacts

Only historic period artifacts were found during this investigation. Historic artifacts included: ceramic objects, glass items and metal objects. Ceramic ware and glaze types were provided, as well as their decoration and colours. When a maker's mark was visible it was recorded.

Date ranges were provided where possible, and the reference cited. Glass artifact colours and decorative patterns were recorded, in addition to technique of manufacture when identifiable. As with ceramic material, when a marker's mark was visible it was recorded. Date ranges were provided where possible, and the reference cited. All other artifacts were described in as much detail as possible including surface treatment, decorative pattern and technique of manufacture when identifiable.

### 7.2.4 Storage and Curation

The collection was packed for storage by spatial location (provenience). When inventoried, artifacts were bagged in transparent, re-sealable (zippered) polyethylene bags which are inert and moisture resistant.

The contents of each artifact bag were identified on archival quality labels (acid-free, non-yellowing, acrylic adhesive), with an archival ink that is permanent and fade resistant. The artifact bags were then placed in a banker's box (12" W x 15" D x 10" H).

Artifact collections are stored in the Golder Ottawa archaeology lab until the report has been submitted to the MHSTCI, after which they will be moved to a secure, indoor, climate-controlled storage facility. The combined Stage 2 and 3 collection contains 33 artifacts and is packed in one banker's box.

## 8.0 STAGE 3 RECORD OF FINDS

The soil stratigraphy observed during the Stage 3 excavation at registered site BhFw-126 consisted of two lots. Lot 1 (topsoil) consisted of dark grey-brown silty loam with root and gravel inclusions and loose compaction. Lot 2 comprised sterile subsoil consisting of orange-brown silty clay with medium compaction. Images 25 to 27 (pp. 57-58) provide representative examples of the stratigraphy observed within the excavated units during the Stage 3 investigation. Image 28 (pp. 58) provides a profile drawing showing representative stratigraphy.

To assess the significance of the entire artifact assemblage documented at the Wm. Blyth site (BhFw-126), the artifacts recovered from both the Stage 2 and Stage 3 field assessments are provided in Table 5 and analyzed together in Section 8.1. This includes the 31 artifacts identified during the Stage 2 survey (see Section 5.0) and the two additional artifacts recovered during the Stage 3 excavation. The total artifact counts are also presented in Map 20.

All artifacts were recovered from Lot 1, which ranged from 15 to 35 cm thickness. No archaeological features were identified during the Stage 3 assessment.

**Table 5: Depths and Artifact Totals by Excavation Unit**

Unit	Depth (cm)	# of Artifacts	Unit	Depth (cm)	# of Artifacts
E100 N100	30	0	E105 N95	40	0
E100 N105	34	1	E105 N100	34	0
E100 N110	30	0	E105 N105 (PTP <sup>3</sup> 1)	25	30
E100 N115	26	0	E105 N110 (PTP 2)	25	1
E102 N102	25	1	E105 N115	20	0
E102 N107	37	0		<b>Total</b>	<b>33</b>

## 8.1 Wm. Blyth site (BhFw-126)

A total of 33 artifacts were recovered from the site and a collection of representative artifacts are presented in Image 29 (p. 59). The artifacts are classified by their function in Table 6.

**Table 6: Total of Artifacts by Function**

Function	# of Artifacts	Percent of Artifacts
Food/beverage	23	71%
Indeterminate	2	7%
Personal/societal	2	7%
Structural	6	15%
<b>Total</b>	<b>33</b>	<b>100%</b>

<sup>3</sup> PTP = Positive Test Pit

All of the recovered food/beverage artifacts represent ceramic sherds, including 19 with a tableware function and four interpreted to represent storage or food preparation vessels. A minimum of six tableware vessels are represented within the assemblage based on the variety of ceramic styles and decorative techniques within the assemblage, including yellowware, moulded, stamped, and transfer print decoration in aqua, blue and brown colours.

The two personal artifacts represent stem fragments from a clay smoking pipe(s). The six structural artifacts comprised nails including one wire nail, two machine cut nails and three wrought by a blacksmith.

Machine cut nails became available after 1800, when a nail cutting machine became of practical use (Vincent 1993). By the 1830's machine cut nails had mostly replaced wrought nails in common use (Vincent 1993). Wire nails replaced the machine cut nail and became relatively common by the 1860's (Miller 2000).

The two indeterminate artifacts include one shard of clear glass and a fragment of iron wire.

The summary of diagnostic artifacts collected during the archaeological investigation at the Wm. Blyth site (BhFw-126) are presented in Table 7 and when assessed as an entire collection suggest the deposition date likely occurred during the 19<sup>th</sup> century.

**Table 7: Diagnostic Ceramics**

Datable Attribute	Dating	Reference
Yellowware	Circa 1840 to present. Peak 1870 to 1900	Richardson 2013
Moulded	1840s to 1900	Maryland 2002
Sponged (including stamped)	1820s to 1930s	Samford 2013
Transfer Print	1820 to 1840 was the period of peak production	Little 1969

## 10.0 ANALYSIS AND CONCLUSIONS

Based on the Stage 2 and 3 archaeological assessments and the associated artifact assemblage, the Wm. Blyth site (BhFw-126) is interpreted to represent a small artifact deposit that is primarily contained within two find locations located within a five-metre radius. This artifact deposit may correlate to the occupation of the structure attributed to Wm. Blyth depicted on the 1863 Gloucester Township map, which is situated just beyond the southeastern extent of the current study area (Map 13).

Based on historical documentation and archaeological data, the Wm. Blyth family is interpreted to have originally resided within the area associated with registered archaeological site BhFw-120 located 225m southwest of the BhFw-126 site until the mid-19<sup>th</sup> century when they relocated to the structure depicted on the 1863 Gloucester Township map situated just beyond the southeast extent of the current study area (Map 13). Following the death of William Blyth in 1866, his wife Mary sold the property on Lot 23 to Joseph Broose on 1 May 1867. It is not known if Joseph Broose resided on the property prior to selling the south half of Lot 23 to Thomas May on 28 April 1870. Thomas May's residence is shown on Belden's 1879 map situated on the opposite (east) side of Rideau Road from the current study area (Map 15). The absence of any structures within the vicinity of the current study area on Map 14, which is interpreted to pre-date 1871, may suggest the structure attributed to Wm. Blyth represented on the 1863 map was occupied for a relatively short duration.

The A. Clothier site (BhFw-123) is located 80m northeast of the Wm. Blyth site (BhFw-126) and occupation at both sites is suggested to have been contemporary as both are represented on the 1863 map (Map 13). Unfortunately, the Stage 3 report documenting the A. Clothier site is currently not available from the Ministry of Heritage, Sport, Tourism and Culture Industries Past Portal database, which prevents further comparative analysis (MHSTCI 2019b). The Long Island site (BhFw-119) is also located within Lot 23 and situated 215m west of the Wm. Blyth site (BhFw-126). The Long Island site is interpreted to represent a discrete occupation period correlating to the Long Island lock construction period (1827-1831) (Golder 2019b) and therefore pre-dates the occupation at the Wm. Blyth site (BhFw-126) by at least 20 years.

Although the BhFw-126 site may be associated with the 19<sup>th</sup> century occupation of the structure southeast of the study area by the Wm. Blyth family, which is interpreted to have been occupied for a short duration, given the small size of the BhFw-126 site, lack of cultural features and the fact that no additional archaeological resources have been identified in the area of the structure within the study area vicinity shown on the 1863 map (Map 13) during previous archaeological assessments (Golder 2017a), there is insufficient evidence to recommend further archaeological investigations at this site.

## 11.0 RECOMMENDATIONS

This archaeological assessment has provided the basis for the following recommendation:

- 1) No additional archaeological assessments are recommended for the Wm. Blyth Site (BhFw-126); and,
- 2) As the Wm. Blyth Site (BhFw-126) does not extend beyond the location of the initial Stage 2 find spot, no additional archaeological investigations are recommended for any portion of the study area shown on Map 2 in this report.

The Ontario Ministry of Heritage, Sport, Tourism and Culture Industries is asked to review the results presented and to accept this report into the Ontario Public Register of Archaeological Reports.

## 12.0 ADVICE ON COMPLIANCE WITH LEGISLATION

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

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

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

The *Funeral, Burial and Cremation Services Act*, 2002, S.O. 2002, c.33, requires that any person discovering or having knowledge of a burial site shall immediately notify the police or coroner. It is recommended that the Registrar of Cemeteries at the Ontario Ministry of Consumer Services is also immediately notified.

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.

## 13.0 IMPORTANT INFORMATION AND LIMITATIONS OF THIS REPORT

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

This report has been prepared for the specific site, design objective, developments and purpose described to Golder by Nicolls Island Holdings Inc. c/o The Regional Group (the Client). The factual data, interpretations and recommendations pertain to a specific project as described in this report and are not applicable to any other project or site location.

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

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

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, sampling and testing program may fail to detect all or certain archaeological resources. The sampling strategies incorporated in this study comply with those identified in the Ministry of Heritage, Sport, Tourism and Culture Industries *Standards and Guidelines for Consultant Archaeologists* (2011).

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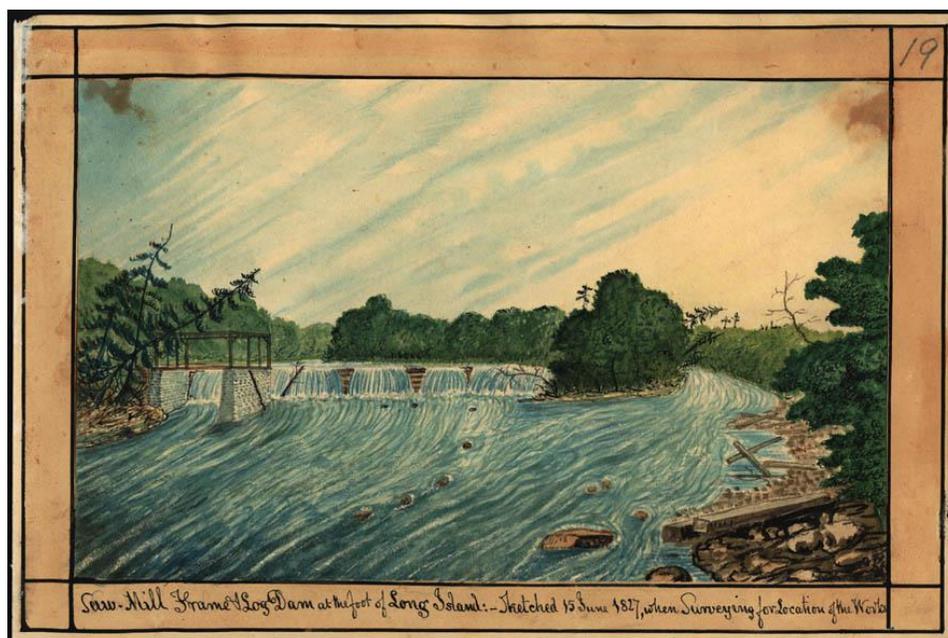
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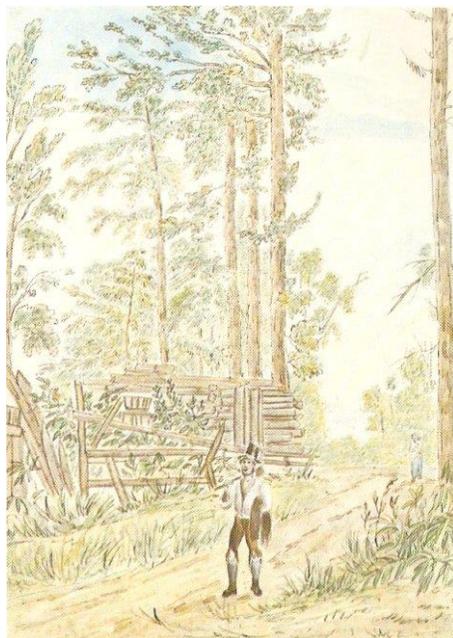
## 15.0 IMAGES



**Image 1: Thomas Burrow sketch of the Saw Mill and Log Dam at the foot of Long Island dated 15 June 1827 (Archives of Ontario).**



**Image 2: 1830 sketch of Settlement on Long Island on the Rideau River, Upper Canada by James Pattison Cockburn (Library and Archives Canada).**



**Image 3: Labourer at Long Island on the Rideau Canal dated August 1830 (Adopted from Passfield 1982:79).**



*Beckett's Landing Ferry, Long Island beach or still water, looking towards Long Island, Bytown, etc.*

**Image 4: Sketch attributed to Thomas Burrows showing the area around Beckett's Landing and the representative vessels plying the Rideau Corridor dated 1835 (Archives of Ontario).**



**Image 5: John Burrows Sketch of the Landscape around Long Island Lock dated 1835 (Library and Archives Canada).**



**Image 6: Phillip John Bainbridge's Sketch of the Landscape around Long Island Dam and Lock dated 1842 (Library and Archives Canada).**



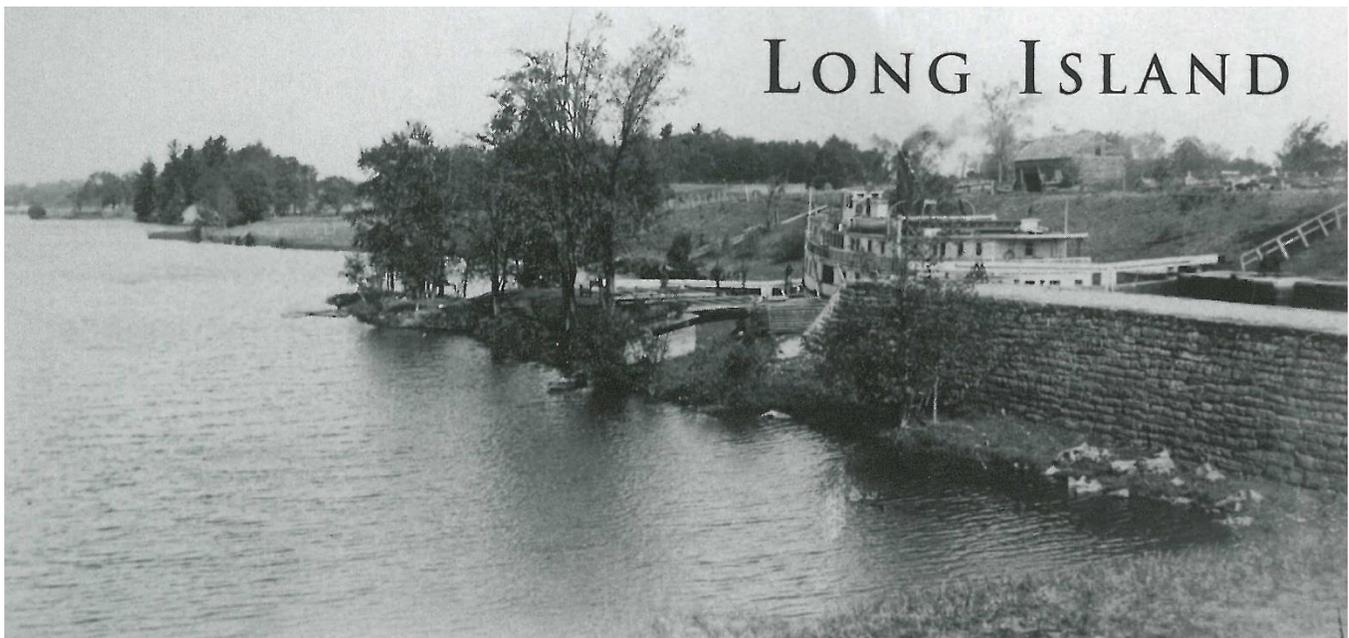
**Image 7: Revision of John Burrows 1835 Sketch of the Landscape around Long Island Lock by William T. Clegg dated 1845 (Archives of Ontario).**



**Image 8: Landscape at Long Island, Rideau River, dated 1880 (Library and Archives Canada).**



**Image 9: Landscape at Long Island Locks, dated 1880 (Library and Archives Canada).**



**Image 10: Landscape at Long Island Locks, dated 1910 (Adopted from Corbett 2007:38).**



**Image 11: Field crew conducting Stage 2 test pit survey on the east side of the residence, view west.**



**Image 12: Field crew conducting Stage 2 test pit survey within the fenced backyard of the residence, view east.**



**Image 13: East side of the property with the gravel driveway in the foreground, view northeast. The stream bed is located behind the treeline.**



**Image 14: Field conditions from the north end of the study area, view southwest.**



**Image 15: Field conditions of the study area located west of the residence, view south.**



**Image 16: Slope leading down to stream bed on the north end of the property, view west.**



**Image 17: Stream bed on the north end of the property, view west.**



**Image 18: Slope leading to stream bed on east side of property, view northeast.**



**Image 19: Representative test pit on the east side of the property, view north.**



**Image 20: Shovel test located on the west side of the residence containing sandy soils, view east.**



**Image 21: Field crew intensifying test pit survey around positive test pit, view north.**



**Image 22: West profile of 1 m x 1 m test unit excavated on Positive Test Pit 1, view west.**



**Image 23: Field crew conducting Stage 3 excavation, unit E105 N100, view southeast.**



**Image 24: Field crew conducting Stage 3 excavation, unit E100 N115, view northwest.**



Image 25: North profile of unit E100 N105, view north.



Image 26: West profile of unit E105 N95, view west.



Image 27: Plan view of unit E105 N115, view north.

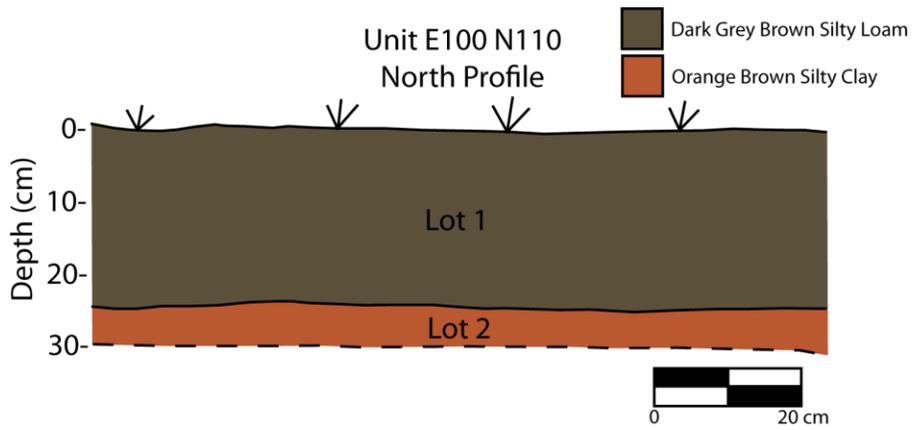


Image 28: Profile drawing of unit E100 N110's north profile.



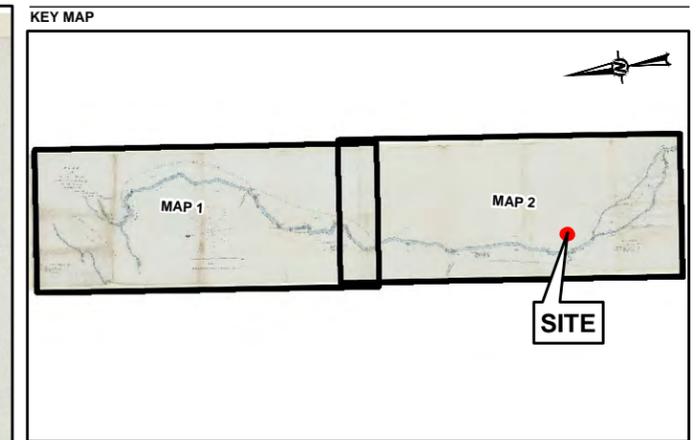
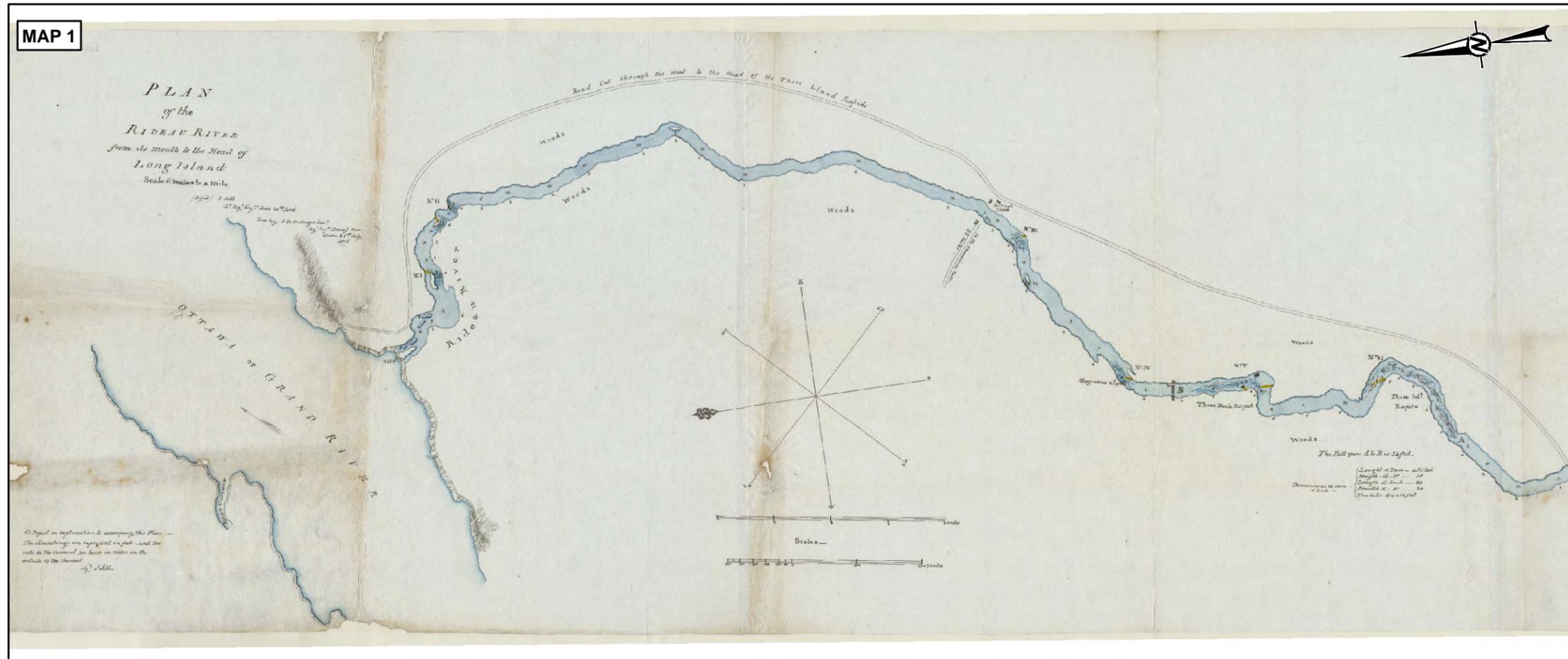
**Image 29: Representative artifacts from BhFw-126. Top row (left to right): yellowware, lead glaze, blue transfer print, black transfer print, pipe stem. Bottom row (left to right): clear glass body sherd, wrought nail and cut nail.**

## 16.0 MAPS





MAP 1



SCALE 1:260,000

LEGEND

[Red box] STUDY AREA

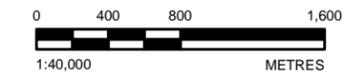
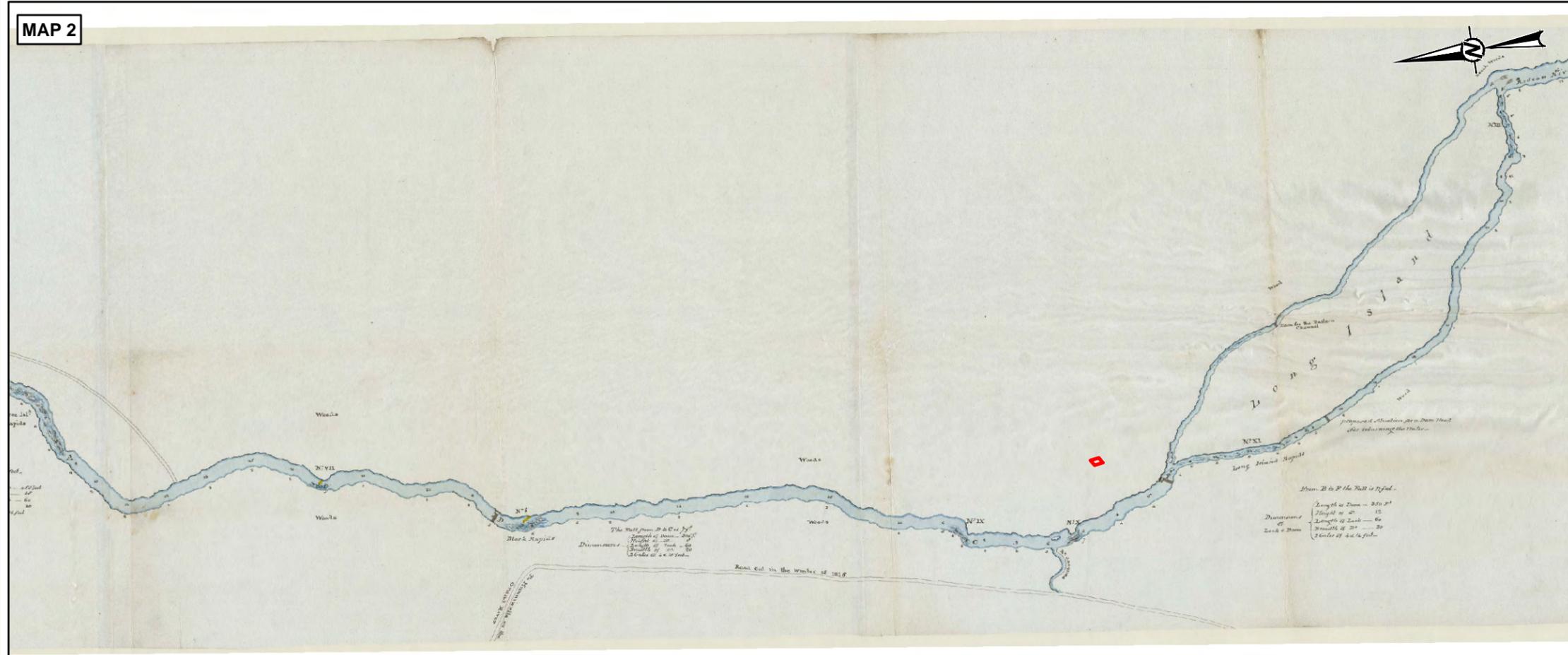
NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

- 1. 1816 SURVEY PLAN OF THE RIDEAU RIVER FROM ITS MOUTH TO THE HEAD OF LONG ISLAND
- 2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83 COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28

MAP 2



CLIENT  
NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

PROJECT  
STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

TITLE  
1816 SURVEY PLAN OF THE RIDEAU RIVER FROM ITS MOUTH TO THE HEAD OF LONG ISLAND

CONSULTANT	YYYY-MM-DD	2020-02-28
DESIGNED	----	
PREPARED	BR	
REVIEWED	AM	
APPROVED	BD	

PROJECT NO. 1534482	PHASE/TASK 3050/3056	REV. 0	MAP 3
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25mm IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM:



**LEGEND**

STUDY AREA

**NOTE(S)**

1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**

1825 PLAN OF THE TOWNSHIP OF GLOUCESTER, WILLIAM COFFIN, LIBRARY AND ARCHIVES, CANADA, LAC NUMBER H12/430, SURVEYED IN AUGUST 1825.  
 2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
 3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
 COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28



CLIENT  
 NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

PROJECT  
 STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

TITLE  
 1825 GLOUCESTER TOWNSHIP MAP

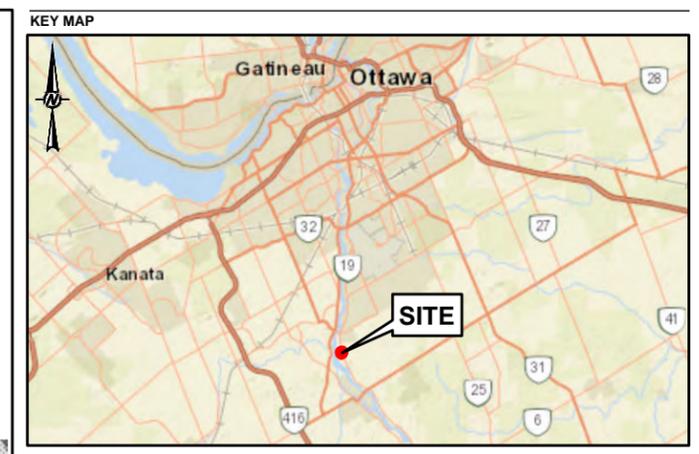
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	PREPARED	BR
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	APPROVED	BD

PROJECT NO. 1534482	PHASE/TASK 3050/3056	REV. 0	MAP <b>4</b>
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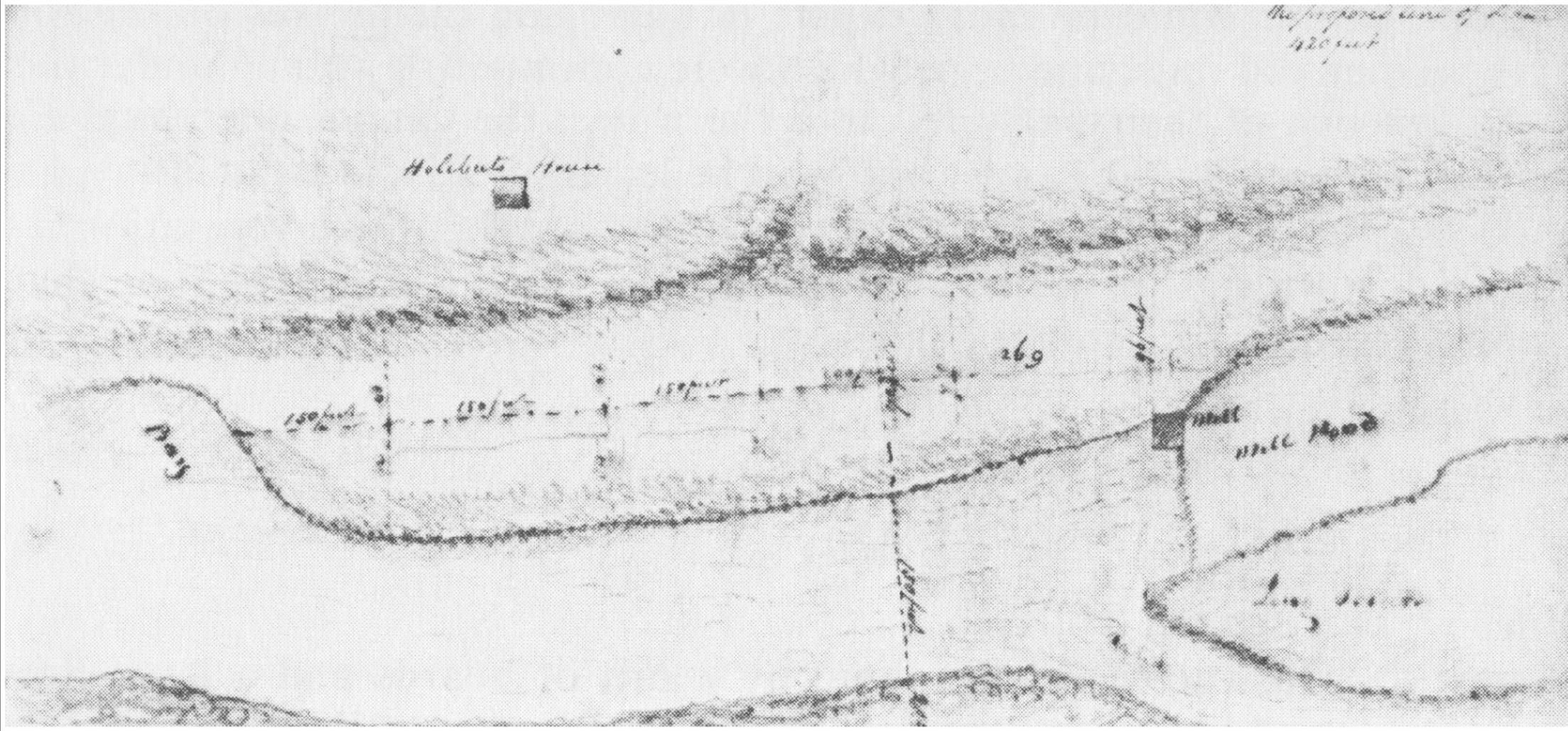
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**NOTE(S)**

1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**

- 1. 1827 SKETCH MAP OF LONG ISLAND
- 2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY



CLIENT  
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PROJECT  
STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

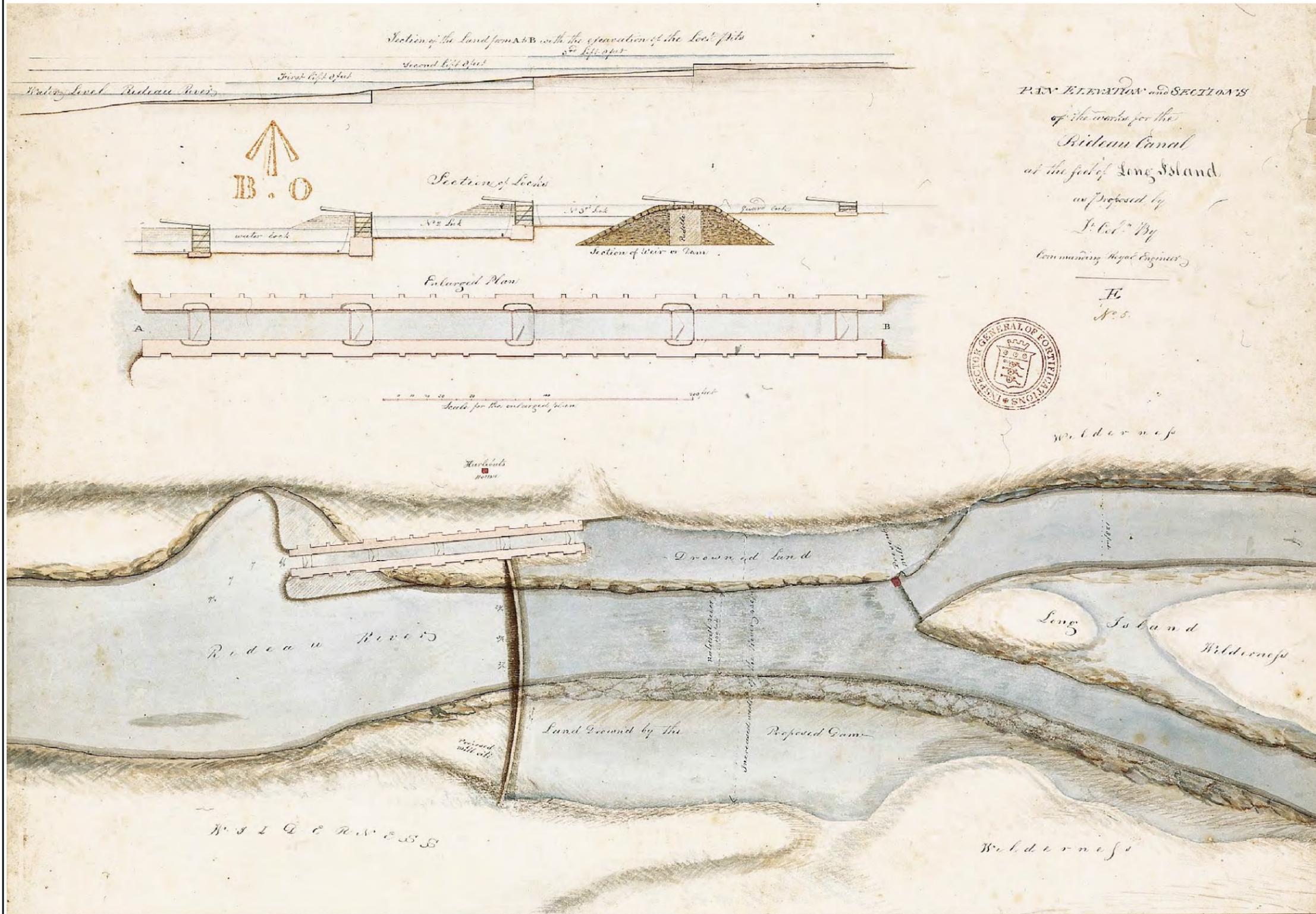
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REVIEWED	AM	
APPROVED	BD	

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**NOTE(S)**  
1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**  
1. 1827 LONG ISLAND SURVEY PLAN  
2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

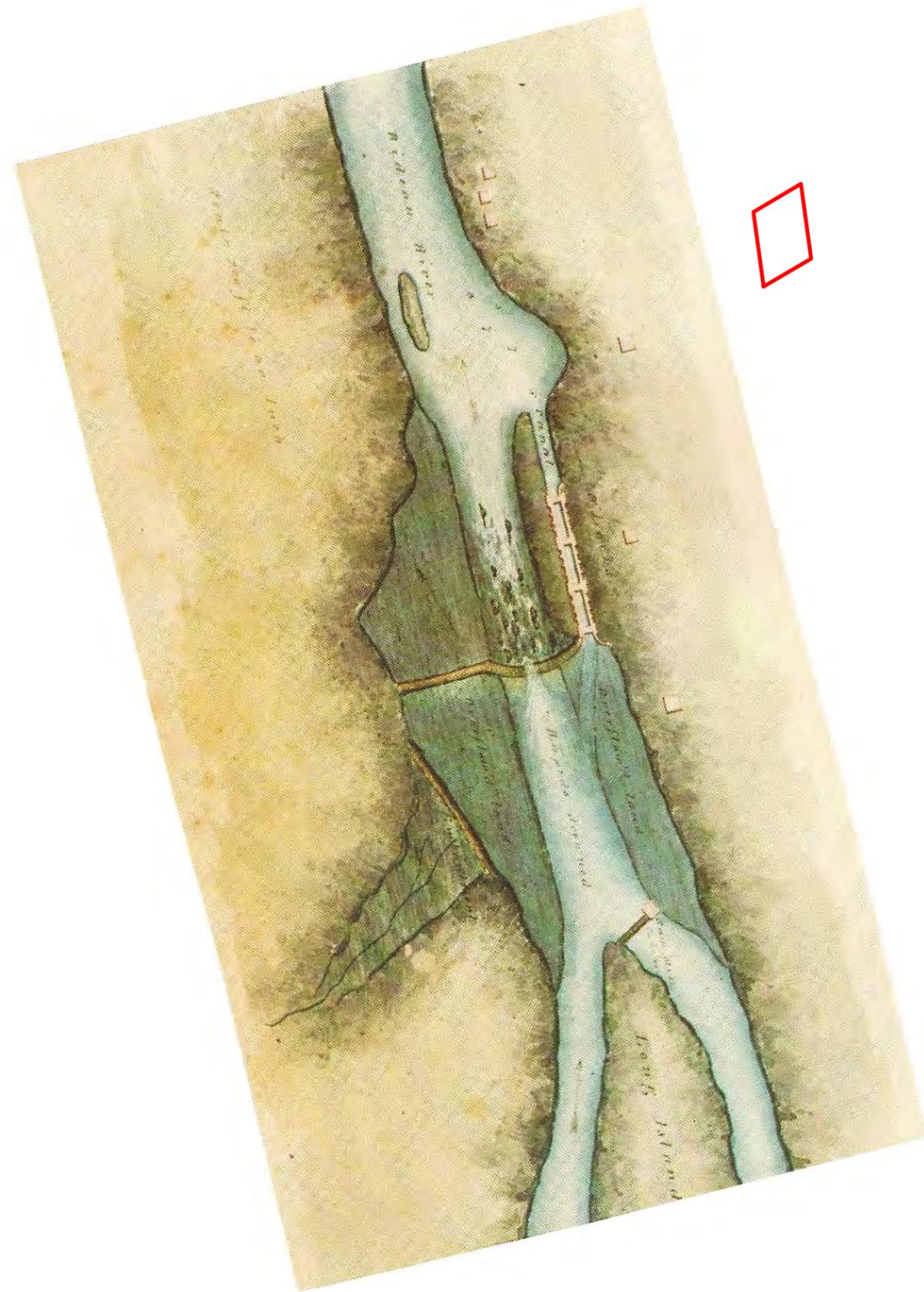
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NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

PROJECT  
STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

TITLE  
**1827 LONG ISLAND SURVEY PLAN**

CONSULTANT	YYYY-MM-DD	2020-02-28	
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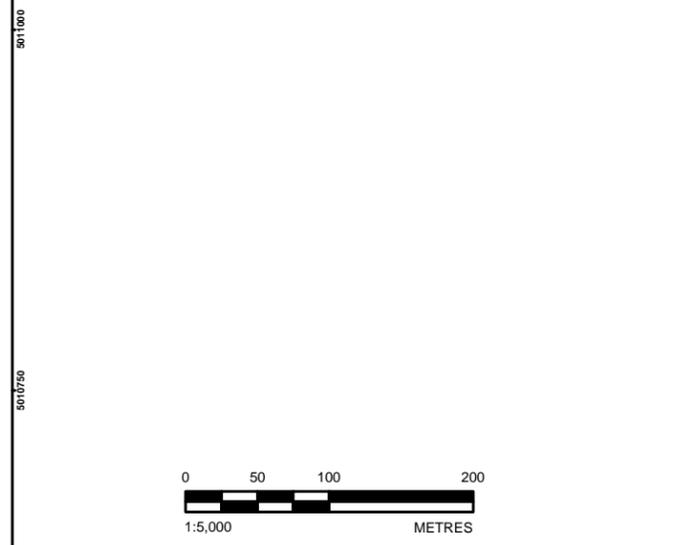


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**LEGEND**  
[Red rectangle symbol] STUDY AREA

**NOTE(S)**  
1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**  
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2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
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COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28



**CLIENT**  
NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

**PROJECT**  
STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

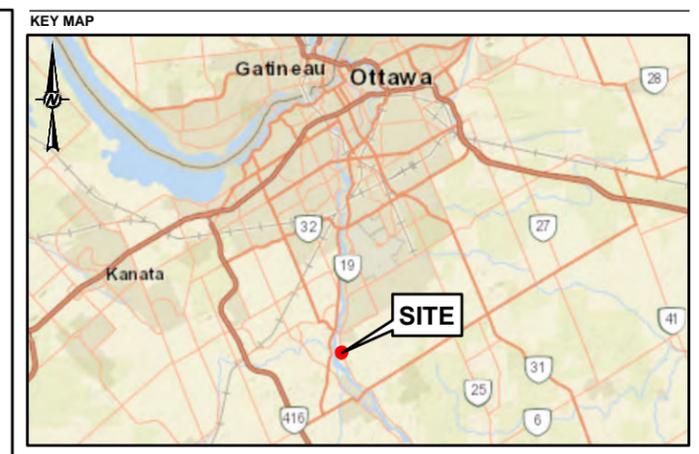
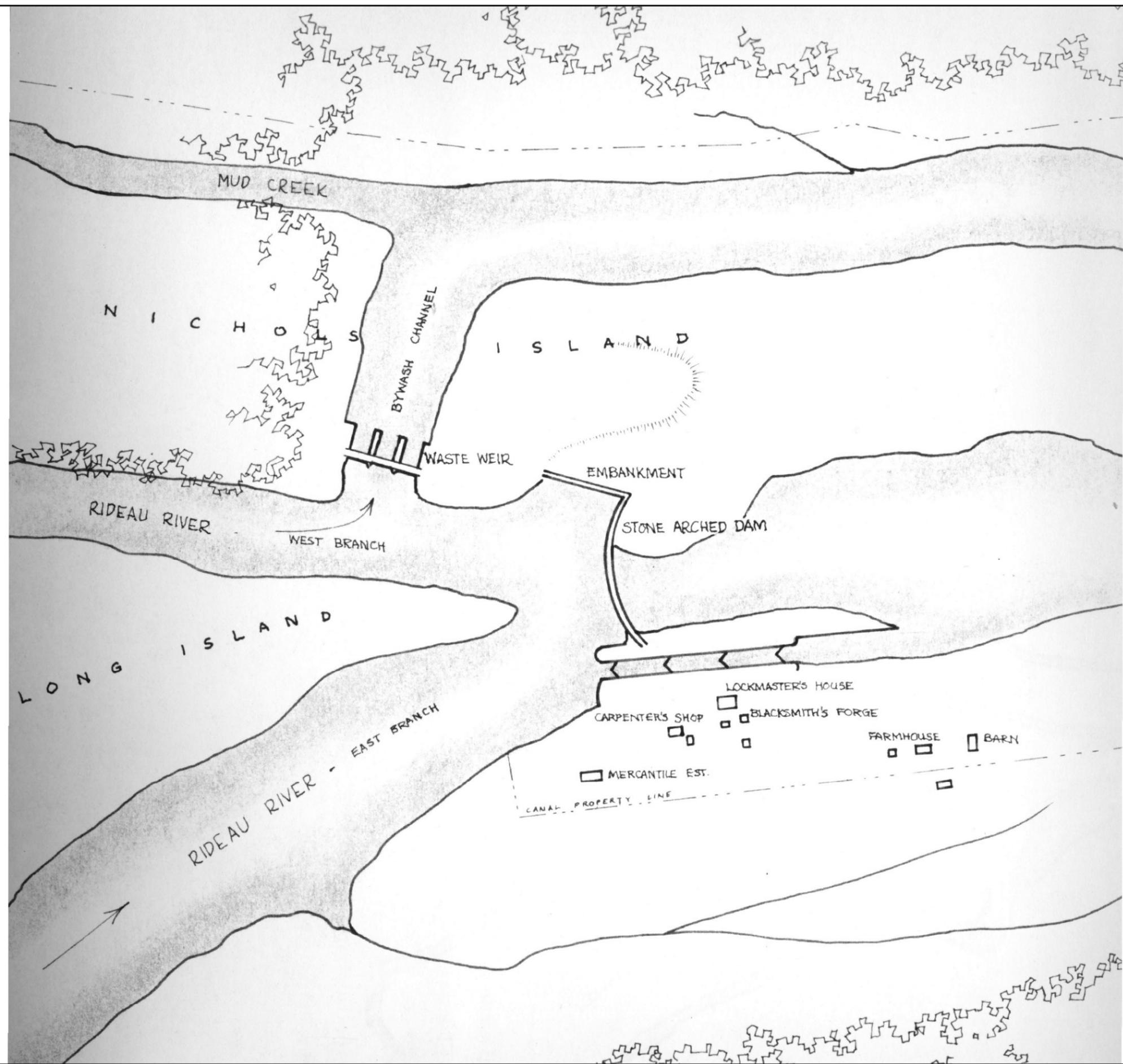
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**NOTE(S)**  
1. ALL LOCATIONS ARE APPROXIMATE

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2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

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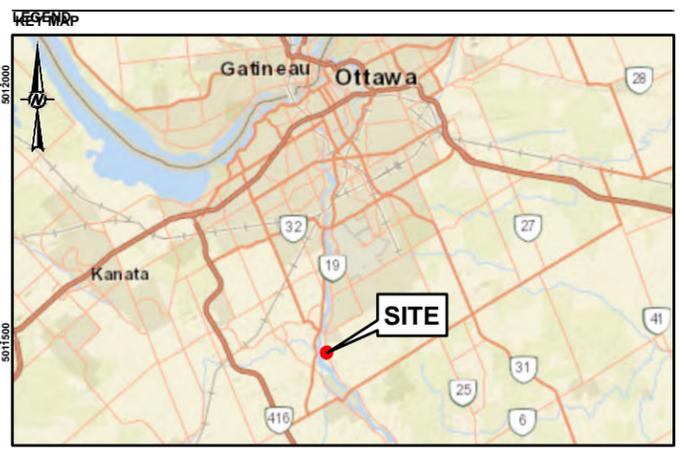
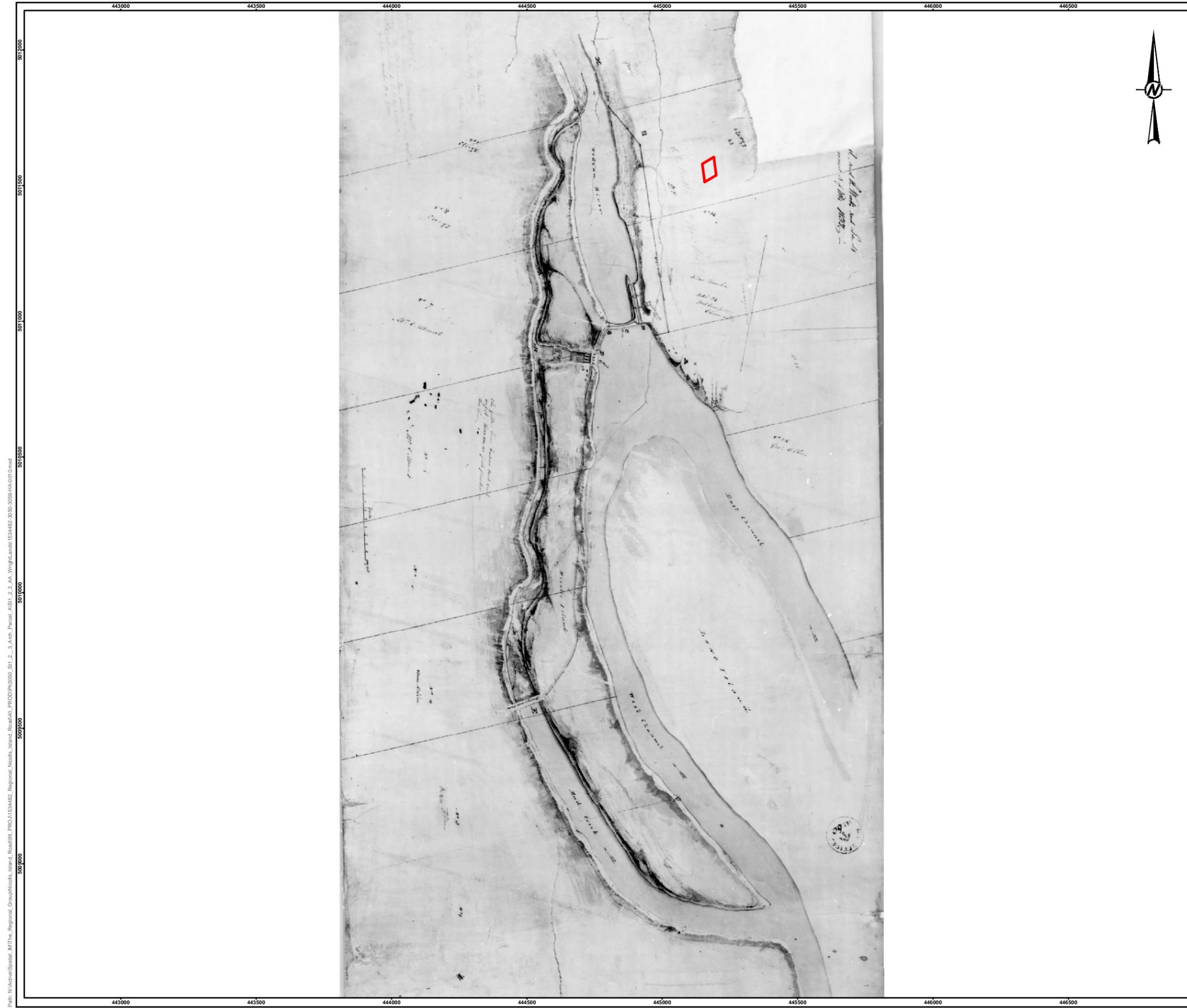
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**TITLE**  
1831 SITE PLAN INTERPRETATION

CONSULTANT	YYYY-MM-DD	2020-02-28
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PROJECT NO. 1534482	PHASE/TASK 3050/3056	REV. 0	MAP 9
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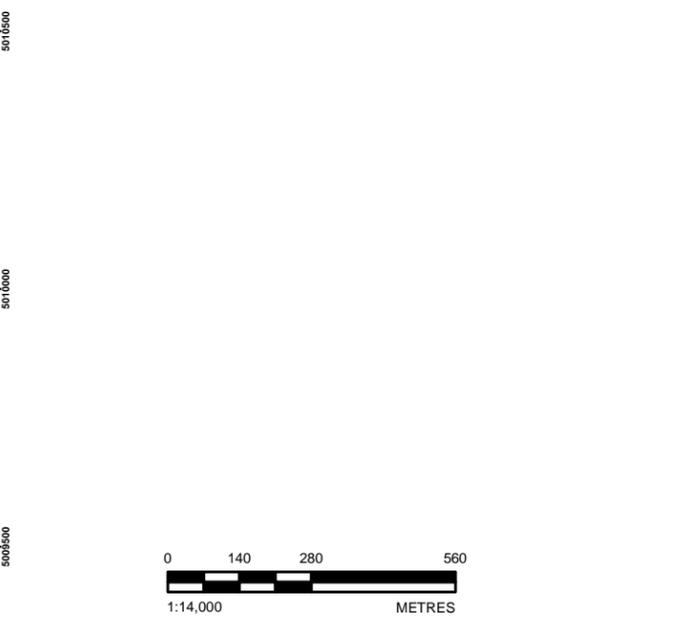


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**LEGEND**  
 STUDY AREA

**NOTE(S)**  
 1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**  
 1. 1832 PLAN OF LONG ISLAND AREA  
 2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
 3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
 COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28



**CLIENT**  
 NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

**PROJECT**  
 STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

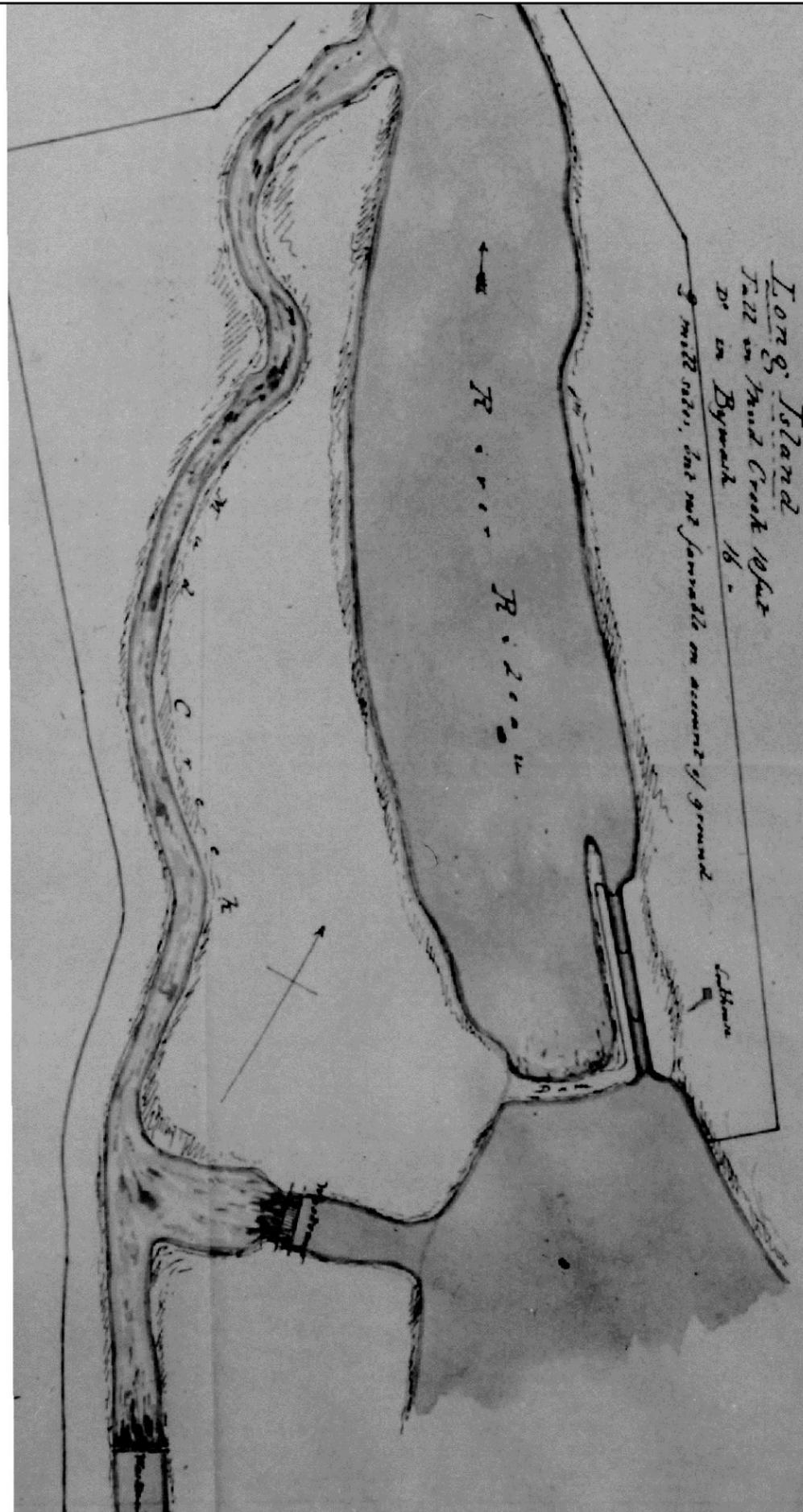
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CONSULTANT	YYYY-MM-DD	2020-02-28
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	APPROVED	BD

PROJECT NO. 1534482	PHASE/TASK 3050/3056	REV. 0	MAP <b>10</b>
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**NOTE(S)**  
 1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**  
 1. 1845 PLAN OF LONG ISLAND LOCK AREA  
 2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
 3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
 COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28

**CLIENT**  
 NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

**PROJECT**  
 STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

**TITLE**  
 1845 PLAN OF LONG ISLAND LOCK AREA

CONSULTANT	YYYY-MM-DD	2020-02-28
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REVIEWED	AM	
APPROVED	BD	



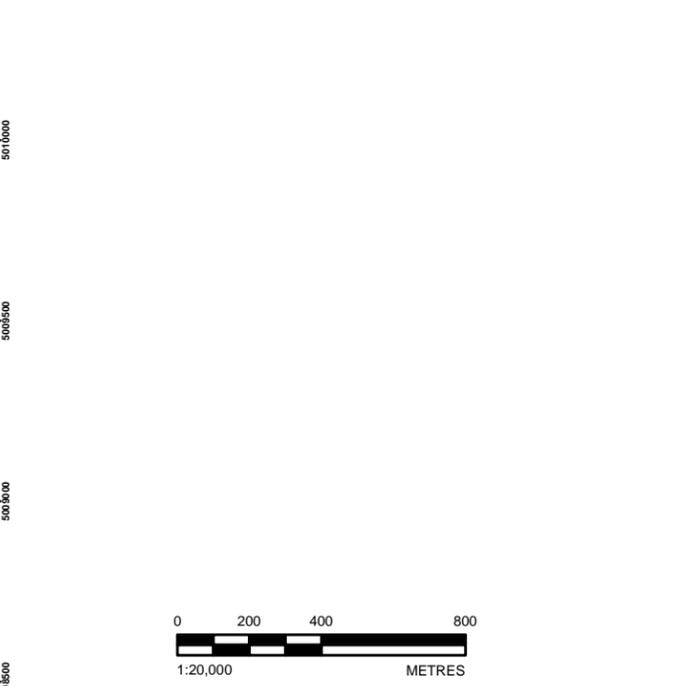


**LEGEND**

STUDY AREA

**NOTE(S)**  
1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**  
1. 1863 GLOUCESTER TOWNSHIP MAP  
2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28



CLIENT  
NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

PROJECT  
STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

TITLE  
**1863 GLOUCESTER TOWNSHIP MAP**

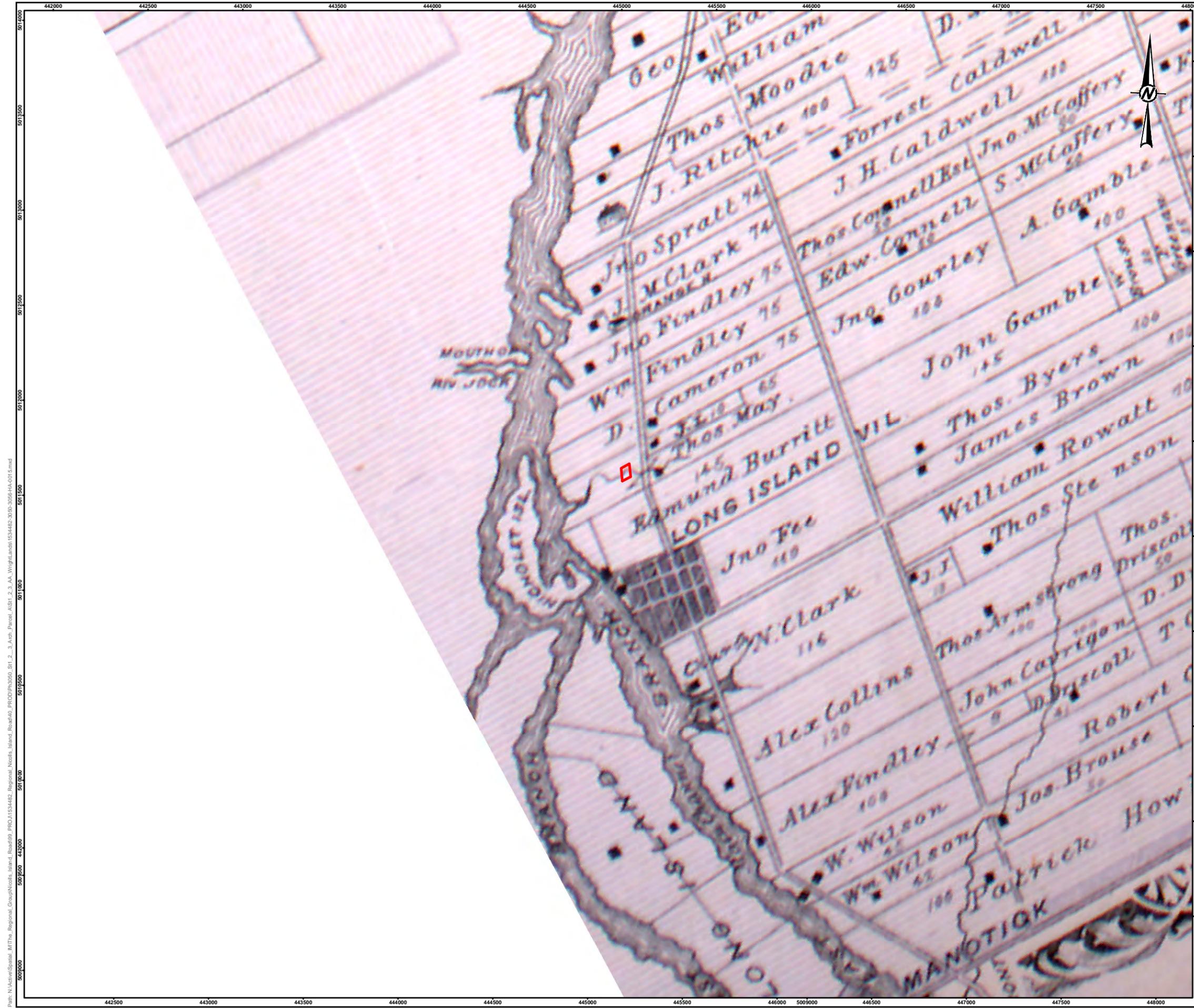
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DESIGNED	---	
PREPARED	BR	
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APPROVED	BD	

PROJECT NO. 1534482	PHASE/TASK 3050/3056	REV. 0	MAP <b>13</b>
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 26mm





SCALE 1:500,000

**LEGEND**

**NOTE(S)**

1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**

1. 1879 GLOUCESTER TOWNSHIP MAP  
 2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
 3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
 COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28



CLIENT  
 NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

PROJECT  
 STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

TITLE  
 1879 GLOUCESTER TOWNSHIP MAP

CONSULTANT	DATE
YYYY-MM-DD	2020-02-28
DESIGNED	---
PREPARED	BR
REVIEWED	AM
APPROVED	BD

PROJECT NO. 1534482 PHASE/TASK 3050/3056 REV. 0 MAP 15

Path: N:\Active\Spatial\_Maps\_Regional\_Group\Nicolls\_Island\_RoadK10\_PROJ1534482\_Regional\_Nicolls\_Island\_RoadK10\_PROJ1534482\_3050\_3056\_HA-0101.dwg

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 28mm

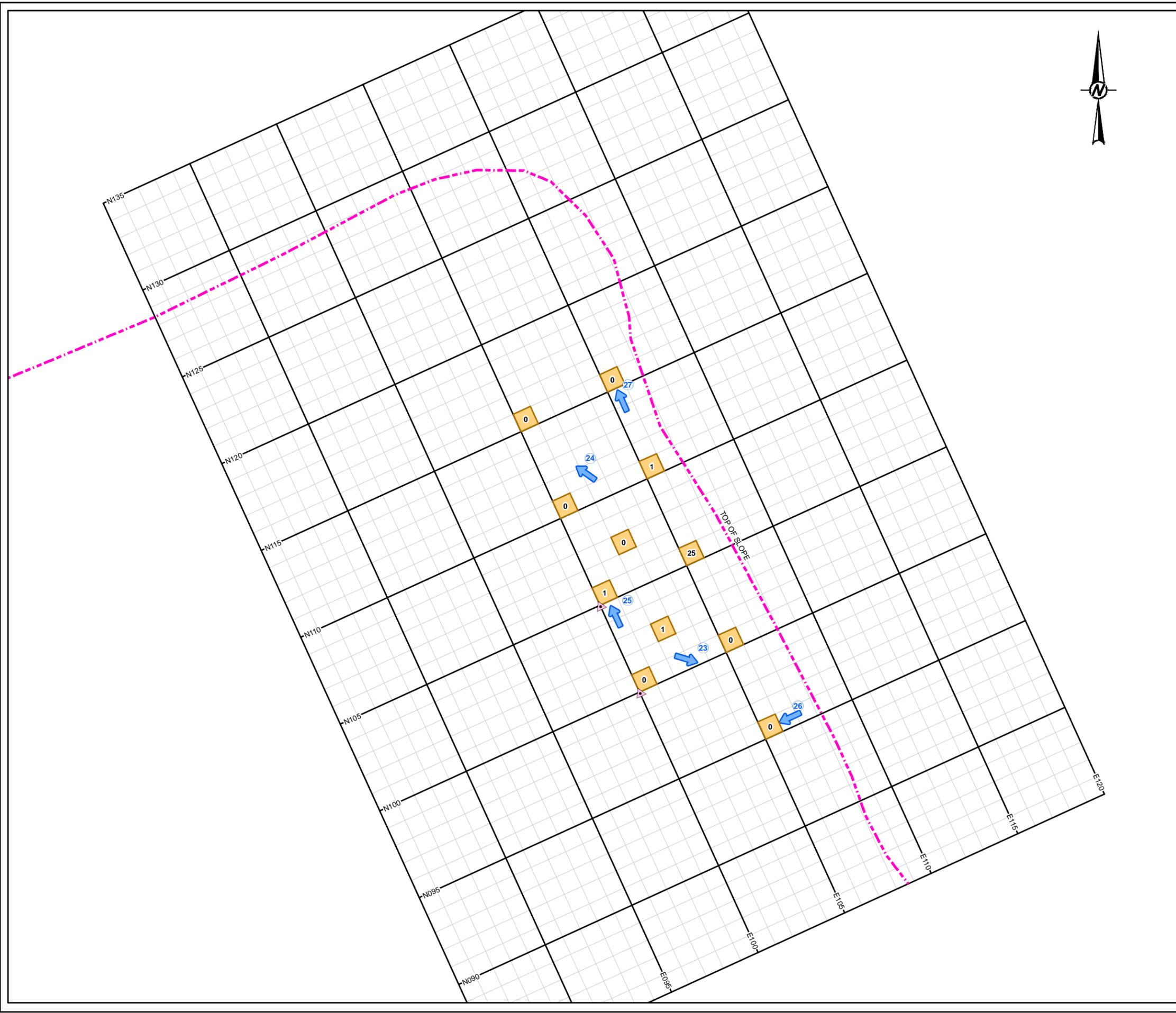








Print: N:\Active\Spatial\_BM\The\_Regional\_Group\Nicolls\_Island\_Road\09\_PROJ\1534482\_Regional\_Nicolls\_Island\_Road\00\_Planet\_ASB1\_2\_3\_AA\_MidnightLand\1534482\_3050\_3056\_HA-020.mxd



**LEGEND**

- 1 ARTIFACT COUNT
- ➡ PHOTO LOCATION AND DIRECTION
- ▲ DATUM
- EXCAVATION UNIT (1x1 METRE)
- - - - - TOP OF SLOPE
- 5 METRE GRID
- 1 METRE GRID

**NOTE(S)**  
1. ALL LOCATIONS ARE APPROXIMATE

**REFERENCE(S)**  
1. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2014  
2. SERVICE LAYER CREDITS: SOURCES: ESRI, HERE, GARMIN, USGS, INTERMAP, INCREMENT P, NRCAN, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), ESRI KOREA, ESRI (THAILAND), NGCC, (C) OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY  
3. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83  
COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28



CLIENT  
NICOLLS ISLAND HOLDINGS INC. C/O THE REGIONAL GROUP

PROJECT  
STAGE 1, 2 & 3 ARCHAEOLOGICAL ASSESSMENT WM BLYTH SITE (BhFw-126), PART LOT 23, CONCESSION 1 BROKEN FRONT, GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA

**TITLE**  
**STAGE 3 RESULTS AND PHOTO LOCATIONS**

CONSULTANT	YYYY-MM-DD	2020-02-28
DESIGNED	---	
PREPARED	BR	
REVIEWED	AM	
APPROVED	BD	

PROJECT NO. 1534482	PHASE/TASK 3050/3056	REV. 0	MAP <b>20</b>
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 28mm

## Signature Page

We trust that this report meets your current needs. If you have any questions, or if we may be of further assistance, please contact the undersigned.

### **Golder Associates Ltd.**



Aaron Mior, M.A.  
*Staff Archaeologist*



Bradley Drouin, M.A.  
*Associate, Senior Archaeologist*

AM/BD/ca

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**APPENDIX A**

**Previous Archaeological  
Assessments**

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
2000-016-086	1	Limebank/River/Leitrim and Armstrong Roads, Gloucester Township, City of Ottawa.	Archaeological Services Inc. (ASI)	2001		If any disturbance is proposed beyond the limits of the existing disturbed right-of-way's within the study area, those lands should be subject to Stage 2 archaeological assessment.
P051-0119-2006	1	North-South Corridor LRT Project, City of Ottawa.	Heritage Quest Inc.	2005	Summers Site (BhFw-20) and Larkin Site (BhFw-17) Mid-nineteenth century farmsteads	That a Stage 2 archaeological assessment be conducted for the Summers site (BhFw-20) located in Lot 19, Concession 2, Rideau Front and the Larkin site (BhFw-17), located in Lot 21, Concession 2, Rideau Front.
n/a	1 and 2	Riverside South High School, Part Lot 18, Concession 2 RF, Gloucester Township, City of Ottawa.	Adams Heritage Inc.	2006		That no further archaeological assessment is required.
P051-104-2006	2	Limebank Road Widening Project, Lots 9-21, Concessions 1 & 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2008	Birt Site (BhFw-18) Mid-nineteenth century farmstead	That a Stage 3 archaeological investigation be undertaken of the Birt Site (BhFw-18) located in Lot 19, Concession 2. No additional archaeological investigation is recommended for the remainder of the corridor.
P302-050-2009	1	RSDC Proposed Subdivision, Lots 20-22 BF, Lots 18-22, Concession 1 RF; Lots 18-21, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2009a		Stage 2 archaeological testing by a licensed archaeologist be undertaken of those areas to be affected by the proposed subdivision that have not been disturbed from previous twentieth century development.

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
P051-119-2006	2	North-South LRT Corridor, City of Ottawa.	Golder Associates Ltd.	2009b	Larkin Site (BhFv-17); Summers Site (BhFv-20); Cunningham Site (BhFv--19)	That a Stage 3 investigation be undertaken for the Larkin (BhFv-17) and Cunningham (BhFv-19) Sites. A Stage 3 is not required for the Summers Site (BhFv--20) because of severe disturbance.
P302-068-2009; P332-019-2010; P332-026-2011	2	Phase 5 RSDC Lots 17-20, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2010a	Birt Site (BhFw-18) mid-nineteenth century farmstead; John Birt Site (BhFw-24) early nineteenth century homestead	That a Stage 3 archaeological investigation of the Birt Site (BhFw-18) in the northern half of section 5X be undertaken prior to any development. That a Stage 3 archaeological investigation of the John Birt Site (BhFw-24) in the western half of section 5P and the central area of section 5H be undertaken prior to any development.
P332-022-2009	2	Phase 6 RSDC Lot 21, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2010b	Larkin Site (BhFw-17) Mid-nineteenth century to Mid-twentieth century homestead	That a Stage 3 archaeological investigation of the Larkin site (BhFv-17) be conducted prior to any disturbance of section 6C, and sections 6A, 6B, 6D, 6E, 6F and 6G require no further archaeological assessments.
P332-020-2009; P332-021-2010	2	Phase 7 RSDC Lots 21-22, Concession 1 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2010c		That no further archaeological investigation is required for Operation 7 and that archaeological clearance be provided for this area.
P332-023-2009; P332-024-2010; P332-028-2011	2	Phase 8 RSDC Lots 21-22, Concession 1 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2010d	Caldwell Site (BhFw-23) Nineteenth century farmstead	That a Stage 3 archaeological investigation of the Caldwell Site (BhFw-23) be conducted prior to any disturbance of section 8E.

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
P332-018-2009; P332-029-2010; P332-030-2011	2	Phase 9 RSDC Lots 20-22, BF Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2010e	Munro Site (BhFw-19) Archaic quartz bi-face and ground slate point	That a Stage 3 archaeological investigation of the Munro Site (BhFw-19) be undertaken prior to any development.
P311-030-2010; P311-059-2011	3	Birt Site BhFw-18, Phase 5 RSDC Lot 19, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2011a	Birt Site (BhFw-18) Mid-late nineteenth century farmstead	That no further archaeological work is required for the Birt Site.
P311-028-2010; P311-078-2011	1 and 2	John Birt Site (BhFw-24), Phase 5, Lot 19, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2011b	John Birt Site (BhFw-24) Mid-late nineteenth century log homestead	That further impacts to the John Birt Site should be avoided, and that the site be protected from any future disturbance under the <i>Ontario Heritage Act</i> . That should impacts to the site be unavoidable then a Stage 4 archaeological investigation is required for the John Birt Site. These should be conducted by a licensed archaeologist and conform to the Stage 4 excavation recommendations outlined in this report.
P311-026-2010; P311-062-2011	3	Larkin Site (BhFw-17), Phase 6 RSDC, Lot 21, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2011c	Larkin Site (BhFw-17) Mid-nineteenth century to mid-twentieth century homestead	That no further archaeological work is required for the Larkin Site (BhFv-17) and as a consequence that the Ministry of Tourism and Culture issue a letter concurring that there are no further archaeological concerns for this area.
P311-029-2010	3	Caldwell Site BhFw-23, Phase 8 RSDC, Lot 21, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2011d	Caldwell Site (BhFw-23) potential nineteenth century barn and outbuilding foundations	That no further archaeological assessments are required for the Caldwell Site and as a consequence that the Ministry of Tourism and Culture issue a letter of clearance for the site.

## APPENDIX A

### Previous Archaeological Assessments

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
P311-027-2010; P311-063-2011	3	Munro Site (BhFw-19), Phase 9 RSDC, Lot 22, BF Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2012	Munro Site (BhFw-19) Archaic quartz bi-face and ground slate point	That Stage 4 mitigation of impacts is not required for the Munro Site (BhFw-19).
P366-0038-2013	1	Phase 9-4 RSDC Lands, Part Lot 22, Concession 1, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2013		A Stage 2 archaeological assessment be conducted by a licenced archaeologist for the entire property prior to construction.
P369-0015-2013	1 and 2	1423 Earl Armstrong Avenue, Subdivision, Part Lot 20 Concession 2 RF, Gloucester Township, City of Ottawa.	Paterson Group	2013		No further archaeological study is required.
P003-0390-2013	1	Riverside South Development Corporation, Phase 13, Lots 21 & 22, Concession 1, Gloucester Township, City of Ottawa.	Adams Heritage	2013		Stage 2 assessment for area identified as possessing archaeological potential.
P386-0013-2014	4	John Birt Site (BhFv-24), Part Lot 19, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2014	John Birt Site (BhFw-24) mid-late nineteenth century log homestead	That the potential of significant archaeological resources within the eastern portion of the John Birt Site (BhFw-24), beyond the boundaries of the current Stage 4 archaeological investigation, should be avoided from any future impacts and that the remaining portion of the Site be protected from any future disturbance under the Ontario Heritage Act.
P386-0021-2014	1	Riverside South Phase 15 Lands, Part of Lots 22, 23 and 24, Broken Front Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2015a		Stage 2 archaeological assessment recommended for all lands identified as possessing archaeological potential.

## APPENDIX A

### Previous Archaeological Assessments

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
P386-0020-2014	1	Riverside South Phase 16, Part of Lot 18, Concession 1 Broken Front, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2015b		Stage 2 archaeological assessment recommended for all lands identified as possessing archaeological potential.
P386-022-2014	1	Riverside South Phase 12, Part of Lots 20 and 21, Broken Front Concession, Former County of Carleton, City of Ottawa, Ontario.	Golder Associates Ltd.	2015c		Stage 2 archaeological assessment recommended for all lands identified as possessing archaeological potential.
P386-0023-2014	1	Riverside South Phase 14, Part of Lot 23, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2015d		Stage 2 archaeological assessment recommended for all lands identified as possessing archaeological potential.
P366-0051-2015	2	Riverside South Phase 16, Part of Lot 18, Concession 1 Broken Front, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2015e		No further archaeological assessment is required.
P366-0048-2015	2	Riverside South Phase 15 Lands, Part of Lots 22, 23 and 24, Broken Front Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2016a	BhFw-108 and BhFw-109	Stage 3 assessments recommended for BhFw-108 and BhFw-109. No additional assessments recommended for remainder of property.
P366-0049-2015	2	Riverside South Phase 12, Part of Lots 20 and 21, Broken Front Concession, Former County of Carleton, City of Ottawa, Ontario.	Golder Associates Ltd.	2016b	BhFw-110, BhFw-112, BhFw-113, BhFw-114 and BhFw-115	Stage 3 assessments recommended for BhFw-110, BhFw-112 and BhFw-113. No additional assessments recommended for remainder of property.
P366-0046-2015	2	Riverside South Phase 14, Part of Lot 23, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2016c	BhFw-106 and BhFw-107 and BhFw-116	Stage 3 assessments recommended for BhFw-106 and BhFw-107. No additional assessments recommended for remainder of property.

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
P385-0018-2016	1 and 2	Lot 23, Concession 1 Broken Front, Geographic Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2017a	Wright Lands 8 (BhFw-119) representing an early-mid 19 <sup>th</sup> century occupation and Wright Lands 9 (BhFw-120) representing a mid to late 19 <sup>th</sup> century occupation	Stage 3 assessments recommended for BhFw-119 and BhFw-120. No additional assessments recommended for remainder of property.
P1077-0021-2016	1 and 2	Riverside South Lands, East of 805-809 River Road, Part of Lots 23 & 24, Broken Front Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2017b		No further archaeological assessment is required.
P366-0055-2015, P366-0059-2015	3	Concession 1 Broken Front, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2017c	BhFw-110 and BhFw-112	Stage 4 mitigation excavation recommended for registered sites BhFw-110 and BhFw-112 should development encroach on these sites
P366-0052-2015, P366-0053-2015	3	Riverside South Phase 14, Part of Lot 23, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2017d	BhFw-106 and BhFw-107	Stage 4 mitigation excavation recommended for registered site BhFw-107. No additional archaeological assessment required for registered site BhFw-106.
P366-0056-2015	3	Riverside South Phase 15 Lands, Part of Lot 23, Broken Front Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2017e	BhFw-108	Stage 4 mitigation excavation recommended for registered site BhFw-108.

## APPENDIX A

### Previous Archaeological Assessments

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
P366-0054-2015	3	Riverside South Phase 15 Lands, Part of Lot 22, Broken Front Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2017f	BhFw-109	No further archaeological assessment is required.
P415-0106-2016	1	Riverside 5 Storm Water Management Pond, Part of Lots 22 and 23, Concession 1, Gloucester Township, City of Ottawa.	Stantec Consulting	2017		Stage 2 archaeological assessment recommended for all lands identified as possessing archaeological potential.
P378-0024-2017	1	Riverside South Development Phase 13 Additional City Lands, Part of Lot 22, Concession 1 RF, Gloucester Township, City of Ottawa	Patterson Group	2017		No further archaeological assessment is required.
P1077-0040-2017	3 (CSP)	Lot 23, Concession 1 Broken Front, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2018a	Blythe Site (BhFw-120) representing 19 <sup>th</sup> century occupation	Stage 3 test unit excavation recommended for registered site BhFw-120.
P1077-0039-2017	3	Lot 23, Concession 1 Broken Front, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2018b	Wright Lands 9 (BhFw-120) representing 19 <sup>th</sup> century occupation	Stage 4 mitigation excavation recommended for registered site BhFw-119.
P366-0061-2016	4	Riverside South Phase 15 Lands, Part of Lot 23, Broken Front Concession, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2018c	BhFw-108	No further archaeological assessment is required.

**APPENDIX A**  
Previous Archaeological Assessments

MTCS PIF Number	Assessment Stage	Project Location	Consultant	Year	Identified Sites	Recommendation(s)
P415-0175-2018, P415-0176-2018	1 and 2	Additional Riverside 5 Storm Water Management Pond, Part of Lot 22, Concession 1, Gloucester Township, City of Ottawa.	Stantec Consulting	2018		No further archaeological assessment is required.
P369-0059-2018	1	879 River Road, Part of Lot 23, Broken Front Concession, Gloucester Township, City of Ottawa.	Patterson Group	2018		Stage 2 archaeological assessment recommended for the entire property.
P366-0060-2016	4	Riverside South Phase 14, Part of Lot 23, Concession 2 RF, Gloucester Township, City of Ottawa.	Golder Associates Ltd.	2019	BhFw-107	No further archaeological assessment is required.

**APPENDIX B**

**Artifact Inventory**

ID	Prov 1	Material 1	Material 2	Function 1	Function 2	Object	Fragment	Attribute 1	Attribute 2	Manufacture	Alteration	# of Artifacts	Note
19228	PTP 2 (E105 N110)	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
19229	PTP 1 (E105 N105)	metal	iron	structural	hardware	nail: lath	incomplete	rectangular head		cut		1	
19230	PTP 1 (E105 N105)	ceramic	clay: white	personal/societal	smoking	smoking pipe	stem	plain				1	
19231	PTP 1 (E105 N105)	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown: light			1	
19232	PTP 1 (E105 N105)	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	stamped	blue		spalled	2	stamped/sponged?
19233	E105 N105 (PTP 1)	glass	indeterminate	indeterminate		holloware: polygonal	body	plain	clear/colourless			1	looks like a modern disruption
19234	E105 N105 (PTP 1)	metal	iron	indeterminate		wire	incomplete					1	
19235	E105 N105 (PTP 1)	metal	iron	structural	hardware	nail: lath	complete	rectangular head		cut		1	
19236	E105 N105 (PTP 1)	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		wrought		3	
19237	E105 N105 (PTP 1)	ceramic	coarse earthenware: red	food/beverage	indeterminate	holloware: cylindrical	body	glaze: lead	brown			3	
19238	E105 N105 (PTP 1)	ceramic	yellowware	food/beverage	tableware	holloware: cylindrical	body	plain	clear/colourless		spalled	1	
19239	E105 N105 (PTP 1)	ceramic	refined white earthenware	food/beverage	tableware	flatware	rim	moulded	clear/colourless			1	
19240	E105 N105 (PTP 1)	ceramic	refined white earthenware	food/beverage	tableware	plate: indeterminate	body	transfer printed	blue			5	likely all Willow pattern
19241	E105 N105 (PTP 1)	ceramic	refined white earthenware	food/beverage	tableware	holloware: cylindrical	body	transfer printed	brown			1	
19242	E105 N105 (PTP 1)	ceramic	refined white earthenware	food/beverage	tableware	saucer	rim	transfer printed	aqua			1	
19243	E105 N105 (PTP 1)	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			7	
19244	E102 N102	ceramic	refined white earthenware	food/beverage	tableware	indeterminate	body	plain	clear/colourless			1	
19245	E100 N105	metal	iron	structural	hardware	nail: common	incomplete	indeterminate		Indeterminate		1	

PTP – Positive Test Pit



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