City of Cornwall

Draft Archaeological Management Plan

May 2023

Cornwall
ONTARIO CANADA

WSP GOLDER

Distribution List

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Land Acknowledgement

We will begin by acknowledging that we are gather, work and live on traditional lands of the Mohawks of Akwesasne. These lands and waterways connect to the vast traditional areas of the Haudenosaunee, Algonquin, Huron-Wendat, and Abenaki Peoples.

At this time, we would also like to recognize the contributions that the Inuit and other Indigenous Peoples have made, both in shaping and strengthening this community and our Provinces and Territories within Canada.

We recognize and deeply appreciate their historic connection to this land.

As settlers, we are grateful for the opportunity to meet here, and we thank all the generations of Indigenous Peoples who have taken care of this land before us. As we move towards healing past injustices, we must acknowledge the wrongs that have been done and work towards truth and reconciliation for a unified path of co-existence and prosperity.

Executive Summary

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

The City of Cornwall's Archaeological Management Plan (AMP) has been developed to serve as a guide to assist the City in the protection and management of its archaeological resources. One of the most significant risks to archaeological resources is land disturbance caused by development projects. In their role as approval authorities for developments and land planning, municipalities have the responsibility under the Ontario Heritage Act, the Planning Act, and the Provincial Policy Statement (2020) to protect archaeological resources on lands they administer. An AMP is a tool to support municipal policy and development decisions for protecting archaeological resources.

This AMP can also be used by development proponents, landowners, consultant archaeologists, and the general public to identify locations within the city where archaeological assessments are required. AMPs provide a transparent means of showing the requirements for archaeological assessments, which can help in project planning and help reduce the risk of unexpected impacts to archaeological resources.

The City of Cornwall's AMP has the following five (5) objectives:

1) outline policy and protocols for managing archaeological resources;

2) compile known cultural heritage and archaeological evidence;

3) develop an archaeological site potential model;

4) outline an Indigenous engagement protocol, and;

5) provide recommendations to conserve archaeological resources.

In order to meet these objectives, the AMP summarizes existing legislation and protocols for the protection and management of archaeological resources at the federal, provincial, and municipal levels.

The AMP makes recommendations for the management of archaeological resources within Cornwall. The role of the Federal Government, the Province, consultant archaeologists, development proponents, and the City are discussed. The AMP includes recommendations for which types of development applications the City of Cornwall should require archaeological assessments. Recommendations are also provided for the management of the AMP and its accompanying geospatial data to assist in its long-term relevance.

This AMP also includes an Indigenous engagement protocol which was developed through consultation with local Indigenous stakeholders, specifically the Mohawk Council of Akwesasne. The engagement protocol is intended to help consultant archaeologists, developers, and the municipality know when to engage Indigenous communities.

Finally, the AMP provides a broad overview of the Indigenous and historical context of Eastern Ontario and the City of Cornwall. It also summarizes previous archaeological assessments conducted within the City and identifies registered archaeological sites. A significant component of the AMP is the mapping of archaeological potential, which identifies where archaeological assessments will be required within the City of Cornwall prior to ground disturbance activities.

Project Personnel

Project Manager	Helen Moore, B.A. (R359)
Report Writer	Randy Hahn, Ph.D. (P1107)
	Stephen Jarrett, M.A. (P385)
Planners	Nadia De Santi, MCIP, RPP
	Jillian MacDonald, MCIP, RPP
Cultural Heritage Specialist	Lindsay Benjamin, MAES, RPP, MCIP, CAHP
Senior Review	Michael Teal, M.A. (P364)
	Aaron Mior, MMA (P1077)

Abbreviations

AMP	Archaeological Management Plan
ARRO	Aboriginal Rights and Research Office (Mohawks of Akwesasne)
BAO	Bereavement Authority of Ontario
EA Act	Environmental Assessment Act
FLR	Field Liaison Representatives
m	Metre(s)
MCA	Mohawk Council of Akwesasne
MCM	Ministry of Citizenship and Multiculturalism
MMAH	Ministry of Municipal Affairs and Housing
MNO	Métis Nation of Ontario
ND	No Date
PIF	Project Information Form
PPS	Provincial Policy Statement
UNESCO	United Nations Educational, Scientific and Cultural Organization

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MAPS

APPENDICES

1.0 INTRODUCTION

This Archaeological Management Plan (AMP) is a tool for the City of Cornwall (Maps 1 and 2, pp. 3-4) to help support the implementation of municipal policies and procedures for identifying and conserving archaeological resources. In addition to providing a summary of the region's cultural history, it also serves as a mechanism for determining archaeological potential, it identifies areas of archaeological potential through mapping, and provides an inventory of known archaeological sites. While this AMP is intended to guide the City of Cornwall in making decisions that could impact archaeological resources, it can also be used by developers, consultant archaeologists, landowners, and the general public when assistance is needed in identifying the need for archaeological assessment within the city.

Archaeological resources are the physical material remains of past human activity that can be found both on land and submerged underwater. They are limited in number and can never be replaced once destroyed. One of the biggest risks to the preservation of archaeological resources are development projects (Coleman and Williamson 1994), which often result in significant alterations to the landscape that can in turn impact archaeological resources. Once impacted, all the information and insight these resources can provide into Ontario's past is lost forever.

Both terrestrial and marine archaeological resources in Ontario are protected under the Ontario Heritage Act. Any willful disturbance or alteration to an archaeological site, except for those with a valid archaeological license issued by the Ontario Ministry of Citizenship and Multiculturalism (MCM), can be subject to fines up to $1,000,000, imprisonment for up to one year, or both. As much of the risk to archaeological sites comes from development projects, the Province of Ontario has transferred the responsibility to review development plans and infrastructure projects to municipalities. In their role as approval authorities, municipalities such as the City of Cornwall are required under the Planning Act to be consistent with the Province's legislation for the protection of archaeological resources.

The City of Cornwall has identified one of the goals in its Official Plan (Approved by the Ministry of Municipal Affairs and Housing, April 11, 2018) as the identification and preservation of significant cultural heritage resources through the use of tools such as a municipal archaeological plan (Cornwall 2018, Section 10.2). "Cultural heritage resources" are defined as "buildings, structures, monuments or artifacts of cultural heritage value or interest as well as areas of unique, representative or effective urban composition, streetscape, landscape or archaeological value or interest". To accomplish this goal, the Official Plan highlights the need for the creation of an AMP and Indigenous engagement protocol for the City.

As previously stated, this AMP is intended to guide the City of Cornwall in the management and conservation of the archaeological resources within the lands it administers. It will do this by fulfilling the following objectives:

1) outline policy and protocols for managing archaeological resources,

2) compile known cultural heritage and archaeological evidence,

3) develop an archaeological site potential model,

4) outline an Indigenous engagement protocol, and;

5) provide recommendations to conserve archaeological resources.

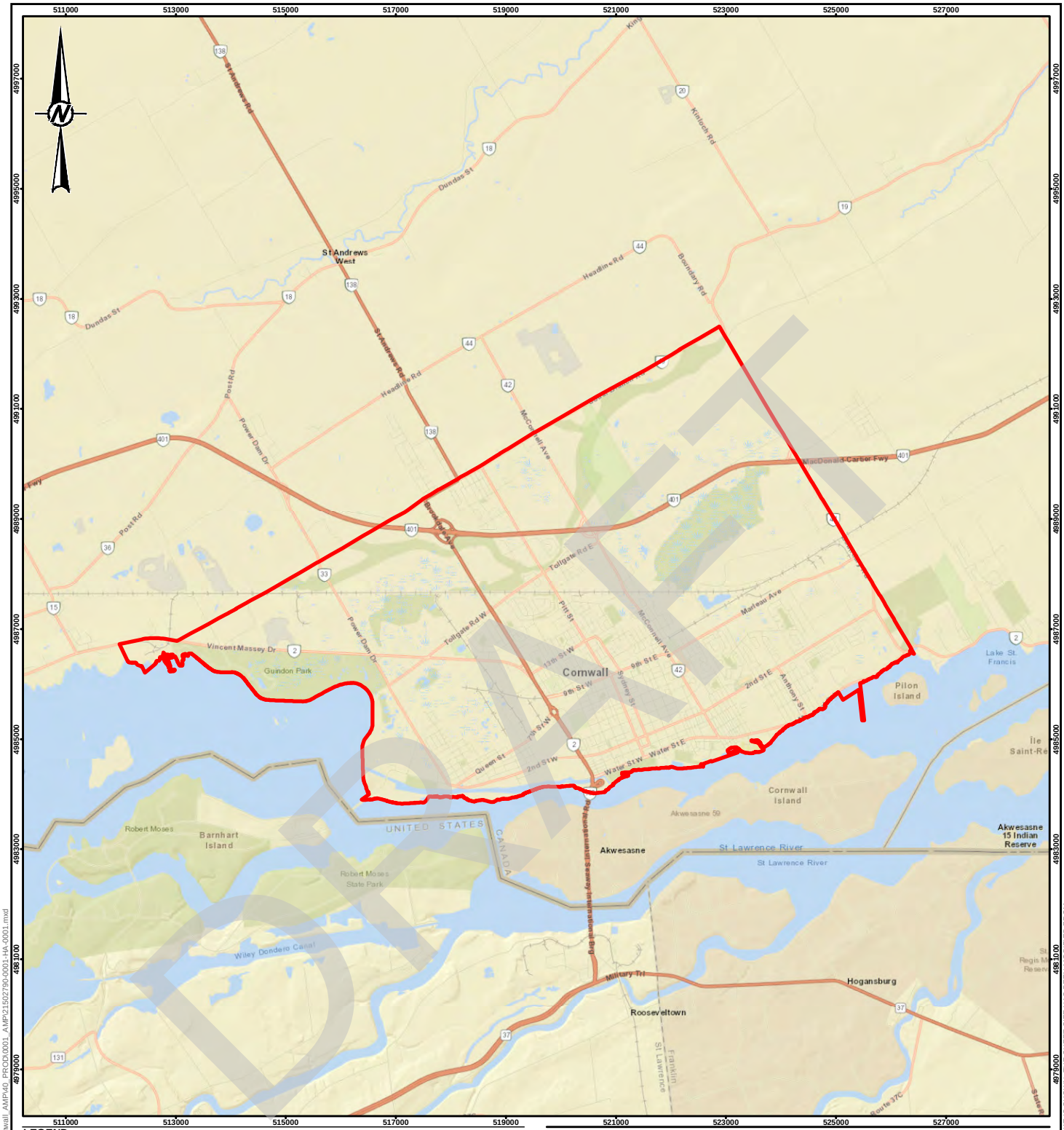
The AMP includes five (5) Sections that address the goals outlined above. The present section provides a general introduction to the AMP and relevant definitions.

Section 2.0 discusses why archaeological resources are worth protecting. It also summarizes policies and protocols for managing archaeological resources, including the existing legislative framework at the provincial and municipal level.

Section 3.0 provides a summary of the role of the Federal Government, the Province of Ontario, the City, consultant archaeologists, and the proponents in the archaeological review process. It also makes recommendations on which types of applications should require archaeological assessments and what to do in the case of unanticipated archaeological finds or human remains. Recommendations are also provided for updating the official plan and the geospatial data associated with the archaeological site potential mapping. This is to assist in the long-term relevance of the AMP and the protection of sensitive archaeological information.

Section 4.0 outlines the Indigenous engagement protocol, which was developed with the consultation of the Mohawks of Akwesasne and Huron-Wendat First Nation. Outreach was also conducted to the Métis of Ontario.

Section 5.0 provides a general overview of the cultural history of Eastern Ontario and the City of Cornwall, information on the general environment, and identifies of features of archaeological potential within the City. Additionally, it lists registered archaeological sites, summarizes previous archaeological assessments, and identifies designated and non-designated heritage properties within the City. Finally, Section 5.0 also presents the archaeological potential mapping developed for the City of Cornwall.



LEGEND

STUDY AREA

0 1,000 2,000 4,000

1:100,000 METRES

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. 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
2. PROJECTION: TRANSVERSE MERCATOR DATUM: NAD 83
COORDINATE SYSTEM: UTM ZONE 18 VERTICAL DATUM: CGVD28

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
KEY PLAN

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-04-06
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT NO.	CONTROL	REV.	MAP
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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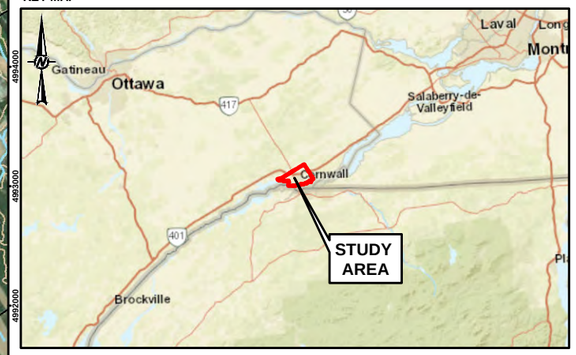
KEY MAP



SCALE 1:2,400,000

LEGEND

- STUDY AREA
- ROADWAY
- RAILWAY
- UTILITY
- WATECOURSE
- TOPOGRAPHIC CONTOUR, METRES

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 2022
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 © 2022 MICROSOFT CORPORATION © 2022 MAXAR ©CNES (2022) DISTRIBUTION AIRBUS DS
3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

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1:50,000 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
SITE PLAN

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-04-06
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
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2.0 POLICIES AND PROTOCOLS FOR MANAGING ARCHAEOLOGICAL RESOURCES

2.1 Why Protect Archaeological Resources?

Humans have occupied Ontario for at least 11,000 years. Much of the evidence for Ontario's early history either comes from Indigenous oral histories passed down through generations or the preserved remains of past human activities that have become part of the archaeological record. These archaeological resources include the remains of campsites, settlements, and burials that can be identified through the presence of archaeological resources such as artifacts or structural features. The introduction of written sources following the arrival of Europeans provide an additional resource for more recent history, but these sources also reflect the biases and prejudices of their authors. Certain peoples, groups and social classes are underrepresented in the historical record. Similarly, many aspects of daily life were taken for granted and not written down. Archaeology, the study of the human past through material remains, is often one of the few means available for studying the ancient past and can provide an avenue for examining aspects of Ontario's more recent history that were neglected in written historical accounts.

Archaeological resources are inherently fragile and non-renewable in nature (Coleman and Williamson 1994). Much of the information that can be obtained from an artifact is lost once it is removed from its original depositional context. While all archaeological sites are impacted by natural erosional processes, by far the biggest threat to archaeological resources is development. Beginning with Euro-Canadian immigration and the conversation of the natural environment to agricultural lands, human impacts to archaeological resources have been increasing at an alarming rate (Coleman and Williamson 1994). Population growth and urbanization during the 20th century has resulted in the significant loss of archaeological resources as lands containing archaeological sites are developed to meet the demands of Ontario's growing population.

Due to the impacts of development, Ontario's archaeological sites, especially those associated with the distant past, become increasingly rare. It is therefore important to protect the archaeological resources that remains as to prevent further loss of one of the primary sources of Ontario's history.

2.2 Overview of the Evolution of Resource Management in Ontario

Archaeological Resource Management in Ontario has its beginnings with the passing of the 1953 Archaeological and Historic Sites Protection Act (Ontario 1960). This act gave the province the authority to protect some archaeological resources through the power to designate significant archaeological sites, require permits to alter archaeological sites and to seize looted artifacts. However, the provincial government's involvement in archaeology was limited at this time, mostly consisting of designating a small number of archaeological sites and providing funds for a few research projects (Ferris 2002). An increase in trained archaeologists during the 1960s and 1970s, many of whom would go on to pursue careers as government employees, helped grow a vocal archaeological community that raised the importance of archaeology as part of Ontario's cultural heritage.

Additional legislation was passed in the 1970s and 1980s with the Ontario Heritage Act, the Environmental Assessment Act, and the Planning Act where archaeological concerns were part of their legislative mandate. The Ontario Heritage Act provided additional measures to implement licensing and reporting systems for the practice of archaeology in the province. Furthermore, the act acknowledges that the conservation and protection of archaeological resources is a provincial responsibility, which led to the establishment of the Ministry of Culture and Recreation (Ferris 2002), now known as the Ministry of Citizenship and Multiculturalism (MCM). The Environmental Assessment Act was passed in 1976 with the purpose of "the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario

environment" (Section 2). As the act defines environment to include "the social, economic and cultural conditions that influence the life of humans or a community" (Section 1c) and includes "any building, structure, machine or other device or thing made by humans" (Section 1d), the environment includes archaeological resources such as artifacts and the remains of structures. The Environmental Assessment Act applies to public and private infrastructure projects such as roads, landfills, sewage, etc. and ensures that environmental assessments are conducted in advance of these projects. Heritage and archaeological assessments are typically included as part of the environmental assessments.

The Planning Act defined how the land use planning system works, who makes decisions, how to resolve disputes and seek public input, and provincial and municipal roles in planning administration. Planning activities undertaken by the private sector would also be required to mitigate development impacts to archaeological sites.

Increased land development during the 1980s highlighted the risk of impacts to archaeological resources. Many of the early archaeological assessments completed to mitigate archaeological sites from development impacts were completed by Ministry archaeologists supported by students and volunteers (for example: Fox 1982; Kenyon and Ferris 1984). These had mixed results and Ministry archaeologists did not have the capacity to carry out archaeological fieldwork at a pace to match development (Ferris 2002). As Ministry archaeologists became more familiar with development review processes, they became more effective in utilising the Environmental Assessment and Planning Acts to conserve archaeological resources. Several municipalities also began to develop archaeological management plans to document the archaeological resources within their boundaries.

As locally approved development projects represented the majority of ground disturbance, the province decided that screening at the municipal level would better ensure the protection of archaeological resources (ASI 2019). As a result, the 1990s saw a shift in the role of approval authority from the province to municipal governments with the province retaining an advisory role. Similarly, as the province stopped attempting to conduct all archaeological resource management directly and proponents were given the responsibility to pay to meet the increased requirements for archaeological conservation, consultant archaeologists began to take on more of the archaeological fieldwork to mitigate development impacts to archaeological resources (Ferris 2002). The MCM published the 1993 Archaeological Assessment Technical Guidelines to provide some general guidelines for the field and reporting methodology for consultant archaeologists.

The Provincial Policy Statement*,* a later addition under the Planning Act, provides further direction to approval authorities to protect heritage resources and landscapes (Ontario 2020). Municipalities are to prevent development or site alteration on lands containing archaeological resources unless these archaeological resources have been conserved, not to permit development or site alteration on adjacent lands to protected heritage properties, and encourage the development of archaeological management (Section 2.6). Planning authorities are also directed to engage with Indigenous communities and consider their interests when identifying, protecting and managing archaeological and cultural heritage resources (Section 2.6.5).

In 2011, the MCM released the Standards and Guidelines for Consultant Archaeologists which describes the expectations for archaeological assessments to ensure a minimum requirement for archaeological fieldwork, analysis, and reporting (MCM 2011a). Consultant archaeologists use the Standards and Guidelines as the basis for recommending archaeological potential and making recommendations for the identification and mitigation of archaeological resources on non-Federal lands within Ontario. This document replaced the MCM 's (1993) earlier Archaeological Assessment Technical Guidelines.

In 2016, the MCM (2016) released the Criteria for Evaluating Marine Archaeological Potential. This document is a screening checklist for non-specialists which is intended to assist in the determining the need for a marine archaeological assessment. At this time, there are no standards and guidelines for marine archaeology.

The MCM has also put out a number of technical bulletins to expand upon specific topics of concern. The Engaging Aboriginal Communities in Archaeology (MCM 2011b) draft technical bulletin provides additional guidance and standards for engaging Indigenous communities in each stage of an archaeological project. The Archaeology of Rural Historical Farmsteads (MCM 2021) draft technical bulletin introduced additional standards to ensure that historical 19th century farmstead sites associated with underrepresented groups such as Indigenous peoples, were being subject to archaeological assessment.

2.3 Existing Legislative Framework

The management of archaeological resources in Ontario is guided by provincial and municipal legislation and planning policy regimes, as well as advice developed at the federal level. These policies have varying levels of authority at the municipal level, though generally all are considered when making decisions about managing archaeological resources. Section 7.0 of the AMP contains URLs to the legislation discussed below.

2.3.1 Federal Legislation

Federal lands located within the City of Cornwall are subject to federal policies and legislation that are separate from those established by the Government of Ontario. Federal lands include national parks, lands belonging to federal departments, and lands being developed by the federal government. The Archaeological Heritage Policy Framework (1990) indicates that it is a policy of the Government of Canada to protect and manage archaeological resources (Parks Canada 2017). While there is no federal legislation that specifically governs archaeological research and planning, some departments such as Parks Canada have their own policies and guidelines to protect archaeological resources. This section will provide a brief summary of federal policies and legislation.

2.3.1.1 Impact Assessment Act (2019)

As outlined in Section 7c of the Impact Assessment Act (2019), the proponent of a designated project must not do any act or thing in conjunction with the carrying of a designated project, in whole or in part, if that act or thing may cause an effect on: i) physical and cultural heritage; ii) the current use of lands and resources for traditional purposes (with respect to the Indigenous people of Canada); or iii) any structure, site or thing that is of historical, archaeological, paleontological or architectural significance. No further guidelines are given for the conservation of archaeological resources.

2.3.1.2 Cultural Property Export and Import Act (1985)

The Cultural Property Export and Import Act (1985) prohibits the illicit import, export, and transfer of ownership of cultural property of any object designated by Canada as being of importance for archaeology, prehistory, history, literature, art of science (Regulation 38). This act protects archaeological artifacts and organic remains, including human remains, from illicit import and export.

2.3.1.3 Parks Canada

Parks Canada (2005a; 2005b) published the Guidelines for the Management of Archaeological Resources and Archaeological Recording Manual: Excavations and Surveys, which replaced the 1993 Guidelines for the Management of Archaeological Resources in the Canadian Parks Services. They present Parks Canada's approach to archaeological resource management and are intended to provide direction to Parks Canada personnel and other organizations and individuals, including consultant archaeologists, undertaking activities that may affect terrestrial and marine archaeological resources on lands administered by Parks Canada.

Parks Canada's (2010) Standards and Guidelines for the Conservation of Historic Places in Canada is an additional resource to guide the conservation of historic places. Section 4.2 provides guidelines for conserving archaeological resources in urban environments, industrial sites, cultural landscapes, protected natural areas,

underwater, and culturally sensitive areas. The document also provides guidelines for the conservation of rock-art and culturally modified trees.

2.3.2 Provincial Legislation

The City of Cornwall is predominantly comprised of lands administered by the province and, as such, most of the archaeological resources within the City are protected by provincial legislation such as the Ontario Heritage Act. This section provides a brief overview of relevant provincial legislation that applies to the protection of archaeological resources in Ontario.

2.3.2.1 The Ontario Heritage Act

The Ontario Heritage Act (OHA) was implemented in 1975 with the purpose of giving municipalities and the provincial government powers to protect and preserve heritage properties and archaeological sites within Ontario. In 2005, the Ontario provincial government amended the OHA to give the province and municipalities new powers to delay or stop the demolition of heritage sites. This included further expanding the province's ability to: identify and designate sites of provincial heritage significance; provide clearer standards and guidelines for the preservation of provincial heritage properties; and, enhance the protection of heritage conservation districts, marine heritage sites, and archaeological resources (MCM 2017).

One of the measures implemented by the amended OHA was to prohibit anyone from disturbing or altering an archaeological site (both marine and terrestrial) except for those with a valid archaeological licence issued by the Ontario Ministry of Citizenship and Multiculturalism (MCM). This includes any disturbance or alteration that might result from land use activities and land development (Section 48 (1)). Normal agricultural work (for example, ploughing) or routine maintenance to the property are exempted (Section 48 (2)(b)). A director or officer of a corporation who violates the Act and disturbs or alters an archaeological site without a license can face a fine of up to $1,000,000, or imprisonment for up to one year, or both. A corporation found in violation of the Act can face a fine of up to $250,000.

2.3.2.2 The Planning Act

The Planning Act, R.S.O. 1990, as amended, is the primary legislation that establishes how municipalities in Ontario may plan, manage, and regulate land use. It also outlines matters of provincial interest and enables the Province to issue Policy Statements to provide direction to municipalities on these matters.

The Planning Act enables municipal Councils to pass a variety of tools to plan and regulate the use of land and the placement of buildings and structures on a lot. Under Section 16 of the Act, most municipalities, including the City of Cornwall, are required to prepare and adopt Official Plans in accordance with the requirements of the Act. Official Plans contain a vision, objectives and policies to guide decision making on land use planning matters. Municipal decisions, by-laws and public works are required to conform to the policies of the Official Plan (Section 24(1)).

There are 20 matters of provincial interest that municipal councils "shall have regard to" when carrying out their responsibilities under the Act, including the preparation and adoption of an official plan. Per Part I, 2(d) of the Act, "the conservation of features of significant architectural, cultural, historical, archaeological or scientific interest" is a matter of provincial interest. Part I, (2) of the Act enables the Province of Ontario to issue policy statements (i.e., Provincial Policy Statement) on municipal planning matters that are of provincial interest, including archaeological conservation.

Part V – Land Use Controls and Related Administration, 34(3.3) of the Planning Act prohibits the use of land, buildings, or structures on land that is the site of a significant archaeological resource.

2.3.2.3 Provincial Policy Statement, 2020

The Provincial Policy Statement, 2020 (PPS) came into effect on May 1, 2020, and was prepared as part of the Province's "More Homes, More Choice: Ontario's Housing Supply Action Plan." The PPS is issued under Section 3 of the Planning Act, which requires that all decisions affecting planning matters be consistent with the PPS. It is the policy foundation that guides Ontario's land use planning system. It provides for appropriate development while protecting resources of provincial interest, public health and safety, and quality of the natural environment. It focuses growth and development within urban and rural settlement areas, while supporting the viability of rural areas.

The PPS seeks to strike a balance between the Province's economic, social, and environmental interests through the following:

- Promoting cost-effective development patterns which stimulate economic growth;
- Protecting resources for their economic use and/or environmental benefits; and
- Directing development away from areas where there is a risk to public health and safety or of property damage.

The PPS includes definitions of archaeological terms including "archaeological resources" and "areas of archaeological potential", which are defined as follows:

> "Archaeological resources" is defined as including "artifacts, archaeological sites, marine archaeological sites, as defined under the Ontario Heritage Act. The identification and evaluation of such resources are based upon archaeological fieldwork undertaken with the Ontario Heritage Act."
>
> "Areas of archaeological potential" is defined as "areas with the likelihood to contain archaeological resources. Criteria to identify archaeological potential are established by the Province. The Ontario Heritage Act requires archaeological potential to be confirmed by a licensed archaeologist."

Section 1.2, Coordination, of the PPS, includes policies to set out direction for a coordinated, integrated, and comprehensive approach when dealing with planning matters within municipalities and with different levels of government, agencies, and boards. Such planning matters include the management of cultural heritage and archaeological resources (Section 1.2.1(c)).

Section 2.0, Wise Use and Management of Resources, of the PPS, sets out policies for protection and conservation of important resources for their economic, environmental, and social benefits. Section 2.6, Cultural Heritage and Archaeology, includes policies on cultural heritage and archaeological resources specifically. Within Section 2.6 of the PPS, broad policy directions related to archaeology include:

- Development and site alteration shall only be permitted on lands containing archaeological resources or areas identified as having archaeological potential if significant resources are conserved by removal and documentation by a licensed archaeologist, or by the preservation of the site (Section 2.6.2);
- Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved (Section 2.6.3);
- Planning authorities should consider and promote archaeological management plans and cultural plans in conserving cultural heritage and archaeological resources (Section 2.6.4); and

- Planning authorities shall engage with Indigenous communities and consider their interests when identifying, protecting, and managing cultural heritage and archaeological resources (Section 2.6.5).

2.3.2.4 The Funeral, Burial and Cremation Services Act

The Funeral, Burial and Cremation Services Act was implemented in 2002 and includes prohibitions for the disturbance of burials and artifacts associated with human remains except (Section 94):

a) On instruction by the coroner;

b) Pursuant to a site disposition agreement; or

c) If the disturbance is carried out in accordance with regulations. 2002, c. 33, s. 94; 2006, c. 34, Sched. D, s. 65.

Any discovery of human remains, including remains uncovered during archaeological assessments are subject to the Act. Anyone discovering or having knowledge of a burial site or human remains must immediately contact the police or coroner.

2.3.2.5 The Environmental Assessment Act

The purpose of the Environmental Assessment Act, R.S.O. 1990, c. E.18 (EA Act), which was last consolidated on December 2, 2021, is “the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management, in Ontario, of the environment (Part I, Section 2). It outlines a planning and decision-making process to ensure that potential environmental effects are considered before a project begins. This legislation applies to provincial ministries and agencies, municipalities, and other public bodies. Certain “classes” or projects can follow streamlined Environmental Assessment Act processes. The EA Act is administered by the Ministry of the Environment, Conservation and Parks.

Part I, Section 1(1) of the EA Act defines “environment” broadly, to include “air, land or water” (a); “plant and animal life, including human life (b); “the social, economic and cultural conditions that influence the life of humans or a community” (c); “any building, structure, machine or other devise or thing made by humans” (d); “any solid, liquid, gas, odour, heat, sound, vibration or radiation resulting directly or indirectly from human activities” (e); or “any part or combination of the foregoing and the interrelationships between any two or more of them” (f). Archaeological resources can fall under “the social, economic and cultural conditions that influence the life of humans or a community” (c); and “any building, structure, machine or other device or thing made by humans” (d).

Part II, Section 6.1(c) sets out the requirements for the preparation of an Environmental Assessment to include the:

i) environment that will be affected or that might reasonably be expected to be affected, directly or indirectly;

ii) effects that will be caused or that might reasonably be expected to be caused to the environment; and

iii) actions necessary or that may reasonably be expected to be necessary to prevent, change, mitigate, or remedy the effects upon or the effects that might reasonably be expected upon the environment.

As such, archaeological assessments are required as part of the Environmental Assessment process to determine which identified archaeological resources, sites, artifacts, or remains may be impacted by a project that is subject to the EA Act.

2.3.2.6 Other Relevant Provincial Acts

Several other Acts include measures for the protection of archaeological sites and resources. The Aggregate Resources Act helps to regulate the approval of pits and quarries on private and Crown lands. It also serves to minimize the impact of aggregate operations on the environment (Section 2(d)). Potential impacts to heritage and archaeological resources are recognized as a potential impact of aggregate operations.

The Renewable Energy Approvals regulation *(*O. Reg. 359/09*)* issued under the Environmental Protection Act requires that archaeological assessments by a licensed archaeologist are conducted for renewable energy projects and that archaeological assessment reports are included in applications (Sections 19 to 22).

The Ontario Ministry of Natural Resources developed the Forest Management Guide for Cultural Heritage Values (2007), which replaced the Timber Management Guidelines for the Protection of Cultural Heritage Resources. This guide provides information on addressing impacts to cultural heritage and archaeological resources in forest management activities.

2.3.3 Municipal Policy

2.3.3.1 City of Cornwall Official Plan – 2018 (Approved by the Ministry of Municipal Affairs and Housing, April 11, 2018)

The City of Cornwall Official Plan was adopted by Council on October 23, 2017 and was approved by the Ministry of Municipal Affairs and Housing (MMAH) on April 11, 2018. The main purpose of the City's Official Plan is to provide a policy framework to guide future land use and physical development within Cornwall, and to inform planning decisions over a 20-year planning period, to the year 2036. The Official Plan states that it will be maintained as an up-to-date, relevant policy document through systematic monitoring, review, and amendment through the concept of continuous planning. This will be achieved through regular monitoring of future growth and land use trends; amendments to policies and schedules of the Official Plan; and, a systematic review of the basic intents and concepts of the Official Plan at least once every 10 years in accordance with the requirements of Section 26 under the Planning Act.

Section 10 Cultural, Arts, and Built Heritage Resources of the Official Plan contains policies related to Cultural Heritage Resources. "Cultural Heritage Resources" are defined as "buildings, structures, monuments or artifacts of cultural heritage value or interest as well as areas of unique, representative or effective urban composition, streetscape, landscape or archaeological value or interest".

In addition, Section 10.2 sets out the Official Plan's goals for Cultural Heritage Resources. Policy 10.2.1 provides for the identification and preservation of Cultural Heritage Resources through tools, including a Municipal Archaeological Plan and Policy 10.2.2 promotes the conservation of Cultural Heritage Resources, including archaeological sites. The increase of public awareness of the value of Cultural Heritage Resources is encouraged, as they may be valuable to the City as opportunities for education (Policy 10.2.4).

Furthermore, Section 10.3 of the Official Plan includes the policies for Cultural Heritage Resources. Policy 10.3.1 establishes the direction to maintain the Municipal Heritage Committee (i.e., Heritage-Patrimoine Cornwall), whose mandate is to advise City Council on all matters related to the identification, conservation, protection, and restoration of Cultural Heritage Resources.

Within Section 10.0, Policy 10.3.10 directs that the City should identify, assess, and protect significant archaeological resources and sites as consistent with the PPS, including a study of archaeological resources in Cornwall in consultation with the Province of Ontario and Heritage-Patrimoine Cornwall. Additionally, the City may require the excavation and study of identified archaeological sites prior to the development of lands in accordance

with the uses identified in Schedule 1: Land Use. Policy 10.3.10 further states that a mechanism should be established that assesses public work projects prior to their commencement to identify, assess, and mitigate impacts on archaeological resources and sites.

Policy 10.3.11 sets out direction for the review of areas of archaeological potential:

i) Areas of archaeological potential shall be determined through the use of Provincial screening criteria, or criteria based on known archaeological records with the City and developed by a licensed archaeologist.

ii) For proposed development within an area of archaeological potential, an archaeological assessment and/or marine archaeological assessment shall be required prior to final planning approval, or as a condition of final planning approval. Archaeological assessments are to be prepared to be in compliance with Ministerial guidelines and licensing requirements under the Ontario Heritage Act.

iii) When archaeological resources are identified, the City is supportive of the Province's preference for in situ preservation, but also recognizes the need for rescue excavation in certain cases. The City may consider archaeological preservation in situ to ensure the integrity of archaeological resources is maintained or by implementing provisions in the Zoning By-law that would prohibit incompatible land uses and/or the erection of buildings or structures on lands containing the site of a significant archaeological resource. Parkland dedication under the Planning Act may be utilized pursuant of the conservation of significant cultural heritage resources.

iv) The City, in consultation with the Ministry, may undertake the preparation of an AMP for all or a portion of the City.[1]

v) Per the requirements of the Ontario Heritage Act and the Funeral, Burial and Cremation Services Act, the City will ensure adequate archaeological assessment and consult appropriate Ministries and agencies when an identified, marked, or unmarked cemetery or previously unknown archaeological site is identified and impacted by development.

vi) Any alterations to known archaeological sites shall only be performed by licensed archaeologists and as per the requirements of the Ontario Heritage Act.

vii) Potential for marine archaeological remains from the pre-historic period through the modern era up to the last 50 years is recognized.

viii) The City shall ensure that built and cultural resources are not adversely affected in the consideration of applications for waterfront development and may require a land and/or marine archaeological assessment. The City shall consult with Ministries and agencies to determine the requirement for archaeological assessments for development applications that may impact archaeological resources outside of municipal jurisdiction.

ix) An Indigenous community consultation protocol may be developed as part of a future AMP, including but not necessarily limited to the Mohawk Council of Akwesasne and the Métis Nation of Ontario.

[1] It is noted that the new AMP under development through this project will encompass the entire City of Cornwall.

3.0 MANAGEMENT OF ARCHAEOLOGICAL RESOURCES

3.1 Archaeological Assessments and the Review Process

The City of Cornwall, in its role as an approval authority, is responsible for determining when an archaeological assessment is required as part of planning and development applications. As per Section 1.4.2 of the MCM's Standards and Guidelines for Consultant Archaeologists, "municipal policies usually require assessment of all property affected by a development project to ensure that the full archaeological record is captured" (MCM 2011a, p. 21). As such, the City of Cornwall should recommend the completion of an archaeological assessment as a condition of approval for all development projects unless an archaeological assessment has been previously conducted for the project area and has determined no further archaeological assessment is required. Appendix A provides a visual representation of the general review process for archaeological assessments. Using the archaeological potential mapping developed as part of the AMP, the City of Cornwall can determine where additional archaeological assessment will likely be required when any portion of a property is located within an area identified as having archaeological potential.

When an archaeological assessment is determined to be a condition of approval for the development, the proponent will retain a consultant archaeologist holding a professional license from the MCM to conduct an archaeological assessment. All archaeological assessments, except for those conducted on federal property, must be registered with the MCM and issued a Project Information Form (PIF). Archaeological assessments conducted by consultant archaeologists in Ontario have four stages. Not all stages will be required for all projects. The four stages are as follows:

- Stage 1: Background study and property inspection
- Stage 2: Property assessment
- Stage 3: Site specific assessment
- Stage 4: Mitigation of development impacts

As outlined in the MCM's Standards and Guidelines for Consultant Archaeologists (2011a, p. 5), the goals of the first three stages are to:

- Identify archaeological sites that are present within the lands that are part of the development project;
- Assess the degree of cultural heritage value or interest of identified archaeological sites; and
- Recommend the most appropriate strategies for those archaeological sites where it has been determined that mitigation of impacts will be necessary.

The fourth stage involves the implementation of recommended mitigation strategies to conserve an archaeological site identified as having significant cultural heritage interest or value, through long term avoidance and protection, excavation, or a combination of both.

Marine archaeological assessments do not follow the MCM's (2011) Standards and Guidelines for Consultant Archaeologists and is not divided into discrete stages like the terrestrial process. Marine assessments involve the marine archaeologist applying for a marine license to undertake an assessment of the impact footprint, plus a buffer of a size which they would propose based on local circumstances. Marine assessments generally include:

- Background research;

- Survey and visual confirmation through methodology proposed by the licensee (e.g. geophysical survey, wading survey, and snorkeling survey);
- Exploration and detailed recording, and;
- Excavation and artifact recovery.

Stage 1 Archaeological Assessment

A Stage 1 archaeological assessment is background study intended to identify where additional, more intensive archaeological assessment will be required. It is the first step of an archaeological assessment and has the following objectives (MCM 2011a, p. 13):

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

A Stage 1 archaeological assessment may include an optional site inspection where the consultant archaeologist visits the property for the proposed development to conduct a visual inspection to document topography, current conditions, and geography. Site inspections can only be conducted when weather conditions permit good visibility to ensure that features of archaeological potential are observable. It cannot be conducted when there is snow cover, frozen ground, excessive rain or drought (Standard 2, Section 1.2, MCM 2011a). This means site inspections cannot typically be completed in the winter. Although optional, a Stage 1 site inspection is required to exempt areas identified as having no archaeological potential from further assessment (Standard 1a, Section 1.4, MCM 2011a). Stage 1 archaeological assessments may also be completed as part of a combined Stage 1-2 archaeological assessment where the site inspection is undertaken as part of the Stage 2 survey. The archaeological assessment, which must comply with the MCM's Standards and Guidelines for Consultant Archaeologists (2011a), must cover the entire development property and not only the portions that are located within the area of archaeological potential from the AMP.

A Stage 1 archaeological assessment will require additional archaeological assessment when areas of archaeological potential are identified. Archaeological potential is determined by the presence or proximity to features. These include (Section 1.3.1, MCM 2011a):

- Previously identified archaeological sites;
- Water sources;
- Elevated topography;
- Pockets of well-drained sandy soil;
- Distinctive land formations that may have been special or spiritual places (for example, waterfalls, caverns, or mounds);
- Resource areas for food or medicinal plants, scarce raw materials, or early Euro-Canadian industry;
- Areas of early Euro-Canadian settlement;
- Early historical transportation routes;

- Property listed on a municipal register or designated under the Ontario Heritage Act or that is a federal, provincial or municipal historical landmark or site; and
- Property that local histories or informants have identified with possible archaeological sites, historical events, activities, or occupants.

Archaeological potential can be determined to have been removed in areas subject to extensive and deep land alterations that would have impacted the integrity of archaeological resources. This disturbance may be caused by quarrying, landscaping involving grading below topsoil, building footprints, and sewage or infrastructure development (Section 1.3.2, MCM 2011a). Stage 2 archaeological assessment is recommended when archaeological potential is identified within the lands to be impacted by a proposed development.

Stage 2 Archaeological Assessment

A Stage 2 archaeological assessment is a property assessment that involves a survey of the portions of the property identified as having archaeological potential during the Stage 1 background study. The archaeological survey may take the form of walking a ploughed and weathered field (pedestrian survey) at regular intervals to look for artifacts brought to the surface by ploughing (Image 1, p. 15) or, in areas where ploughing is not possible, the hand excavation of shovel test pits at regular intervals to search for buried archaeological resources (Image 2, p. 16). Test pit and pedestrian survey is typically required at a maximum of 5 m intervals although the intervals may be increased to 10 m in areas more than 300 m from any feature of archaeological potential (Standard 3, Section 2.1.2, MCM 2011a). In areas with the potential for deeply buried archaeological resources, for example, along Cornwall's waterfront or downtown area, alternative survey strategies may be required. Alternative strategies include proceeding to Stage 3 immediately or the use of backhoes or excavators (Standard 3, Section 2.1.7, MCM 2011a).

Image 1: Example of archaeologists conducting a Stage 2 pedestrian survey on a ploughed field (WSP Canada Inc.).

Image 2: Example of archaeologists conducting a Stage 2 test pit survey in a wooded area (WSP Canada Inc).

If the Stage 2 property assessment results in the discovery of archaeological resources, the consultant archaeologist refers to the MCM's (2011a) Standards and Guidelines for Consultant Archaeologists to determine if they meet the criteria for Stage 3 archaeological assessment. For pre-Contact archaeological sites, Stage 3 is typically required when there are diagnostic artifacts (meaning the archaeologist can identify when an artifact was produced), concentrations of artifacts, or the presence of artifact of special interest such as Indigenous ceramics, exotic cherts, or isolated artifacts dating to the Paleo or Early Archaic periods. Stage 3 archaeological assessment is required for historical sites when there are at least 20 artifacts dating to before 1900. Twentieth century archaeological sites may require archaeological assessment when background documentation indicates possible CHVI. Stage 3 archaeological assessment is also required when human remains are present.

Partial clearance may be recommended as a temporary status that allows construction to begin on one part of a property while archaeological assessment continues on other parts. Partial clearance does not remove the requirement for Stage 3 site-specific assessment. If site impacts can be avoided by a development limited to another part of the property, a detailed plan for Long Term Avoidance and Protection would need to be prepared after Stage 3 confirms the site limits.

Stage 3 Site-Specific Assessment

A Stage 3 site-specific assessment is conducted when an archaeological site was discovered during Stage 2 survey and determined to have further CHVI. The objectives of a Stage 3 are to determine the extent of the archaeological site, collective a representative sample of artifacts, assess the CHVI of the archaeological site, and determine the need for mitigation of development impacts (MCM 2011a).

Stage 3 site-specific assessment most commonly takes the form of the hand excavation of 1 m square units at 5 or 10 m intervals over the extent of the archaeological site (Image 3, p. 17). The standards for determining the location and number of test units are dependent on the nature and size of the archaeological site. All excavated soil is screened through mesh measuring no greater than 6 mm. For sites with the potential for small artifacts (for

example, beads) or for sites dating to the Paleo or Early Archaic period, it is required a sample of test units are screened using 3 mm mesh (Standard 7, Section 3.2.2, MCM 2011a). For archaeological sites in deeply buried conditions, Stage 3 archaeological assessment may include the use of an excavator or backhoe to remove the overlying layers. Indigenous engagement is required when formulating the strategy for Stage 3 archaeological assessment on Indigenous archaeological sites.

Image 3: Example of archaeologists conducting a Stage 3 archaeological assessment involving the hand excavation of 1 metre square test units at 5 m intervals (WSP Canada Inc.).

For archaeological sites located in ploughed fields, controlled surface pick-up may proceed the test unit excavation. Controlled surface pick-up involves collected artifacts from the ground surface systematically to gather information to further document the characteristics and extent of the archaeological site.

Following the completion of the Stage 3 site-specific assessment, the need for mitigation of an archaeological site through Stage 4 mitigation of development impacts is determined by whether the archaeological site has further CHVI. Stage 4 mitigation is always required on sites identified as sacred or as containing burials, rare archaeological sites, Paleo period sites, large, dense lithic scatters, woodland period archaeological sites, post-contact archaeological sites dating to before 1830, or late 19 and 20th century archaeological sites where background research or archaeological features document further CHVI (Standard 1, Section 3.4, MCM 2011a).

Stage 4 Mitigation of Development Impacts

Stage 4 mitigation is intended to address the development impacts on an archaeological site determined to have sufficient CHVI to warrant further mitigation. Stage 4 mitigation may take the approach of avoidance and protection or excavation to document the archaeological site before it is destroyed by development. Avoidance and protection of archaeological sites is generally the preference of the MCM. The avoidance and protection area includes the entire archaeological site as well as a protective buffer measuring a minimum of 20 metres for Indigenous village sites or a 10 metre buffer for other types of archaeological sites (MCM 2021, Standard 1 and 2 of Section 4.1). Upon the recommendation of the consultant archaeologist, the buffer may be reduced if there is an existing permanent constraint around the extent of the site such as an existing road, waterbody, or steep

slope. If grading or other soil disturbing activities caused by the development project will extend to the edge of the area to be avoided, the proponent must (a) erect a temporary barrier around the area to be avoided, (b) issue "no go" instructions to all on site construction crews, engineers, architects or others involved in day-to-day decisions during construction, (b) show the location of the area to be avoided on all contract drawings, and (c) when applicable, include instructions to avoid that area. Stage 4 avoidance and protection also requires the implementation of long-term protection mechanisms to ensure the conservation of archaeological resources. Commonly used mechanisms are restrictive covenants on titles, zoning bylaw amendments, and transfer of ownership to the municipality or other public land-holding body. Section 4.1.4 of the MCM's (2011a) Standards and Guidelines for Consultant Archaeologists provide the following standards for long-term protection:

1) The mechanism recommended for long-term protection must set out how protection of the archaeological site is to be addressed as a prerequisite to any proposed removal of the archaeological restrictions on the land in the future. This includes defining the mandatory steps, such as ensuring that the archaeological site is either further protected on a long-term basis or is excavated by a licensed archaeologist.

2) The allowable uses for the protected area must not include any activities that might alter the archaeological site in any way, either temporarily or permanently. This includes even minor forms of soil disturbance such as tree removal, minor landscaping, utilities installation, etc.

3) If transfer of ownership is part of the avoidance and protection strategy, the proposed new owner must provide documentation (e.g., letter) confirming their awareness of their obligations for the archaeological site and their willingness and capacity to fulfill those obligations.

The proponent must provide written commitment to the avoidance and protection strategy prior to the commencement of development.

Stage 4 excavation typically involves mechanical topsoil removal, hand excavation, or a combination of both. Mechanical topsoil removal (Image 4, p. 19) is typically limited to sites that have been previously subject to ploughing for many years or are located under extensive fill deposits. In areas previously subject to ploughing, topsoil removal may only be considered when there is only one cultural stratum below topsoil, the extent of the archaeological site is large, the site dates to the Woodland period or later, there is a reasonable expectation of extensive sub-surface features (Image 5, p. 19) and settlement data, and the previous Stage 2 and Stage 3 assessments have documented a representative sample of ploughzone artifacts and their distribution (MCM 2011a, Standard 1 of Section 4.2.3).

Image 4: Stage 4 mechanical topsoil removal in a ploughed field (WSP Canada Inc.).

Image 5: Example of a large rectangular sub-surface feature in the process of being uncovered during mechanical topsoil removal (WSP Canada Inc.).

Review Process and Risks

Consultant archaeologists submit reports for each stage of the archaeological assessment to the MCM for review. Archaeological reports determined to meet the requirements outlined in the MCM are issued a letter of compliance and entered into the Ontario Public Register of Archaeological Reports. The letter from the MCM summarizes the report's recommendations. Once the reports identify that a property has no further archaeological potential or the archaeological site(s) have no further cultural heritage value or interest, the City of Cornwall receives copies of the archaeological assessment reports and the letters of compliance from the MCM and the archaeological requirements for the development have been met.

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even comprehensive investigations, including sampling and testing programs, may fail to detect all or certain archaeological resources. 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.

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 licence.

3.1.1 The Role of the Federal Government

The protection of archaeological resources on federal lands is the responsibility of the Crown with a number of agencies taking on roles and responsibilities. Following the Federal Property and Federal Immovables Act, the Treasury Board provides policy direction for the management of real property and material to ensure that all decisions respect the management of assets (including archaeological resources) through the Guide to the Management of Real Property (2009) and the Guide to the Management of Movable Heritage Assets (2008).

Federal custodians of real property and material are responsible for the protection and management of these resources, including archaeological resources, in their portfolios.

The authority on federal archaeology is the Parks Canada Agency. Parks Canada has developed policies, standards, and guidelines for the management and protection of archaeological resources within Parks Canada. These include Guidelines for the Management of Archaeological Resources and Archaeological Recording Manual: Excavations and Surveys (Parks Canada 2005a; 2005b). They provide support to the Historic Sites and Monuments Board of Canada and are responsible for the Federal Heritage Buildings Review Office.

The Impact Assessment Agency of Canada is responsible for providing high-quality impact assessments to examine the environmental, economic, social, and health impacts of potential projects. This agency ensures planned development does not have adverse impacts on archaeological resources on federal lands.

Map 11 (p. 80) shows the federal properties and buildings located within the city. Archaeological assessments that take place on Federal property are not subject to provincial legislation. As such the MCM's (2011a) Standards and Guidelines for Consultant Archaeologists do not apply. On Parks Canada properties, consultant archaeologists may be required apply for a Parks Canada research and collection permit and follow Parks Canada guidelines for conducting archaeological assessments (Parks Canada 2005a; 2005b).

The 2021 *Treasury Board Directive on the Management of Real Property* identifies that real property practitioners must "consult with Parks Canada Agency before undertaking any intervention that may impact the heritage value of a federal heritage property or an archaeological site on federal land." Therefore, any intervention should be

submitted to the FHBRO for a review of intervention if it is being undertaken at a federal heritage building, a national historic site, a heritage lighthouse, a heritage railway station, or a World Heritage Site that is federally owned or administered. Engineering works, archaeological sites, Indigenous heritage sites, and landscape features are subject to a review of intervention if they are a component of a federal heritage property, or if an intervention on them has the potential to impact the heritage value of the federal property.

The FHBRO should be consulted to determine whether a property has any federal heritage designations, and can be contacted at: beefp-fhbro@pc.gc.ca.

3.1.2 The Role of the Province

The Ontario Ministry of Citizenship and Multiculturalism (MCM) is the provincial body responsible for reviewing all archaeological assessments within Ontario, except for those that fall on federal land. The MCM also establishes the standards and guidelines by which archaeological assessments are conducted to ensure consistent quality.

Approval authorities such as the City of Cornwall typically rely upon confirmation from the MCM to ensure that all archaeological concerns on a proposed development property have been addressed. Following review of an archaeological assessment report produced by a consultant archaeologist, the MCM determines whether the report complies with MCM requirements. If the report is accepted, the MCM issues a letter confirming the archaeological assessment report and the recommendations complies. Copies of these letters are also provided to the proponent and approval authority.

3.1.3 The Role of Consultant Archaeologists

Consultant archaeologists are hired by proponents to conduct archaeological assessments according to identify archaeological resources within the proposed area of development and to make recommendations for the conservation of archaeological resources prior to development impacts. These recommendations may include additional archaeological assessment to ensure that archaeological resources are documented prior to ground disturbance.

Consultant archaeologists must follow relevant requirements when undertaking archaeological assessments, most commonly the MCM's Standards and Guidelines for Consultant Archaeologists. Consultant archaeologists holding a valid archaeological license issued by the MCM and have registered the assessment under a PIF are the only ones allowed to disturb or alter an archaeological site under the Ontario Heritage Act, this includes excavating a site to mitigate impacts.

3.1.4 The Role of the Proponent

The proponent can be developers, landowners, municipalities, ministries, and other provincial or federal agencies (MCM 2011b). As required by the Planning Act, the proponent may be required to undertake an archaeological assessment to ensure that a development project does not impact an archaeological site and is accountable to the approval authority for ensuring a proposed project mitigates any impacts to archaeological sites identified through the archaeological assessment. The proponent typically hires a consultant archaeologist holding a valid archaeological license issued by the MCM to conduct any required archaeological assessments. Proponents often engage with Indigenous communities on a development project as a whole but this engagement on the development project as a whole does not replace requirements for engagement on archaeology (MCM 2011b). The requirements for Indigenous engagement on archaeology are summarized in Section 4.0 of the AMP.

The proponent is responsible for providing the consultant archaeologist with permission to enter a property to conduct an archaeological assessment. They must also provide plans of the project so that the consultant archaeologist can ensure archaeological assessments cover the extent of the proposed impacts by the project.

3.1.5 The Role of the City

The Province of Ontario has transferred the responsibility to review all development plans and infrastructure projects to municipalities. The municipality or planning board makes decisions on planning applications during the Municipal plan review (Ontario 2021). The municipality is required by the Planning Act to be consistent with the Provincial Policy Statement for the protection of archaeological resources. This includes the engagement of Indigenous communities and the consideration of their interests when identifying, protecting and managing archaeological and cultural heritage archaeological resources.

Appeals on planning applications can be made to the Ontario Land Tribunal (Ontario 2021). The Ministry of Municipal Affairs and Housing is the only provincial ministry that can file appeals to the Ontario Land Tribunal. Appeals of a municipal decision are coordinated between other ministries to ensure that the provincial policy positions are integrated (Ontario 2021).

3.2 When are Archaeological Assessments Required?

An archaeological assessment may be required for the following development applications:

- Official Plan Amendments: undertaken when a property owners may wish to use or develop a property in a way that conflicts with the policies in a municipality's Official Plan (Ontario 2021a).
- Zoning By-law Amendments: required to apply for a zoning change so that a property can be used or developed in a way that is not in compliance with the current Zone and provisions set out in a municipal Zoning By-law (Ontario 2021b).
- Plans of Subdivision and Plans of Condominium: Subdivision refers to the legal process of dividing a property into two or more parcels so that one or more such parcels can be sold (Ontario 2021c). Obtaining an approval of a Plan of Subdivision from the municipality is necessary to ensure the land is suitable for its proposed new use, the proposal conforms to the Official Plan and Zoning By-law, and to protect the community from developments which are inappropriate or may put undue strain on community facilities, services or finances.
- Site Plan Control: a tool that allows the municipality to control some site-specific aspects of development such as access, walkways, lighting, waste facilities, landscaping, and exterior design (Ontario 2021d). The control reduces negative impacts and ensures that the design of the site fits in with the surrounding uses.
- Consent Applications: undertaken to create new lots, add to existing lots, allow easements/right-of-ways, and register long-term leases in excess of 21 years (Cornwall 2017b).
- Public Works Projects: examples include the replacement or development of infrastructure and the development and maintenance of municipal assets.
- Building Permits: issued by the municipality to enforce Ontario's Building Code and are necessary when a property owner wishes to construct, renovate, demolish, or change the use of a building (Ontario 2021e). Specifically, an archaeological assessment could be required by the municipality for a building permit application for proposed construction causing soil disturbance that is located on a site having archaeological potential, if an archaeological assessment wasn't previously completed, and if no other development application was filed. A City-initiated Official Plan Amendment would be required to implement this and updates to the City application forms would be required.

Appendix B contains examples of development application scenarios where archaeological assessment may be required. In general, archaeological assessment is required prior to site alteration which is defined as any activities that would alter the landscape such as grading, excavation, or the placement of fill. This includes

landscaping, tree removal, road widening, building or replacing roads or sidewalks, installation of utilities, construction of buildings. Activities such as normal agricultural work (for example, ploughing) or routine maintenance to the property are exempted under the Ontario Heritage Act (Section 48(2)(b)).

Marine archaeological assessments may be required when development impacts below the high water mark. Applicants should complete the MCM's (2016) Criteria for Evaluating Marine Archaeological Potential checklist, and if the checklist indicates potential, retain a marine archaeologist to undertake an assessment. Additional information on marine archaeological assessments and the Criteria for Evaluating Marine Archaeological Potential is provided in Section 5.9.3.

3.3 Unanticipated Finds

Special risks occur whenever archaeological investigations are applied to identify subsurface conditions and even a comprehensive investigation, including sampling and testing programs, may fail to detect all or certain archaeological resources. Should unanticipated archaeological resources be encountered during construction or other project related activities, the following steps should be followed.

Initial Response

- **Step 1**: If intact or disturbed archaeological resources are encountered, stop construction in the immediate vicinity of the discovery and identify the area(s) as a no-go zone to all project personnel.
- **Step 2**: Fence, flag or mark the area where the archaeological resources are interpreted to have been originally located to ensure the security and integrity of potential additional archaeological resources.
- **Step 3**: Contact the development proponent who will then have a licensed Consultant Archaeologist advise on further action.

Initial Action

Depending on the nature of the situation, one of the following responses is likely:

- Based on a telephone description of the incident with the Consultant Archaeologist, it may be decided that there are no further concerns allowing construction to continue as planned.
- Photographs of the potential archaeological resources may also be recommended to be sent to the Consultant Archaeologist in order to further determine the extent of the potential archaeological deposit or resources.
- A field visit by a licensed archaeologist may be recommended. In this case, the Consultant Archaeologist or Development Proponent will notify the site contractor to coordinate a site visit.
- If the archaeological resources are Indigenous, then interested Indigenous communities should be notified of the find.
- Based on communication with Site Personnel and professional judgement, the Consultant Archaeologist will determine whether the resources are considered to possess cultural heritage value or interest (CHVI) and determine if additional mitigation and/or avoidance/protection strategies are required. If the resources are Indigenous, the Indigenous communities should be included in the decision.

Management Options

If an archaeological site (intact or disturbed) is present, then a mitigation/avoidance plan will be developed to address the specific archaeological resource. This plan will be developed based on consultation with the

consultant archaeologist, the MCM, Indigenous communities, and appropriate Project Personnel and may consider the following options when deciding how to proceed:

- **Option 1**: Avoidance through partial project redesign or relocation. This results in minimal impact to the archaeological site and is the preferred option from a cultural resource management perspective. In certain instances, it can also be the least expensive option from a construction perspective. However, a site investigation may still be required to define archaeological site limits.
- **Option 2**: Archaeological site assessment to document the archaeological resources, if necessary. Depending on the site complexity and cultural significance, the archaeological assessment may involve the documentation of the archaeological resource and/or further on-site monitoring by a licensed archaeologist. This option should be approved by the MCM prior to implementation and can delay construction by days, weeks or months depending on the size and complexity of the archaeological site.
- **Option 3**: Site Protection. Archaeological site protection measures include both temporary and long-term plans. Temporary strategies could include erecting fencing or barricades to protect the archaeological site, while longer term solutions may include permanent removal of that portion from the Project Boundaries. Appropriate measures should be identified on a site-specific basis in consultation with the MCM, City of Cornwall, Indigenous Communities (if applicable) and appropriate Project Personnel.

Once the archaeological resource(s) have been sufficiently mitigated, either by removal from the site or development of an avoidance/protection strategy, the zoning delineation will be removed by the Site Contractor and construct work may resume upon direction from the Consultant Archaeologist.

3.4 Emergency Discovery Plan for Human Remains

If human remains be encountered during construction or other project related activities, then the following steps should be followed.

- **Step 1**: Immediately stop all project activities in the vicinity of the remains and identify the area(s) as a no-go zone to all project personnel.
- **Step 2**: Immediately notify the police or coroner of the discovery of human remains.
- **Step 3**: No person shall disturb or order the disturbance of a burial site or artifacts associated with the human remains except on instruction by the coroner, pursuant to a site disposition agreement, or if the disturbance is carried out in accordance with the regulations.
- **Step 4**: If the coroner declares that foul play is not suspected in relation to the human remains:

    a) The coroner shall ensure the Registrar, Funeral, Burials and Cremation Services Act, is notified; and,

    b) The owner of the land shall take whatever steps are necessary to preserve the site, the human remains and any artifacts until a final disposition is made in accordance with the Funeral, Burial and Cremation Services Act and its regulations.

If the coroner declares that foul play is suspected, the site ceases to be a burial site and the next steps will be dictated by the Coroner's Act.

If the site is determined not to be the result of foul play, the Funeral, Burial and Cremation Services Act will dictate how the site will be managed. The result will be that the Registrar will declare the site to be one of the following:

1) A burial ground;

2) An Indigenous peoples burial ground;

3) An irregular burial site; or,

4) A burial site containing ancestors' remains not in their original or intended resting place.

For burial grounds and Indigenous peoples burial grounds, the Registrar will notify representatives of the deceased. The Registrar will order the landowner and these representatives to negotiate with a view of entering into a site disposition agreement.

For irregular burial sites or burial sites containing ancestors' remains not in their original or intended resting place, the Registrar will notify those who would have been representatives of the deceased had the site been a burial ground or Indigenous peoples burial ground, and the landowner must ensure the remains are interred in a cemetery.

For all burial sites, the disposition process ends in one of the following:

1) The burial site must be established as a cemetery; or,

2) The human remains must be moved to an existing cemetery; or,

3) The human remains may be moved to a nearby location that must then be established as a cemetery.

3.5 Ongoing Application of Archaeological Management

3.5.1 Recommended Updates to the City of Cornwall Official Plan

As discussed in Section 2.1.3 of this Draft AMP, the City of Cornwall Official Plan – 2018 (Approved by the MMAH, April 18, 2018) includes several references to the goal of creating an AMP and an Indigenous Engagement Protocol. It is recommended that the City of Cornwall update its Official Plan to reflect the creation and maintenance of the AMP. Table 1 lists recommended draft policy additions and revisions to the City's Official Plan to reflect the creation and maintenance of the AMP.

Table 1: Recommended Draft Policy Updates to the City of Cornwall Official Plan

Relevant Section in Current Official Plan	Recommended Policy
Replace Section 10.2.1	Provide for the identification and preservation of significant Cultural Heritage Resources through the use of and regular updates to the City's Archaeological Management Plan and the use of such tools as a Municipal Heritage Property (Listing) Registry and […]
Replace Section 10.3.10	Take the necessary steps to identify, assess, and protect significant archaeological resources and sites consistent with the Provincial Policy Statement, including: (i) engagement with Indigenous communities to consider each community's interest when identifying, protecting, and managing cultural heritage and archaeological resources; (ii) undertaking of a study of cultural and archaeological resources in the City of Cornwall in consultation with the Province and Heritage-Patrimoine Cornwall; and (iii) requirement by the City for the excavation and study of identified archaeological sites prior to the development of lands in accordance with the uses indicated on Schedule 1: Land Use of this Plan.
Replace Section 10.3.11(iv)	The City, on the advice of the Ministry of Citizenship and Multiculturalism (MCM), will maintain an Archaeological Management Plan for all of the City that identifies known archaeological resources and mapped areas of archaeological potential. The Archaeological Management Plan will be subject to review and updated in conjunction with reviews of the Official Plan.

Relevant Section in Current Official Plan	Recommended Policy
Replace Section 10.3.11(ix)	The City will maintain an Indigenous Engagement Protocol on matters related to archaeological resource identification and conservation. The Indigenous Engagement Protocol will be subject to review and may be updated with conjunction with reviews of the Official Plan. Updates to the Indigenous Engagement Protocol should be undertaken in consultation with, but not limited to, the Mohawks of Akwesasne, Huron-Wendat First Nation, and Métis Nation of Ontario.
Add Section 10.3.11(x)	It is the policy of the City to generally keep confidential the existence and location of archaeological sites and resources to protect against vandalism, disturbance, and the inappropriate removal of artifacts or cultural heritage resources.

3.5.2 Geospatial Data

The archaeological potential map layer produced as part of the AMP should be made available online on the City of Cornwall's interactive maps database. The location of registered archaeological sites, which are restricted by the MCM, should be excluded from the publicly available mapping data. Access to the knowledge of the location of registered archaeological sites is restricted to prevent potential impacts to the sites from looting and disturbance.

3.5.3 Artifact Curation

In Ontario, licensed archaeologists are responsible for safeguarding and curating archaeological resources on behalf of the Crown. Section 66 of the Ontario Heritage Act states that "The Minister may direct that any artifact taken under the authority of a licence or a permit be deposited in such public institution as the Minister may determine, to be held in trust for the people of Ontario." Additionally, O. Reg. 8/06 states that it is a term and condition of an archaeological license that "the licensee keep in safekeeping all objects of archaeological significance that are found under the authority of the licence and all field records that are made in the course of the work authorized by the licence, except where the objects and records are donated to Her Majesty the Queen in right of Ontario or are directed to be deposited in a public institution under subsection 66 of the Act."

As a result, the majority of artifacts recovered as part of archaeological assessments in Ontario are held by the licensed archaeologist. Once the artifacts have been analyzed and the report entered into the public registrar by the MCM, artifacts may be sent to a public repository, such as a museum or university for perpetual curation. The curation of artifacts in a public repository or institution is the preferred option as artifacts remain within the same community and are accessible to researchers.

It is recommended that archaeological assemblages collected from future archaeological assessments within Cornwall be curated by a public institution within the city such as the Cornwall Community Museum. The MCA should be consulted for artifact assemblages consisting of Indigenous artifacts. The MCA currently have two community museums, the Akwesasne Cultural Center and Library and Museum and the Native North American Traveling College which could potentially serve to curate assemblages of interest to Akwesasne.

3.5.4 Updating the Archaeological Management Plan

Updates to the AMP are necessary for its long-term viability as a planning tool. As archaeological potential is influenced by the presence of known archaeological sites, the areas identified as having archaeological potential may change as more archaeological assessments are completed in Cornwall and additional archaeological sites discovered. Additionally, future legislation or updates to the federal and provincial policies may introduce new requirements for managing archaeological resources.

Updates to the AMP corresponding to the City's comprehensive review of its Official Plan is recommended. These should at a minimum include revisions to the archaeological potential mapping to include changes to potential based on new archaeological assessments and the discovery of additional archaeological sites, address any changes in the MCM's criteria for identifying archaeological potential, and update protocols on Indigenous engagement.

4.0 INDIGENOUS ENGAGEMENT PROTOCOL

Engagement with Indigenous communities and the consideration of their interests when identifying, protecting and managing archaeological and cultural heritage resources is part of the municipality's responsibilities under the Planning Act, and the Provincial Policy Statement. Meaningful engagement seeks to build a mutual understanding of issues, expectations, and opportunities for solutions and partnership in identifying and assessing archaeological sites (MCM 2011b). Early engagement is encouraged, and it should be recognized that each community will have their own distinct interests, knowledge, and capacity to participate in engagement.

The MCM's (2011b) Engaging Aboriginal Communities in Archaeology draft technical bulletin provides some guidelines on when Indigenous engagement is required and encouraged. As per Section 1.1 of the technical bulletin (MCM 2011b), Indigenous engagement is required:

1) In Stage 3, when you are assessing the cultural heritage value or interest of an Indigenous archaeological site that is known to have or appears to have sacred or spiritual importance, or is associated with traditional land uses or geographic features of cultural heritage interest, or is the subject of Indigenous oral histories.

2) At the end of Stage 3, when formulating a strategy to mitigate the impacts on the following types of Indigenous archaeological sites through avoidance and protection or excavation:

    a. rare Indigenous archaeological sites;

    a. sites identified as sacred or known to contain human remains;

    b. woodland Indigenous sites;

    c. Indigenous archaeological sites where topsoil striping is contemplated;

    d. undisturbed Indigenous sites;

    e. sites Previously identified as of interest to an Indigenous community.

Engagement is encouraged earlier in the project (MCM 2011b, Section 1, 2):

1) In the Stage 1, when conducting the Background Study, in order to identify information sources in local Indigenous communities.

2) In the Stage 1, when evaluating archaeological potential and making recommendations to exempt areas meeting the criteria for low archaeological potential from further assessment, in order to ensure there are no unaddressed Indigenous cultural heritage interests.

3) In Stage 2, when assessing a property and determining archaeological sites that require Stage 3 fieldwork, in order to determine interest (general and site-specific) in the Indigenous archaeological sites and ensure that there are no unaddressed Indigenous archaeological interests connected with the land surveyed or sites identified.

4) In Stage 3, when making recommendations regarding the excavation or preservation of Indigenous archaeological sites of cultural heritage value or interest (other than those identified in the standards), in order to review the recommendations with the relevant, interested Indigenous communities.

It is increasingly becoming more common to engage Indigenous communities prior to the Stage 3 archaeological assessment. Some Indigenous communities are showing increased interest to be involved at the Stage 1 and 2 level of assessment. Given this, it is possible that Indigenous communities with interests in the City of Cornwall may request further information regarding a project and/or be engaged during one or more stages of archaeological assessment. Although not mandated by the MCM, the expectation of many Indigenous groups is minimally to have Field Liaison Representatives (FLRs), or monitors, present during archaeological investigations to participate in and/or observe fieldwork, and to review and comment on draft reports to ensure their interests are considered. An agreement for FLR/monitor participation in fieldwork and/or report review is customarily between the communities and the project proponent.

4.1 Indigenous Communities with Interests in the City of Cornwall

Identifying the communities with potential interest in development projects depends on the project specific location and whether it falls within a community's traditional territory, who inhabited the area over time, whether the project falls within established or asserted treaty areas, and, when it can be inferred, the cultural affiliation of the site. Indigenous communities with potential interests in the City of Cornwall were contacted during the creation of the AMP, including the Mohawks of Akwesasne, Huron-Wendat First Nation, and the Métis Nation of Ontario. At the time of writing this Draft AMP, the Mohawks of Akwesasne had provided guidance on their engagement protocols which are summarized in Section 4.3.

4.2 Summary of Engagement with Indigenous Communities

The engagement program with Indigenous communities for the Cornwall Archaeological Management Plan was undertaken throughout the course of the project. Engagement commenced in March 2022 with the circulation of a project notice by email to the three (3) identified Indigenous communities. The project notice email described the rationale for the undertaking of the project, its goals, initial timeline, and included a staff contact for the City of Cornwall. Additionally, the project notice email invited recipients from each community to contact City staff or the project consultant if they had any preliminary comments or to organize a meeting to discuss the AMP project in further detail. Follow-up calls and emails were made following circulation of the March 2022 notice to advise of project milestones and open houses.

As of the time of preparation of this Draft AMP, responses had been received from the Mohawks of Akwesasne only. An introductory meeting was held with the Mohawk Council of Akwesasne's Aboriginal Rights and Resource Office (ARRO) on May 18, 2022, to present the project and discuss preliminary comments. Following this meeting, the first Draft AMP was circulated to ARRO staff in December 2022 for review and comment.

A second meeting was held with ARRO in May 2023 to review the Draft AMP. ARRO staff provided comments at that meeting and following the meeting, which were then incorporated into this document.

4.3 Mohawks of Akwesasne

4.3.1 Mohawk Council of Akwesasne Cultural Properties Protocol

The Mohawk Council of Akwesasne's Cultural Properties Protocol (2015, p. 2) was developed by the MCA to "assist in identifying areas and objects of cultural significance to the Mohawks of Akwesasne." It is intended to assist developers and approval authorities in identifying when notifying the MCA is required. As of the time of writing of this Draft AMP, The Aboriginal Rights and Resource Office (ARRO) of the MCA was undertaking an update to the Cultural Properties Protocol.

An Akwesasne Cultural Property is defined as:

> "a resource that can be used as a teaching tool to preserve the history and practices of the Akwesasne community. These resources include any place or object that has significance to our cultural continuity. These cultural properties may reflect a single event or represent multi-component activities extended over a period of time." (MCA 2015)

ARRO requires advance notice of 60 working days prior to projects in the territory of the Mohawks of Akwesasne that will result in ground disturbance. The ARRO also recommends that a professional consultant Archaeologist conduct an archaeological assessment following the standards established in the MCM's (2011a) Standards and Guidelines for Consultant Archaeologists. The ARRO and / or Indigenous Site Monitor will monitor the work of the consultant archaeologist during the project. The Site Monitor is defined by as the MCA Cultural Properties Protocol as, "trained individuals who perform necessary field observations on or at a Cultural Property".

Within Cornwall, the property at 3360 Montreal Road is owned by the MCA. The Port Lands, which comprise of approximately 6.47 hectares of land along the City's waterfront, are jointly owned by the municipality and the MCA (Map 11, p. 80). The Cultural Properties Protocol, and any future updated versions of the Protocol, should be consulted prior to any ground disturbing or development Projects occurring on these properties.

4.3.2 City Engagement Protocol with the Mohawk Council of Akwesasne

The following engagement protocol was developed in consultation with the MCA and the City. This protocol reflects the preferences of the MCA. The MCA's Environment Program, along with the Aboriginal Rights and Research Office (ARRO) is mandated with ensuring the protection and preservation of archaeological resources and cultural properties within the jurisdiction of the MCA (MCA 2018). The ARRO and the Environment Program consult with external organizations on archaeological management within their traditional territory.

The contact information for ARRO and the Environment Program are listed:

Aboriginal Rights and Research Office (ARRO)

MCA Administrative #1 Building, 12 Akwesasne Street, Akwesasne QC H0M 1A0
General Email: arro@akwesasne.ca
Phone: (613) 575-2250

- Cactus Cook Sunday, Manager
  Email: Cactus.Sunday@akwesasne.ca

Phone: (613) 575-2250 ext. 2132

- Adam Jacobs, Researcher
  Email: Adam.Jacobs@akwesasne.ca
  Phone: (613) 575-2250 ext. 2131
  As of Spring 2023, Adam Jacobs is the Native American Site Monitor for the MCA and ARRO for archaeological assessments. ARRO staff can also be contacted via the general email at arro@akwesasne.ca.

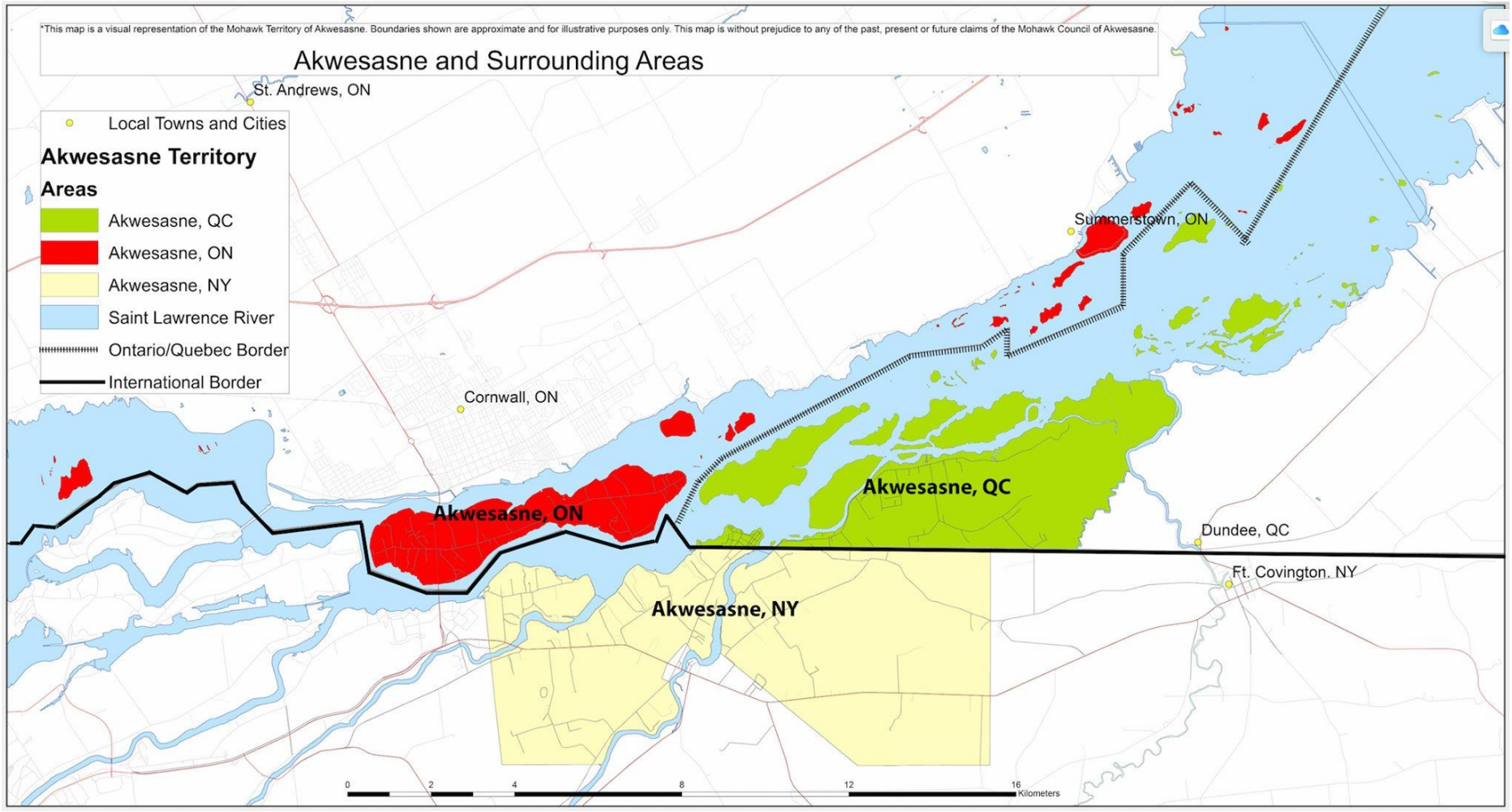


Image 6: Map of Akwesasne and Surrounding Areas.

4.3.2.1 Protocol for the Accidental Discovery of Human Remains

Should Indigenous human remains be discovered at any time, the following steps must be taken in coordination with the MCA:

1) The City of Cornwall Police must be contacted. Sign-off from the coroner is required.
2) Contact Adam Jacobs, the MCA Native American Site Monitor or the MCA Native American Site Monitor as identified by the ARRO. Medicine Man would say a prayer on-site.
3) MCA Site Monitor will notify the three Councils:
    a) Mohawk Council of Akwesasne – elected Council for the Canadian portion of Akwesasne;
    b) St. Regis Mohawk Tribal Council – elected Council for the US portion of Akwesasne. The Tribal Historical Preservation Office (71 Margaret Terrance Memorial Way, Akwesasne NY 13655) serves a similar capacity as the ARRO.
    c) Mohawk Nation Council of Chiefs, with whom the other Councils look to for direction and advice on traditions and cultural practices and protocols.
4) Elders to be consulted with and the Mohawk Nation Council of Chiefs to make final decision on whether the discovered human remains would remain in-situ, be excavated, or otherwise as determined by the Elders
5) A Chief-appointed liaison would be responsible for corresponding with the licensed archaeologist on-site.

4.3.2.2 Engagement Protocol for City-led and Private Land Development

The MCA should be notified prior to archaeological assessments undertaken as part of City of Cornwall-led and private land development for all lands within the City of Cornwall boundary. Should an archaeological assessment be undertaken as part of a City-led project, then it will be the role of municipal staff to carry out the below steps outlined in the engagement protocol.

The engagement protocol for each stage of the archaeological assessment is provided below.

Stage 1 Archaeological Assessments:

1) The MCA may provide an archaeological monitor to attend site inspections conducted as part of Stage 1 archaeological assessments.
2) The City of Cornwall is to issue a letter or email to MCA staff which includes a project overview, the City's role, project schedule, and email contact.
3) The draft Stage 1 archaeological report is to be circulated by City staff or the private land developer to the MCA for review prior to its public release, including public open houses and public meetings.
4) Should the MCA find no concerns with the Stage 1 archaeological report, the ARRO will forward a standard letter signed by the Portfolio Chief, or an individual delegated by the Portfolio Chief, to the City or private land developer citing no concerns.

Stage 2 Archaeological Assessments:

1) The MCA will be notified prior to Stage 2 archaeological field assessments and will provide a monitor for archaeological surveys.

2) The draft Stage 2 archaeological report is to be circulated by City staff or the private land developer to the MCA for review prior to its public release, including public open houses and public meetings.

3) Should the MCA find no concerns with the Stage 2 archaeological report, the ARRO will forward a standard letter signed by the Portfolio Chief, or an individual delegated by the Portfolio Chief, to the City or the private land developer citing no concerns.

Stage 3 Archaeological Assessments and 4 Mitigations:

1) The MCA will be notified prior to Stage 3 and 4 archaeological field work regardless of cultural affiliation and will provide a monitor for archaeological excavations.

2) The draft Stage 3 and 4 archaeological reports are to be circulated by City staff or the private land developer to the MCA for review prior to its public release, including public open houses and public meetings.

3) Should the MCA find no concerns with the Stage 3 and 4 archaeological reports, the ARRO will forward a standard letter signed by the Portfolio Chief, or an individual delegated by the Portfolio Chief, to the City or the private land developer citing no concerns.

4.4 Huron-Wendat First Nation

The Huron-Wendat are involved in over 300 various consultations per year in their duty to ensure the respect and protection of Huron-Wendat archaeological sites (Nation Huronne-Wendat 2022). Their primary objective in consultation is to ensure the protection of archaeological sites and this objective requires the Huron-Wendat Nation's involvement in development projects from the outset. The Office of the Nionwentsïo oversees consultation and engagement in archaeology in South Wendake (Ontario). Any development project that might impact Huron-Wendat archaeological and cultural heritage is of concern to the Nation and it is therefore important that the Nation be involved as early as possible in any archaeological studies or fieldwork.

The Huron-Wendat were consulted as part of the production of the Cornwall AMP and they provided the following general guidelines that would also be relevant to any future archaeological assessments:

1) Capacity funding should be made available to allow for the Huron-Wendat to support the resources required for engagement.

2) Any documents that describe the historical occupation of the land should include information about the Huron-Wendat Nation. This information should be reviewed by the Office of the Nionwentsïo to ensure that the content reflections the Huron-Wendat Nation's understanding of their history. All sections should reflect a willingness to involve Indigenous Nations rather than simple notification.

3) Wendat ossuaries are often only found during the construction phase of a project and therefore there should always be a contingency allowing for the presence of Wendat field monitors to allow for respectful treatment of any ancestral remains that could be fortuity encountered during construction.

4) Should archaeological resources or burial sites associated with Indigenous communities be found through archaeological assessment or during the development process, the City shall prioritize and engage with Indigenous Nations for all matters regarding their historical heritage.

5) Where archaeological resources are documented and found to be Indigenous in origin, a copy of the archaeological assessment report shall be provided by the consultant to the appropriate Indigenous nations

6) Where the preservation of a site containing Indigenous archaeological resources is not possible, the city, the development proponent, and the consultant archaeologist (in an advising role) shall engage at the earliest possible moment (including before any fieldwork takes place) with the appropriate Indigenous Nations to identify interpretive and commemorative opportunities to ensure the long-term protection of any archaeological resources.

4.5 Métis Nation of Ontario

The Métis Nation of Ontario (MNO) has nine (9) regions within the Province of Ontario. The City of Cornwall is located closest to Region 6. Métis Consultation and Accommodation was published by MNO in 2021 and is a document intended to serve as a guide for government and industry on engagement with MNO.

Five (5) steps are outlined in the Métis Consultation and Accommodation document for the pre-consultation stage:

1) Trigger for consultation: Government or a proponent identifies a plan, policy or project with potential impact to Métis rights, interests or ways of life;

2) Notice to Métis: Notice from the government or the industry proponent is sent to the Métis Consultation Unit c/o the MNO Head Office. This notice should include sufficient detail for the MNO to determine consultation requirements;

3) Assessment by Métis;

4) Métis Response; and

5) Consultation Stage.

5.0 HISTORICAL CONTEXT AND ARCHAEOLOGICAL EVIDENCE

5.1 Natural History

The human occupation of the City of Cornwall is dependant on the natural conditions in which the city is situated. In natural history terms, the region became habitable following the recession of the Laurentide ice sheet approximately 11,000 years before present (BP). The Laurentide ice sheet formed during the Pleistocene epoch (2.6 million BP to 11,700 BP). The Pleistocene epoch is commonly known as the “Great Ice Age” and represents a period of continental glaciation cycles; with expanding and retreating ice sheets across Canada and the northern United States. The last glacial maximum, called the Wisconsin Glaciation, occurred approximately 20,000 BP. During this last glacial maximum, considerable changes occurred in the region including the geomorphic changes which resulted in the creation of the basins of the modern Great Lakes and much of the surficial geology (soils) in Ontario.

Following the Pleistocene geo-chronological era, the current Holocene epoch began (11,700 BP to present). The Holocene epoch follows the start of a period of warming which resulted in the melting of the Laurentide ice sheet. Once the ice sheet left the region, large portions of eastern Ontario was inundated by what is now called the Champlain Sea. At that time, the land within the base of the Champlain Sea was below sea level and the Atlantic Ocean waters were able to flow directly into the sea. The land was below sea level due to the depression of the land from the weight of the glaciers.

The Champlain Sea is interpreted to have extended from the Rideau Lakes in the south, along the Ottawa Valley and St. Lawrence areas and terminating in the vicinity of Petawawa in the west. The exact western boundary of the Champlain Sea is unconfirmed as current elevation levels reflect the isostatic adjustment (uplift) of the land following the melting of the glaciers which has obscured definitive traces of the Champlain Sea shoreline at the time of its existence. The eastern portion of the sea extended into the Atlantic Ocean along the St. Lawrence River Valley.

As the land slowly uplifted with the weight of glaciers off the region (known as isostatic rebound), the current ground elevations of the region were established. As the land moved above sea level throughout the region around 10,000 BP, the Atlantic Ocean waters were no longer able to penetrate into the region and the Champlain Sea disappeared. The paths of the natural waterways in the region became established and vegetation and terrestrial fauna where able to take hold. Climatic conditions were still colder than they are today as the glaciers receded. Following the departure of the Champlain Sea the region was tundra initially. As global temperatures rose, the region transitioned from tundra to taiga and, by approximately 5000 BP, the Great Lakes-St. Lawrence Forest of today. With each broad vegetative shift, the plant and animal resources changed based on the climatic and vegetative conditions they have evolved to exploit.

The St. Lawrence River was formed along with the Great Lakes as a result of numerous glacial advances and retreats gouging depressions in the earth. As the glaciers and subsequent Champlain Sea disappeared, water drained into low-lying areas forming the river network. The St. Lawrence is the second largest river network in North America with a watershed measuring approximately 1.6 million km^2 (Thorp et al. 2005). It flows from Lake Ontario to the Gulf of St. Lawrence. It is home to a diversity of species including many mollusks, dozens of species of fresh water and migratory fish, about 115 species of waterfowl, and, in the upper estuary, several species of whale including long-finned pilot and beluga whales (Thorp et al. 2005).

Known as the Kaniatarowanenneh by the Mohawk (MCA ND), the St. Lawrence River plays a significant role in the lives of the many Indigenous peoples who have utilized the river for thousands of years. Not only providing a source of subsistence due to its rich resources, it provided a navigable route from the Great Lakes in the west to the Atlantic Coast to the east.

Just west of Cornwall, a significant feature of the St. Lawrence River is the Long Sault Rapids. Now significantly altered following the creation of the St. Lawrence Seaway in the 1950s, many travelers would have portaged around the rapids making the banks around the rapids a natural resting place where travelers would camp, hunt, trade and fish (Bonaparte ND).

5.2 Regional Indigenous History

This section provides a general overview of the regional Indigenous history. A summary of the chronology used by archaeologists is presented in Table 2.

Table 2: Overview of Pre-Contact Chronology of Eastern Ontario

Period		Time Period (circa)	Characteristics
Paleo	Early	11,000 – 9,500 BP	Small bands; mobile hunters and gatherers and large territories; fluted projectiles.
	Late	9,500 – 9,000 BP	Continuing mobility; campsite/way-station sites; smaller territories are utilized; non-fluted projectiles.
Archaic	Early	9,000 – 8,000 BP	Side-notched, corner-notched projectile points, growing diversity of stone tool types; heavy woodworking tools appear (e.g., ground stone axes and chisels).
	Middle	8,000 – 4,000 BP	Stemmed, side-and corner-notched projectile point traditions; reliance on local resources; populations increasing; more evidence of ritual activities; fully ground and polished tools; net-sinkers common; earliest copper tools.
	Late	4,000 – 2,950 BP	Regional variation in projectile point traditions; less mobility and decreased territory size; use of fish-weirs; more formal cemeteries appear; stone pipes emerge; long-distance trade (marine shells and galena).
Woodland	Early	2,950 – 2,200 BP	Ceramic technology emerges; continuation with Late Archaic projectile points with well made side notched points
	Middle	2,200 – 1,100 BP	Increased reliance on ceramics; fishing becomes a larger focus of subsistence; densely occupied basecamps.
	Late	1,100 – 500 BP	Introduction of agriculture; appearance of village sites in southern Ontario; more permanent settlements; triangular projectile points

Paleo Period (11,000 – 9,500 BP)

Although the complex precontact sequence of occupation within the project area is not completely understood, it is inferred that populations during the Paleo Period would have migrated into the area following the establishment of vegetation and sustainable wildlife. The Paleo Period in Ontario was broadly characterized by small populations of hunter-gatherers whose subsistence strategies exploited large areas, while often travelling distances in excess of 150 km in an effort to procure raw materials for the production of lithic tools. Archaeologists have denoted the earliest inhabitants of Ontario with the archaeological moniker “Clovis” (Wright 1994).

Cultural signatures of Early Paleo Period populations include the production of projectile points with channel flakes or flutes predominately manufactured from Collingwood or Onondaga chert. In Ontario, these early inhabitants were likely caribou hunters, although it is possible they occasionally hunted the now extinct mammoth and mastodon. The environment in southern Ontario during the Early Paleo Period would also have been able to support a variety of other plant and animal resources. In addition to caribou, mammoth and mastodon, fish, birds, moose, elk and muskoxen would also presumably have been available to hunters during the Paleo Period and it is reasonable to suggest these resources were also utilized (Peers 1985).

Paleo Period fluted points may be a reflection of large game hunting, while tools such as scrapers, piercing implements and gravers that are typically associated with Paleo Period sites were probably used in the manufacture and repair of wooden implements, bone tools and clothing (Peers 1985). Within modern Ontario, diagnostic dart heads from this period are generally found exclusively in southern Ontario, with the continental glacier still covering the majority of northern Ontario during this period (Wright 1994).

Early Paleo Period sites tend to be located within areas of elevated topography on well-drained loamy soils, as well as on former beach ridges associated with glacial lakes. The majority of Paleo Period sites are relatively small in size and typically represent contemporary camp sites, with only a few large sites, such as the Parkhill and Fisher sites, recognized as extending over several hectares. It is likely these larger sites were formed as people continued to occupy the same area for short durations over the course of several years. Given their placement in locations conducive to the interception of migratory mammals such as caribou, it has been suggested these larger sites may represent communal hunting camps (Ellis and Deller 1997).

There are also smaller Early Paleo Period camp sites scattered throughout the interior of Ontario, usually situated adjacent to wetlands or navigable waterways. Paleo Period sites are typically recognized by the presence of finely-crafted lance points of a very distinctive nature. Knives, gravers, scrapers and a variety of other stone processing tools are typically associated with Paleo Period sites (MCR 1981).

By the Late Paleo Period (9,500 – 9,000 BP), enclosed coniferous forests with some minor deciduous elements became established in southern Ontario. It is likely that many of the large game species that had been hunted during the early epoch of the Paleo Period had either moved further north, or as in the case of the mastodons and mammoths, became extinct. Similar to the inhabitants during the Early Paleo Period, Late Paleo Period inhabitants traversed large territories in response to seasonal resource fluctuations. The transition to the Late Paleo Period also included projectile points comprised of smaller unfluted projectiles along with lanceolate parallel flaked stemmed and non-stemmed Plano points, while hunting strategies may have transitioned from communal groups to more individualized pursuits (Ellis and Deller 1997).

Paleo Period sites are apparently rare in the County of Stormont, Dundas, and Glengarry given that to date, only two possible Paleo projectile point fragments have been found in the region. The point fragments were recovered at the Francis Island site (BgFp-15), which represents a multi-component site located on St. Francis Island in Lake St. Francis, approximately 12 km east of Cornwall (MCM 2022).

Archaic Period (9,000 – 2,950 BP)

During the Early Archaic Period (9,000 – 8,000 BP), a gradual increase in atmospheric humidity in conjunction with warmer summers influenced the environmental landscape within the general study area vicinity. Fossil pollen and spore identification from sedimentation cores lifted from Lovesick Lake provide evidence of climate change, with jack pine forests becoming dominant during the beginning of the Early Archaic Period (Teichroeb 2007).

Concurrent with the environmental evolution during the Early Archaic Period were notable technological changes including the appearance of side and corner-notched projectile points. Other significant innovations included the introduction of ground stone tools such as celts and axes, which suggest the beginning of a simple woodworking industry. 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 encompass large areas.

Populations occupying Ontario during this period primarily used large base camps on islands, near river mouths, and on the shores of embayment's where a variety of flora, fish, and wild fowl resources could be obtained during the spring, summer and fall seasons. Smaller hunting and specialized campsites were established in the uplands and along smaller watercourses. Access to these shoreline occupation areas would have been facilitated by a variety of Indigenous watercraft such as bark canoes, skin boats and dugout canoes (Monk 1999).

The bark canoes believed to have been utilized during the Archaic Period were relatively light, easily transportable, and were adaptable to inland waterways such as creeks, rivers and smaller isolated lakes (Adney and Chapelle 2014; Monk 1999). A variety of raw materials were utilized in the construction of these canoes including the bark of oak, butternut, white pine (Adney and Chapelle 2014), elm, hickory, chestnut, cottonwood and spruce, although birch bark was considered superior and highly desirable (Leshikar 1988).

Early Archaic Period sites are not common in south central Ontario, suggesting populations remained sparsely distributed throughout the region. Existing data and known site distributions suggest Early Archaic Period populations may have concentrated along the north shore of Lake Erie and around the western edge of Lake Ontario, with these waterways also providing accessible transportation routes and opportunities for subsistence extraction such as fishing and hunting grounds.

During the Middle Archaic Period (8,000 – 4,000 BP) the environmental landscape continued to evolve with the jack pine forests prevalent during the Early Archaic Period being primarily replaced by white pine growth, suggesting a gradual increase in humidity and a continuation of hot summers (Teichroeb 2007).

The trend towards more diverse toolkits also continued into the Middle Archaic Period, as the presence of netsinkers and fish weirs suggest that fishing was becoming an important component of the subsistence strategy. The development of task specific stone implements, including those specifically designed for the preparation of wild plant foods were manufactured, and this period also marked the introduction of 'bannerstones", which are carefully crafted ground stone devices that served as a counterbalance for atlatls or spear-throwers.

Another characteristic of the Middle Archaic Period was 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, which provided the opportunity to visit primary outcrops of high-quality chert at least once during their seasonal round, during the 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 materials that had been previously deposited by the glaciers in the local till and river gravels were utilized.

This reduction in territory size may reflect the 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 a source located northwest of Lake Superior were being traded (Ellis et al. 1990), with a wide range of copper tools such as socketed and tanged spear points, projectile points, knives, harpoons, crescent knives, gouges, pikes and celts being produced during this period (Dawson 1983).

Settlement and land use generally continued the trend from the Early Archaic Period, with the majority of documented habitation sites discovered on islands, near river mouths, and along sheltered shorelines where a variety of flora, fish, and wild fowl resources could be obtained during the spring, summer and fall seasons. Smaller hunting and specialized campsites were established in the uplands and along smaller watercourses. Along the waterways, the Trent system from Rice Lake south to Lake Ontario, Prince Edward County, and the St. Lawrence shores and islands were particularly favoured during this period (MCR 1981).

During the Late Archaic Period (4,000 – 2,950 BP), the trend towards decreased territory size and a broadening subsistence strategy continued. Late Archaic Period sites have been discovered in greater numbers compared to Early and Middle Archaic Period sites, suggesting the local population was rapidly expanding.

The appearance of more formal cemeteries 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 sandy and gravel soils adjacent to major watercourses.

The suggestion of increased territoriality is also consistent with the regionalized variation present in Late Archaic Period projectile point manufacturing, with distinct locally diagnostic styles appearing within the archaeological record.

Trade networks established during the Middle Archaic Period also continued to flourish during the Late Archaic Period. Copper implements from northern Ontario and marine shell artifacts from the Mid-Atlantic coast are frequently encountered as grave goods (Ellis et al. 1990; Ellis et al. 2009).

Other artifacts including polished stone pipes and banded slate gorgets also appear on Late Archaic Period sites. One of the more unusual and interesting components of the Late Archaic Period artifact assemblage is the "birdstone", which are small, bird-like effigies usually manufactured from green banded slate (Ellis et al.1990).

Examples of Archaic period sites in the County of Stormont, Dundas, and Glengarry include the previously mentioned Francis Island site (BgFp-15), in addition to the Johnson site (BeFt-1), the Raymond site (BgFr-5), the Adams site (BgFr-8), Glengarry Cairn (BgFo-1), and the Chesterville 2 site (BgFt-6) (MCM 2022). All these sites except the Chesterville 2 site (BgFt-6) are located along the St. Lawrence River, which may reflect the importance of the St. Lawrence Waterway as a significant transportation route during this period.

Woodland Period (2,950 – 500 BP)

The Early Woodland Period (2,950 – 2,200 BP) is distinguished from the Late Archaic Period primarily by the introduction of ceramic technology. The first pots were thick walled and friable suggesting they may have primarily been used in the processing of nut oils by boiling crushed nut fragments in water and skimming off the oil (Spence et al. 1990). These vessels were likely not easily portable, and their fragile nature suggests they may have required regular replacement. There have also been numerous Early Woodland Period sites identified where ceramics were absent from the recovered assemblage, suggesting these vessels may have not been completely integrated within the day-to-day lives of Early Woodland Period populations.

Besides the addition of ceramic technology, the cultural affinity of Early Woodland Period inhabitants showed a great deal of continuity with the preceding Late Archaic Period. For instance, birdstones continued to be manufactured, although the Early Woodland Period varieties have "pop-eyes" that protrude from the sides of their heads (Spence et al. 1990). Another example of general continuity from the terminal segment of the Archaic Period is represented by the thin, well-made projectile points, although the Early Woodland Period variants were side-notched rather than corner-notched, giving them a slightly altered and distinctive appearance (Spence et al. 1990). The Glengarry Cairn (BgFo-1) site, located on Lake St. Francis, is the only registered archaeological site with an Early Woodland Period component in the County of Stormont, Dundas and Glengarry (MCM 2022).

Compared to the Early Woodland Period, Middle Woodland Period populations relied much more extensively on ceramic technology, which were often decorated with hastily impressed designs covering the entire exterior surface and upper portion of the vessel interior. Consequently, even very small fragments of vessels manufactured during the Middle Woodland Period are easily identifiable.

It is not inconceivable that watercraft were involved in the rapid spread of ceramic technology and other artifact attributes during the Woodland Period. The watercraft utilized during the Archaic Period continued to be employed along the navigable waterways and would have provided the ability to transport not only the larger ceramic containers, which were not easily portable over land, but also the concepts and technology associated with Early Woodland Period pottery manufacturing. Evidence of exchange networks during the early stages of the Woodland Period indicate numerous reciprocal, down-the-line exchanges between trade partners located both short and long distances away. There is a gradual intensification of these types of trade throughout the period continuing into, and reaching its apex in, the Middle and Late Woodland Periods (Hartmann 1996).

In terms of subsistence strategies, the Middle Woodland Period (2,200 – 1,100 BP) provides a clear demarcation from patterns observed on Archaic and Early Woodland Period sites. While Middle Woodland Period populations continued to rely on hunting and gathering to meet their subsistence requirements, an increased consumption of fish became an important component of their diet. Some Middle Woodland Period sites have produced thousands of bones from spring spawning species including walleye and sucker. Food sources such as shellfish, tree nuts and a proliferation of plant greens and seeds began to be exploited. The seasonal variety and relative dependability of these foods encouraged population growth in many areas. It also provided the opportunity for a stabilized settlement pattern based on a seasonally variable system of small strategic hunting camps throughout a territory, and large habitually used base camps in locations situated to take advantage of the greatest number of resources (MCR 1981).

The settlement patterns during the Middle Woodland Period generally reflect densely occupied sites that appear on the valley floor of major rivers. Middle Woodland Period sites are significantly different from previous periods in that the same location was occupied periodically for several hundred years, often producing sites with significant artifact deposits. Unlike earlier seasonally utilized locations, many Middle Woodland Period sites appear to have functioned as base camps, occupied periodically over the course of the year. There are also numerous small upland Middle Woodland Period sites, many of which can be interpreted as special purpose camps where localized natural resources were exploited.

This shift towards a greater degree of sedentism continued the trend established from at least the Middle Archaic Period and provides a prelude to the developments that followed during the Late Woodland Period. The extensive trade networks that prevailed through the Late Archaic and Early Woodland Periods also continued throughout the Middle Woodland Period.

There are eleven (11) registered Middle Woodland Period archaeological sites within the County of Stormont, Dundas and Glengarry (MCM 2022). The majority, again, are located along the St. Lawrence River showing the continued importance of the river as a transportation network and resource for fishing during the Woodland Period.

In general, the Late Woodland Period is characterized by a shift in settlement and subsistence patterns, involving the introduction of agriculture and more permanent occupation sites, including the construction of long houses and palisaded villages in southern Ontario (Fox 1990; Smith 1990; Williamson 1990). The transition from the Middle to Late Woodland Period is typically marked by the introduction of triangular projectile point styles and “cord-wrapped stick” decorated ceramics, which are associated with the Princess Point Complex (Martin 2004; Crawford et al. 1997; Bursey 1995; Ferris and Spence 1995; Spence, et al. 1990; Williamson 1990; Ritchie 1971).

There was also an evolution to an increasing reliance on corn horticulture, which may have been introduced into southwestern Ontario from the American Midwest as early as 350 CE (Fox 1990; Williamson 1990), although corn is not believed to have become a dietary staple in Ontario until at least 300 to 400 years later.

By approximately 1,500 BP, a significant shift in settlement patterns was occurring throughout the area as people began to transition from seasonally occupied waterway-oriented campsites towards more permanent village sites on higher ground, often on well-drained sandy soils. These small settlements, generally only a few acres in size, were often surrounded by palisade walls where the traditional “longhouse” structure was introduced (MCR 1981).

There are twelve (12) Late Woodland Period sites located within the County of Stormont, Dundas and Glengarry (MCM 2022). By the end of the Late Woodland Period, distinct regional populations occupied specific areas of Ontario separated by vast stretches of largely unoccupied land, including the Huron along the north shore of Lake Ontario, the Algonquins along the Ottawa River and the St. Lawrence Iroquois along the St. Lawrence River.

The Cornwall area falls within the territory of the St. Lawrence Iroquois who consisted of tribes of related peoples who occupied the St. Lawrence drainage basin from the east end of Lake Ontario to the area around Quebec City. French explorer Jacques Cartier encountered two groups of St. Lawrence Iroquois during his explorations in 1534, 1535, and 1541. These were the Stadaconans of the Quebec City area and the Hochelagans on Montreal Island. These groups, however, represented only the easternmost St. Lawrence Iroquois and there would have been a greater population living in the region of eastern Ontario and New York State.

Differences in subsistence practices existed between the eastern and western populations (Wright 2004). Those located east of Montreal relied more heavily on fishing and the hunting of sea mammals due to their proximity mouth of the St. Lawrence River. Those located west of Montreal relied more upon horticulture, growing corn, beans, squash, sunflower and tobacco. The shift to horticulture occurred sometime prior to the 14th century which saw a change in settlement patterns from seasonal hunting and fishing camps to semipermanent horticultural villages (Wright 2004). However, fishing remained a substantial part of the subsistence base.

The best documented St. Lawrence Iroquois sites include a number of fortified villages such as the Roebuck site and Beckstead Site. The Roebuck Site, located approximately 10 km north of Prescott, was a semi-permanent St. Lawrence Iroquois village that measured approximately 3 ha in size and had a population of up to 2,000 people. The settlement was made up of three rows of palisades, an earthwork fortification, and about 40 longhouses (Jamieson 1990, p. 398; Wintemberg 1936). Recent accelerated mass spectrometry (AMS) dates indicate Roebuck was occupied beginning in 476 to 382 BP and ending between 426 to 363 BP (Birch et al. 2016).

Closer to Cornwall, the Beckstead site is a smaller fortified village located outside of Williamsburg. The site was partially excavated by James Pendergast in 1962 and 1977. Pendergast (1984) interpreted the Beckstead site as an inland farming village covering an area of approximately 3 acres. The 1977 excavations identified the remains of four long houses, eighteen burials, and several additional disarticulated remains belonging to 5 adults whose remains Pendergast suggested may represent ceremonially cannibalized prisoners of war. The presence of steatite beads, one marine shell bead, and a European blue glass trade bead indicated the inhabitants of the village participated in the trade of long-distance goods, possibly being transported along the St. Lawrence River.

While both the Beckstead and Roebuck site are inland villages, a number of seasonal fishing camps have been identified along the St. Lawrence River. One such site is the Steward site (BfFt-2), located in Morrisburg, which consisted of two houses, one containing burials of two fetuses and an infant, and a stratified midden (Jamieson 1982).

In the vicinity of Cornwall, there are a number of registered St. Lawrence Iroquois sites located around the St. Lawrence River (see Section 3.6). Many of these sites were inundated during the construction of the St. Lawrence Seaway.

The St. Lawrence Iroquois disappeared as a distinct group sometime during the 16th century as a result of hostilities with the neighbouring Huron and the Iroquois confederacy to the south. Some refugees may have dispersed among the Algonquin populations in the Ottawa Valley region to the north (Pendergast 1999) or the population may have been conquered with the survivors absorbed by the Huron (Wright 2004). Nonetheless, by the arrival of Samuel de Champlain in 1608, the St. Lawrence Iroquois were gone, and their former homelands contested by the confederacy of Huron, Montagnais, and Algonquins and the Iroquois confederacy consisting of the Mohawk, Onondaga, Oneida, Cayuga, and Seneca.

5.3 Early Euro-Canadian Settlement and Post-Contact History

5.3.1 The United Counties of Stormont, Dundas, and Glengarry

Fronting the north side of the St. Lawrence River, the United Counties of Stormont, Dundas and Glengarry extend from the Quebec border in the east to County of Grenville between the towns of Cardinal and Iroquois, Ontario to the west. Altogether it contains twelve townships, four within each county, including the Township of Cornwall within Stormont County. The City of Cornwall is entirely contained within the geographic Township of Cornwall.

The region in which the United Counties is found was first claimed by the French in 1534 by the French explorer, Jacques Cartier, who planted the French flag in modern Gaspe, Quebec. Jacques Cartier was the first European to document his explorations of the St. Lawrence River, traveling as far west as the Iroquoian village of Hochelaga (modern Montreal) in 1535. However, it wasn't until the voyages of Samuel de Champlain in the early 17th century when the river became the principal route for explorers, missionaries and fur traders travelling to the interior. Throughout the 17th and 18th centuries the waterway remained an important link in the French fur trade.

French settlement stalled within the 16th and 17th centuries in the territory of modern Canada. By 1650, New France only contained a few hundred colonists, primarily in Quebec, and was largely employed managing the fur trade in the region. Rene-Robert Cavelier (commonly known as La Salle) was the first French explorer to build a settlement in modern Ontario at the mouth of the Cataraqui River (in modern Kingston) in 1673. Settlement was minimal by the French in what was to become Ontario and New France was ceded to the British in the Treaty of Paris in 1763.

Similar to much of southern Ontario, substantial settlement of what became the United Counties of Stormont, Dundas and Glengarry began in the late 18th century with the arrival of United Empire Loyalists following the American Revolutionary War. Upon their arrival, the Loyalists drew their lots with each receiving a grant of 100 acres fronting the St. Lawrence and an additional 200 acres further inland within the same township. Officers were entitled to larger grants, based on their rank, with children of Loyalists also being granted free land. Through this process, the entire riverfront within the newly surveyed Townships of Charlottenburgh, Cornwall, Osnabruck, Williamsburgh and Matilda (originally identified simply by numbers) were settled almost simultaneously (Lockwood 1996). Generally, Scots were placed in the eastern townships and the western townships were primarily comprised of German immigrants.

Not long after arriving, the early settlers expressed desire for local governance. This area was considered part of the Montreal District until 1788 when Lord Dorchester announced the formation of new districts west of Montreal and the Counties of Stormont, Dundas and Glengarry became affiliated with the most eastern district of Lunenburg (Harkness 1946). By the end of the 18th century, all of the townships along the waterfront in the District of Lunenburg had been surveyed and partially settled. By 1826, the original districts had been broken up into to smaller districts, as settlement increased and the desire for further localized government grew. The United Counties became part of the Eastern District, and by the mid-1800s the districts were phased out as counties and townships took on more governing responsibilities.

The townships further inland from the St. Lawrence River were not settled nearly as quickly as those along the water. It wasn't until the 1880s, with the addition of several railways in the northern section of the county, that development in these areas began in earnest. Small centers such as Alexandria, Chesterville, and Avonmore grew considerably and new villages such as Maxville were established (Harkness 1946).

Despite the number of early Euro-Canadian settlements in Eastern Ontario, population growth was much slower than that of other regions in Ontario. In the mid- to late 19th century, progressive agricultural techniques, which favoured soils with deep fertility, came common place and these techniques were not effective on the soils of eastern Ontario. The led to the emigration of the younger population to locations such as the Prairies after confederation. Eastern Ontario's and the United Counties agricultural focus largely shifted to dairy farming (Gentilcore 1993). The lack of fertile farmland and the favouring of larger urban centres for rapid industrial growth has led to slower population growth than most of Canada for the United Counties for the late 19th and 20th centuries.

The St. Lawrence River had been an important transportation route prior to European settlement within the county, although there were several rapids between Cornwall and Prescott making navigation for larger vessels difficult. Several canals were constructed in an effort to improve navigation through the area, with the Cornwall Canal opening in 1842 and the Williamsburg Canals (Farran Point, Rapide Plat, Galop and Iroquois) completed in 1847. As early as 1895, a joint commission between the United States and Canada was initiated to discuss further developments to ensure the river could be utilized as a viable shipping route (Marin and Marin 1982).

Most citizens along the riverfront protested the flooding of their lands, while large companies lobbied for the construction of the St. Lawrence Seaway. Although the project was delayed due to two world wars and American inaction, in 1951 the St. Lawrence Seaway Act was approved in Canada and in 1954, the American Seaway Act was passed with approval granted for New York to join Ontario Hydro on the project (Marin and Marin 1982).

There were great expectations for the St. Lawrence Seaway as many believed it would bring significant economic growth to the United Counties of Stormont, Dundas and Glengarry. Ground was officially broken in August 1954 and the Seaway was officially opened five years later following construction of three large dams and several cofferdams to support construction. In the United Counties, Ontario Hydro bought 37,000 acres, with 6,500 people losing their homes and eight villages being affected including Iroquois, Aultsville, Farran's Point, Dickinson's Landing, Wales, Moilinette, Mille Roches, and Morrisburg. Railways and roads, including Highway 2, were moved further inland while some structures were relocated, and two new towns (Ingleside and Long Sault) were created for the displaced people from the historic villages (Marin and Marin 1982). Two cemeteries were raised, and 14 cemeteries originally positioned along the waterfront were amalgamated and moved to the St. Lawrence Valley Union Cemetery (Marin and Marin 1982).

The creation of the St. Lawrence Seaway was considered by many to be the most significant engineering project of the decade in North America and possibly one of the most important in the world at the time (Marin and Marin 1982). Unfortunately, the Seaway did not bring the substantial economic growth to the area that was predicted, and the region's population has not drastically changed since the 1950s.

Upper Canada Village was created to promote the history of the United Counties and more than half of the buildings showcased at the site originated from the United Counties (Marin and Marin 1982). Many parks and beaches were created along the river with signs and plaques commemorating historic sites and villages that had a positive effect on tourism in the area. In addition to these efforts to preserve the history of the United Counties, an archaeological investigation was carried out over three summers on Sheek Island, located 5 km west of Cornwall, to gather information and artifacts prior to the flooding of the area. An Indigenous settlement, including a burial site, was identified as being from the Point Peninsula Period (Marin and Marin 1982).

5.3.2 Mohawks of Akwesasne

The Mohawks of Akwesasne are a community of approximately 13 000 people located along the St. Lawrence River in an area that straddles the borders of Quebec, Ontario, and New York (MCA 2015; 2017). They are part of the Six Nations Confederacy (also known as the Haudenosaunee or Iroquois) which consists of the Mohawk, Seneca, Cayuga, Oneida, Onandaga, and Tuscaroras Nations. In 1888, Akwesasne became the seat of the Mohawk Nation Council of Chiefs.

Akwesasne, originally named St. Regis by the French, was established in the mid-18th century and was the first Haudenosaunee community in the region that would later become Ontario (Hamori-Torok 1994). Its first inhabitants were 30 predominately Mohawk families from a Christian Iroquois community located near Montreal called Kahnawake (Bonaparte ND). The exhaustion of local land resources and the onset of the Seven Years' War (1754-1763) led these families to seek a new home downriver. Following the American Revolutionary War (1775-1783), the Mohawk lost their traditional homelands in New York State after the British conceded territory to the United States with the 1783 Treaty of Paris (INAC 2011). Akwesasne was not included in the lands conceded to the United States and some of the displaced Mohawk chose to settle in the community. In 1796, the Haudenosaunee signed a treaty with the United States government to cede all lands except for a 100 km² area around Akwesasne on the south bank of the St. Lawrence River (Hamori-Torok 1994).

Another consequence of the American Revolutionary War was that Akwesasne territory was intersected by the US border, with a portion of the community within British Upper Canada. The 1795 Jay Treaty signed between the United States and Great Britain confirmed the rights of Indigenous peoples to cross the border although tensions between America and Britain leading up to the War of 1812 resulted in the British refusing to allow people from the American side to live on the Canadian side (Bonaparte ND; Hamori-Torok 1994). The British Crown also settled loyalists on the north bank of the St. Lawrence River in the area of the City of Cornwall on land claimed by the Mohawk (Bonaparte ND). Eventually the Crown compromised and under Treaty 57 established hunting and gathering rights on 30,690 acres known as the Nutfield Tract (MacGillivray and Ross 1979). Finding the lands unsuitable for hunting or settlement, the Mohawk leased the land to settlers while collecting rent. Mohawk claims to the Nutfield Tract were ended in 1847 with the Municipal Act. After the government took control of the land, they granted much of it to the tenants and squatters who had leased it from the Mohawk.

5.3.3 Huron-Wendat

The Huron-Wendat First Nation is located in Wendake, Quebec although they originated from the territory of Huronia or Wendake Sud, located in Ontario and extending from Lake Nippissing in the north to the north shore of Lake Ontario in the south and from Ille Perrot in the east and to Owen Sound in the west (Nation Huronne-Wendat 2022). The City of Cornwall would therefore fall within their traditional territory.

The Huron-Wendat were the northernmost Iroquoians, living in villages and subsisting through agriculture focused on corn, beans and squash (Williamson 2014). This was supplemented by fishing and hunting. Conflict with the neighbouring Haudenosaunee peoples during the 16th and 17th centuries, led to the Huron-Wendat Confederacy, consisting of four allied nations of the Attignaawantan, Attigneenongnahac, Arendarhonon, and Tahontaenrat, concentrating their settlement in fortified villages in the area between Lake Simcoe and Georgian Bay (Williamson 2014). The conflict with the Haudenosaunee and epidemics brought on by contact with Europeans led to the dispersal of the population from their traditional territory between 1649 and 1650. Many settled within their current location near Quebec City.

5.3.4 Métis Nation of Ontario

The Métis Nation of Ontario (MNO) was established in 1993 to create a Métis-specific governance structure. It represents individuals and communities that are part of the Métis Nation. These include over 25,000 Métis Citizens and 31 Chartered Community Councils across the province which represent Métis citizens at the local level (MNO 2022). The Métis are a distinct Indigenous people created through the intermarriage of European and Indigenous peoples. The historical Métis were often the children of fur traders and would grow up to work in the fur trade themselves. Typically raised by their Indigenous mothers, but also introduced to Christianity, European customs, and the fur trade through their fathers, the Métis bridged both cultures. They helped to improve relations between Indigenous populations and fur trading companies and played a central role in the development of the trade in Ontario.

5.4 City of Cornwall

The City of Cornwall began as a settlement for United Empire Loyalists in 1784 (Cornwall 2022). The United Empire Loyalists included those who fought for the British during the American Revolutionary War and were granted land by the Crown in the remaining British territories for their service. The early settlement of Cornwall, originally named New Johnstown (Image 7, p. 47), was established by the officers and families of the first Battalion King's Royal Regiment of New York and the 84th Royal Highland Emigrants. Cornwall was named after Prince George, the Duke of Cornwall, and was incorporated as a town in 1834 and a city in 1945 (Harkness 1946).

Image 7: Sketch showing the Loyalist encampment at New Johnston, now the City of Cornwall (Peachey 1785).

Cornwall was surveyed by Patrick McNiff, under the orders of Sir John Johnson who had grown frustrated with waiting for Government surveyors and feared that his men would be dissuaded from taking up the granted land. The location for the settlement was known by the French as Pointe Maligne (the cursed point) and was located across the river from the Indigenous community of St. Regis. The proximity to St. Regis led to immediate dispute as Johnson was met by men from the community who stated their claim to the lands of the proposed settlement and that Johnson's own father, Sir William Johnson, had promised to have the lands confirmed to them (Senior 1984). Johnson asked the chiefs of St. Regis whether they would be willing to relinquish their claim "to two or three Leagues in Depth from the (Raisin) River to the Long Sault for a reasonable compensation" (Senior 1983, p. 18). The dispute delayed the survey and Johnson had to return to Montreal to consult with Governor Frederick Haldimand.

Johnson had escaped to St. Regis at the outbreak of the Revolutionary War and its residents had provided him and his men with assistance so Johnson had prior obligation to the community. Haldimand found no record that the disputed lands but urged Johnson to settle the matter with reasonable terms for St. Regis. One of Johnson's Indigenous officers, Captain Joseph Brant, undertook the negotiations with St. Regis. An agreement was made by May 1784 with Indigenous claim to the north bank of the St. Lawrence reduced to a tract of land between the first and second townships to ensure the community of St. Regis could maintain access to the Petite Nation River. In exchange for giving up their claim to the rest of the land for the new Township, St. Regis was granted land south of the St. Lawrence. Following negotiations, Sir Johnson had his surveyors lay own the mile-square town plot.

Due to Cornwall's location along the St. Lawrence River and the border with the United States, the settlement occupied a strategic location that made it vulnerable to invasion by the United States. Indeed, the settlement of disbanded soldiers was intended to keep the men of the regiments together so they could defend the land against the United States should the need arise (Senior 1983). Combined with its location in a region that was considered remote wilderness at the time of its initial settlement by Europeans, the people of Cornwall were forced to become self-reliant (Parham 2004). When the Loyalists arrived, there were no roads or means of communication with commercial centers such as Montreal which forced the settlers to rely on themselves and their neighbours for basic subsistence. Good soils and growing conditions similar to what the Loyalists were accustomed to in New York provided favourable conditions to the development and growth of the settlement. Lumbering and the burning

of wood to produce potash and lye provided an additional resource for the Loyalists as land was cleared to be converted to agriculture.

Settlement began in June of 1784. The 516 settlers who arrived in the area were provisioned with a tent, one month's worth of food rations, clothes, and agricultural provisions. The initial settlement consisted of a mass of tents along the waterfront with the government stores and provisions housed in a temporary hut (Senior 1983). Additional rations were provided by military officials for the first three years and then the residents were expected to be self-sufficient enough to fend for themselves (Parham 2004). However, three years proved to be not enough time for self-sufficiency and many of Cornwall's residents faced uncertainty and starvation. Provisions by the government were eventually increased as Governor Haldimand feared the development of sympathies for the American colonies (Senior 1983).

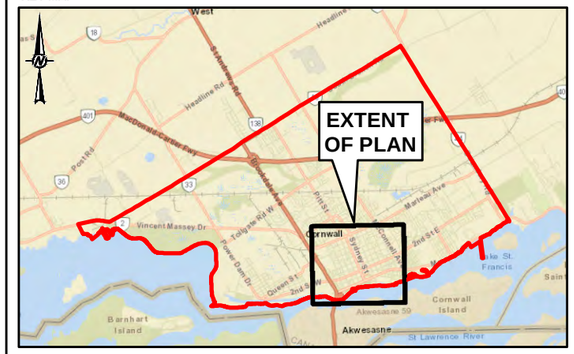
Land was awarded by lottery with the size of allotment based on military rank. Non-commissioned officers were granted 200 acres while high ranking field officers were granted 5, 000 acres. Awarding land by lottery was a point of disagreement between Johnson and Haldimand as Johnson wanted to ensure his officers were provided with the more desirable waterfront lands while Haldimand argued the common soldiers who not have the resources to settle the more remote portions of the township. Haldimand argued that lottery would better ensure the success of the settlement (Senior 1983). Johnston went against Haldimand's wishes by ensuring eleven of his commissioned officers received waterfront lots. Not all those who were granted land settled on their grants which resulted in large portions of the most desirable lands left unoccupied and made it so new settlers were unable to purchase land in desirable locations at reasonable prices (Parham 2004). Additionally, the officers who did settle in Cornwall may have owned large tracts of land, they lacked the access to labour, appropriate tools, and other resources that prevented them from generating wealth from their lands. As such, the development of a wealthy land-owning class was slow as all settlers were forced to share labour and resources.

The first buildings mostly consisted of wood shanties constructed from logs and mortared with mud and sticks. Roofs were constructed from elm bark. Blankets or wooded boards could be used for doors and oil paper placed over openings for windows. A fireplace constructed from mud or stone was used for heating and cooking. The remote location and harsh conditions required men, women and children to participate in tasks such as harvesting, planting and wood cutting. Women still retained their primary responsibilities of cooking, cleaning and childrearing (Parham 2004).

The early settlers of Cornwall included a number of black slaves who travelled with their white owners and were expected to take part in the clearing and cultivation of the land (Senior 1983). The exact number of households who brought slaves with them is unknown. Although there were black soldiers who served in provincial corps, there is no record of black soldiers being granted land in Cornwall Township.

A plan dating to 1792 shows Cornwall during the late 18th century (Map 3, p. 49). The plan shows the original Square Mile town plot. While the Square Mile does not include the waterfront, the locations of buildings on the plan reflect the early settlement of Cornwall was primarily concentrated within the southern half of the town plot which was closest to the St. Lawrence River.

KEY MAP



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LEGEND

STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. 1882 TOWN OF CORNWALL, DEPARTMENT OF CROWN LANDS, TORONTO, 1882.
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

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CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1792 PLAN OF CORNWALL

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-25
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

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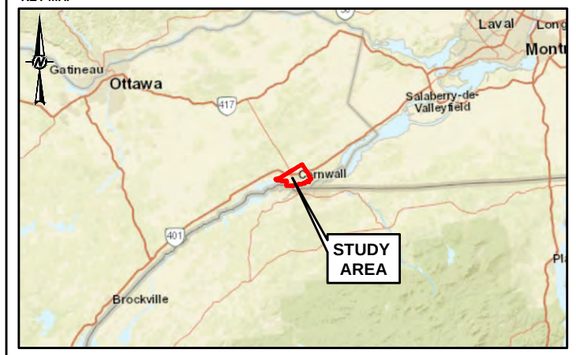
Cornwall occupied a strategic location during the War of 1812 (Cornwall 2022), and consequently acted as a garrison town with a prominent role as a communication and supply post. Additionally, as many residents were former soldiers from the American Revolutionary War, they were organized into militia to help defend the British territory from invasion. On November 10, 1813, approximately 500 members of the Stormont, Dundas and Glengarry militia engaged American soldiers in what would be known as the Skirmish at Hoople's Creek. This battle was a prelude to the main American offensive on November 11 with the goal of capturing the City of Montreal. Canadian militia soldiers stationed in Cornwall evacuated the military supplies before the American soldiers occupied the town (Harkness 1946). British soldiers and local militia with the support of Indigenous allies successfully repelled the offensive on the same day during the Battle of Crysler's Farm (Image 8, p. 50), which took place approximately 30 km west of Cornwall. News of the defeat resulted in the occupying force in Cornwall retreating across the border and the defeat ultimately contributed to ending American military plans to take Montreal. Following the battle, Cornwall's garrison was increased to over 500 men through to 1814 in case of a second attempt (Senior 1983).

Image 8: Painting depicting the Battle of Crysler's Farm (Scott ND).

Following the War of 1812, Cornwall began to develop into an industrial centre. Significant development began with the construction of the Cornwall Canal between 1834 and 1842. The canal provided a bypass to the Long Sault rapids for ships traveling between Kingston and Montreal, as well as power for mills and textile plants (Cornwall 2022). Expansion of the canal occurred between 1876 and 1904 to accommodate larger ships (St. Lawrencepiks 2017). A drydock was built near the eastern entrance to the canal in 1872.

As a result of the towns growth and development, families began to be able to afford to move out of their wood shanties and log cabins into more comfortable frame and brick structures. In 1845, Cornwall's population of more than 1,000 people occupied 321 framed, 45 brick, and 129 log homes (Parham 2004). The 1879 plan (Map 4, p. 51) shows the Town of Cornwall within the original Square Mile and the expansion of settlement within the surrounding rural communities. The Cornwall Canal is visible on the north shore of the St. Lawrence River and the Grand Trunk Railway, which opened in 1855 (Granger 2022), is shown running north of the town. The construction of the Grand Trunk Railway was significant as it connected Cornwall to Toronto and Montreal, opening up the town for further settlement and providing access to the resources of the major commercial centres. The original station (Image 9, p. 52) was demolished in 1962 and replaced by a new station (CCM 2014b).

KEY MAP



SCALE 1:2,400,000

LEGEND

STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. 1879 TOWNSHIP OF CORNWALL
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

0 495 990 1,980

1:50,000 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1879 PLAN OF CORNWALL

CONSULTANT

wsp GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	**4**

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Image 9: The original Cornwall railway station, c. 1900 (CCM 2014b).

In 1897, the New York and Ottawa Railway began construction on a two-span railway bridge to cross the St. Lawrence River at Cornwall (CCM 2014a). In September 1898, when construction of the bridge was nearing completion, two piers collapsed on the American site of the bridge resulting in the loss of 15 lives and delaying the completion of the bridge until 1900. A second collapse occurred in 1908 when the swing bridge was wrecked, preventing access to the bridge until it was repaired in 1909. The bridge was renamed the Roosevelt International Bridge in 1934 and converted to use by vehicular traffic (Image 10, p. 52).

Image 10: Postcard showing the Roosevelt International Bridge, c. 1930s (CCM 2014c)

Much of Cornwall's industrial development occurred along the waterfront where the canal provided power to industry. Major manufacturers included Cotton Mills and the Toronto Paper Company whose plants were erected in 1882 (Cornwall 2022; Harkness 1946). At the time, the Cotton Mills plant was built for 10,000 spindles and was recognized as the worlds largest weave shed. The Cotton Mills operated until 1959 when it was closed due to declining profits and worker unrest. The Toronto Paper Company plant (Image 11, p. 53) operated until 2006, having been purchased by Howard Smith Paper Mills in 1919 and then Domtar in the 1960s.

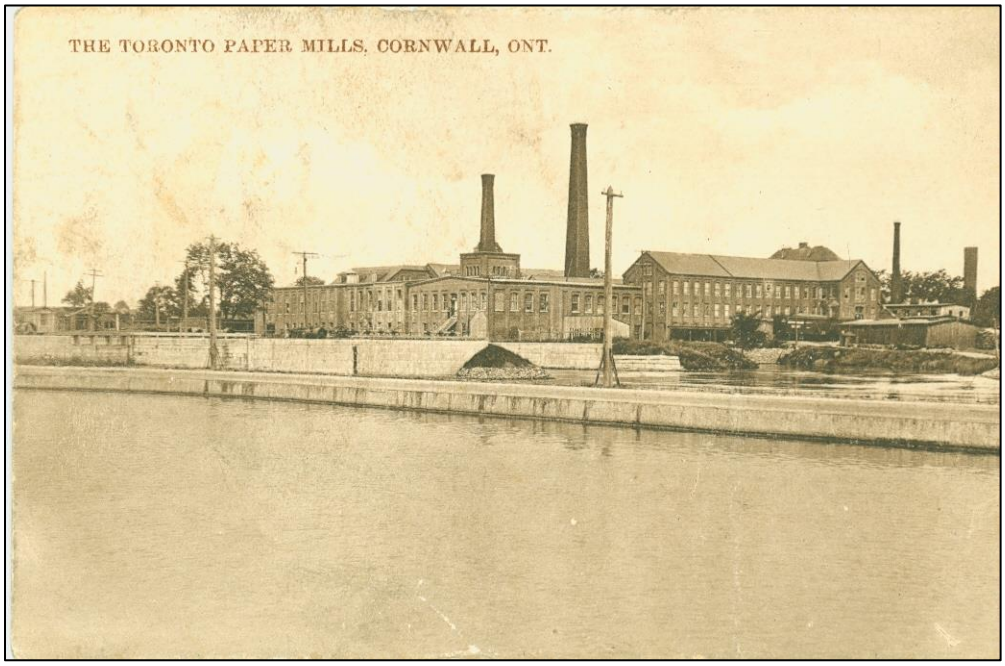
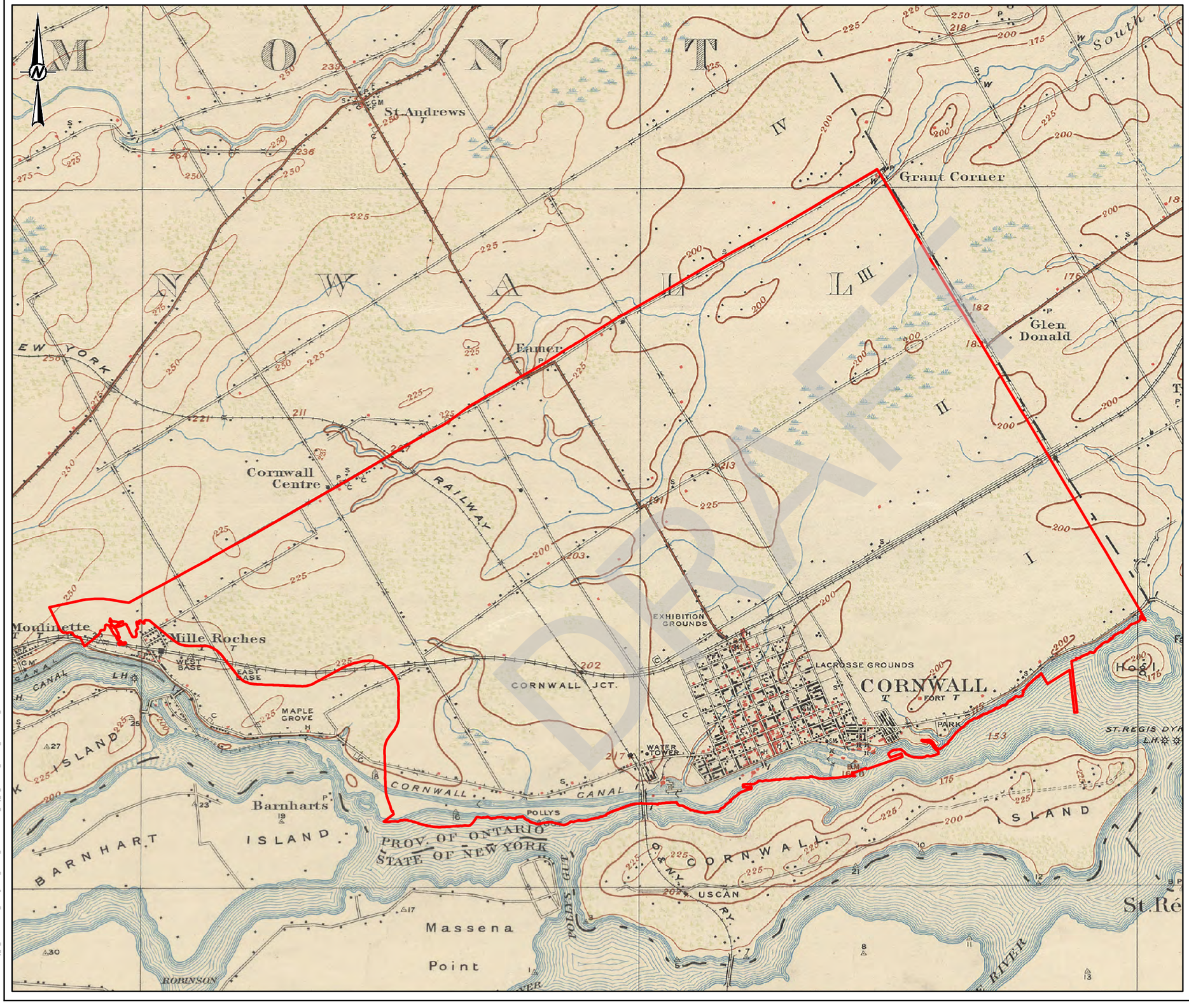


Image 11: Postcard showing the Toronto Paper Mills dating to the World War I era (CCM 2016).

Cornwall's industry led to an influx of people moving to the city to find employment. Between 1871 and 1881, the population doubled and continued to grow during the early 20th century. This growth is reflected in contemporary cartographic sources that illustrate the City's expansion, including topographic maps (Map 5, p. 54), Fire Insurance Plans from 1916 (Map 6, p. 55), and aerial imagery collected in 1929 (Map 7, p. 65). By 1909, developments were increasing within the Square Mile and along the shore of the St. Lawrence River (Map 5, p. 54). The Fire Insurance Plans provide additional information on the buildings located within the Square Mile during the early 20th century. Of note, the plans show detailed information many of the industrial buildings associated with Cornwall's waterfront including the Grist Mill and Cotton Mills.



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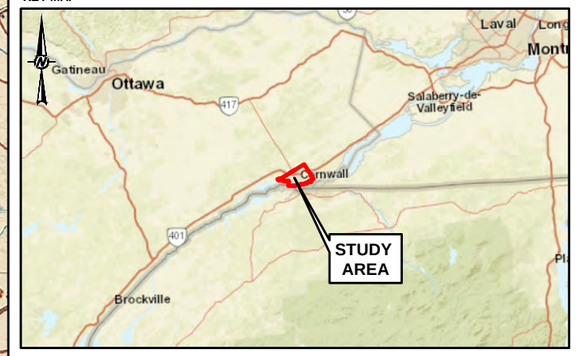

SCALE 1:2,400,000

LEGEND

STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CORNWALL, ONTARIO. 1:63,360. MAP SHEET 031G02, [ED. 1], 1909, SURVEY DIVISION, DEPARTMENT OF MILITIA AND DEFENCE
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

DRAFT

0 495 990 1,980

1:50,000 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1909 TOPOGRAPHIC MAP

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	**5**

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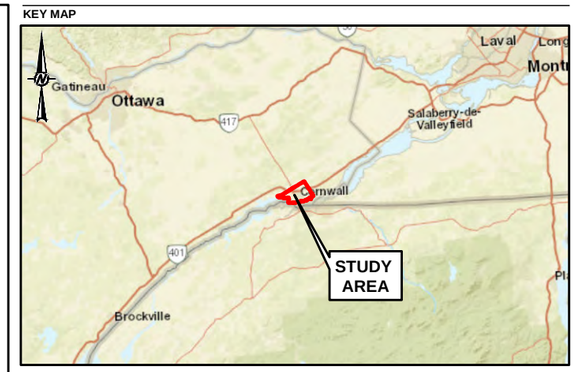

SCALE 1:2,400,000

LEGEND

STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CITY OF CORNWALL, 1916 FIRE INSURANCE PLANS
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. PROJECT: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

DRAFT

0 100 200 400
1:10,000 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
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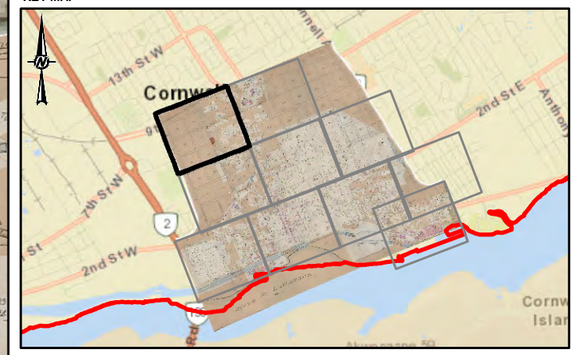

SCALE 1:60,203

LEGEND

STUDY AREA

NOTE(S)

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DRAFT

0 25 50 100
1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-08-16
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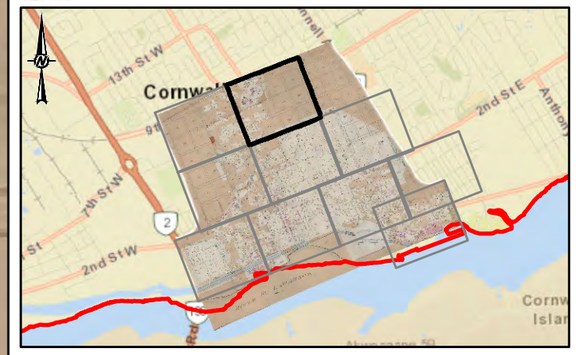

SCALE 1:60,203

LEGEND

STUDY AREA

NOTE(S)

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REFERENCE(S)

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3. PROJECT: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

0 25 50 100
1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
wsp GOLDER

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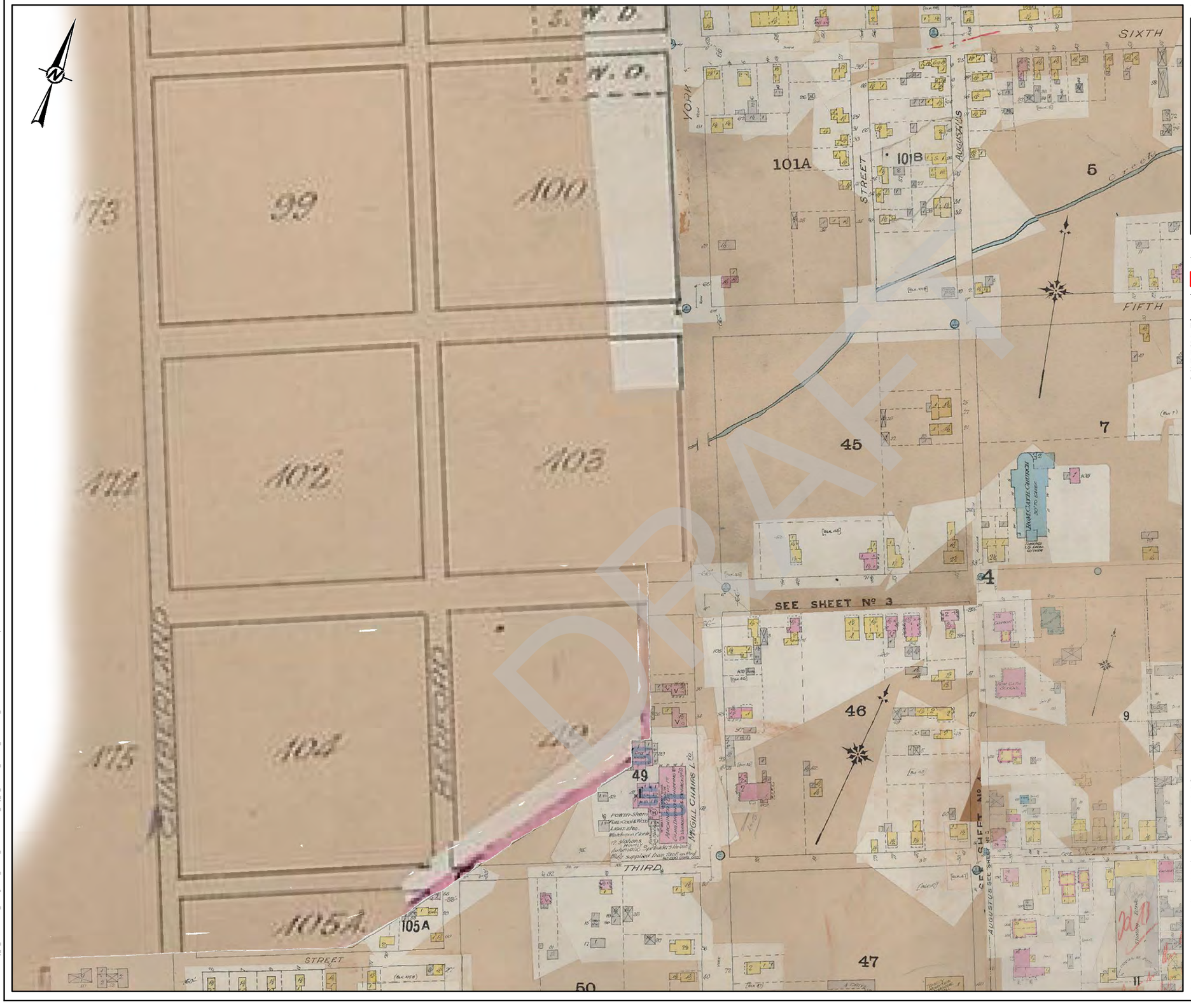

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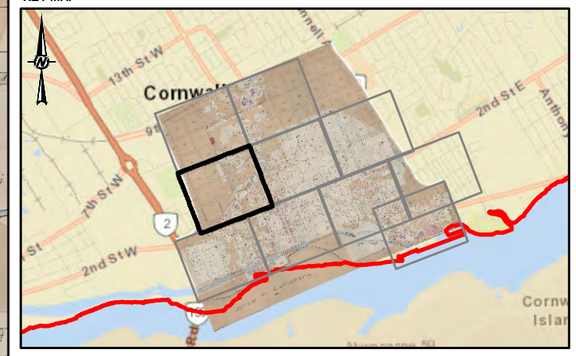

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LEGEND

STUDY AREA

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3. PROJECT: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

DRAFT

0 25 50 100
1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-16
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PROJECT No.	CONTROL	REV.	MAP
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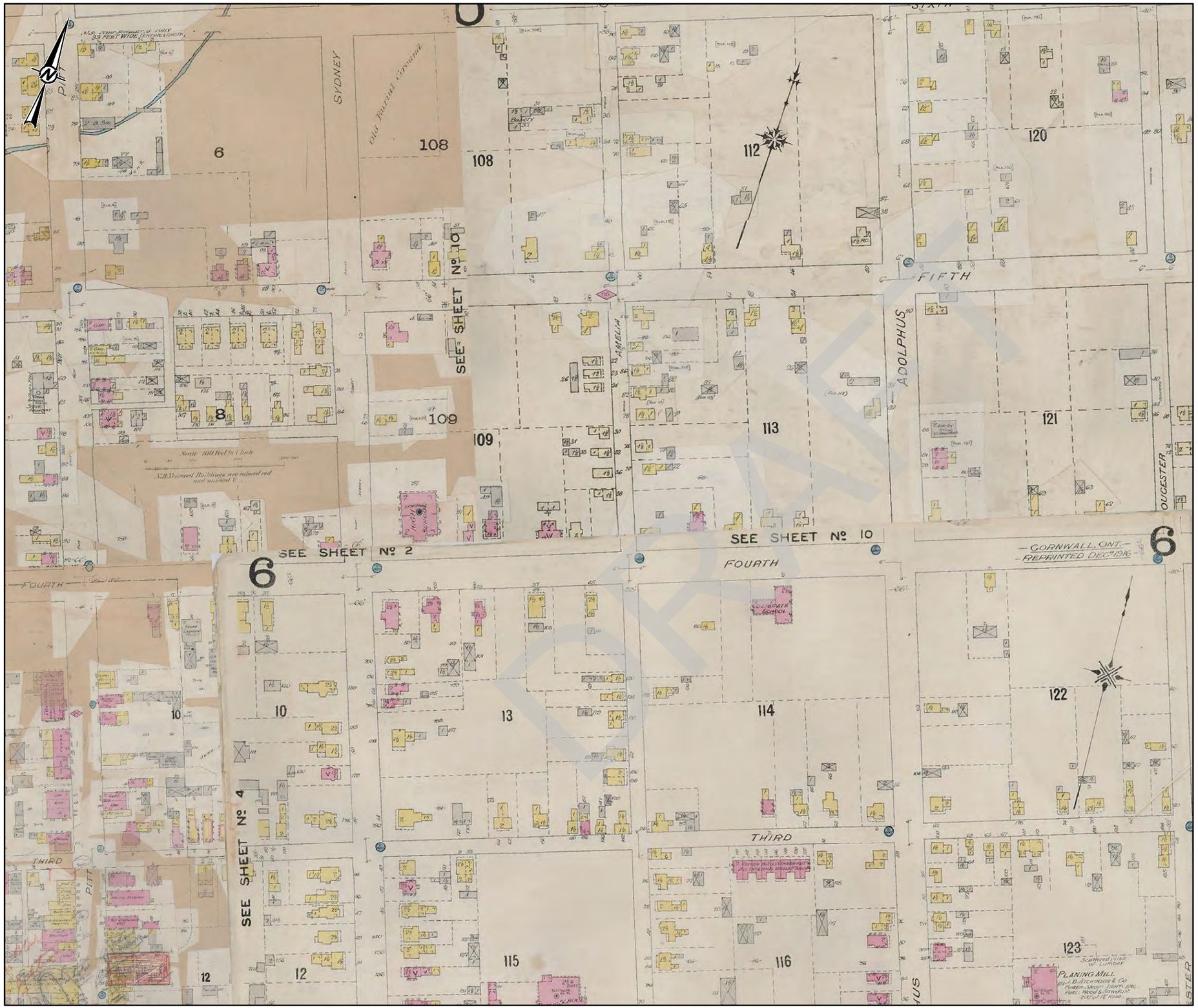

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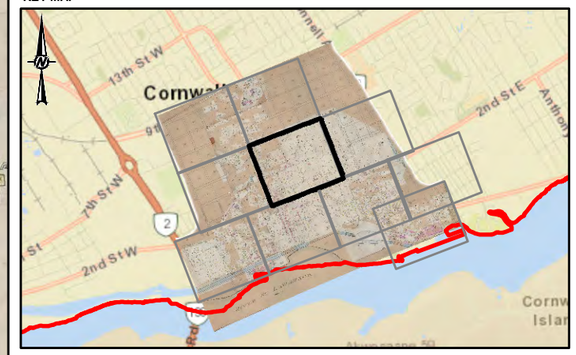

SCALE 1:60,203

LEGEND

STUDY AREA

NOTE(S)

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3. PROJECT: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

DRAFT

0 25 50 100
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CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-08-16
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PROJECT No.	CONTROL	REV.	MAP
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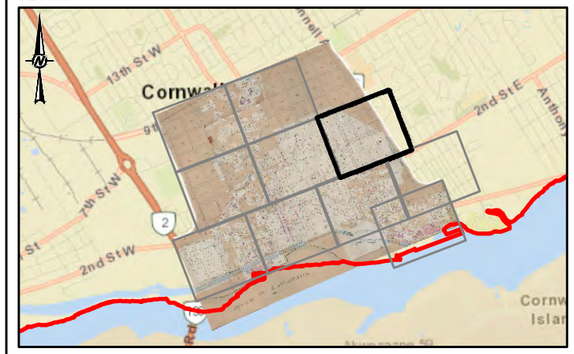

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LEGEND

STUDY AREA

NOTE(S)

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0 25 50 100
1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-16
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PROJECT No.	CONTROL	REV.	MAP
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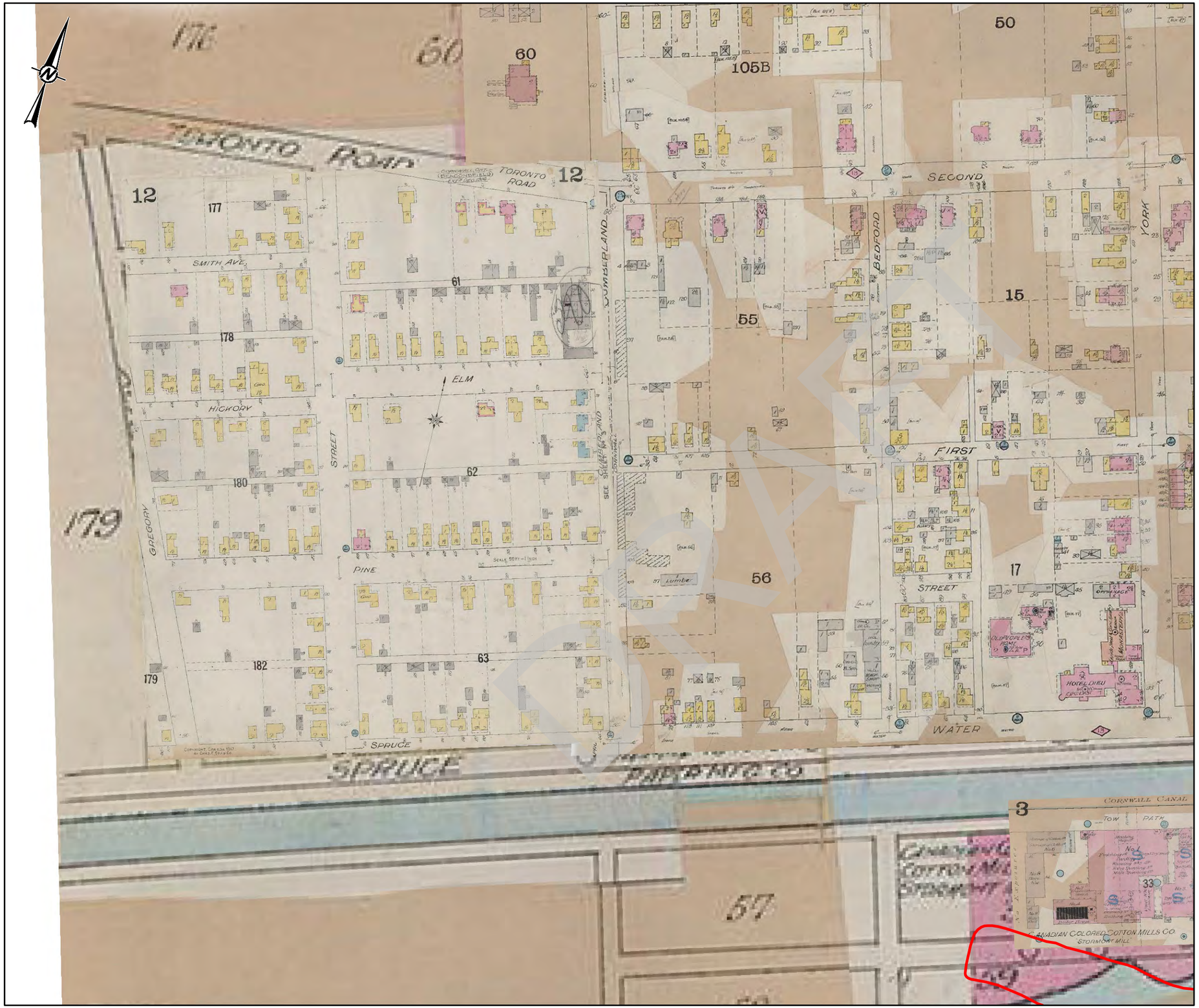

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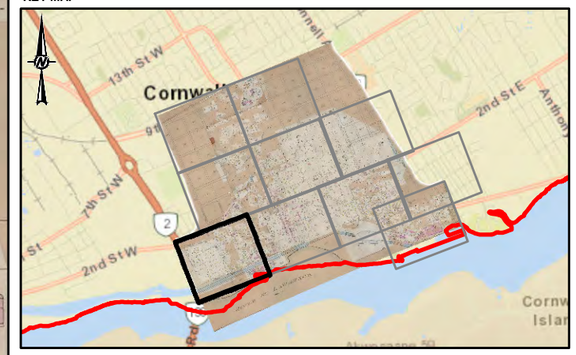

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LEGEND

STUDY AREA

NOTE(S)

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REFERENCE(S)

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3. PROJECT: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

DRAFT

0 25 50 100

1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
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PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	**6f**

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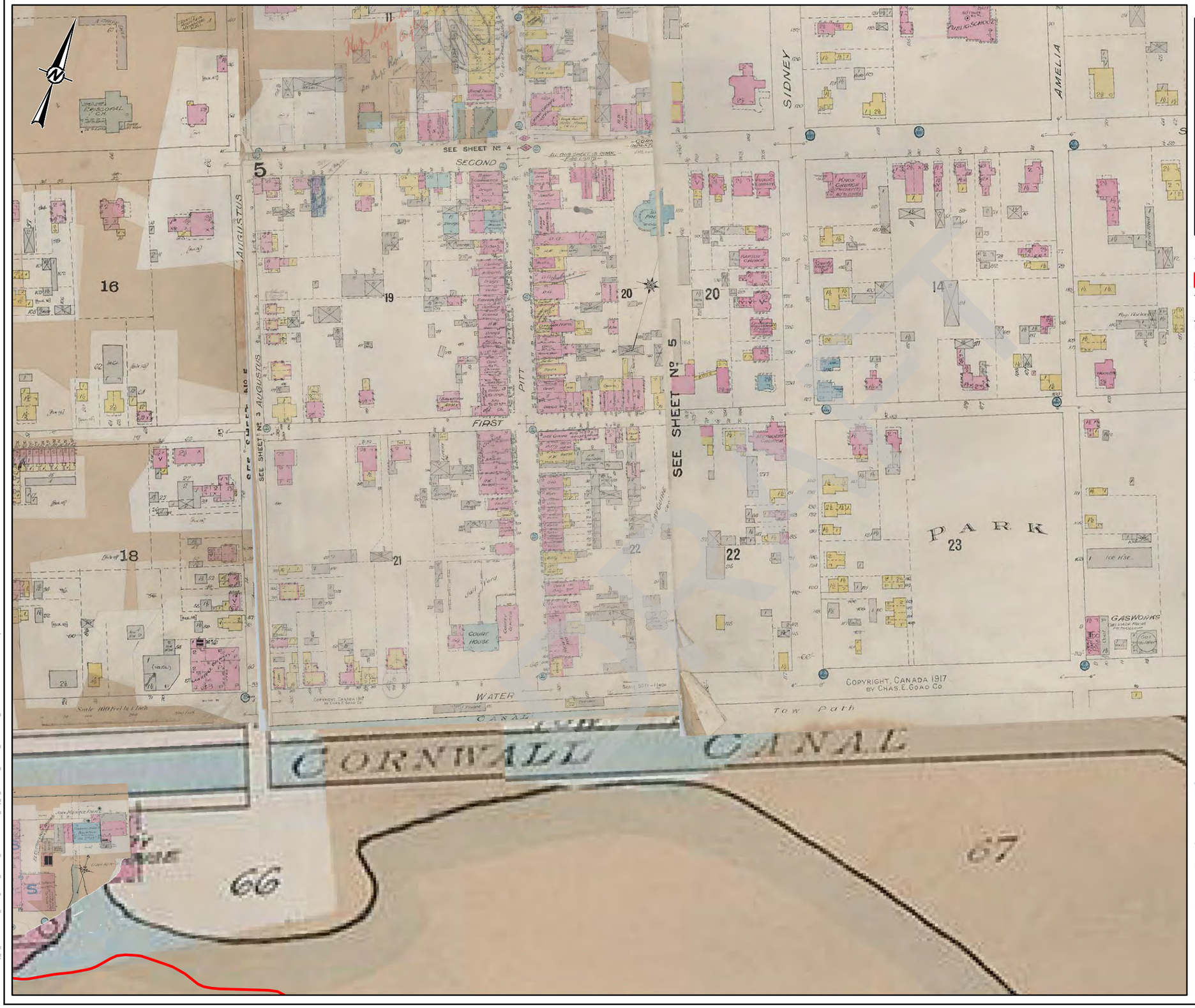

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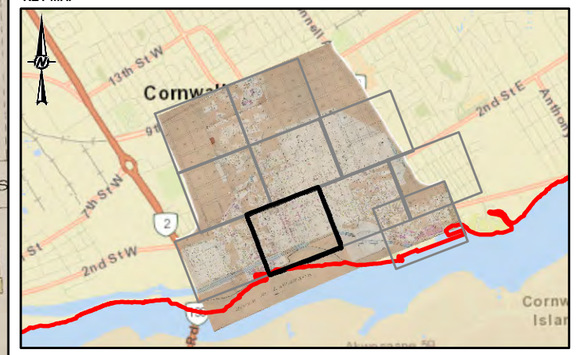

SCALE 1:60,203

LEGEND

STUDY AREA

NOTE(S)

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3. PROJECT: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

DRAFT

0 25 50 100
1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-16
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PROJECT No.	CONTROL	REV.	MAP
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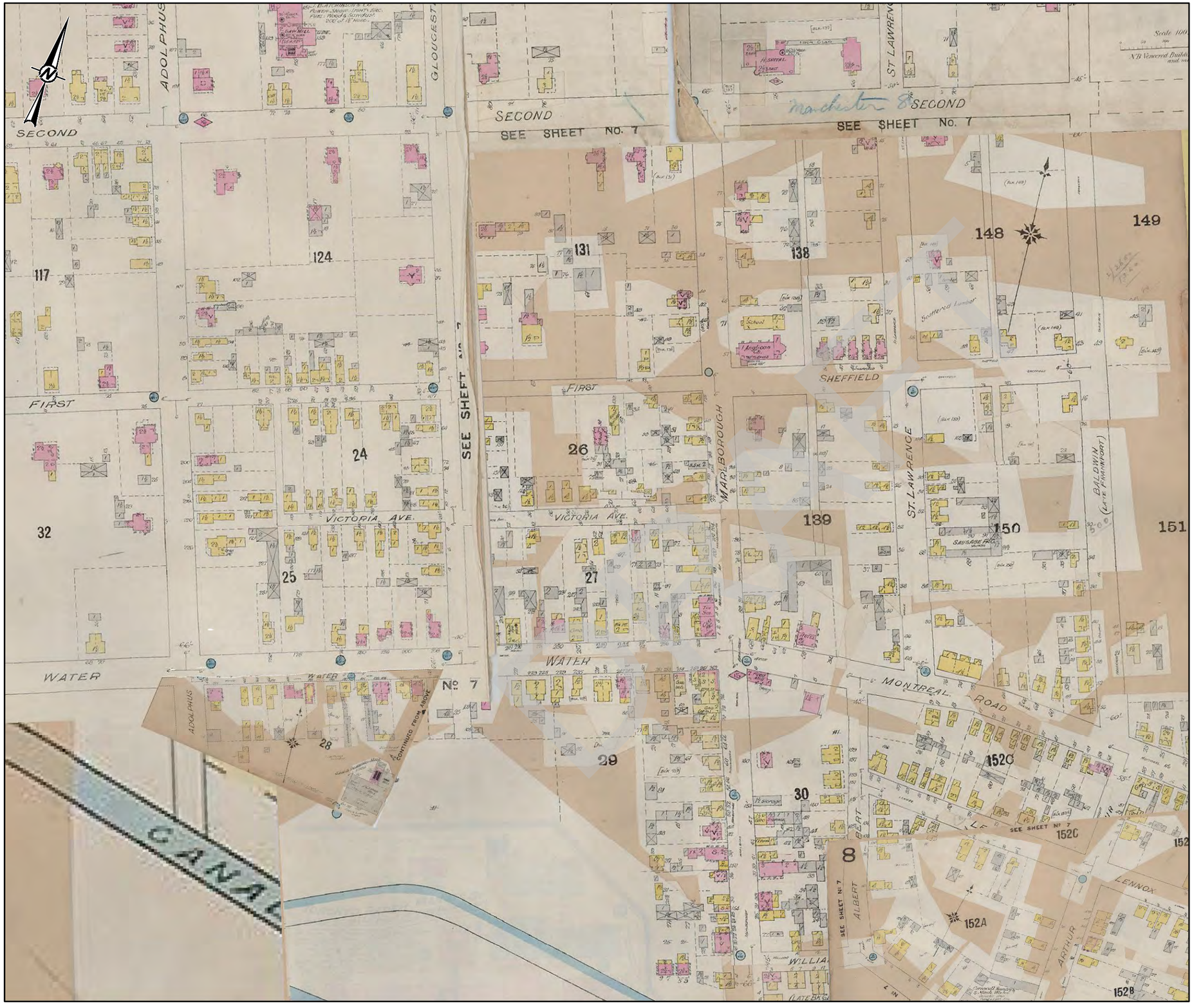

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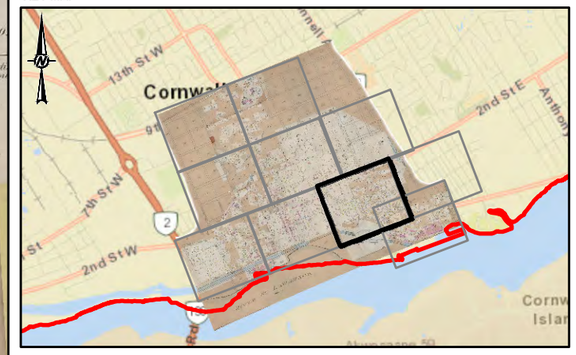

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LEGEND

STUDY AREA

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0 25 50 100
1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	**6h**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 0 25mm

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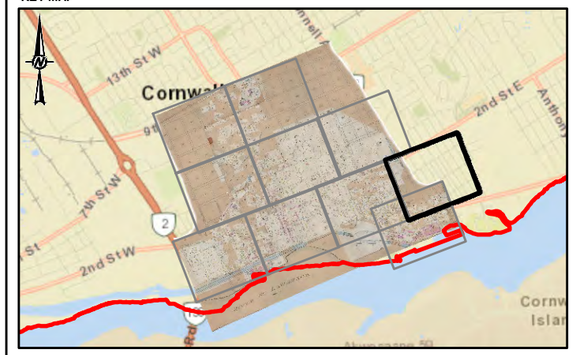
KEY MAP



SCALE 1:60,203

LEGEND

STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CITY OF CORNWALL, 1916 FIRE INSURANCE PLANS
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. PROJECT: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

0 25 50 100
1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	**6i**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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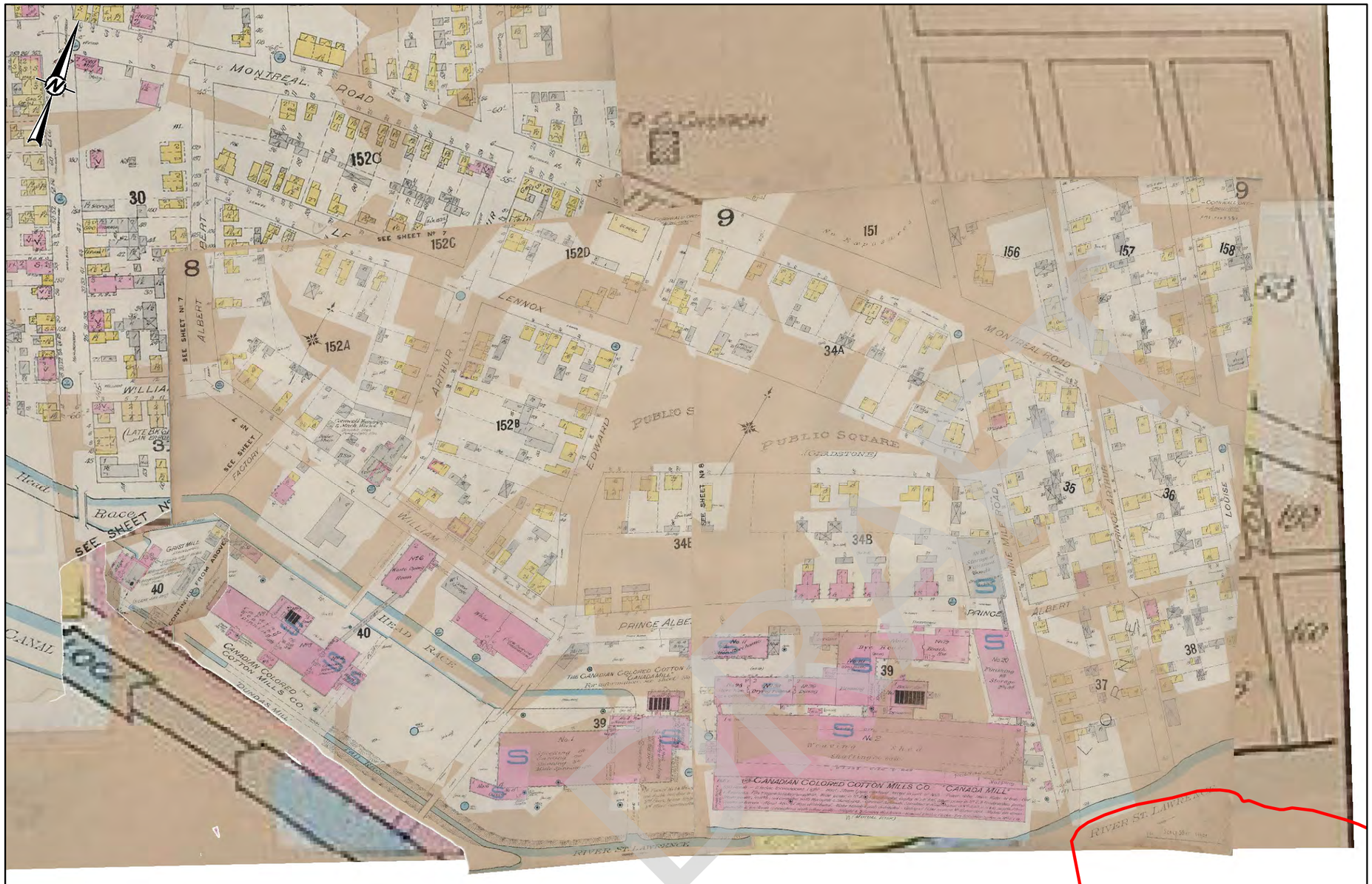
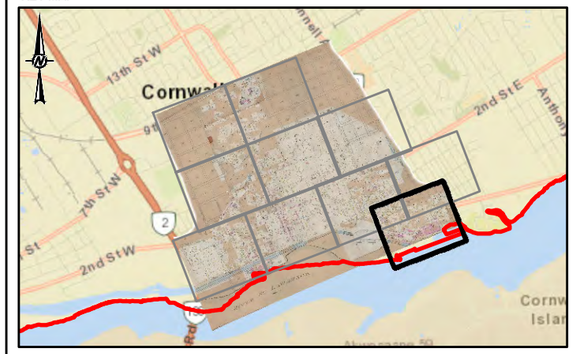


KEY MAP



SCALE 1:60,203

LEGEND

STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. CITY OF CORNWALL, 1916 FIRE INSURANCE PLANS
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

DRAFT

0 25 50 100

1:2,500 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1916 FIRE INSURANCE PLANS

CONSULTANT

wsp GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	**6j**

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

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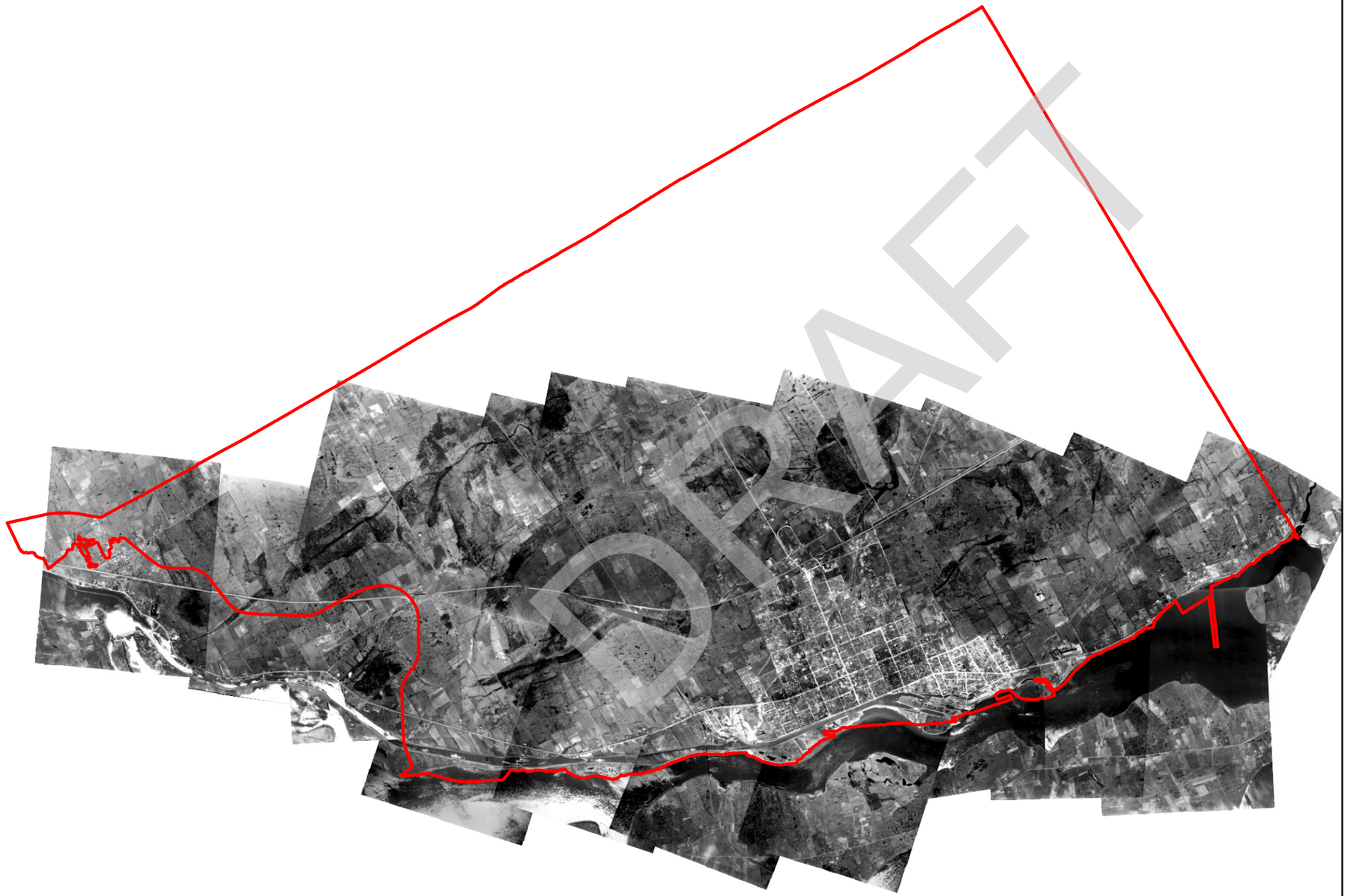
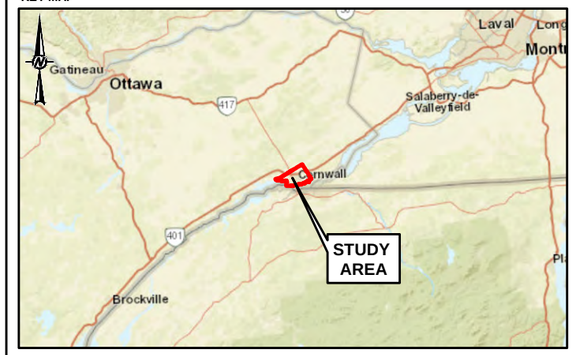


KEY MAP



SCALE 1:2,400,000

LEGEND

STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. 1929 AERIAL PHOTOGRAPHS, CITY OF CORNWALL
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

0 495 990 1,980

1:50,000 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
1929 AERIAL PHOTOGRAPH

CONSULTANT

wsp GOLDER

YYYY-MM-DD	2022-08-16
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	7

Aerial photographs from 1929 (Map 7, p. 65) show the landscape prior to alterations resulting from the St. Lawrence Seaway expansion in the 1950s and the infilling of the eastern portion of the canal in the 1970s. Several photos and illustrations show conditions along the waterfront during the late 19th century up to the mid-20th century (Images 12 to 14, pp. 66-67). The area of present day Lamoureux Park is the result of landfilling and is shown as being part of the river until the mid-20th century.

Image 12: Photo from 1895 showing the waterfront east of the Augusta Street swing bridge (CCM 2015).

Image 13: View east showing the waterfront in the 1950s (CCM 2015). Notice that the area south of the canal has been infilled.

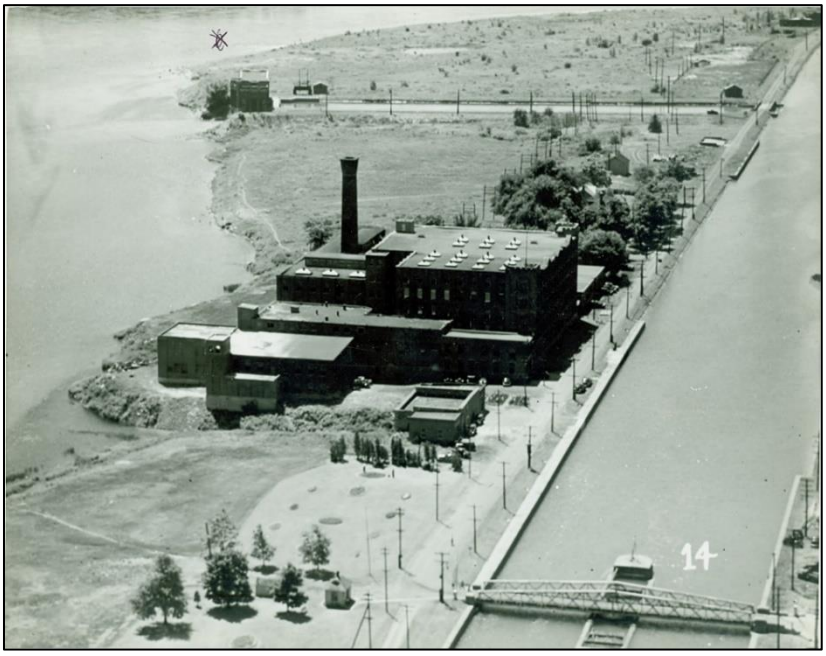


Image 14: Photograph showing the area west of the Augusta Street Swing Bridge with the Stormont Mill in the centre and old powerhouse in the upper left (CCM 2015).

The Moses-Saunders Power Dam was constructed as part of the St. Lawrence Seaway project between 1954 and 1958. Spanning the St. Lawrence River, the dam supplies water for two adjacent hydroelectric power stations on the American and Canadian sites. The Canadian power station is the R.H. Saunders Generating Station.

Construction of the Seaway enabled larger ships to travel along the St. Lawrence River, essentially making the Cornwall Canal obsolete (CCM 2013). The canal was closed in 1958 and a portion of the canal was infilled in the 1970s. Infilling occurred in part due to stagnating water following the closure of the canal which cut off the flow of fresh water (CCM 2014b). The infill area included the Cornwall Dry Dock and eastern entrance to the canal (Image 15, p. 68). The infilled area is now Lamoureux Park and houses the Cornwall Civic Complex which was built in 1976.

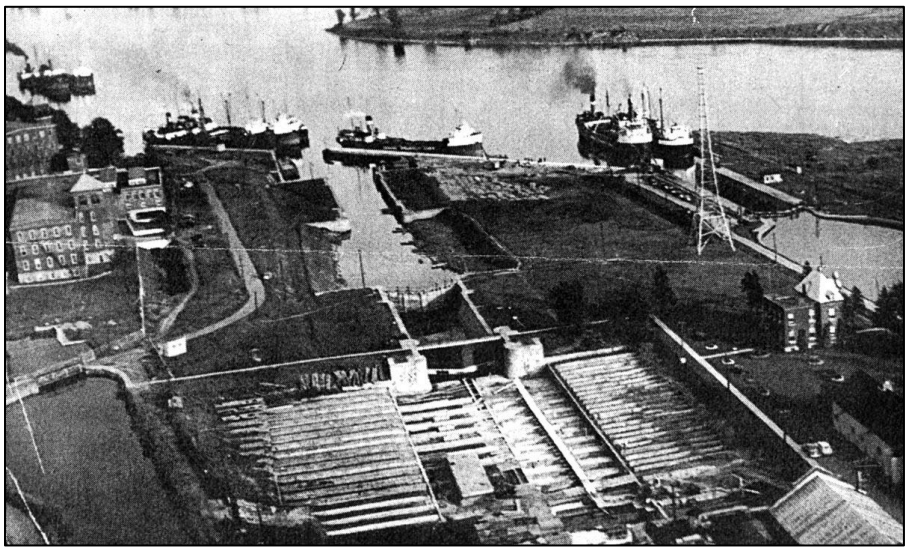
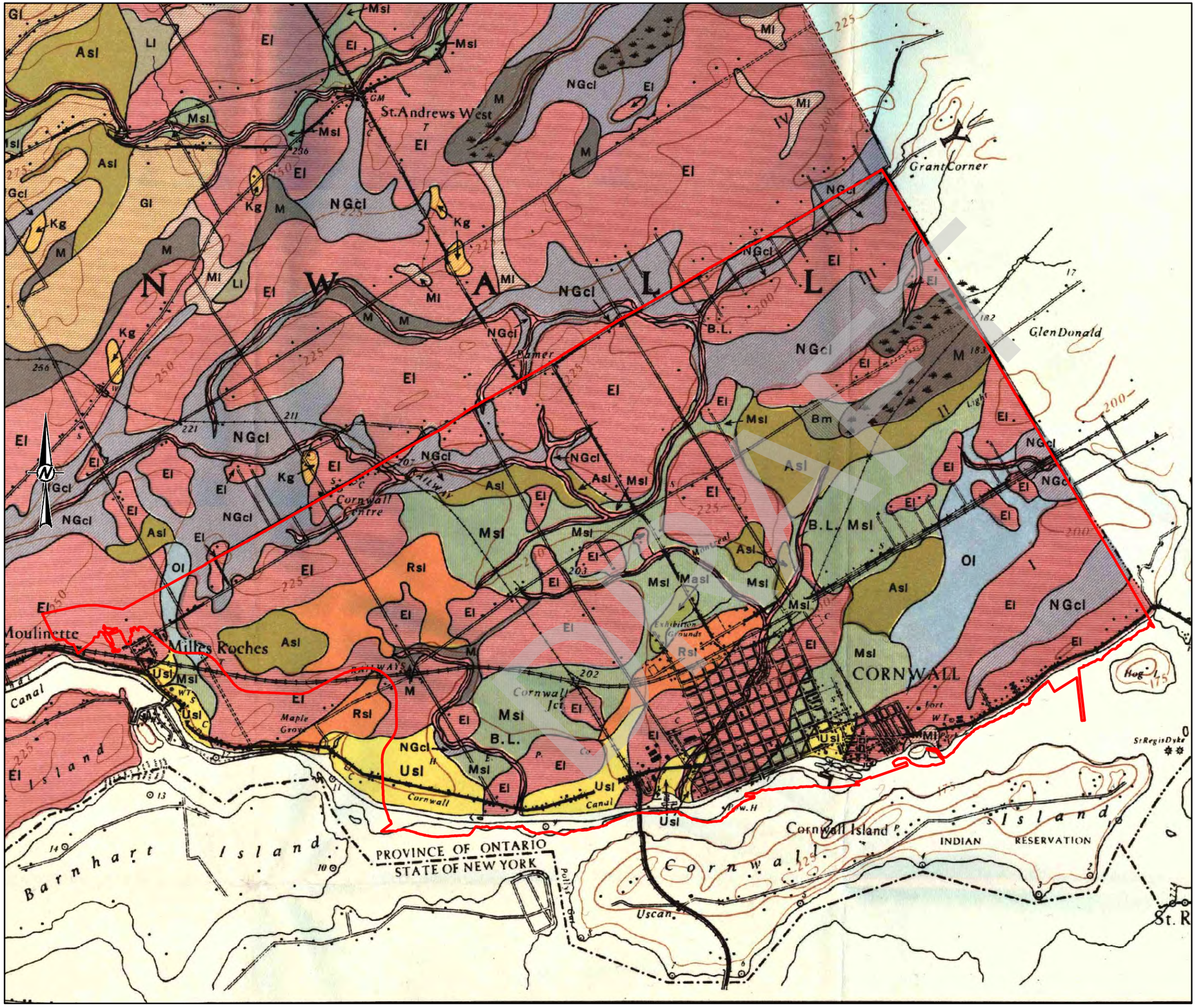


Image 15: The drydocks and eastern entrance to the canal before infilling, date unknown (St. Lawrencepiks 2017).

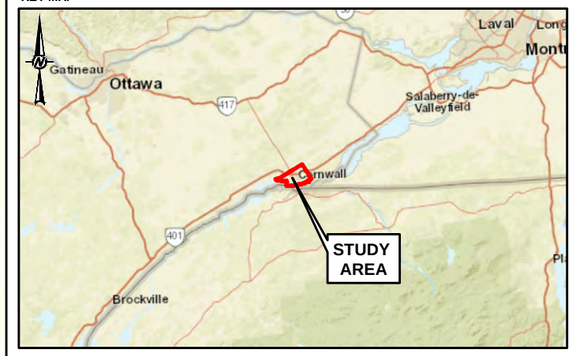
The Seaway International Bridge, formerly known as the Cornwall-Massena International Bridge was constructed in two parts with the Cornwall section opening in 1962 (CCM 2014b). The high-level bridge was replaced by a new lower-level bridge in 2014 and the older bridge was subsequently demolished.

5.5 Modern Environment

The City of Cornwall is located primarily within the Lancaster Flats physiographic region, with portions of the north end of the city extending into the Glengarry Till Plain. The Lancaster Flats is a lowland where the till plain has been buried under water-laid deposits ranging from clay to very fine sand (Chapman and Putnam 1984). The original vegetation consisted if water-loving species such as American elm, white ash, and red maple. The Glengarry Till Plain consists of undulating to rolling plains consisting of morainic ridges and drumlins with clay flats and wetlands in between (Chapman and Putnam 1984). The region is characterised as stony with the crests of ridges and drumlins containing boulder pavement due to wave action from the Champlain Sea. Map 8 (p. 69) shows Cornwall's soils.



KEY MAP



SCALE 1:2,400,000

LEGEND

STUDY AREA

LEGEND OF SOIL DESCRIPTIONS SHOWN ON MAP 8A

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. SOIL MAP OF STORMONT COUNTY
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

0 495 990 1,980

1:50,000 METRES

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
SOIL MAP OF STORMONT COUNTY ONTARIO

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-08-17
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	8

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: 25mm

Path: S:\Clients\City_of_Cornwall\Arch_Management_Plan\99_PRO\21502790_City_of_Cornwall_AMP\40_PRO\0001_AMP2\21502790-0001-HA-0008.mxd

SOIL MATERIALS	MEDIUM TEXTURED TILL			
NATURAL DRAINAGE	Good		Imperfect	Poor
SERIES	Grenville	Eamer	Matilda	Lyons
TYPE, SYMBOL, ACREAGE	loam Gl 46,900 loam (bouldery) Gl-b 800 loam shallow Gl-s 1,800	loam El 26,400	loam Ml 4,600	loam Ll 1,300
COLOUR				
TOPOGRAPHY	Undulating to rolling.	Strongly undulating to rolling.	Gently undulating.	Usually depressional.
SURFACE STONINESS	Moderately stony, occasionally bouldery.	Moderately stony to bouldery.	Moderately stony.	Moderately stony.
SURFACE REACTION	About neutral.	Neutral to slightly alkaline.	About neutral.	Neutral to slightly alkaline.
GREAT SOIL GROUP	Brown Forest.	Brown Forest.	Brown Forest.	Dark Grey Gleisolic.
PROFILE DESCRIPTION OF CULTIVATED SOIL	6 inches of very dark grey loam underlain by light brown loam underlain by dark grey-brown loam over greyish brown calcareous till.	7 inches of very dark grey loam underlain by dark grey-brown loam containing some stones over grey-brown to grey loamy calcareous till.	8 inches of grey-brown loam underlain by brown loam underlain by mottled brown loam underlain by grey loamy calcareous till.	8-10 inches of very dark brown loam underlain by mottled grey loam underlain by grey loamy calcareous till.
MAIN FERTILITY NEEDS	ORGANIC MATTER, PHOSPHORUS, POTASH.		Organic Matter, PHOSPHORUS, POTASH.	

SOIL MATERIALS	HEAVY TEXTURED TILL		
NATURAL DRAINAGE	Good	Imperfect	Poor
SERIES	Wolford	Morrisburg	Osnabruck
TYPE, SYMBOL, ACREAGE	clay loam Wl 13,000	clay loam Mrl 20,500	clay loam Obl 3,400
COLOUR			
TOPOGRAPHY	Gently undulating to rolling.	Gently undulating.	Level to depressional.
SURFACE STONINESS	Moderately stony, occasionally bouldery.	Moderately stony.	Moderately stony.
SURFACE REACTION	Neutral to slightly alkaline.	Alkaline.	Alkaline.
GREAT SOIL GROUP	Brown Forest.	Brown Forest.	Dark Grey Gleisolic.
PROFILE DESCRIPTION OF CULTIVATED SOIL	6 inches of very dark brown clay loam underlain by dark brown clay loam underlain by very dark greyish brown clay loam underlain by brownish grey clay loam till.	6 inches of dark brown clay loam underlain by dark yellowish brown clay loam underlain by brown clay loam slightly mottled underlain by grey compacted, calcareous clay loam till.	7-9 inches of very dark brown clay loam underlain by light brownish grey, mottled clay loam underlain by grey, calcareous clay loam till.
MAIN FERTILITY NEEDS	Organic Matter, PHOSPHORUS, Potash.		PHOSPHORUS, Potash.

SOIL MATERIALS	POORLY SORTED OUTWASH	WELL SORTED OUTWASH			MEDIUM TEXTURED LACUSTRINE
NATURAL DRAINAGE	Good	Good	Imperfect	Poor	Poor
SERIES	Kars	Uplands	Rubicon	Granby	Osgoode
TYPE, SYMBOL, ACREAGE	gravelly sandy loam Kg 19,100	sandy loam Us 2,400 sandy loam Usl 1,200	Sand Rs 7,300 sandy loam Rsl 4,200	sand Gs 4,900 sandy loam Gsl 3,700	loam Ol 5,300 silt loam Osil 900
COLOUR					
TOPOGRAPHY	Strongly undulating to rolling.	Strongly undulating to rolling.	Undulating to level.	Level to depressional.	Level to slightly undulating.
SURFACE STONINESS	Slightly to moderately stony.	Stonefree.	Stonefree.	Stonefree.	Stonefree.
SURFACE REACTION	Slightly acid to neutral.	Moderately to slightly acid.	Moderately to slightly acid.	About neutral.	About neutral.
GREAT SOIL GROUP	Grey-Brown Podsolic.	Podsol.	Ground water Podsol.	Dark Grey Gleisolic.	Dark Grey Gleisolic.
PROFILE DESCRIPTION OF CULTIVATED SOIL	4 inches of dark brown sandy loam underlain by yellow-brown sandy loam underlain by rough, poorly sorted gravel and sand.	3-4 inches of dark brown sand or sandy loam underlain by brown sand or sandy loam underlain by grey sand or sandy loam.	4-6 inches dark grey sand and sandy loam underlain by reddish brown sandy loam over grey sand. Occasionally the grey podzol A_2 layer shown in freshly plowed fields but usually becomes incorporated with other horizons when cultivated.	7 inches of very dark brown sand or sandy loam underlain by grey mottled sand underlain by grey sand occasionally stratified with some silt and clay.	6 inches of dark grey loam underlain by light brownish grey loam slightly mottled underlain by grey-brown mottled loam underlain by grey loam.
MAIN FERTILITY NEEDS	ORGANIC MATTER, PHOSPHORUS, POTASH.			PHOSPHORUS, POTASH.	Phosphorus, Potash.

SOIL MATERIALS	OUTWASH OVER LACUSTRINE				SHALLOW OVER BEDROCK	ORGANIC	MISCELLANEOUS
NATURAL DRAINAGE	Good	Imperfect	Poor	Poor	Good	Very Poor	Variable
SERIES	Manotick	Mountain	Allendale	Marionville	Farmington	Muck	Bottom Land.
TYPE, SYMBOL, ACREAGE	sandy loam Masl 600	sandy loam Msl 4,900	sandy loam Asl 8,200	fine sandy loam Mfsl 500	F 500	M 35,100	B.L. 15,700
COLOUR							
TOPOGRAPHY	Moderately to slightly undulating.	Slightly undulating.	Level to depressional.	Level to slightly undulating.	Undulating to depressional.	Depressional.	Variable.
SURFACE STONINESS	Stonefree.	Stonefree.	Stonefree.	Stonefree.	Variable, bedrock frequently exposed.	Stonefree.	Variable.
SURFACE REACTION	Slightly acid.	Slightly acid to neutral.	Usually about neutral.	About neutral.	Neutral to alkaline.	Neutral to slightly alkaline.	Variable.
GREAT SOIL GROUP	Brown Podsolic.	Brown Podsolic	Dark Grey Gleisolic.	Dark Grey Gleisolic.	Brown Forest.	Bog.	Azonal Alluvial.
PROFILE DESCRIPTION OF CULTIVATED SOIL	5 inches of brown sandy loam underlain by yellowish brown sandy loam underlain by brown sandy loam or loam over dark brown clay loam; heavy textured material occurs at depths of three feet and less.	6 inches of light brown sandy loam underlain by yellowish brown sandy loam with some mottling over dark brown clay loam which occurs at three feet and less.	6-8 inches of dark grey sandy loam underlain by yellowish brown mottled sandy loam over plastic grey clay or clay loam at depths of three feet and less.	5 inches of dark brown fine sandy loam underlain by grey mottled fine sandy loam and silt over grey plastic clay occurring at depths of two feet or less.	Shallow deposits of materials of variable texture underlain by limestone bedrock. Veneer of soil materials usually less than one foot in depth.	Very well decomposed organic material ranging from one to several feet in depth underlain by sand, clay, till, or bedrock.	Areas adjoining stream courses and subject to occasional flooding. Dark coloured surface soil of variable depth and texture.
MAIN FERTILITY NEEDS	Phosphorus, Potash.				VARIABLE		

SOIL MATERIALS	FINE TEXTURED LACUSTRINE		
NATURAL DRAINAGE	Imperfect	Poor	Very Poor
SERIES	Carp	North Gower	Belmeade
TYPE, SYMBOL, ACREAGE	clay loam Ccl 2,400	clay loam NGcl 26,600	Muck Bm 1,500
COLOUR			
TOPOGRAPHY	Undulating.	Level to slightly undulating.	Level to depressional.
SURFACE STONINESS	Stonefree.	Stonefree.	Stonefree.
SURFACE REACTION	About neutral.	About neutral.	Neutral to slightly alkaline.
GREAT SOIL GROUP	Grey-Brown Podsolic.	Dark Grey Gleisolic.	Bog.
PROFILE DESCRIPTION OF CULTIVATED SOIL	6 inches of dark grey-brown clay loam underlain by light brownish grey clay loam underlain by brown clay loam, slightly mottled, underlain by grey mottled clay loam underlain by grey calcareous silty clay loam.	7-9 inches of very dark grey clay loam underlain by grey mottled clay loam underlain by intensely mottled grey clay loam underlain by grey silty calcareous clay loam.	7-15 inches black muck underlain by mottled grey clay underlain by grey clay or silty clay.
MAIN FERTILITY NEEDS	Phosphorus, Potash.		

CLIENT
CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
LEGEND OF SOIL MAP OF STORMONT COUNTY ONTARIO

CONSULTANT
wsp GOLDER

YYYY-MM-DD	2022-08-17
DESIGNED	----
PREPARED	BR
REVIEWED	----
APPROVED	----

PROJECT No.	CONTROL	REV.	MAP
21502790	0001	A	**8A**

5.6 Previous Archaeological Assessments

The earliest known archaeological assessment within Cornwall is a survey by the National Museum of Man in 1947 in advance of the St. Lawrence Seaway project (Leechman and de Laguna 1947). The report summarizes Indigenous artifacts found by residents in Cornwall Township. Dailey and Wright (1954) conducted a survey of the St. Lawrence River which resulted in the identification of a number of sites, most of which are now inundated following the construction of the seaway. The Middle Woodland Period Malcolm Site (BgFq-2) was subject to excavation (Dailey and Wright 1955). Pendergast (1981) conducted excavations on the Glenbrook Village Site, a St. Lawrence Iroquoian village located approximately 8 km east of Cornwall.

More recent archaeological assessments completed within Cornwall have been completed as part of cultural resource management studies. Table 3 provides a summary of the known archaeological assessments completed within Cornwall as of the time of the writing of this AMP. Map 9 (p. 76) shows the locations of these assessments where their study areas could be determined.

Table 3: Previously Completed Archaeological Assessments in the City of Cornwall

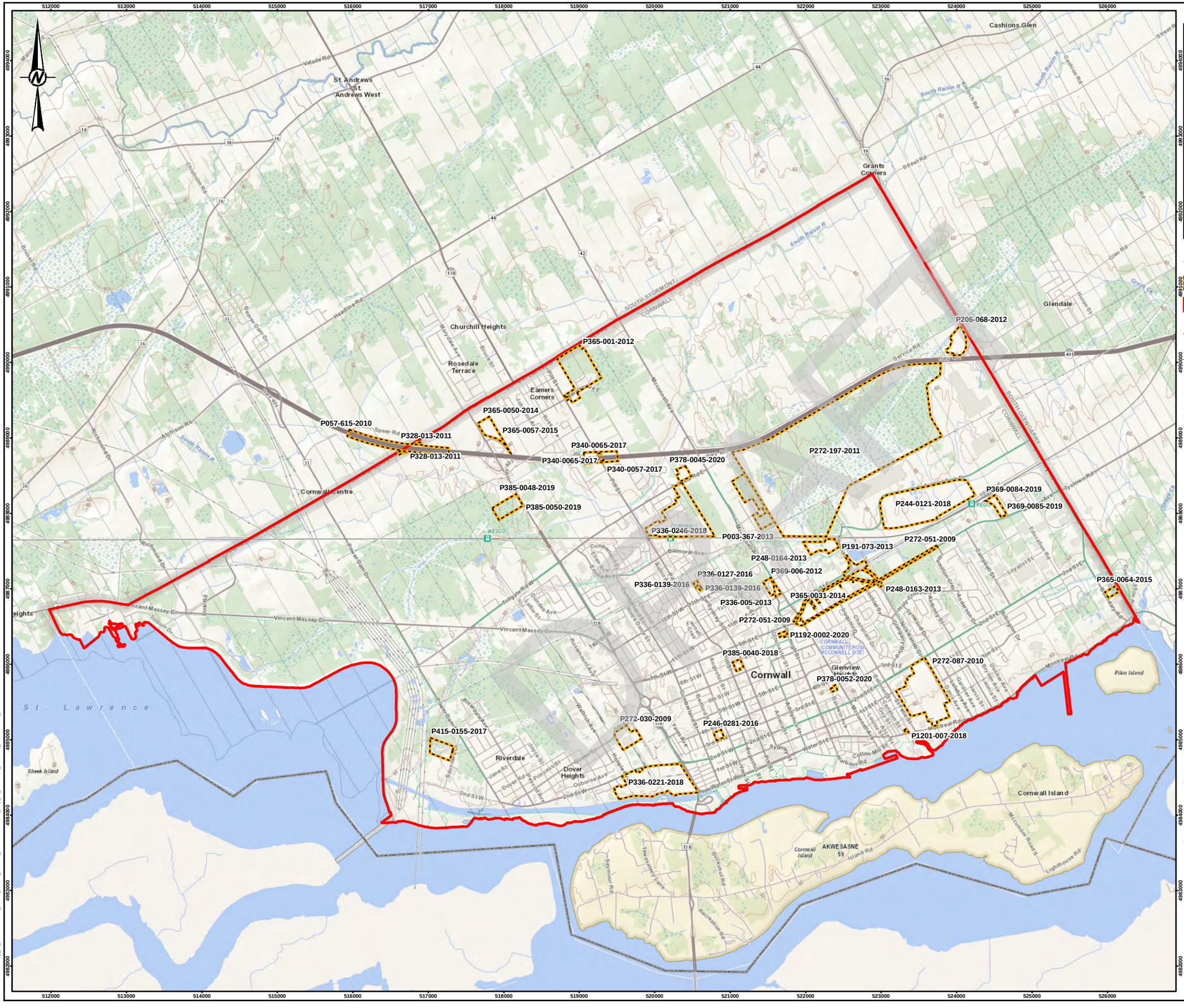
PIF#	Report Date	Title	Consultant	Associated Borden Numbers
P369-0129-2021	-	Stage 1 and 2 Archaeological Assessment: 403 Tollgate Road East Concession 3, Part Lot 7, RP 52R-B254 Part 1 Geographic Township of Cornwall, City of Cornwall, Ontario	Benjamin Mortimer – Matrix Heritage	None
P246-0539-2021	-	Stage 2 Archaeological Assessment of the former Domtar Lands Part of Lots 13, 14 & 15, Concession 2 Geographic Township of Cornwall, City of Cornwall, United Counties of Stormont, Dundas and Glengarry Original Report	-	None
P378-0052-2020, P378-0053-2020	February 22, 2021	Stage 1 and 2 Archaeological Assessment: 304 Baldwin Avenue Part 1, Plan 52R-9000 PIN 60175-0171 Part Lot 7 Concession 1 Former Geographic Township of South Stormont (Formerly Cornwall and Osnabruck) County of Stormont City of Cornwall, Ontario	Nadine Kopp – Paterson Group Inc.	None
P336-0246-2018	July 7, 2020	Stage 1 and 2 Archaeological Assessments of Bellwood Ridge Subdivision Part Lots 8 and 9, Concession 2, Geographic Township of Cornwall, Now City Of Cornwall, Ontario	Adam Pollock – Past Recovery	None
P1192-0002-2020	June 12, 2020	Stage 1 Archaeological Assessment 822 Marlborough Street-Parts of Lot 1 and 2, North Side of Eighth Street, and Lot 1 and 2, South Side of Ninth Street, Historic Town Plot of Cornwall, Cornwall Township, Historic Stormont County, Now The City of Cornwall, Province Of Ontario	Joel Bush – WSP Canada Inc.	None

PIF#	Report Date	Title	Consultant	Associated Borden Numbers
P385-0050-2019	August 28, 2019	Stage 2 Archaeological Assessment Cornwall Honda Dealership Part of Lot 13, Concession 3, In the Historic Township of Cornwall, In Historic Stormont County, Now United Counties of Stormont, Dundas and Glengarry, Now In the City of Cornwall, Within the Province of Ontario	Stephen Jarrett – WSP Canada Inc.	None
P369-0085-2019	May 2019	Stage 2 Archaeological Assessment 3000-3300 Marleau Ave Part east half of Lot B, Concession 1 Former Geographic Township of Cornwall City of Cornwall, Ontario	Ben Mortimer – Paterson Group Inc.	None
P369-0084-2019	February, 2019	Stage 1 Archaeological Assessment: 3000-3300 Marleau Ave Part east half of Lot B, Concession 1, Former Geographic Township of Cornwall City of Cornwall, Ontario	Ben Mortimer – Paterson Group Inc.	None
P385-0048-2019	February 7, 2019	Stage 1 Archaeological Assessment: Cornwall Honda Dealership Cornwall Honda Part of Lot 13, Concession 3, City of Cornwall, Geographic Township of Cornwall, United Counties of Stormont, Dundas and Glengarry (Historical Stormont County), Province of Ontario	Stephen Jarrett – WSP Canada Inc.	None
P385-0040-2018	June 7, 2018	Stage 1 Archaeological Assessment 780 Sydney Street Parts of Lot 13 and Lot 14, North of 7th Street and South of 8th Street, City of Cornwall, County of Stormont, Ontario	Stephen Jarrett – WSP Canada Inc.	None
P244-0121-2018	June 7, 2018	Stage 1 Archaeological Background Study Cornwall Business Park: 1500 Industrial Park Drive Formerly the Township of Cornwall, Stormont County Southern Halves of Lots 2, 1, A & Southwest Portion of Lot B, Concession 2	Claire Freisenhausen – CRM Lab Archaeological Services	None
P336-0139-2016	September 26, 2016	Stage 2 Archaeological Assessment 1335 Reneal Street Part Lot 9, Concession 2 Geographic Township of Cornwall City of Cornwall, Ontario	Jeff Earl – Past Recovery Archaeological Services	None
P336-0127-2016	July 22, 2016	Stage 1 Archaeological Assessment 1335 Reneal Street, Part Lot 9, Concession 2, Geographic Township of Cornwall, City of Cornwall, Ontario	Jeff Earl – Past Recovery Archaeological Services	None
P395-0010-2015	February 29, 2016	Stage 2 Archaeological Assessment Improvements and Extension of Lemay Street Project Part of Lots 7, 8, 9 and 10, Concession 2, Township of Cornwall, in the United Counties of Stormont, Dundas and Glengarry, Ontario	Catherine Dupont - AECOM	None

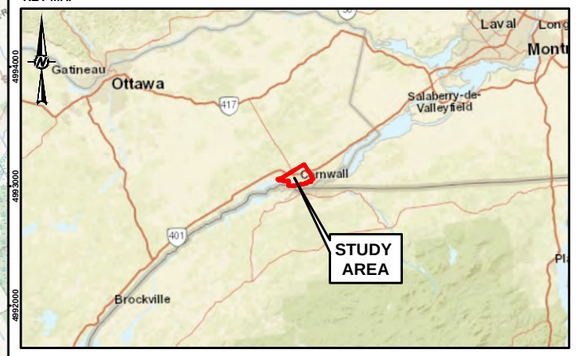
PIF#	Report Date	Title	Consultant	Associated Borden Numbers
P1201-0007-2018	December 2, 2018	Stage 1 Archaeological Assessment of 910 Montreal Road, Part Lot 5, Concession 1, Geographic Township of Cornwall, City of Cornwall, Ontario	Stephanie Cleland – Past Recovery Archaeological Services	None
P415-0155-2017	December 22, 2017	Stage 1 Archaeological Assessment: Saunders Road Development Property Part of Lots 19 and 20, Concession 2, Geographic Township of Cornwall, now City of Cornwall, Ontario	Patrick Hoskins - Stantec	None
P336-0221-2018	June 25, 2018	Stage 1 Archaeological Assessment of the Former Domtar Lands, Part Lots 13, 14 and 15, Concession 2, Geographic Township of Cornwall, City of Cornwall, Ontario	Jeff Earl – Past Recovery Archaeological Services	None
P340-0065-2017	February 15, 2018	Stage 2 Archaeological Assessment Pitt Street Overpass GWP4085-13-01 and GWP4383-13-01 Sites 31-211.1 and 31-211.2, Part Lots 9 and 10 Concession 3, South Stormont Township Unites Counties of Stormont, Dundas and Glengarry, Cornwall, Ontario	Shan Ling – Golder Associates Ltd.	None
P340-0057-2017	August 22, 2017	Stage 1 Archaeological Assessment Pitt Street Overpass GWP4085-13-01 and GWP4383-13-01 Sites 31-211.1 and 31-211.2, Part Lots 9 and 10 Concession 3, South Stormont Township United Counties of Stormont, Dundas and Glengarry, Cornwall, Ontario	Shan Ling – Golder Associates Ltd.	None
P246-0281-2016	August 16, 2016	Stage 1&2 Archaeological Assessment of 235 Third Street West, Part of Lots 23 and 24, South Side of Fourth Street and Lots 23 and 24, North Side of Third Street, Plan Cornwall, City of Cornwall, Geographic Township of Cornwall, Stormont County, Ontario, Original Report	Michael Berry – Abacus Archaeological Services	None
P365-0057-2015	August 8, 2015	Stage 2 Archaeological Assessment 3001 & 3105 Brookdale Avenue West Part of Lot 12, Concession 3, City of Cornwall, Geographic Township of Cornwall, United Counties of Stormont, Dundas and Glengarry (Historical County Of Stormont), Province of Ontario	Douglas A. Yahn WSP Canada Inc.	None
P365-0031-2014	July 21, 2014	McConnell Tower Stage 1-2	Douglas A. Yahn WSP Canada Inc.	None
P395-0008-2015	-	Stage 1 Archaeological Assessment Proposed Lemay Street and Municipal Works Yard Project Part of Lots 7, 8, and 9, Concession 2 Township of Cornwall United Counties of Stormont, Dundas and Glengarry	-	None

PIF#	Report Date	Title	Consultant	Associated Borden Numbers
P365-0064-2015	September 8, 2015	Stage 1 Archaeological Assessment Morbern Inc. Property Part of Lot D, Concession 1, City of Cornwall, Geographic Township of Cornwall, United Counties of Stormont, Dundas and Glengarry (Historical County of Stormont), Province of Ontario	Douglas A. Yahn WSP Canada Inc.	None
P365-0050-2015	January, 2015	Stage 1 Archaeological Assessment 3001 & 3105 Brookdale Avenue	Douglas A. Yahn WSP Canada Inc.	None
P365-0031-2014	July 21, 2014	McConnell Tower Stage 1-2	Douglas A. Yahn WSP Canada Inc.	None
P191-072-2013	-	Stage 1 Archaeological Assessment of the Proposed Extension of Nick Kaneb Drive, Cornwall, Ontario	-	None
P248-0164-2013	November 19, 2013	Stage 2 Archaeological Property Survey, Future Snow Disposal Site, Virginia Drive, City of Cornwall, Ontario	Douglas A. Yahn WSP Canada Inc.	None
P248-0163-2013	November 19, 2013	Stage 2 Archaeological Property Survey, Proposed Extension of Nick Kaneb Drive, Cornwall, Ontario	Laura McRae – The Central Archaeology Group Inc.	None
P003-367-2013	June 25, 2013	An Archaeological Assessment (Stage 1 & Stage 2) Subdivision Lands Part East Half Lot 6, Concession 2 Geographic Township of Cornwall City of Cornwall UNITED COUNTIES OF STORMONT, DUNDAS AND GLENGARRY	Nicholas R. Adams – Adams Heritage	None
P336-005-2013	June 17, 2013	Stage 2, Proposed Development McConnell Avenue & 11th Street East, Part Lot 7, Concession 2, Geo Twp Cornwall, City of Cornwall	Jeff Earl – Past Recovery Archaeological Services	None
P191-073-2013	April 29, 2013	Stage 1 Archaeological Assessment of the Future Snow Disposal Site, Virginia Drive, Cornwall, Ontario	Helen Sheldon – Ground Truth Archaeology	None
P365-001-2012	February 4, 2013	REVISED: St 1 AA, Northwoods Forest Subdivision, Pt of Lot 8 & Pt of E 1/2 of Lot 9, Con 3; Lot 34, Registered Plan No. 156; Pt 2 & 3, Plan 52R-1876; Lot 33, Registered Plan 156, Pt 5 Plan 52R-2763, within the City of Cornwall and Province of Ontario	Douglas A. Yahn – GENIVAR Inc.	None
P369-006-2012	November, 2012	Stage 1 Archaeological Assessment: Proposed Development at McConnell Avenue and 11th Street East, Part Lot 7, Concession 2 (geographic) Township of South Stormont (Formerly Cornwall and Osnabruch), United Counties of Stormont, Dundas and Glengarry, City of Cornwall, Ontario	Ben Mortimer – Paterson Group Inc.	None

PIF#	Report Date	Title	Consultant	Associated Borden Numbers
P328-013-2011	July 2012	REVISED: Stage 2 Archaeological Assessment of Proposed Plough Turnaround and Construction Staging Areas, Cornwall Centre Road and Hwy 401, South Stormont Township, United Counties of Stormont, Dundas, and Glengarry	Lindsay Dales – Golder Associates Ltd.	None
P206-068-2012	May 2, 2012	Stage 1 Archaeological Assessment of a Concrete Recycling site at 2050 Boundary Road, Cornwall, Ontario	Nick Gromoff – Ground Truth Archaeology	None
P272-197-2011	January 31, 2012	Business Park Stage 1	Derek Paauw - The Central Archaeology Group Inc.	None
P272-051-2009	March, 2011	Stage 1 and Stage 2 A. A. Municipal Class Environmental Assessment for the Proposed Widening and Improvements to Marleau Avenue, City of Cornwall Geographic Township of Cornwall, Stormont County	Derek Paauw – The Central Archaeology Group Inc.	None
P057-615-2010	January 26, 2011	Stage 1 Archaeological Assessment (Background Research and Property Inspection) Highway 401 over Cornwall Centre Road (Bridge Site # 31-209) Preliminary Design and Environmental Assessment Study, City of Cornwall, United Counties of Stormont, Dundas and Glengarry, Ontario	Robert Pihl - Archaeological Services Inc.	None
P272-087-2010	April 2010	Stage 1 Archaeological Background Study and Stage 2 Archaeological Property Survey, Part of Lot 4, Concession 1, City of Cornwall, Geographic Township of Cornwall, Stormont County	Derek Paauw – The Central Archaeology Group	None
P272-030-2009	June 24, 2009	Stage 1 Archaeological Background Study Former Domtar Woodland Site Part of Lots 13 and 14, Concession 1 in the City of Cornwall, Geographic Township of Cornwall, Stormont County. Project Number 09-R06	Derek Paauw – The Central Archaeology Group	None
99-050	October 15, 1999	Wood House BgFq-10 Relocation Stage 1 & 2 Archaeological Assessment of the Wood House Property and Lamoureux Park, Cornwall, Ontario.	Susan Bazeley - CARF	BqFq-10



KEY MAP



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LEGEND

PREVIOUS ARCHAEOLOGICAL ASSESSMENTS

STUDY AREA

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 2022
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3. PROJECTION: TRANSVERSE MERCATOR, DATUM: NAD 83, COORDINATE SYSTEM: UTM ZONE 18, VERTICAL DATUM: CGVD28

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TITLE
PREVIOUS ARCHAEOLOGICAL ASSESSMENTS

CONSULTANT

WSP GOLDER

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5.7 Known Archaeological Sites

The MCM's archaeological site database was consulted on March 3, 2022 and there are 20 registered archaeological sites located within Cornwall or on islands in the vicinity. These sites are all within 300 m of the City of Cornwall and therefore influence the identification of archaeological potential within the city boundaries. The majority of the registered archaeological sites are located along the St. Lawrence River.

Table 4 provides a summary of the sites that were used in the creation of the archaeological potential model.

Table 4: Archaeological Sites within Cornwall

Borden Number	Site Name	Affinity	Time Period	Site Type	Retains Cultural Heritage Value or Interest
BgFp-22	Salem Suburb	Indigenous (St. Lawrence)	Woodland	Camp/campsite	Unknown
BgFp-27	Kaneb Road	Indigenous (St. Lawrence)	Woodland	Camp/campsite	Unknown
BgFp-37	Grey's Creek Site #1	Indigenous	Woodland	Unknown	Unknown
BgFp-4	Salem	Indigenous (St. Lawrence)	Late Woodland	Camp/campsite, Burial	Unknown
BgFp-49	Colquhoun Site	Euro-Canadian	Post-Contact	Homestead	Yes
BgFp-50	Flanagan	Euro-Canadian	Post-Contact	Cabin	Yes
BgFp-6	Grays Creek	Indigenous (St. Lawrence)	Late Woodland	Camp/campsite, Burial	No
BgFp-7	Crab Island	Unknown	Unknown	Unknown	No
BgFp-8	West Colquhouns Island	Indigenous (Point Peninsula)	Woodland	Findspot	Unknown
BgFp-9	East Colquhouns Island	Indigenous (Iroquoian)	Late Woodland	Findspot	Unknown
BgFq-10	Wood House	Euro-Canadian	Post-Contact	House	Unknown
BgFq-2	Malcolm	Indigenous (Point Peninsula)	Middle Woodland	Campsite	No
BgFq-5	Hartle	Unknown	Unknown	Possible burial	No
BgFq-6	Snapper	Indigenous (Point Peninsula)	Woodland	Campsite	No
BgFq-7	Blackbird	Indigenous	Pre-Contact	Possible campsite	No
BgFq-8	Tern	Indigenous	Woodland	Possible campsite	No
BgFq-9	Thistle	Indigenous (Point Peninsula)	Woodland	Campsite	No
BgFr-4	Little Ault Park	Indigenous (Point Peninsula)	Woodland	Campsite	No
BgFr-6	Mille Roche	Indigenous	Pre-contact	Possible campsite	No
BgFr-9	Errington Mews	Euro-Canadian	Post-Contact	Cabin	Yes

Many registered Indigenous archaeological sites in the vicinity of Cornwall were recorded in the 1950s by Dailey and Wright who conducted an archaeological survey of the St. Lawrence islands. The locations of many of these sites such as BgFq-5, BgFq-6, BgFq-2, BgFp-7, BgFp-8, and BgFp-9 appear to have been impacted by the creation of the St. Lawrence International Seaway and are now submerged.

Most of the registered archaeological sites within the city limits are located to the south of the canal. An exception is the Wood House Site (BgFq-10), which consisted of a house built by William Wood in 1840. Originally located along Second Street West, the Wood House was moved to Lamoureux Park and now houses the Cornwall Community Museum (CARF 1999). The site location has since been developed. Past Recovery (2018) identified that much of the area in the vicinity of the site has been subject to deep and extensive ground disturbance.

5.8 Designated and Non-Designated Heritage Properties

The City of Cornwall maintains a list of designated and non-designated heritage properties (Cornwall 2017a) to ensure the protection of historically significant buildings and properties. Heritage properties designated by the City of Cornwall have architectural or historical value or interest and are protected under the Ontario Heritage Act. Non-designated heritage properties are those identified as having elements of cultural heritage value. Map 10 (p. 79) shows the locations of these properties within the city. The list of the heritage properties as of the date of the AMP is presented in Appendix C. Additional information on the properties is available on the City of Cornwall's website (Cornwall 2017a).

5.9 Development of an Archaeological Potential Model

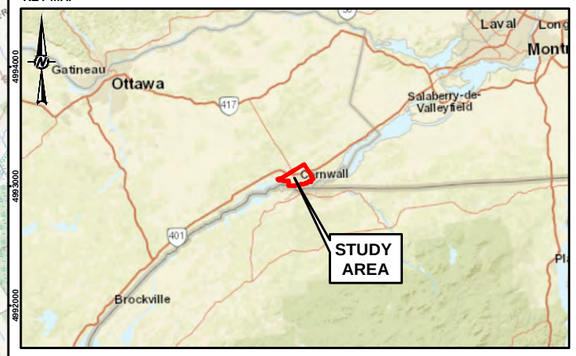
Map 11 (p. 80) shows the areas within the City of Cornwall identified as having archaeological potential based on the archaeological potential model. This mapping includes areas where previous archaeological assessments have been conducted and made recommendations for additional archaeology. Most of the City of Cornwall falls within provincial legislation and any archaeological assessments would follow the standards and guidelines established by the MCM (2011a). The exceptions are federal properties which are depicted on Map 11 (p. 80).

The archaeological potential model was created using the features of archaeological potential outlined in Section 1.3.1 of the MCM's (2011a) Standards and Guidelines. These include proximity to water sources, elevated topography, pockets of well drained sandy soil, distinctive landforms, registered archaeological sites, and historical settlement and transportation routes. The locations of water sources, including lakes, streams, creeks, and wetlands, were identified using the historical plans of Cornwall, topographic maps and aerial photographs. Historical plans and aerial photographs are important for identifying the location of historical water sources as the development of the city during the 20th century as well as the creation of Lake St. Lawrence has altered water courses and shorelines. Following Standard 1C (iii) of Section 1.4 of the Standards and Guidelines, all areas within 300 m of a water source are identified as having archaeological potential.

Areas of elevated topography, pockets of well drained sandy soil, and distinctive landforms were identified using the topographic and soil maps. While areas of elevated topography are limited in Cornwall, the soils map indicates areas of Uplands Series soils which are identified as being sandy soils with good drainage. Archaeological potential was restricted to the boundaries of these features.

The locations of previously identified archaeological sites were obtained from the MCM's archaeological site database. As previously discussed in Section 3.7, there are presently 20 registered archaeological sites located within Cornwall. Following Standard 1C (i) of Section 1.4 of the Standards and Guidelines (MCM 2011a), all areas located within 300 m of a registered archaeological site have archaeological potential.

KEY MAP



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LEGEND

- DESIGNATED HERITAGE SITES
- NON-DESIGNATED HERITAGE SITES
- STUDY AREA

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

1. HERITAGE CORNWALL DESIGNATED AND NON-DESIGNATED HERITAGE SITES, CITY OF CORNWALL
2. LAND INFORMATION ONTARIO (LIO) DATA PRODUCED BY GOLDER ASSOCIATES LTD. UNDER LICENCE FROM ONTARIO MINISTRY OF NATURAL RESOURCES, © QUEENS PRINTER 2022
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DESIGNATED AND NON-DESIGNATED HERITAGE SITES

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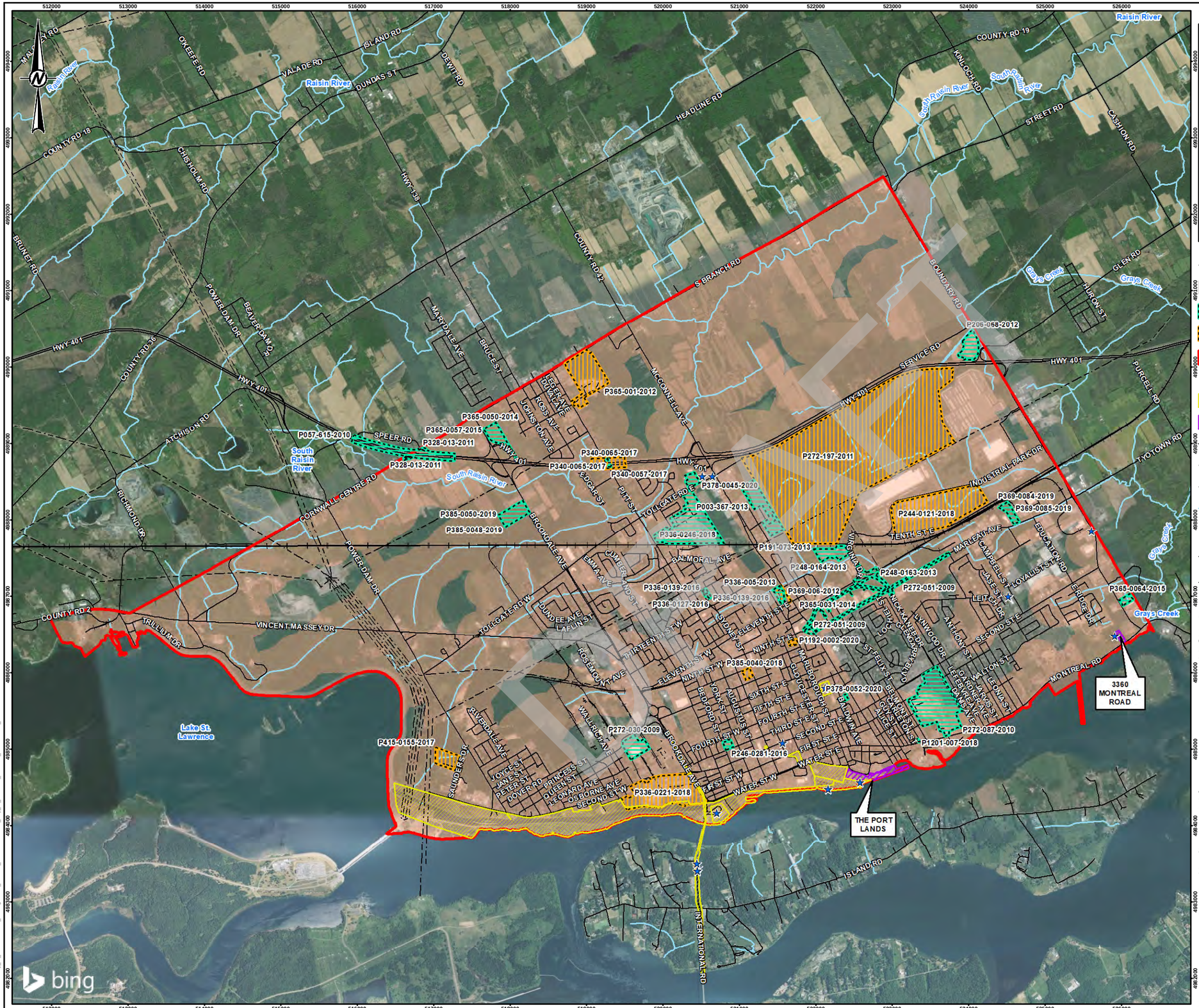

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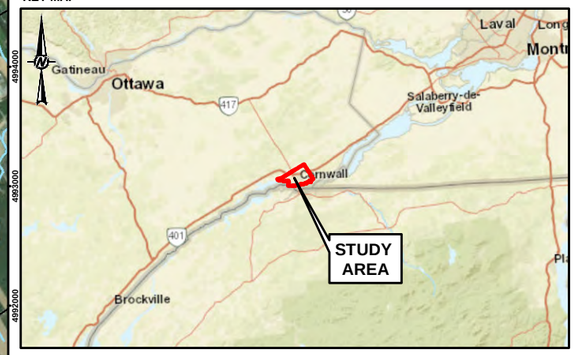

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- ARCHAEOLOGICAL POTENTIAL
- PREVIOUS ARCHAEOLOGICAL ASSESSMENT- NO FURTHER ARCHAEOLOGY RECOMMENDED
- PREVIOUS ARCHAEOLOGICAL ASSESSMENT - FURTHER ARCHAEOLOGY RECOMMENDED
- STUDY AREA
- FEDERAL BUILDINGS
- FEDERAL PROPERTY
- JOINTLY OWNED BY MOHAWK COUNCIL OF AKWESASNE
- ROADWAY
- RAILWAY
- UTILITY
- WATECOURSE

NOTE(S)

1. ALL LOCATIONS ARE APPROXIMATE

REFERENCE(S)

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CITY OF CORNWALL

PROJECT
ARCHAEOLOGICAL MANAGEMENT PLAN CITY OF CORNWALL

TITLE
ARCHAEOLOGICAL POTENTIAL

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-10-20
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Areas of early Euro-Canadian settlement and historical transportation routes were determined based on the locations of structures, roads, and rail lines depicted on the historical plans of Cornwall County (Maps 3 and 4). An additional sources of archaeological potential are the designated and non-designated heritage properties identified by the City. Archaeological potential is present on the properties of these locations.

5.9.1 Pre-Contact Indigenous Archaeological Potential

The primary indicators of Indigenous archaeological potential within the City of Cornwall are proximity to water sources, well drained sandy soils, and registered Indigenous archaeological sites. Water sources are abundant within Cornwall and include the St. Lawrence River, the South Raisin River, and many creeks and wetlands. The raising of the St. Lawrence River water level as part of the construction of the St. Lawrence International Seaway in the 1950s has resulted in the submersion of many of the islands, portions of the shoreline and low-lying areas that would have been used by Indigenous inhabitants. Indeed, the majority of the registered Indigenous archaeological sites within the area were documented on islands or along the contemporary the St. Lawrence River shoreline, and subsequently became inundated by the rising water levels. It is likely that there are additional undocumented archaeological sites that were impacted by the construction of the St. Lawrence Seaway. Additionally, the construction of the Moses-Saunders Power Dam flooded the land west of Cornwall so the current shoreline is not a good indicator of Indigenous archaeological potential as the historical shoreline was several hundred meters to the south.

Additional impacts to Indigenous archaeological potential are the industrial development of Cornwall's waterfront beginning in the 19th century. The resultant changes to the landscape, infilling of portions of the waterway and removal of the natural topsoil would have resulted in the disturbance of the Indigenous archaeological sites located in these areas. Nonetheless, the known Indigenous archaeological sites in Cornwall highlight the long presence of Indigenous peoples in the region. As the City of Cornwall grows and undergoes further development, there will continue to be a need to protect Indigenous resources in collaboration with nearby Indigenous communities.

5.9.2 Historical Archaeological Potential

The areas containing potential for historical archaeological resources are derived from a number of sources including proximity to water sources, registered historical archaeological sites, heritage buildings, cemeteries, transportation networks, and areas of early Euro-Canadian settlement. In most cases, the MCM typically uses the year 1870 as an arbitrary cut off for determining when historical resources are deemed to have archaeological significance.

The sections below provide a brief discussion of a few areas that require special consideration.

The Cornwall Canal and Waterfront

The waterfront and Lamoureux Park hold special symbolic meaning to Cornwall (Cornwall 2018, p. 7-125). The construction of the Cornwall Canal between 1876 and 1904 brought in thousands of workers and shaped much of Cornwall's development during the 19th and 20th centuries. It was one of eight canals that provided Western Canada with access to the ocean by the Great Lakes and St. Lawrence River and is a national historic event (Parks Canada ND). The canal and waterfront are therefore of significant cultural heritage value to the city which should be considered for any future development.

Although much of Lamoureux Park is largely the product of 20th century infilling, it was the area of several historically significant locations including the Upper Wharf and site of the original 1784 United Empire Loyalist Landing (CCM 2015). There is potential for deeply buried archaeological resources within the park, including resources may be associated with the initial construction of the canal, the enlargements that occurred between 1876 and 1904, or even marine archaeological resources that were buried during the infilling.

Deeply Buried Archaeological Resources

Despite the urban and industrial nature of Cornwall's downtown core and the impact of development during the 20th and 21st centuries, there remains the potential for deeply buried archaeological resources in the area of the historical Square Mile and waterfront. Prior to the invention of motorized excavators, much of the excavation for construction within Cornwall would have been done by hand, steam powered machinery or with the assistance of horses. It was often easier to build over structural foundations and other large archaeological resources rather than remove them. As such, places with long historical occupations often contain deeply buried archaeological resources despite extensive later disturbance. Images 16 and 17 (pp. 79-80) provide examples illustrating buried archaeological resources in urban contexts.

Image 16: Photo showing a stone foundation from a historical building underneath a modern surface in urban contexts. (Courtesy of Becky Remmer)

Image 17: Illustrative example of deeply buried archaeological resources within an urban context (Courtesy of Becky Remmer).

The potential for deeply buried archaeological resources within Cornwall's downtown core and waterfront can be determined during future Stage 1 archaeological assessments which will provide a more detailed background study of specific properties. The Fire Insurance Plans (Map 6) can be a useful resource for identifying the locations where historical foundations may be present between the footprints of modern buildings.

Cemeteries

The cemeteries within the City, which include the Woodlawn Cemetery, St. Columban's Cemetery, and the Cimetiere de la Nativite, all have archaeological potential due to the risk of impact to human remains. The Bereavement Authority of Ontario (BAO) requires that professionally licensed archaeologists conducting invasive archaeological assessments within a cemetery submit a request to the Register of the BAO for an investigation order prior to the commencement of the assessment (BAO 2018). The investigation order is intended to relieve the archaeologist of the prohibition and liability related to the disturbance of a human burial in a cemetery. The Investigation Order is required for archaeological investigation intended to determine the boundaries of a cemetery when records are not available to confirm the exact locations of the burials.

Requests for an investigation order must be accompanied by a summary of the Stage 1 archaeological report and the following information:

- The contact information and permission of the owner of the cemetery land
- The reason why the activity is necessary and what results are expected.
- What the manner of the assessment or investigation will entail.
- Proposed commencement date of the activity.
- Confirmation that the archaeological assessment will be keeping with the MCM Standards and Guidelines for Consultant Archaeologists and the Funeral, Burial and Cremation Services Act, 2002 and Ontario Regulation 30/11.
- The Project Information Form (PIF) number from the MCM.

The MCM requires archaeological assessments be undertaken within 10 m of known boundaries of a cemetery prior to the issuance of municipal permits. Following Guideline 4 of Section 2.2 of the Standards and Guidelines for Consultant Archaeologists (2011a), a Stage 3 archaeological assessment is needed to confirm whether the cemetery extends beyond the boundaries. This is due to the potential for unmarked graves located outside of present boundaries. The placement of burials in early cemeteries were often poorly documented and although there was great variability between denominations, some types of deaths such as suicides were proscribed separate burial practices which could include burial outside of cemetery boundaries. As a result, there is potential for human remains beyond cemetery boundaries.

5.9.3 Marine Archaeology

There is archaeological potential for marine archaeological resources below the high watermark for the Cornwall Canal and the St. Lawrence River.. Additional guidance for identifying the need for marine archaeological assessments is provided in the MCM's (2016) Criteria for Evaluating Marine Archaeological Potential in 2016 and is listed below.

- Known marine or land-based archaeological sites on or within 500 m of the project area
- Indigenous or local knowledge of marine or land-based archaeological sites on or within 500 m of the project area
- Indigenous knowledge of or historically documented evidence of past Indigenous use on or within 500 m of the project area
- Known burial site or cemetery on or adjacent to the project area.

- The project area includes property recognized for its cultural heritage value or interest (CHVI).
- The project area has been subject to recent (post 1960), extensive and intensive disturbance.
- The presence of two or more reported or registered shipwreck sites or reports of lost ships within 5 km
- Project area within 1 km of an active or historical harbour, seaplane or floatplane base, tunnel, ferry route, marine terminal, or winter road.
- The presence of narrows, rapids, waterfalls, or a watercourse entering or leaving a body of water within 300 m.
- Built heritage or cultural heritage landscape resources that may be of CHVI adjacent to the watercourse or water body.
- Inundated beaches, bluffs, lakeshores, streams or riverbanks within 300 m.
- Inundated beaches, lakeshores or river/creek banks beyond 300 m and at a greater depth than the project area with evidence of two or more of the following:
    - elevated bathymetric features such as drumlins, eskers, kames, ridges, etc.
    - pockets of sandy lakebed
    - distinctive bathymetric formations such as escarpments, shoals, promontories, reefs, etc.
    - inundated resource extraction areas (quarry, fishery)
    - inundated historical settlement including built heritage resources or cultural heritage landscapes.
    - inundated historical transportation routes

As previously discussed, the infilling of the area of Lamoureux Park during the mid- 20th century and the infilling of the eastern portion of the Cornwall Canal during the 1970s resulted in the burying of previously underwater areas and consequently, there is potential for deeply buried marine archaeological resources in these areas.

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Cultural Property Export and Import Act (1985)

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https://www.ontario.ca/laws/regulation/090359

Municipal Policy

City of Cornwall Office Plan – 2018

https://www.cornwall.ca/en/do-business/official-plan.aspx?_mid_=11026

8.0 GLOSSARY

Approval Authority: Any public body such as a municipality with the authority to approve development projects that fall under its jurisdiction. The approval authority will typically be the City for archaeological assessments within Cornwall.

Archaeological Fieldwork: Any activity carried out on, above or under land or water for the purpose of obtaining and documenting data, recovering artifacts and remains or altering an archaeological site and includes monitoring, assessing, exploring, surveying, recovering, and excavating.

Archaeological Potential: Areas where the discovery of archaeological sites or artifacts are possible.

Archaeological Resources: Artifacts, sites or physical features identified by a licensed archaeologist as possibly possessing Cultural Heritage Value or Interest.

Archaeological Site: Any property that contains an artifact or any other physical evidence of past human use or activity that is of cultural heritage value or interest.

Artifact: Any object, material or substance that is made, modified, used, deposited or affected by human action and is of cultural heritage value or interest.

Before Present: Used as an agnostic alternative to BC/AD when referring to dates. Before present refers to years before 1950, the year when practical radiocarbon dating became available.

Consultant Archaeologist: An archaeologist holding a valid professional archaeological licence issued by the MCM and hired by a client to carry out archaeological fieldwork, produce a report, and/or provide technical advice.

Cultural Heritage Value or Interest: Archaeological resources recommended by the consultant archaeologist to be of sufficient archaeological value or interest to warrant further archaeological assessment or protection. These resources are protected under the Ontario Heritage Act. Criteria for determining CHVI include:

- whether the archaeological site contributes to local, regional, provincial, or national history.
- value of the archaeological site to a community or Indigenous group.
- whether the site contributes to enhancing the public's understanding and appreciation of Ontario's past.

Development Project (Project): For the purpose of the AMP, development projects refer to any construction, ground disturbance, maintenance, or infrastructure project that has the potential to cause ground disturbance or requires approval by the City in their role as an approval authority.

Indigenous Peoples Burial Ground: Land set aside with the apparent intention of interring in it, in accordance with cultural affinities, human remains and containing remains identified as those of persons who were one of the Indigenous peoples of Canada.

Irregular Burial Site: A burial site containing ancestors' remains not in their original or intended resting place.

Marine Archaeological Site: An archaeological site that is fully or partially submerged or that lies below or partially below the high-water mark of any body of water.

Proponent: The individuals, private corporation, or government body undertaking a development project.

Signature Page

Golder Associates Ltd.

Randy Hahn, Ph.D.
Archaeologist

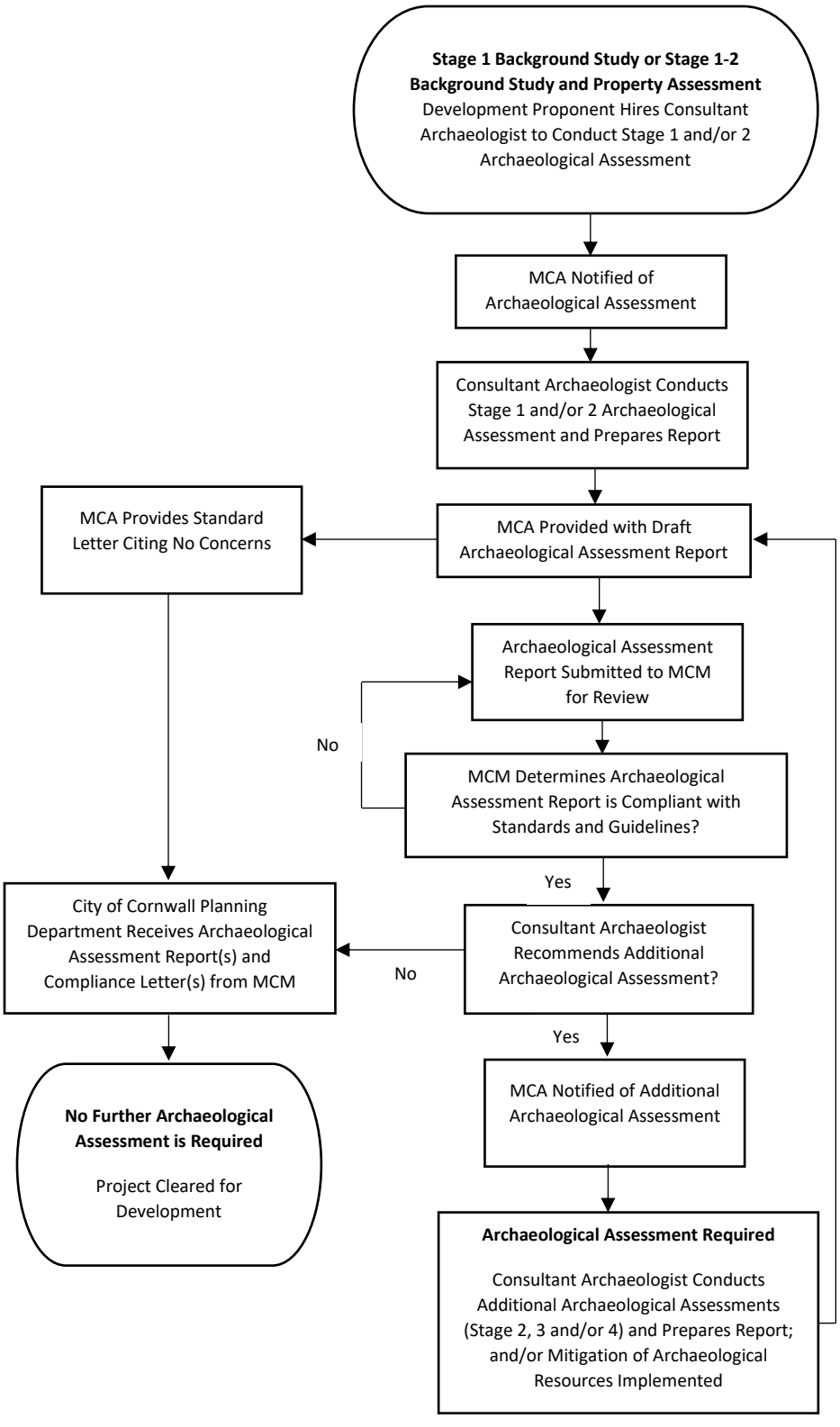
Michael Teal, MA
Director, Archaeology and Heritage, Ontario, Earth & Environment

RH/MT/ca

https://wsponline-my.sharepoint.com/personal/randy_hahn_wsp_com/documents/desktop/reports/2022/21502790 cornwall amp/draft amp/21502790 amp dec2022-revdraft.docx

APPENDIX A

Visual Overview of the General Archaeological Review Process


Stage 1 Background Study or Stage 1-2 Background Study and Property Assessment
Development Proponent Hires Consultant Archaeologist to Conduct Stage 1 and/or 2 Archaeological Assessment
MCA Notified of Archaeological Assessment
Consultant Archaeologist Conducts Stage 1 and/or 2 Archaeological Assessment and Prepares Report
MCA Provided with Draft Archaeological Assessment Report
MCA Provides Standard Letter Citing No Concerns
Archaeological Assessment Report Submitted to MCM for Review
No
MCM Determines Archaeological Assessment Report is Compliant with Standards and Guidelines?
Yes
City of Cornwall Planning Department Receives Archaeological Assessment Report(s) and Compliance Letter(s) from MCM
No
Consultant Archaeologist Recommends Additional Archaeological Assessment?
Yes
No Further Archaeological Assessment is Required
Project Cleared for Development
MCA Notified of Additional Archaeological Assessment
Archaeological Assessment Required
Consultant Archaeologist Conducts Additional Archaeological Assessments (Stage 2, 3 and/or 4) and Prepares Report; and/or Mitigation of Archaeological Resources Implemented

APPENDIX B

Development Scenarios

Table 1: Examples of Development Application Scenarios where Archaeological Assessments may be Required

The below is intended as illustrative examples only. The requirement for a Stage 1 AA for sites of archaeological potential would be determined on a case-by-case basis by municipal staff.

OPA to implement the City's Archaeological Management Plan would need to specify Archaeological Assessment as a list of potential required studies. Include this table as part of the revised AMP. Include policies, but not the table in the City initiated OPA to implement the AMP (eg. City of Cornwall's existing and new OP).

Type of City Development Application	Development Scenario	Archaeological Assessment Required? (Yes / No)	Implementation
Official Plan Amendment – Change of Land Use	■ Greenfield for residential use. ■ Non greenfield example – eg. Existing building but use is changing. ■ Greenfield for employment use – business park.	Yes	City initiated OPA to update policies. Update City OPA/ZBLA Application Form.
Official Plan Amendment – Change of Policy	■ Proposed development but doesn't change the land use. Only if the results of a Stage 1 Archaeological Assessment or other Stages of AA result in some development constraints on a site.	Case by case basis – likely not.	OPA - either City or proponent-led depending on the scenario.
Zoning By-law Amendment	■ Removal of Holding	No	
	■ Temporary Use By-law for a parking lot, surface or underground	Yes	City-initiated OPA. Update Temporary Use By-law. Update City OPA/ZBLA Application Form.
	■ Temporary Use By-law for a change of use within an existing building	No	
	■ Temporary Use By-law for a developer's model home.	Yes	

Type of City Development Application	Development Scenario	Archaeological Assessment Required? (Yes / No)	Implementation
Zoning By-law Amendment	■ Temporary Use By-law for an outdoor commercial patio.	Yes	
	■ Rezone from one use to another use on a vacant, brownfield or underutilized property.	Yes	City-initiated OPA. Update City OPA/ZBLA Application Form.
	■ Rezone from one use to another use within an existing building – no building footprint expansion.	No	
	■ Rezone from one use to another use on a development property where there is a building expansion vertically.	Yes	City-initiated OPA. Update City OPA/ZBLA Application Form.
Plan of Subdivision / Plan of Condominium	■ Soil disturbance on any lands identified as being part of an Akwesasne Cultural Property.	Yes	Update City OP policy in accordance with adopted Indigenous Engagement Protocol. Update City OPA/ZBLA Application Form.
	■ Greenfield subdivision (vacant land)	Yes	City-initiated OPA. Update City OPA/ZBLA Application Form.
	■ Additional phase of development to an existing subdivision	Yes	City-initiated OPA. Update City OPA/ZBLA Application Form.
	■ Plan of Condominium – Vacant	Yes	City-initiated OPA. Update City OPA/ZBLA Application Form.
	■ Plan of Condominium – Common Elements	Yes	City-initiated OPA. Update City OPA/ZBLA Application Form.
	■ Plan of Condominium – standard	No	

Type of City Development Application	Development Scenario	Archaeological Assessment Required? (Yes / No)	Implementation
Site Plan Control	■ Vacant / undisturbed lands that have been identified as having archaeological potential. Urban and rural locations.	Yes	City-initiated OPA and check/revise Site Plan Control By-law. Update Site-Plan Control Application Form
	■ Redevelopment located generally within existing building footprint.	No	City-initiated OPA and check/revise Site Plan Control By-law
	■ Redevelopment located on a different previously undeveloped part of the lot.	Yes	City-initiated OPA and check/revise Site Plan Control By-law. City to update Site Plan Control By-law application form.
	■ Brownfield sites	Yes	City-initiated OPA and check/revise Site Plan Control By-law. City to update Site Plan Control By-law application form.
	■ Waterfront Development	Yes	City-initiated OPA and check/revise Site Plan Control By-law. City to update Site Plan Control By-law application form.
Consent	**Urban Consent Application** ■ For lands that contain or directly affect a registered archaeological site or federal, provincial or municipal historic landmark, monument, or designated property.	Yes	City-initiated OPA. Update City Consent to Sever application.
	■ To sever a vacant lot.	Yes	City-initiated OPA. City to update Consent to Sever application form.
	■ Addition to a lot (lot line adjustment)	No	
	■ Mortgage Charge (partial discharge of mortgage)	No	
	■ Correction of title	Maybe, depends on the site location	

Type of City Development Application	Development Scenario	Archaeological Assessment Required? (Yes / No)	Implementation
Consent	■ Easement/right-of-way	Maybe, depends on the site location	
	■ Severance of existing units (eg. Sever semi-detached or townhouse units)	Maybe, depending on the extent of development on the property and if a previous Archaeological Assessment has been completed.	
	■ Lease	No	
	Rural Consent Application ■ Soil disturbance on undisturbed lands located within 300 m of a watercourse.	Yes	City initiated OPA. Update City Consent to Sever application and have a Rural Section. See City of Ottawa Consent to Sever application: https://app06.ottawa.ca/online_services/forms/ds/app_consent_en.pdf, specifically page 3.
Minor Variance	■ Zoning relief, legal non-conforming use	No	
Part Lot Control	■ Lifting of part lot control application to sever existing units.	No	
Building Permits	■ Addition to an existing structure for a structure/dwelling that was recently constructed and does not result in soil disturbance or excavation (e.g. porch, deck)	No	

Type of City Development Application	Development Scenario	Archaeological Assessment Required? (Yes / No)	Implementation
	■ Any application causing soil disturbance such as new buildings, substantial additions, swimming pools and driveways, new construction of a separate structure on a property (e.g. coach house, detached garage, barn). Urban and rural locations.	Yes, if the proposed construction is on a site having archaeological potential based on the AMP mapping, if an Archaeological Assessment hasn't been previously completed, and if no other development application was filed.	Confirm if an Archaeological Assessment was previously completed for the site. If yes, the Archaeological Assessment should be reviewed to confirm if recommendations were made for mitigation for future work or if Stage 2, 3, or 4 is required to be completed prior to construction.
			City-initiated OPA.

Sources:

https://www.selwyntownship.ca/en/township-hall/resources/Building__Planning/Archaeological-Assessments.pdf

https://ottawa.ca/en/planning-development-and-construction/official-plan-and-master-plans/official-plan/volume-1-official-plan/section-4-review-development-applications#section-4-6-cultural-heritage-resources

https://pub-hamilton.escribemeetings.com/filestream.ashx?DocumentId=120593

APPENDIX C

Heritage Properties

APPENDIX C
Heritage Properties

Table 5: Designated Heritage Properties within Cornwall

Name Address	Site Name
The Cline House	208 Second Street East
The Smart/Fraser House	224 Second Street East
The Wood House	160 Water Street East
Nativity Church	300 Montreal Road
Chesley's Inn	40 First Street West
Stormont Cottages	33 to 43 York Street
Cornwall Grammar School	39 Fourth Street East
St. Columban's Church	40 Fourth Street West
St. Columban's Rectory	36 Fourth Street West
St. Columban's Cemetery	429 Eleventh Street West
Captain MacDonald House	1128-1130 Captain MacDonald Boulevard
Cornwall Public Library	45 Second Street East
Nativity School	146 Chevrier Avenue
United Counties Courthouse and Jail	7 Water Street West
Central Public School	115 Second Street East
Old Baptist Church	130 Sydney Street
Cornwall Street Railway Locomotive #17	Southeast corner of Brookdale Avenue and Ninth Street
Port Theatre	132 Montreal Road

Table 6: Non-designated Heritage Properties

Address	Date	Notes
24 Adolphus Street	1875	the Young house
111 Adolphus Street	1870	Gothic Revival style, the Bissett house
121-125 Adolphus Street	1860	Italian villa style with some Queen Anne features, home built from materials of the old St. John’s Presbyterian Church including tower
221-223-225 Augustus Street	1890	
2 Belmont Street		South of Second St. former Classical College? Was priest’s residence, now St. Lawrence College
1730 Cornwall Centre Road		Original Mullin farm and stone house
703 Cotton Mill Street	1873	First mill in Canada to introduce electric lighting. Former Canada Cotton Mill, known now as Weave Shed, Edison building
50-52 Cumberland Street	1889	former Masson home- Frank Masson-blacksmith- L shaped 1 1/2 Storey frame dwelling with front verandah and rear wing, part of Beaconsfield

APPENDIX C
Heritage Properties

Address	Date	Notes
102 Cumberland Street	pre-1915	Alex Laflesh- carpenter- Beaconsfield, Structure exhibits a more prominent architectural style and building materials compared to other houses in the area. Verandah wraps around front façade.
540 Cumberland Street		Woodlawn Cemetery, Historic Cemetery, 1889 land purchased for new cemetery
14-16 Edward Street	1895	Typical mill housing, former Bourget home
39-41 Edward Street		Home of cotton mill workers, unusual brick pattern on façade above front entrance
201 Eleventh Street East	1913	Former House of Refuge, Heartwood, Nursing home
33 Fifth Street East	1873	Former residence of Duncan Monroe (Cedar Brae)
42 Fifth Street East	1896	Canadian Inventory of Historic Buildings complete
47 Fifth Street East	1936	Munroe cottage, property purchased from Duncan Munroe
105 Fifth Street East	1870	Canadian Inventory of Historic Buildings Complete
9 First Street East	1860	Long established business; one of the oldest in Cornwall, damage to structure (October 2014) Renovated 2015
33 First Street East	Circa 1820	Former Wood home, former hotel and post office
100 Block (even number) of First Street East	1880	Peggy Bruce Home
125-127 First Street East	1860	former Andrew Hodge house, mill owner and civic leader
205 First Street East	Circa 1880	Canadian Inventory of Historic Buildings complete, architectural summary included, Queen Anne Style, no title search included, former home of Joseph Chevrier (father of Lionel)
232 First Street East	Circa 1860	former home of James Leitch, Canadian inventory of Historic Buildings complete, Georgian revival style
238 First Street East	Circa 1875	Former home of Judge O'Reilly, Canadian inventory of Historic Buildings complete, architectural summary included, Italianate – Queen Anne Style
302 First Street East	Circa 1840	Anderson home, Canadian inventory of Historic Buildings complete
506 First Street East		Former Anglican Church of Good Sheppard, Now Boys and Girls Club
512-518 First Street East	1880	Church of Good Sheppard homes
505 Fourth Street East	1938	Cornwall Armoury, Federal Designation, Recognized Register of the Government of Canada Heritage Buildings. Architect: Charles D. Sutherland
7 Gloucester Street	Circa 1860	Canadian Inventory of Historic Buildings completed
16 Gloucester Street	Circa 1885	Canadian Inventory of Historic Buildings completed,
1109 Gretchen Crescent	1920	Former residence of the House of Refuge caretaker

APPENDIX C
Heritage Properties

Address	Date	Notes
1117 Gretchen Crescent	1920	former residence of House of Refuge caretaker
1110-1120 Kirkman Court	1925	Former Courtaulds cottages
21 Lennox Lane	1935	Former Patenaude Home, Gladstone village
39-41 Lennox Street	Circa 1920-1934	Former Lalonde Home
42-46 Marlborough Street South	Circa 1880	Boomtown Front House, owned in 1890 by Henry King a mill operative
107 Marlborough Street (506 First Street East)	Circa 1900	Parish of the Church of the Good Sheppard
128 Marlborough Street North	Circa 1920	Royal Manor Rest Home, former Marlborough Tourist Home
840 McConnell Avenue	1955	Former Hotel Dieu Hospital run by the RHSJ evolved from York St. site
1-9 Montreal Road		Dr. Bergin's home
135 Montreal Road		1887 Peter McCullough, yeoman to Henry Doyle, mill operative; current building circa 1956
171 Montreal Road	1940	The Lavigne Block
325 Montreal Road	1928	1920 – Owner Joseph Pitre, Loom fixer
331-333 Montreal Road	1946	1919 – conveyed from Frank Leroux merchant to Louis Brunet Cotton Mill overseer
369 Montreal Road	1900	1888- Alexander McCracken, a butcher, sold to Robert Ferrie, a dyer; Census link to Ferrie
400-406 Montreal Road	1946	Edifice Lefebvre
500 Montreal Road		Edifice Lefebvre
837 Montreal Road	Circa 1980	Riverside Restaurant – Karabatsos Family
1150 Montreal Road	1924	Plant buildings demolished, office building remains; first plant in Canada to produce viscose
1173-1193 Montreal Road	1925	Cottage housing for workers situated across the road
1800 Montreal Road	1929	Bishop's residence
1810 Montreal Road		East Front Public School
1950 Montreal Road	1850	architectural integrity, environmental significance and historical associations.
3350 Montreal Road	1816	Built by fur trader John McDonald of Garth
44 Pitt Street	1934	Constructed to house the newly amalgamated newspapers (The Standard-Conservative/The Freeholder-Liberal) Mural
52-54 Pitt Street	1894	Owned by William Skeith 1894-1930
58-62 Pitt Street	1907	Owner local merchant George McDonnell, Italianate style

APPENDIX C
Heritage Properties

Address	Date	Notes
100-106 Pitt Street	1822	Property traced back to 1822- owned by Phillip Vankoughnet. Webbers book and stationery store. Monroe Loyal Orange Lodge #880
101-105 Pitt Street	1880	Former Johnson building
107-109 Pitt Street	1880	Historic building
108-118 Pitt Street	1879	Campbell block
111-113 Pitt Street	1891	Liddell block, decorative cornices accented by heavy brackets, awnings, lintels and sills and the original overhang design. Building name and date still visible on top level.
115-119 Pitt Street	1847	Former Eaton's of Canada location in 1963, virtually nothing remains of the original style, except the 5 set bay windows, third floor was removed.
122-128 Pitt Street		Miller block, former T. Eaton Co. Ltd., Peoples store, International Style. No historic ornament is apparent due to aluminum cladding on majority of façade.
130 Pitt Street	1906	Part of Stormont block. No historic ornament apparent.
132-134 Pitt Street	1884	Property traced back to 1884, owned by Robert Brown
135-137 Pitt Street	1879	Owned by Snetsinger family since 1879
139-141 Pitt Street	1936	Historic building
145 Pitt Street	1896	Clark family operated shoe store from 1896-2012
150 Pitt Street	1899	Property traced back to 1899-owners John and George McPhee
155-157 Pitt Street	1890	The estate of Richard Larmour owned the property from 1899-1919 operated as dry goods store
156-162 Pitt Street	1834	1834-1920 Cline family, 1907-1959 Yates family
159 Pitt Street	1823	Bank of Montreal since 1912. Simple vernacular form of Beaux-Arts Classicism. Former location of St. John's Presbyterian Church from 1826-1889
163-167 Pitt Street	1883	L.E. Bailey operated jewelry store from 1883
164-168 Pitt Street	1883	1883-1920 Colquhoun family, 1920-1979 Jacob family
170 Pitt Street	1900	Formerly part of Colquhoun Block
206-208 Pitt Street	1888	Former Royal Bank of Canada
210-228 Pitt Street	Circa 1887	Glengarry Block
213-217 Pitt Street	1885	Kyte family operated store since 1910
221-225 Pitt Street	1924	1948-1954 Imperial Bank of Canada
227-231 Pitt Street	1921	1921-1979 owners Robino family

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Heritage Properties

Address	Date	Notes
240-246 Pitt Street	Circa 1934	1933-1985 property belonged to Salhany family
239-241 Pitt Street	1924	1925-1952 Kavanagh family
245 Pitt Street	1919	1923-1964 Mary Ann Duffy and family
248 Pitt Street	1925	1928-1989 bakery owned by William and Ida Riley. Continues to house a bakery
249 Pitt Street	1910	former Bell Canada Building from 1910-1978
251-257 Pitt Street	1916	former Wonderland Theatre prior to construction of Palace Theatre 1921
254-266 Pitt Street	1940	1898-1986 estate of Colonel Roderick McLennan
268-272 Pitt Street	1920	property owned by Donald J. Gillies from 1897 until 1917
2065 Pitt Street	1900	Eamer/ MacDonell House
1891 Power Dam Drive	1910	Blackadder Home
10, 16, 18, 22 Race Street	1875	Canal Homes
6 Second Street East	1930	Pommier Jewellers
16 Second Street East		Former Cornwall Street Railway Office
28 Second Street East	1888	Third home of congregation dating back to 1787; ministered by Reverend John Bethune, Reverend Hugh Urquhart, designed by Sydney R. Badgley.
42 Second Street East	1895	Cornwall Club, Historical significance
136 Second Street East	1931	home was owned by several prominent citizens of Cornwall
138 Second Street East		Second Street Study, origins similar to 136 Second Street East
211 Second Street East	1890	Park Residence
217 Second Street East	1848	Former Grant home, former residence of Mary Mack
223 Second Street East	1909	former McDiarmid home and home to predominant Cornwallites
229 Second Street East	1899	J.G. Harkness home
233 Second Street East	1890	former residence of predominant Cornwallites like Urquhart, Mattice, Pitt
305 Second Street East	1874	owned by several predominant Cornwallites
340 Second Street East	1867	former Mack House
428 Second Street East	1890	former Liddel Home
510 Second Street East	1947	Cornwall General Hospital
702 Second Street East	1910	Architecturally significant, Upper Canada Mortgages

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Heritage Properties

Address	Date	Notes
11-17 Second Street West		The Standard Block
44 Second Street West	1922	former Cline business, insurance agent, 1912-1944
46 Second Street West	1922	housed Monroe and Cottrell Insurance co.
117 Second Street West	1869	Congregation dates back to 1787, John Strachan Memorial Church
212 Second Street West		Armstrong property
214 Second Street West	1937	Strathcona Apartments; land owned by many prominent Cornwallites
216 Second Street West	1930	architectural significant, former home of Saul Horovitz
228 Second Street West	1880	predominant land or home owners, Solomon Chesley, Bagg, Kervin, McDonell
310 Second Street West	1937	property owned by MacLennan's
328 Second Street West	1910	Charles Cline House, former MacLennan House
329 Second Street West	1915	former tourist home
338 Second Street West	1910	former MacHaffie Home
415 Second Street West	1880	former Stormont Mill's supervisors' house, Royal Canadian Legion
418 Second Street West	1891	former Empy House
800 Second Street West	1883	Former Howard Smith Paper Mill
810 Second Street West		Former Domtar Forestry Office
830 Second Street West		former New York Central Railroad Hotel (The National)
1125 Second Street West		former Government Home, Girouette home
2500, 2500B Second Street West		R.H. Saunders Power Generating System
35 Seymour Avenue	1896-1905 approximately	census data available on Loucks family owners. L-shaped, 1 1/2 story wood frame dwelling depicts common vernacular architecture of the late 1800's
46 Seymour Avenue	1891	census data available on McCann family owners. L-shaped, 1 1/2 story wood frame dwelling depicts common vernacular style of the late 1800's.
48 and 48 1/2 Seymour Avenue	1896-1905 approximately	census data available on McNichol family owners. L-shaped, 1 1/2 story wood frame dwelling with rear extension
61 and 63 Seymour Avenue	1903-1905 approximately	census data available on Laflesh family owners. Double residential, 2 story brick building, having rectangular L shaped plan
16 Smith Avenue	1872	census data available on Emerson family owners. L shaped one 1/2 story wood frame dwelling that has retained several original features including the tin roof and front verandah
101 and 103 Sydney Street	1909-1916	former Eamer Home,

APPENDIX C
Heritage Properties

Address	Date	Notes
102 and 104 Sydney Street	1912-1916	former Johnson Home
107 and 109 Sydney Street	1909-1916	property owned by John M. Eamer
110 Sydney Street	Circa 1880	property purchased by Louisa Alguire in 1884, property purchased by Knox Presbyterian church and used as a church manse
116 Sydney Street	1880	former French Presbyterian Church
219 Sydney Street	1891	1890 owned by Joseph G. Kilgour
225 Sydney Street	1887	property owned by Mark Hermiston
226 Sydney Street	1890	property belonged to McDonell family; house was constructed elsewhere and transported to its current location on Sydney Street
229 Sydney Street	1896-1906	The Ross Construction Company built this dwelling for Gordon R. Phillips
235 Sydney Street	1889	former Wallace House
237 Sydney Street	1887	property purchased by George W. Armstrong in 1887
240 Sydney Street	1891-1895	former McDonnell Home
241 Sydney Street	1891	property purchased in 1886 by James Nugent
303 Sydney Street	1846-1862	former Dr. Roderick McDonald house
304 Sydney Street	1887	Henry Webber house, owned bookstore
316 Sydney Street	1882-1891	former Dunkin home
321 and 323 Sydney Street	1925	former Smith home
322 Sydney Street	1916	former Dunkin family home
325 Sydney Street	1888-1891	former Grant boarding house
329 Sydney Street	1900	former Kingsley home
341 and 345 Sydney Street		former Dr. Aber and Primeau home
342 Sydney Street	circa 1917-1938	former Monk home
406 Sydney Street	1935	former Atkinson home
410 Sydney Street	circa 1935	former Phillips home
418 Sydney Street	circa 1922	the Ambrose Mulhern House
426 Sydney Street	1890	former McDonell home
430 Sydney Street	1890-1891	former Derouchie home, originally two storey, eight bedroom frame dwelling
434 Sydney Street	1886-1906	one of the Monroe cottages
437 Sydney Street	1956	Cornwall High School

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Heritage Properties

Address	Date	Notes
515 and 517 Sydney Street	1957	former Rousseau home
516 Sydney Street	1937	former Ross-Ross home
520 Sydney Street	1937	Monroe cottage
521 Sydney Street	1952	former Battista House
540 Sydney Street	1952	Monroe Cottage
548 Sydney Street	1941	former Donihee home
101 Third Street West	1897	Big Brothers & Sisters
735 Tollgate Road West	1885	former Gravely Farm House
422 and 422A Victoria Avenue	1890	former Cunningham home
100 Block (even numbers) Water Street West		former Augustus Street swing bridge location
240 Water Street West	1900	former Canal Superintendent's home, now RCAFA building, designed by Thomas S. Scot, Architect
401-403 Water Street West	1896	former Fitzpatrick home
300 Block (even numbers) Water Street West		Eco-Gardens
8 William Street	1880	former Cotton Mill worker's home
26 William Street		former Cotton Mill Manager's home
52-54 William Street	1890	former mill worker's home
56 William Street	1890	former mill worker's home
14 York Street	1851	St. Joseph's Villa
847 York Street	1954	former St. John Bosco Parish

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