

REGION OF PEEL

CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION

July 13, 2023

DRAFT





CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT

MCVEAN SEWAGE PUMPING
STATION

REGION OF PEEL

ORIGINAL REPORT

DRAFT

PROJECT NO.: 211-01228-00

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EXECUTIVE SUMMARY

WSP Canada Inc. (WSP) was retained by the Region of Peel (the Client), to conduct a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) as part of the McVean Sewage Pumping Station (SPS) Schedule 'B' Environmental Assessment (EA).

The McVean SPS is located at 3900 Ebenezer Road in the City of Brampton, it includes a pump station control building and an emergency overflow lagoon. The property on which the control building is located is owned by the Region of Peel. All other surrounding property, including the land on which the lagoon is situated, is property of the Toronto and Region Conservation Authority (TRCA).

In 2015, the Region of Peel completed a condition assessment report. The report identified a list of upgrades required for McVean SPS to accommodate planned growth, comply with Region design standards, and optimize operation. The proposed upgrades include:

- Expansion of the station firm capacity to 2,100 L/s through addition of a fourth sewage pump and connection to the new 1200 mm forcemain.
- Addition of a new grit management system. The McVean SPS experiences high grit loads which deposit in the wet wells. Grit build up reduces wet well capacity, increases wear and tear on equipment, and increases potential for odour formation.
- Addition of a new Fat, Oil, and Grease (FOG) management system. FOG solidifies and adheres to pipes, wet wells, and pump hardware. This can result in decreased pumping capacity and sewer blockages.
- Upgrades to the emergency overflow mitigation management strategy to provide approximately 2-hours of storage at the new peak flow of 2,100 L/s, as specified in the Region's design guidelines.
- Replacement of the existing biofilter odour control system.
- Miscellaneous modifications to the existing control building and site improvements.

As a result, the Region of Peel has identified the need to upgrade and expand the capacity of the McVean Sanitary SPS, in order to service planned growth within the Region of Peel, as well as to upgrade the SPS to comply with current Region design standards. These upgrades include odour control, grit management, emergency storage capacity, and additional site works needed to help the expansion and upgrades. As a result, a Schedule 'B' Class EA is currently being completed to identify a solution for this infrastructure need.

The study area includes the McVean SPS property at 3900 Ebenezer Drive and all adjacent properties. It is bounded by the north by a modern residential subdivision, to the east by McVean Drive, Goreway Drive to the west and Highway 407 to the south. Queen Street East (Regional Road 107) crosses the study area, just south of Ebenezer Road.

The cultural heritage identification and assessment in this Cultural Heritage Report follows the process set out in the *Draft Existing Conditions and Preliminary Impact Assessment Report Guidelines* provided by the MCM (2019). In addition, best practice in heritage identification and assessment has been used, as outlined in the MCM's *Standards and Guidelines for the Conservation of Provincial Heritage Properties* (2010), *Identification and Evaluation Process* (2014) and the *Ontario Heritage Toolkit* (2006a).

This Cultural Heritage Report was prepared by Emily Game, B.A., Cultural Heritage Specialist and reviewed by Joel Konrad, PhD, CAHP, Cultural Heritage Lead, Ontario.

This Cultural Heritage Report considered the project study area and all adjacent properties, which included the lands within the Claireville Conservation Area (Figures 1 and 2, Appendix A).

A field review was conducted on October 5, 2021, by Emily Game, which confirmed there are two Built Heritage Resources (BHR) and four Cultural Heritage Landscapes (CHL) with and known cultural heritage value or interest (CHVI) with the study area.

The report has resulted in the following recommendations:

- 1 Storage and construction staging areas should be appropriately located and/or planned to avoid impacting any of the identified BHRs and CHLs.
- 2 Where construction is anticipated to result in grading impacts and tree removal, post-construction landscaping with native tree species should be employed to mitigate visual impacts to CHL-1 and CHL-4.
- 3 Should future work require expansion of the McVean SPS study area, a qualified heritage consultant should be contacted to confirm the impacts of the proposed work on known or potential BHRs and CHLs.

¹ McVean Drive is oriented in an approximately northwest to southeast direction. For ease of description in this report, McVean Drive will be described as being north-south oriented.

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1 INTRODUCTION

1.1 STUDY PURPOSE AND OBJECTIVES

The Region of Peel retained WSP Canada Inc. to undertake a Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment (Cultural Heritage Report) for the McVean Sewage Pumping Station (SPS) (Figure 1, Appendix A) Schedule ‘B’ Class Environmental Assessment (EA).

The McVean SPS is located at 3900 Ebenezer Road in the City of Brampton, it includes a pump station control building and an emergency overflow lagoon. The property on which the control building is located is owned by the Region. All other surrounding property, including the land on which the lagoon is situated, is property of the TRCA.

In 2015, the Region of Peel completed a condition assessment report. The report identified a list of upgrades required for McVean SPS to accommodate planned growth, comply with Region design standards, and optimize operation. As a result, the Region of Peel has identified the need to upgrade and expand the capacity of the McVean Sanitary Pumping Station (SPS), in order to service planned growth within the City of Brampton, as well as to upgrade the SPS to comply with current Region design standards. These upgrades include odour control, grit management, emergency storage capacity, and additional site works needed to help the expansion and upgrades. As a result, a Schedule ‘B’ Class Environmental Assessment (EA) has been initiated to identify a solution for this infrastructure need.

A Cultural Heritage Report is required for the Environmental Assessment process to: identify existing and potential built heritage resources (BHR) and cultural heritage landscapes (CHL); review the background history of the project area; complete a site visit to confirm existing conditions; provide a preliminary impact assessment to conserve BHRs and CHLs; identify mitigation and/or monitoring for potential impacts; and determine whether additional heritage reporting is required.

To meet these objectives, the report will:

- Introduce the study including the purpose and methodology used to undertake the work.
- Review background studies to complete a summary history of the study area using local histories, historical mapping and aerial photographs. This work will trace the evolution of the study area and aid in the identification of existing and potential BHRs and CHLs.
- Contact City of Brampton Heritage Planners regarding heritage recognitions and identification of listed and/or designated heritage properties within the study area.
- Confirm the presence of previously recognized built heritage resources and cultural heritage landscapes. This process will aid in the identification of built heritage resources and cultural heritage landscapes that may be impacted by the undertaking. This task will include a review of municipal, provincial, and federal heritage registers and inventories, including the City of Brampton’s Heritage Register.

This work will be conducted in accordance with the *Ontario Heritage Act* (OHA) (2005), the *Provincial Policy Statement* (2020), the *Environmental Assessment Act* (1990) and the City of Brampton *Official Plan*.

1.2 PROJECT DESCRIPTION AND STUDY AREA

The McVean SPS study area is located within parts of Lots 2 to 8, Concession VIII and Lots I to 6, Concession IX, within the Township of Peel. It is bounded by the north by a modern residential subdivision, to the east by McVean Drive, Goreway Drive to the east and Highway 407 to the south. Queen Street East crosses the study area, just south of Ebenezer Drive.

The study area is located within the boundaries of the Claireville Conservation Area. The conservation area consists of 848 hectares of natural and forested lands that straddles the Region of Peel and the City of Toronto. It is made up of wetlands, forests, grasslands, valleys; the west branch of the Humber River and its tributaries traverse the conservation area.

The McVean Farm property, located at 0 Gorewood Drive, is situated north of Queen Street East and west of McVean Drive. The 19 acre property was founded by the TRCA and FarmStart and consists of a working farm that provides part-time farmer training program focused on organic vegetable growing.

2 LEGISLATIVE FRAMEWORK

This report reviews BHRs and CHLs within the Project Areas to ensure that the requirements under the Ontario *Environmental Assessment Act* (1990) are satisfied. This section outlines the various legislative frameworks and policies relevant to the report.

2.1 ENVIRONMENTAL ASSESSMENT ACT

The purpose of the Ontario Environmental Assessment Act (1990) 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” (*Environmental Assessment Act* 2009, Part I-Section 2). The *Environmental Assessment Act* (1990) defines the environment broadly to include the built and cultural environment and 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.

2.2 PROVINCIAL POLICY STATEMENT

The *Provincial Policy Statement* (PPS) (2020) outlines provincial “policy direction on matters of provincial interest related to land use planning and development” (Part I: Preamble PPS 2020). The intent is to provide for appropriate development that protects resources of public interest, public health and safety and the quality of the natural and built environment. The PPS 2020 identifies the conservation of significant built heritage resources and cultural heritage landscapes as a provincial interest in Section 2.6.1.

Relevant definitions from the PPS 2020 include:

Built Heritage Resources (BHR): means a building, structure, monument, installation or any manufactured or constructed part or remnant that contributes to a property’s cultural heritage value or interest as identified by a community, including an Indigenous community. *Built heritage resources* are located on property that may be

designated under Parts IV or V of the OHA, or that may be included on local, provincial, federal and/or international registers.

Cultural Heritage Landscapes (CHL): means a defined geographical area that may have been modified by human activity and is identified as having cultural heritage value or interest by a community, including an Indigenous community. The area may include features such as buildings, structures, spaces, views, archaeological sites or natural elements that are valued together for their interrelationship, meaning or association. *Cultural heritage landscapes* may be properties that have been determined to have cultural heritage value or interest under the OHA, or have been included on federal and/or international registers, and/or protected through official plan, zoning by-law, or other land use planning mechanisms.

Conserved: means the identification, protection, management and use of built heritage resources, *cultural heritage landscapes* and *archaeological resources* in a manner that ensures their cultural heritage value or interest is retained. This may be achieved by the implementation of recommendations set out in a conservation plan, archaeological assessment, and/or heritage impact assessment that has been approved, accepted or adopted by the relevant planning authority and/or decision-maker. Mitigative measures and/or alternative development approaches can be included in these plans and assessments.

2.3 ONTARIO HERITAGE ACT

The OHA (2005) gives municipalities and the provincial government powers to preserve the heritage of Ontario, with a primary focus on protecting heritage properties and archaeological sites. The OHA grants the authority to municipalities and to the province to identify and designate properties of heritage significance, provide standards and guidelines for the preservation of heritage properties and enhance protection of heritage conservation districts, marine heritage sites and archaeological resources.

Designation ensures the conservation of important places and can take the form of individual designations (Part IV of the OHA) or as part of a larger group of properties, known as a Heritage Conservation District (Part V of the OHA). An evaluation using the criteria outlined in Ontario Regulation (O. Reg) 9/06 is used to determine whether a property possesses cultural heritage value or interest and may be worthy of designation under the OHA. Designation offers protection for properties under Sections 33, 34 and 42 of the OHA, prohibiting the owner of a designated property from altering, demolishing or removing a building or structure on the property unless the owner applies to the council of the municipality and receives written consent to proceed with the alteration, demolition or removal.

In addition to designated properties, the OHA allows municipalities to list properties that are considered to have cultural heritage value or interest on their Municipal Heritage Register. Under Part IV, Section 27 of the OHA, municipalities must maintain a Register of properties situated in the municipality that are of cultural heritage value or interest. Section 27 (1.1) states that the register shall be kept by the clerk and that it must list all designated properties (Part IV and V). Under Section 27 (1.2), the Register may include property that has not been designated, but that council believes to be of cultural heritage value or interest. Listed properties, although recognized as having cultural heritage value or interest, are not protected under the OHA to the same extent as designated properties, but are acknowledged under Section 2 of the PPS 2020 under the *Planning Act*. An owner of a listed heritage property must provide the municipality with 60 days' notice of their intention to demolish a building or structure on the property.

The OHA also allows for the designation of provincial heritage properties (PHP). Part III.1 of the OHA enables the preparation of standards and guidelines that set out the criteria and process for identifying the cultural heritage value or interest of PHPs (Part II of the OHA) and cultural heritage value or interest of provincial heritage properties of provincial significance (PHPPS) (Ontario Regulation (O. Reg.) 10/06 of the OHA) and to set standards for their protection, maintenance, use, and disposal.

2.3.1 ONTARIO REGULATION 9/06

The criteria for determining cultural heritage value or interest is defined in O. Reg. 9/06. This regulation was created to ensure a consistent approach to the designation of heritage properties under the OHA. All designations under the OHA made after 2006 must meet the criteria outlined in the regulation.

A property may be designated under Section 29 of the OHA if it meets one or more of the following criteria for determining whether it is of cultural heritage value or interest:

- 1 The property has design value or physical value because it,
 - i. is a rare, unique, representative or early example of a style, type, expression, material or construction method,
 - ii. displays a high degree of craftsmanship or artistic merit, or
 - iii. demonstrates a high degree of technical or scientific achievement.
- 2 The property has historical value or associative value because it,
 - i. has direct associations with a theme, event, belief, person, activity, organization or institution that is significant to a community,
 - ii. yields, or has the potential to yield, information that contributes to an understanding of a community or culture, or
 - iii. demonstrates or reflects the work or ideas of an architect, artist, builder, designer or theorist who is significant to a community.
- 3 The property has contextual value because it,
 - i. is important in defining, maintaining or supporting the character of an area,
 - ii. is physically, functionally, visually or historically linked to its surroundings, or,
 - iii. is a landmark.

2.4 PEEL REGION OFFICIAL PLAN

The *Peel Region Official Plan* (2018) was first adopted by Regional Council on July 11, 1996, through By-law 54-96 and was subsequently approved with modifications by the Minister of Municipal Affairs and Housing. There have been many amendments approved by the Minister since. The Office Consolidated version of Plan was released in 2018.

Section 3.6: Cultural Heritage addresses heritage resource conservation. Relevant policies include:

- 3.6.2.5 Direct the area municipalities to require, in their official plans, that the proponents of development proposals affecting heritage resources provide for sufficient documentation to meet Provincial requirements and address the Region's objectives with respect to cultural heritage resources.

- 3.6.2.6 Encourage and support the area municipalities in preparing, as part of any area municipal official plan, an inventory of cultural heritage resources and provision of guidelines for identification, evaluation and impact mitigation activities.

2.5 CITY OF BRAMPTON OFFICIAL PLAN

The City's *Official Plan* (2006) was adopted by City Council in October 2006 and approved in part by an Ontario Municipal Board (OMB) Order in October 2008 and last consolidated in September 2020. It provides policy on a wide range of topics including future land use, physical development, and future infrastructure needs to provide a balance between the needs of individual residents and the greater community.

The following sections of the City of Brampton's Official Plan identify the recognition and commitment to designate cultural heritage resources of significant cultural heritage value or interest and for their ongoing protection and conservation.

- S. 4.10.1.3 All significant heritage resources shall be designated as being of cultural heritage value or interest in accordance with the Ontario Heritage Act to help ensure effective protection and their continuing maintenance, conservation and restoration.
- S. 4.10.1.4 Criteria for assessing the heritage significance of cultural heritage resources shall be developed. Heritage significance refers to the aesthetic, historic, scientific, cultural, social or spiritual importance or significance of a resource for past, present or future generations. The significance of a cultural heritage resource is embodied in its heritage attributes and other character defining elements including: materials, forms, location, spatial configurations, uses and cultural associations or meanings. Assessment criteria may include one or more of the following core values:
- Aesthetic, Design or Physical Value;
 - Historical or Associative Value; and/or,
 - Contextual Value.
- S. 4.10.1.6 The City will give immediate consideration to the designation of any heritage resource under the Ontario Heritage Act if that resource is threatened with demolition, significant alterations or other potentially adverse impacts.
- S. 4.10.1.8 Heritage resources will be protected and conserved in accordance with the Standards and Guidelines for the Conservation of Historic Places in Canada, the Appleton Charter for the Protection and Enhancement of the Built Environment and other recognized heritage protocols and standards. Protection, maintenance and stabilization of existing cultural heritage attributes and features over removal or replacement will be adopted as the core principles for all conservation projects

3 METHODOLOGY

3.1 BACKGROUND REVIEW

BHRs and CHLs already recognized by the municipality, the OHT, provincially and federally were identified by reviewing the following:

- The inventory of OHT easements;
- The OHT's Ontario Heritage Plaque Guide, an online, searchable database of Ontario Heritage Plaques;
- Ontario's Historical Plaques website;
- Inventory of known cemeteries/burial sites in the Ontario Ministry of Government and Consumer Services and the Ontario Genealogical Society's online databases;
- Parks Canada's Historic Places website, an online, searchable register that provides information on historic places recognized at the local, provincial/territorial and national levels;
- Parks Canada's Directory of Federal Heritage Designations, a searchable on-line database that identifies National Historic Sites, National Historic Events, National Historic People, Heritage Railway Stations, Federal Heritage Buildings and Heritage Lighthouses;
- Canadian Heritage River System, a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage; and
- UNESCO World Heritage Sites.

The following municipality-specific resource was consulted in addition to contacting the City's Heritage Planners:

- The City of Brampton's online Heritage Properties Map (City of Brampton, 2021), a website that provides all BHRs and CHLs that are designated under Part IV or V of the OHA, listed on the heritage register and inventoried.

For the purposes of this study, any property previously identified by a municipality, municipal staff, provincial or federal agencies as containing, or having the potential to contain, CHVI will be determined to be a BHR or CHL, and if applicable, will be discussed in Section 4.4.

3.2 FIELD ASSESSMENT

Field assessment for this report included a survey of the study area to confirm or identify existing and/or potential BHRs and CHLs. Permission to enter was granted by the Region of Peel, as such, there were no limitations to the field assessment. Where identified, potential resources were photographed and mapped, and physical characteristics visible from the right-of-way or aerial imagery were described.

The use of a 40-year-old threshold is a guiding principle when conducting a preliminary identification of cultural heritage resources (MCM 2016). While identification of a resource that is 40 years old or older does not confer outright heritage significance, this threshold provides a means to collect information about resources that may retain heritage value.

Similarly, if a resource is younger than 40 years old it does not preclude this resource from having CHVI, however it does provide a systematic means of identifying properties that have a higher likelihood of retaining cultural heritage value.

This report includes background research that summarizes the history of the study area. In addition to textual sources, historical mapping and aerial photography was consulted to identify the presence of structures/building, settlement patterns and other previously recognized BHRs and CHLs.

3.3 IDENTIFICATION OF CULTURAL HERITAGE VALUE OR INTEREST

Properties identified during field review were screened by employing an application of the 40-year threshold used to identify potential BHRs and/or CHLs, followed by a high-level and cursory evaluation based on a theoretical understanding of the criteria outlined in O. Reg. 9/06 for determining CHVI (see Section 2.3.1 for full criteria). The criteria in O. Reg. 9/06 were established to identify properties with sufficient CHVI to warrant designation under the OHA. It is considered best practice when identifying potential BHRs and CHLs to employ O. Reg. 9/06 as it provides a general framework for understanding and interpreting heritage value. It should be noted, however, that the application of this framework is used as a theoretical underpinning, not as a strict measurement applied, to a greater or lesser degree, to each property under study. This report does not provide a comprehensive evaluation of a property according to O. Reg. 9/06 and does not satisfy the requirement for a Cultural Heritage Evaluation Report (CHER).

3.4 AGENCY DATA REQUESTS

As part of this study, the City of Brampton's online Heritage Register Search website was reviewed to determine if properties and structures have been previously identified and/or have been designated under the OHA. A request was sent to the City of Brampton's Heritage Planner on September 27, 2021, to confirm those properties that are listed on the Register or designated under Parts IV or V of the OHA and which may be located within or adjacent to the study area. A response was received September 29, 2021, confirming that there two registered non-designated and two designated properties located within the study area. A list of these recognized properties and accompanying by-law information was provided.

A request was sent to the OHT on September 27, 2021, to obtain information related to OHT easements and owned properties. A response was received September 29, 2021, confirming there are no Trust-owned properties within the study area.

Another request was sent to the MCM on September 27, 2021, to confirm if any PHPs were located within the study area. A response was received September 29, 2021, confirming there are no Provincial Heritage Properties and/or Provincial Heritage Properties of Provincial Significance

A summary of data requested through consultation with the agencies noted above is provided in Table 3-1.

Table 3-1: Agency Data Requests

Contact Name / Position	Organization	Contact Information	Dates of Communication	Description of Information Received
Merissa Lompart, Heritage Planner	City of Brampton	Merissa.Lompart@brampton.ca	Sent: September 27, 2021 Received: September 29, 2021	Ms. Lompart provided by-law information and heritage reports for the listed and designated resources within the study area. Ms. Lompart confirmed there have no updates to the heritage recognition of the identified resources.
Kevin De Mille, Natural Heritage Coordinator	OHT	Kevin.DeMille@heritagetrust.on.ca	Sent: September 27, 2021 Received: September 28, 2021	Mr. De Mille confirmed the OHT does not have any conservation easements or Trust-owned properties within or adjacent to the McVean SPS study area.
Karla Barboza, Heritage Planner	MCM	karla.barboza@ontario.ca	Sent: September 27, 2021 Received: September 28, 2021	Ms. Barboza confirmed there are no Provincial Heritage Properties and/or Provincial Heritage Properties of Provincial Significance within the study area. MCM requested that any technical heritage studies (e.g. Cultural Heritage Assessment Report, Cultural Heritage Evaluation Report, Heritage Impact Assessment) be sent for MCM review as part of the environmental assessment process.

4 HISTORICAL CONTEXT

This section provides a brief overview of the history of the study area. The intent of this section is to provide a context for the BHRs and CHLs in the study area.

4.1 INDIGENOUS CONTEXT

The following provides a generalized cultural history of Indigenous people within the region the Project study area is situated. Information is primarily derived from the archaeological record and the interpretations of archaeologists. Technological or temporal divisions have been defined to describe adaptations to changing climates, physiography, subsistence patterns, and geopolitical pressures which do not necessarily provide an accurate reflection of fluid cultural practices spanning thousands of years. Likewise, terms used in this history have been created by archaeologists and do not reflect the names used by Indigenous peoples. The following presents a sequence of Indigenous land-use from earliest human occupation following deglaciation to the recent past based on periods defined by archaeologists as:

- Paleo Period
- Archaic Period
- Woodland Period
- Historic Period

Paleo period populations were the first to occupy what is now Southern Ontario, moving into the region following the retreat of the Laurentide Ice Sheet approximately 11,000 years before present (BP). The first Paleo period populations to occupy southern Ontario are referred to by archaeologists as Early Paleo (Ellis and Deller, 1990).

Early Paleo period groups are identified by their distinctive projectile point characteristics, exhibiting long grooves, or 'flutes', that likely functioned as a hafting mechanism (method of attaching the point to a wooden stick). These Early Paleo group projectile morphological types include Gainey (ca. 10,900 BP), Barnes (ca. 10,700), and Crowfield (ca. 10,500) (Ellis and Deller, 1990). By approximately 10,400 BP, Paleo projectile points transitioned to various unfluted varieties such as Holcombe (ca. 10,300 BP), Hi Lo (ca. 10,100 BP), and Unstemmed and Stemmed Lanceolate (ca. 10,400 to 9,500 BP). These point types were utilized by Late Paleo period groups (Ellis and Deller, 1990). Both Early and Late Paleo period populations were highly mobile, participating in the hunting of large game animals. Paleo period sites often functioned as small campsites where stone tool production and maintenance occurred (Ellis and Deller, 1990).

Climatic warming, which occurred approximately 8,000 BP, was accompanied by the arrival of the deciduous forest in southern Ontario. With this shift in flora came new faunal resources, resulting in a change in cultural adaptations in the region. This change is reflected in new tool-kits and associated subsistence strategies referred to archaeologically as the Archaic period. The Archaic period in southern Ontario is divided into three phases: the Early Archaic (ca. 10,000 to 8,000 BP), the Middle Archaic (ca. 8,000 to 4,500 BP), and the Late Archaic (ca. 4,500 to 2,800 BP) (Ellis et al., 1990).

The Archaic period is differentiated from earlier Paleo populations by a number of traits such as: 1) an increase in tool stone variation and reliance on local tool stone sources, 2) the emergence of notched and stemmed projectile point characteristics, 3) a reduction in extensively flaked tools, 4) the use of native copper, 5) the use of bone tools for hooks, gorges, and harpoons, 6) an increase in extensive trade networks, and 7) the production of ground stone tools. Also noted is an increase in the recovery of large woodworking tools such as chisels, adzes (a tool similar to an axe with an arched blade, used for cutting or shaping large pieces of wood), and axes (Ellis et al., 1990). The Archaic period is also marked by population growth. Archaeological evidence suggests that by the end of the Middle Archaic period (ca. 4,500 BP) populations were steadily increasing in size (Ellis et al., 1990).

Over the course of the Archaic period, populations began to rely on more localized hunting and gathering territories. By the end of the Archaic period, populations were utilizing more seasonal encampments. From spring to fall, settlements would exploit lakeshore/riverine locations where a broad-based subsistence strategy could be employed, while the late fall and winter months would be spent at interior site where deer hunting was likely a primary focus with some wild edibles also being collected (Ellis et al., 1990 p. 114). This steady increase in population size and adoption of a more localized seasonal subsistence strategy eventually evolved into what is termed the Woodland period.

The beginning of the Woodland period is identified by archaeologists by the emergence of ceramic technology for the manufacture of pottery. Similar to the Archaic period, the Woodland period is separated into three primary timeframes: the Early Woodland (approximately 2,800 to 2,000 BP), the Middle Woodland (approximately 2,000 to 1,200 BP), and the Late Woodland (approximately 1,200 to 350 BP) (Spence et al., 1990; Fox, 1990).

The Early Woodland period is represented in southern Ontario by two different cultural complexes: the Meadowood Complex (ca. 2,900 to 2,500 BP), and the Middlesex Complex (ca. 2,500 to 2,000 BP). During this period, the life ways of Early Woodland populations differed little from that of the Late Archaic with hunting and gathering representing the primary subsistence strategies. The pottery of this period is characterized by its relatively crude construction and lack of decorations. These early ceramics exhibit cord impressions, likely resulting from the techniques used during manufacture (Spence et al., 1990).

The Middle Woodland period is differentiated from the Early Woodland period by changes in lithic tool characteristics (e.g. projectile points, expedient tools) and the increased elaboration of ceramic vessels (Spence et al., 1990). In southern Ontario, the Middle Woodland is observed in three different cultural complexes: the Point Peninsula Complex to the north and northeast of Lake Ontario, the Couture Complex near Lake St. Clair, and the Saugeen Complex throughout the remainder of southern Ontario. These groups can be identified by their use of either dentate or pseudo scalloped ceramic decorations. It is by the end of the Middle Woodland period that archaeological evidence begins to suggest the early use of maize (corn) horticulture (Warrick, 2000).

The adoption and expansion of maize horticulture during the Late Woodland period allowed for an increase in population size, density and complexity among Late Woodland populations. As a result, a shift in subsistence and settlement patterns occurred, with the adoption of a more sedentary village life and reliance on maize horticulture, with beans, squash and tobacco also being grown. Nearing the end of the Late Woodland period (approximately 600 BP) villages reached their maximum size.

During this period, increased warfare resulted in the development of larger villages with extensive palisades. In the Eramosa River area, the shift from Point Peninsula tradition during the Middle Woodland period to the Late Woodland period Iroquoian lifeways is indicated by settlement in larger, more permanent village sites. Later in the Late Woodland period, the pre-contact Neutral tradition is defined by large villages (up to five hectares in size) with

large populations and extensive farming of crops. Additional site types, including hamlets, cabins, camps and cemeteries are represented in the Late Woodland period as well (Williamson, 2014).

Early contact with European settlers at the end of the Late Woodland period resulted in extensive change to the traditional lifestyles of most populations inhabiting Southern Ontario. Trade with the Europeans led to dependency on European goods and incited conflict between the Indigenous communities in Southern Ontario (Warrick, 2000).

4.2 EURO CANADIAN CONTEXT

4.2.1 PRE-CONFEDERATION TREATIES

Indigenous communities were the first occupants of what is now Ontario. Over time, distinct Indigenous groups' lands and territories shifted in response to physiographic changes, resource fluctuation, and changes in settlement strategies. The Project study area, found within the City of Brampton, is situated within land negotiated under Treaty 19 (Ajetance Purchase).

The treaty was signed on October 28, 1818, by representatives of the Crown and Anishinaabe peoples. The territory described in the written Treaty covers approximately 6,500 km² (Government of Ontario, 2021).

4.2.2 COUNTY OF PEEL

From 1783 to 1787 the British government negotiated a series of treaties to acquire lands along the north shore of Lake Ontario from the Mississaugas of the Credit. A portion of land that ran between Etobicoke Creek and Burlington Bay was excluded from the treaties, the land came to be known as the "Mississauga Tract." The land surrounding the tract was used to settle United Empire Loyalists that were displaced from the American colonies during the Revolutionary War in 1783 (Riendeau, 1985). In 1818, as settlement in the area increased, the British Crown conducted the Mississauga Purchase, acquiring 648,000 acres of the Mississauga Tract, which included what was to become known as the Townships of Albion, Caledon, Chinguacousy and Toronto Gore (Heyes, 1961).

In 1854, the County of Peel was established and was named after Sir Robert Peel, Prime Minister of Great Britain. Originally, the County was united with the County of York, but many inhabitants wanted independent county status. In October of 1866, a vote was taken that favoured separation, and eventually, the Village of Brampton was chosen as the county town. On January 22, 1867, the first county council of Peel met at the newly constructed courthouse in Brampton. At this time, the County of Peel included the Townships of Albion, Caledon, Chinguacousy, Toronto, and Toronto Gore, and the Town of Brampton and Village of Streetsville (Mika & Mika, 1983).

The Townships of Caledon and Chinguacousy were both surveyed in 1819 and settlement occurred shortly after by United Empire Loyalists. The land within the area was sold in parcels to individuals as well as awarded to soldiers in lots under the stipulation that a percentage of the land be cleared and planted. In the early settlement days, the county had an established industry of timber, specifically tall pines used as masts on the British Navy ships (Riendeau 1985). As more land was cleared and settled, a new industry was needed to sustain the economy of the county. In the 1850s, by capitalizing on the trade demands with the United States, the County of Peel was established as an agricultural hub. Rather than focusing on cereal crops, the county developed a niche in the

breeding of livestock and dairy industries. These agricultural industries brought economic growth to the county well into the early 1900s (Riendeau, 1985).

The Regional Municipality of Peel incorporated on October 15, 1973, and includes the City of Brampton, the City of Mississauga and the Town of Caledon (Mika & Mika, 1983).

TORONTO GORE TOWNSHIP

Named for its triangular shape, the Gore of Toronto Township is located between the Townships of Chinguacousy, Toronto, Vaughan, and Etobicoke (Walker and Miles 1877:88). The township was surveyed in 1818, Archibald McVean was among the first settlers in 1819. By 1841, the population of Gore in was 1,145, by 1871 it climbed to 1,559. Several historical villages were once located within Toronto Gore, including Claireville, Ebenezer, Castlemore, Wildfield and Coleraine.

CITY OF BRAMPTON

Brampton was incorporated as a village in 1852, and as a town in 1873. Mr. William Buffy is credited as being an early settler in the town, having built the first tavern within its boundaries, which is said to have been the first substantial building within the town (Walker and Miles, 1877). Brampton had a predominantly agricultural economy with few other industries until the introduction of a railway in the mid-nineteenth century, which connected it with towns and cities in the surrounding area. Prior to the addition of the railway, the main trade routes to and from Brampton consisted of plank roads, which were found to be unreliable in wet weather and in constant need of repair. The Grand Trunk Railway was opened on June 16, 1856, providing a reliable route to Toronto and other areas, and creating an economic boom. The Peel Courthouse was completed in 1876 and it became a county seat until 1974 (Loveseed, 1987). Brampton housed a large greenhouse industry and was described as the most important agricultural supply point within the mainly agricultural tract of land to the north of Toronto (Chapman and Putnam 1984: 294). In 1974, the City of Brampton was created from the Town of Brampton, Toronto Gore Township and the southern half of Chinguacousy Township and a portion of the Town of Mississauga (Moreau, 2020).

4.2.3 HISTORICAL MAPPING REVIEW

A review of historical mapping and aerial photography was undertaken to understand the changing landscape and built environment within the McVean SPS study area. To determine the presence of historical features, nineteenth century historical county maps and aerial photos were reviewed. While these maps and photographs were not the only visual sources consulted for the purposes of this study, they were determined to provide the best overview of land development in the study area. It should also be noted that the absence of structures or other features shown on the historical maps does not preclude their presence on these properties. Illustrating all homesteads on the historical atlas maps would have been beyond the intended scope of the atlas and, often, homes were only illustrated for those landowners who purchased a subscription.

The 1859 Tremaine Map of Peel County, Canada West (Tremaine, 1859; Figure 3, Appendix A) indicates that present-day McVean Drive and Ebenezer Road have been constructed and the study area constituted a rural landscape. Landowners are listed for each lot within the study area, with structures illustrated on Lot 5, Concession VIII ND, owned by Thomas W. Bland and Michael Dixon, Lot 3, Concession VIII ND, owned by Ross Nixon and Lot 2, Concession IX ND, owned by Elisha Lawrence. No structures are illustrated within the location of the preferred alternative. The Humber River and associated branches are depicted as crossing through the study area.

The 1877 historical atlas map of the Conty of Peel (Walker & Miles, 1877) shows structures and orchards on the majority of the lots within the study area (Figure 4, Appendix A). Archibald McVean is depicted as owning 53 acres within Lot 7, Concession VIII ND and one structure is illustrated on the eastern half of Lot 6, Concession VIII ND,

owned by William Mason. Similar to the 1859 Tremaine Map, no structures are illustrated within the location of the preferred alternative.

The 1914, 1934 and 1940 NTS map (Figures 5-7, Appendix A) were reviewed to assist in documenting more recent changes to the landscape. The topographic maps reveal a largely agricultural landscape, not significantly different than that depicted in the 1877 historical map. The McVean farmstead (CHL-1), 8949 Claireville Conservation Road (BHR-2) are depicted as frame structures on all three maps. The Wiley Bridge (BHR-1) is depicted on the maps as a wood bridge. The McVean sawmill is not illustrated on the 1914, 1934 or 1940 NTS maps.

The 1954 aerial image shows little change in the landscape of the study area (Figure 8, Appendix A). The area remains agricultural in nature, and while buildings are visible on the aerial photograph, the quality makes it difficult to discern their exact configurations.

The lands within the study area, including the Claireville Conservation Area were acquired in 1957 by the TRCA to construct a flood control dam and reservoir after the destruction caused by Hurricane Hazel. After the TRCA's acquisition, farming in the conservation area stopped, allowing vegetation to re-establish, this is particularly evident along the banks of the Humber River. The 2004 aerial imagery indicates that agricultural fields in the conservation area have been abandoned and overgrown, with woodlots scattered throughout the study area (Figure 9, Appendix A).

5 EXISTING CONDITIONS

5.1 FIELD REVIEW

A field review was conducted on October 5, 2021, by Emily Game, Cultural Heritage Specialist, to record the existing conditions of the McVean SPS study area and all adjacent properties. Permission to enter was granted by the Region of Peel, as such, there were no limitations to the property visit. The field review was preceded by a review of available historical and current aerial photographs and maps. These photographs and maps were reviewed for any potential BHRs and CHLs that may be extant in the study area. The existing conditions of the study area are described below. Two BHRs and four CHLs were identified and are presented in Table 5-2 in Section 5. Mapping of these BHRs and CHLs are presented in Figure 10, Appendix A.

5.2 DESCRIPTION OF EXISTING CONDITIONS

The majority of the study area is located within the Claireville Conservation Area (CHL-4). The conservation area consists of 848 hectares of natural and forested area that straddles Peel Region and Toronto. The natural landscape of the conservation area includes wetlands, valleys, forests, grasslands, as well as the west branch of the Humber River and its tributaries (Photographs 1 and 2). The Wiley bowstring arch bridge (BHR-1) and the McVean Farm Property are located within the conservation Area.

The McVean SPS is located at 3900 Ebenezer Road on the north side of Ebenezer Road, west of McVean Drive. Ebenezer Road consists of a rural, two-laned paved road with ditches and narrow shoulders; the road terminates approximately 70m west of the McVean SPS (Photographs 3 and 4). The McVean SPS consists of a square building of modern construction, it is set back from Ebenezer Road approximately 35m (Photograph 5). The existing emergency overflow storage lagoon is located west of the SPS building, the lagoon and SPS building are surrounded by a chain-link fence. The lands north and west of the lagoon consists of gently rolling meadow, and table lands associated with the Humber River. The area immediately north of the lagoon has been recently planted with evenly spaced coniferous saplings (Photograph 6-10). The property immediately east of the McVean SPS is a one-storey bungalow, likely constructed in the 1960s (Photograph 11).



Photograph 1: Wiley Bowstring Arch Bridge (BHR-1) within the Claireville Conservation Area



Photograph 2: Lands within the Claireville Conservation Area (CHL-4)



Photograph 3: View to the east along Ebenezer Road



Photograph 4: View to the west along Ebenezer Road



Photograph 5: McVean SPS building



Photograph 6: View to the northwest of the McVean SPS lagoon



Photograph 7: The McVean SPS lagoon, facing west



Photograph 8: View to north of CHL-1, from the McVean SPS



Photograph 9: View from the McVean SPS, west to the Humber River



Photograph 10: View to the McVean SPS and CHL-1 from Queen Street East



Photograph 11: Modern residential house, east of the McVean SPS

5.3 PREVIOUS CULTURAL HERITAGE ASSESSMENTS

Two previous cultural heritage assessments have been completed within the study area, as outline in Table 4-1.

Table 5-1: Previous Cultural Heritage Assessments


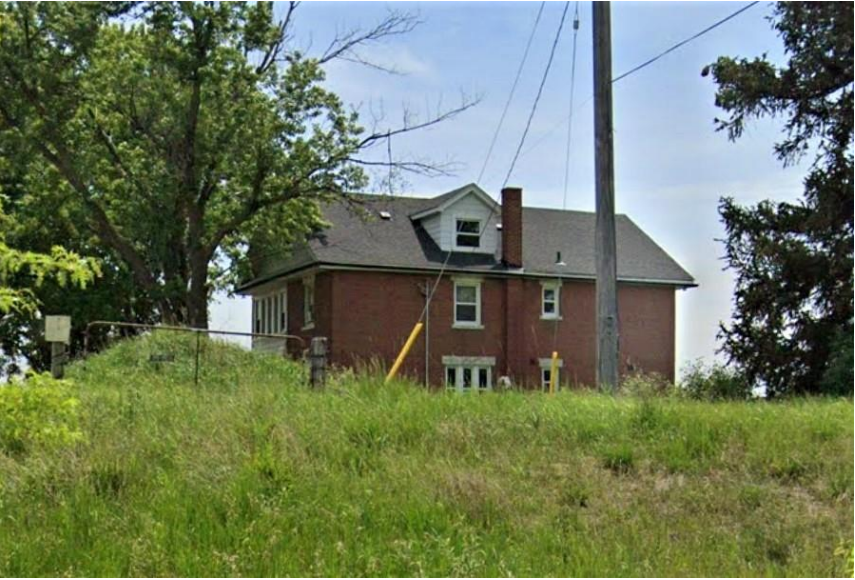
Year	Report Title/Company	Findings
2009	Heritage Impact Assessment 8712 Claireville Conservation Road (Lot 5, Concession VIII ND, Geographic Township of Toronto Gore, City of Brampton, Ontario) / Unterman McPhail and Associates (UMCA)	The Heritage Impact Assessment (HIA), which included an evaluation using O. Reg. 9/06, determined the property has Design/Physical Value, Historical and Associative Value as well as Contextual Value and determined the property was of local heritage interest and/or value for design/physical, historical, and contextual reasons, and it was worthy of consideration for municipal listing and/or designation.
2017	Cultural Heritage Resource Assessment: Built Heritage Resources and Cultural Heritage Landscapes Existing Conditions and Preliminary Impact Assessment for the 407 Transitway – West of Hurontario Street to East of Highway 400 / Archaeological Services Inc (ASI)	The report identified a number of BHRs and CHLs within the 407 Transitway study area, including the west branch of the Humber River, the Claireville Conservation Area, the Wiley Bridge, and 8271 Claireville Conservation Road.



5.4 IDENTIFIED CULTURAL HERITAGE RESOURCES



Background research and a field visit were completed to identify known and potential BHRs and CHLs located within the study area as described in Section 3. In addition, a review was conducted to determine previously identified heritage resources documented within the study area, including listed (registered non-designated) and designated properties, heritage conservation districts and known CHLs. This included a review of the City of Brampton's online Heritage Properties Map, a website that provides all BHRs and CHLs that are designated under Part IV or V of the OHA, listed on the heritage register and inventoried. (City of Brampton, 2021).

Potential heritage resources were identified through the high-level application of the criteria identified in the MCM's Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes. As a result of this review, four CHLs and three BHRs have been identified within the study area. See Table 5-1 on the following page for a description of the heritage resources and Figure 10, Appendix A for an illustration of their location within the study area.

Table 5-2: Identified BHRs and CHLs with Known or Potential CHVI

BHR or CHL #	Resource Type	Location	Heritage Recognition	Description on Known or Potential CHVI	Photograph
BHR-1	Bowstring Bridge	0 Gorewood Drive (Crossing the Humbe River in the Claireville Conservation Area)	Designated (by-law 328-2013)	<p>The Wiley Bridge is a rare example of a concrete bowstring bridge in Brampton. Along with the Bowstring Arch Bridge on Creditview Road, the Wiley Bridge is one of two examples of its kind in Brampton. As an excellent example of civic engineering, the Wiley Bridge also demonstrates a technical and architectural achievement. Elements that reflect the structure’s engineering technology include a continuous span deck, with two fixed, hinge-less "bow-string" arches, three concrete girders that tie the tops of the arches, concrete vertical hangers, and parapets. The bridge has all the classic lines of concrete bowstring bridge with its graceful arches. It was constructed circa 1930 by Langton and Bartho of Toronto, from a design by N.L. Powell, a Peel County Engineer.</p> <p>By the mid-twenties, approximately 65 bridges of this type were built in Canada, most of which were located in Ontario. The Wiley Bridge reflects this period of bridge construction in Ontario. The Wiley Bridge has been converted to a pedestrian footbridge in the scenic Claireville Conservation Area. The Wiley Bridge reflects the work of local community members, including builders, engineers, and policy makers, and the use of local resources. The site was named “Wiley Bridge” in honour of an important family of settlers that resided on a nearby farm.</p> <p>The property holds contextual value due to its landmark status in the Claireville Conservation Area. As a unique manmade structure in the vast cultural heritage landscape, the Wiley Bridge is a striking and familiar site in the area.</p>	
BHR-2	Residential	8940 Claireville Conservation Road	Listed	<p>A vernacular two-storey, brick residence, built in 1915. The house features two, two storey porch/sunrooms on the southwest and southeast corners of the building. Other notable features include window openings both paired and groupings of three with flat concrete sills and lintels. The house sits on a concrete foundation, which has been parged to resemble ashlar blocks.</p> <p>The house is set back approximately 50 m from Queen Street East, prominently sited on a hill, overlooking the West Branch of the Humber River.</p>	

CHL-1	Farmstead	0 McVean Drive	Designated (by-law 380-2006)	<p>The McVean Farmstead has several cultural heritage resources that comprise the cultural heritage landscape.</p> <p>The cultural heritage value of McVean Barn is related to its design or physical value as a very rare Double English Wheat Barn built in the 1840s. The barn is a timber frame construction, built using a unique double and quadruple bracing system. Other distinguishing features include original hand wrought iron door hinges, latches and other hardware.</p> <p>The property also has historical or associative value as it reflects early agricultural trends. The McVean Barn was built specifically for the processing of wheat using an ancient method that harnessed the wind to separate the wheat kernel from the chaff.</p> <p>It provides evidence of one of the first European architectural techniques adapted to Upper Canada's farming operations. The property is also associated with the McVean family, who are believed to be the first settlers to the Toronto Gore. In 1834, Alexander McVean built one of the first grist and sawmills in the area, near the existing barn. His son, Archibald, was also a respected member of the Toronto Gore community as both a director of the Agricultural Society and as a councillor of the Township between 1876 and 1878.</p> <p>The cultural heritage value of McVean Barn is also supported by its contextual value, as it is located within the Claireville Conservation Area, a well-preserved natural heritage territory near the Humber River. The barn is the last surviving vestige of the rural settlement that once characterized the area.</p>	
CHL-2	West Branch of the Humber River	Caledon to the Main Humber in Toronto.	Designated Canadian Heritage River (1999)	<p>The Humber river is a significant waterway and has been the site of human activity for nearly 10,000 years. The Humber River was designated a Canadian Heritage River in 1999 as a result of its outstanding cultural and recreational values. It flows through Carolinian forests, meadows, farms, and abandoned mills and through the largest urban area in Canada – metropolitan Toronto. A system of greenways along the river's shores maintains the spirit of the historic Toronto Carrying Place Trail and provides an urban oasis in this city of 5 million people.</p>	

CHL-3	Mill Ruins	Part of Lots 6 and 7, Concession VIII, NERN DIV	Listed	<p>The remains of McVean mill flume located along the west bank of the West Humber River. The ditch-like canal flume originally extended approximately 1.6 km along the West Humber to where the river narrowed and a dam was constructed; the surviving portion of this canal flume extends approximately 75 feet. The saw and grist mill was built in 1834 the McVean Family, it was located on Part of Lot 5, Concession VIII ND.</p> <p>The open canal flume is the only surviving feature of the McVean Mill.</p>	
CHL-4	Conservation Area	8180 Highway 50	Identified during field review	<p>The Claireville Conservation Area consists of 848 hectares of natural and forested area that straddles Peel Region and Toronto. The natural landscape of the conservation area includes wetlands, valleys, forests, grasslands, as well as the west branch of the Humber River and its tributaries (Photograph 1). The Wiley Bowstring Arch Bridge (BHR-1) is located with the conservation area, north of Highway 407, at the junction of Gorewood Drive and Claireville Conservation Road.</p>	

6 PRELIMINARY IMPACT ASSESSMENT

To establish potential impacts, identified BHRs and CHLs were considered against a range of possible impacts as outlined in the MCM's *Information Bulletin 3: Heritage Impact Assessments for Provincial Heritage Properties* (2017) (see Section 1.2 for a full description of impacts).

Where any BHRs and CHLs may experience direct or indirect impacts, appropriate mitigation measures will be developed. If appropriate, this may require the completion of a CHER to identify the property's CHVI and heritage attributes if the property's heritage attributes have yet to be defined. For properties that have been subject to a CHER or their CHVI has otherwise been defined, an HIA may be required to determine appropriate mitigation measures.

6.1 PRELIMINARY IMPACTS ON CULTURAL HERITAGE RESOURCES

This section provides a preliminary assessment of the potential adverse affects that may result from the Project. The conservation of BHRs and CHLs in planning is considered to be a matter of public interest. Changes to transit infrastructure have the potential to adversely affect BHRs and CHLs by displacement and/or disruption during and after construction. These heritage resources may experience displacement (i.e., removal) if they are located within the footprint of the undertaking. There may also be potential for disruption or indirect impacts to BHRs and CHLs by the introduction of physical, visual, audible or atmospheric elements that are not in keeping with their character and/or setting.

- Methods of minimizing or avoiding a negative impact on a BHR or CHL include, but are not limited to:
- Alternative development approaches;
- Isolating development and site alteration from significant built and natural features and vistas;
- Design guidelines that harmonize mass, setback, setting and materials;
- Limiting height and density;
- Allowing only compatible infill and additions;
- Reversible alterations;
- Buffer zones, site plan control and other planning mechanisms;
- Recommendations for additional studies, including CHERs, HIAs and Strategic Conservation Plans; and,
- Alterations to project design during construction planning and project controls (i.e., vibration reduction, dust suppression or other measures).

Table 5-1 considers the potential impacts of the proposed station improvements on known or potential BHRs and CHLs. The study area for the McVean SPS was reviewed to assess impacts to identified heritage resources (Figure 10, Appendix A).

Table 6-1: Impacts and Preliminary Mitigation Strategies for BHRs and CHLs

BHR or CHL #	Resource Type	Location	Heritage Recognition	Description of Potential/Anticipated Impact(s)	Mitigation Measures
BHR-1	Bowstring Bridge	0 Gorewood Drive (Crossing the Humbe River in the Claireville Conservation Area)	Designated (by-law 328-2013)	There will be no direct or indirect impacts to the property as a result of the proposed undertaking.	None required.
BHR-2	Residence	8940 Claireville Conservation Road	Listed	There will be no direct or indirect impacts to the property as a result of the proposed undertaking.	None required.
CHL-1	Farmstead	0 McVean Drive	Designated (by-law 380-2006)	The preferred alternative will result in minor property acquisition along the southern boundary of CHL-1. Based on the current design, the construction of the emergency overflow lagoon expansion and the overflow thanks will no result in any impacts to built heritage resources or significant landscape features. Although this intervention will not significantly alter the landscape, it will result in direct impacts to the property parcel.	Where feasible, the preferred alternative should be designed in a manner requiring as little property acquisition as possible. Storage and construction staging areas should be along Ebenezer Road. Where construction is anticipated to result in grading impacts and tree removal north of the McVean SPS, post-construction landscaping with native tree species should be employed to mitigate visual impacts and restore the property as close as possible to an as-found condition.
CHL-2	Humber River	Extends 100km north from Lake Ontario to	Designated Canadian Heritage River (1999)	There will be no direct or indirect impacts to the property as a result of the proposed undertaking.	None required.
CHL-3	Mill Ruins	Part of Lots 6 and 7, Concession VIII, ND	Listed	There will be no direct or indirect impacts to the property as a result of the proposed undertaking.	None required.
CHL-4	Conservation Area	8180 Highway 50	Identified during field review	The preferred alternative will result in minor property acquisition along the southern boundary of CHL-4. Based on the current design, the construction of the emergency overflow lagoon expansion and the overflow thanks will no result in any impacts to built heritage resources or significant landscape features. Although this intervention will not significantly alter the landscape, it will result in direct impacts to the property parcel.	Where feasible, the preferred alternative should be designed in a manner requiring as little property acquisition as possible. Storage and construction staging areas should be along Ebenezer Road. Where construction is anticipated to result in grading impacts and tree removal north of the McVean SPS, post-construction landscaping with native tree species should be employed to mitigate visual impacts and restore the property as close as possible to an as-found condition.

7 RECOMMENDATIONS

This Cultural Heritage Report has resulted in the following recommendations:

- 1** Storage and construction staging areas should be appropriately located and/or planned to avoid impacting any of the identified BHRs and CHLs.
- 2** Where construction is anticipated to result in grading impacts and tree removal, post-construction landscaping with native tree species should be employed to mitigate visual impacts to CHL-1 and CHL-4.
- 3** Should future work require expansion of the McVean SPS study area, a qualified heritage consultant should be contacted to confirm the impacts of the proposed work on known or potential BHRs and CHLs.

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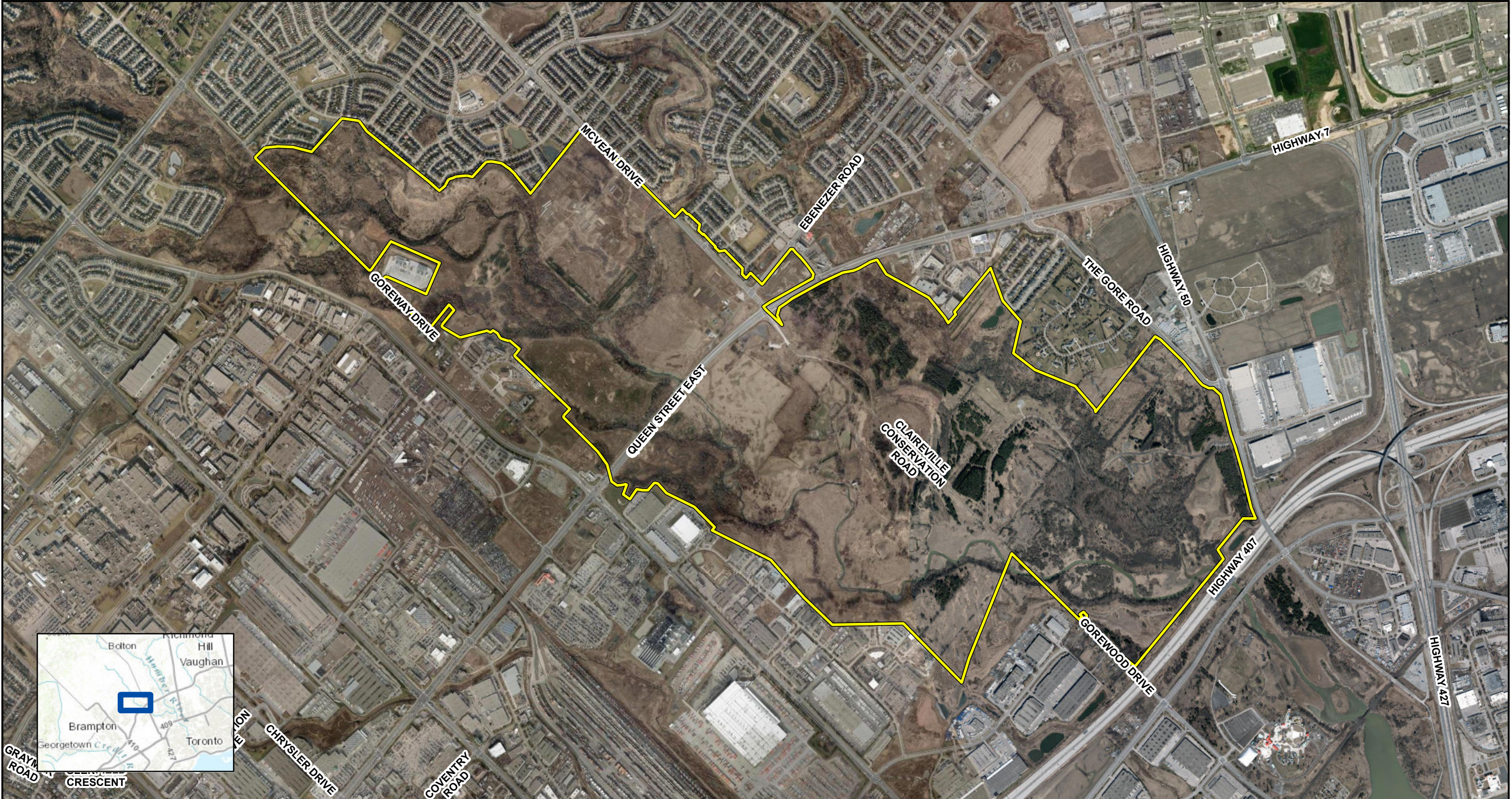
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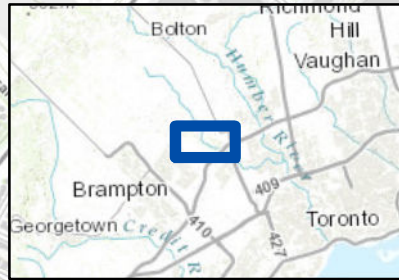
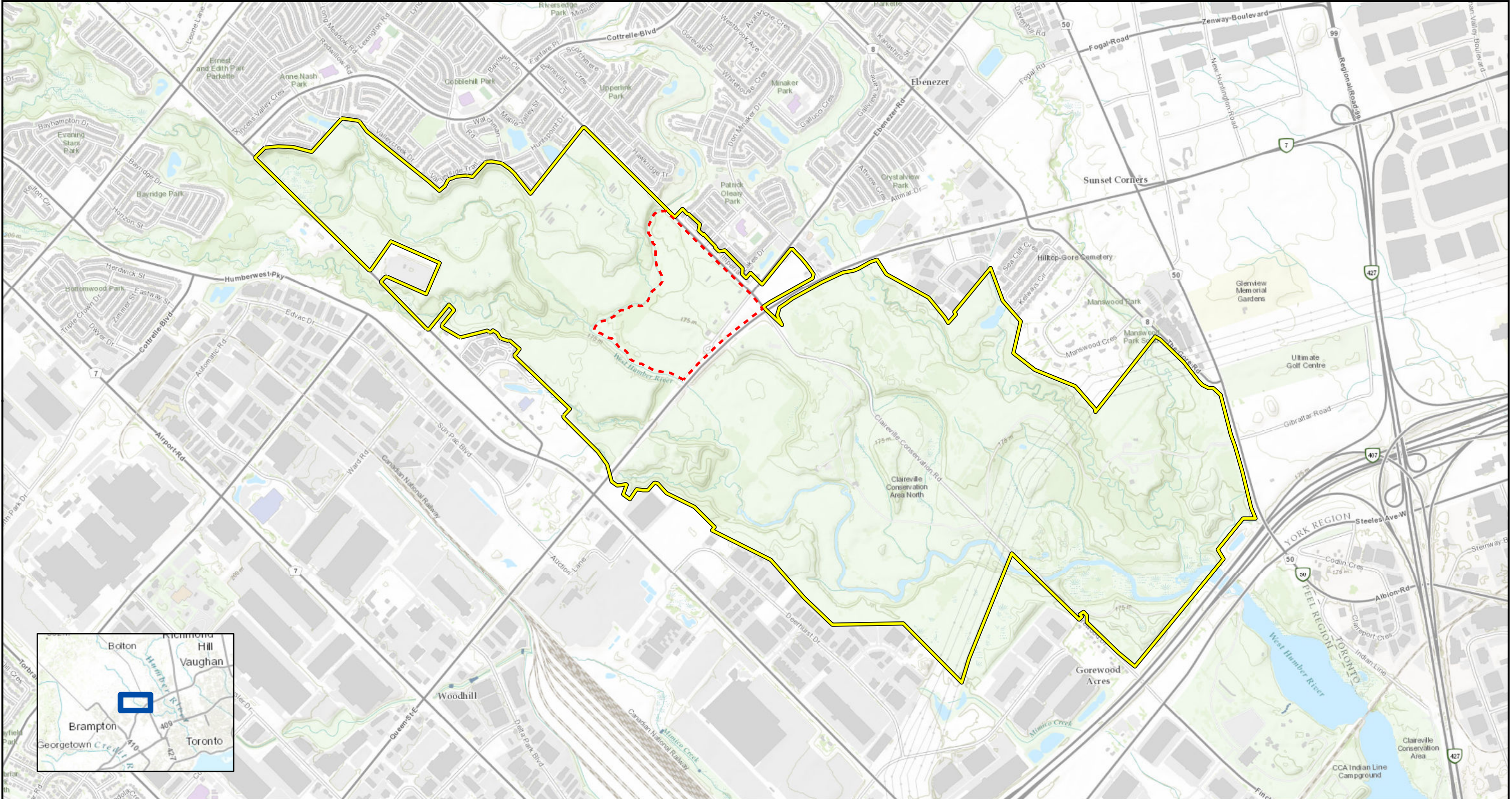
9 FIGURES



LEGEND

 Study Area

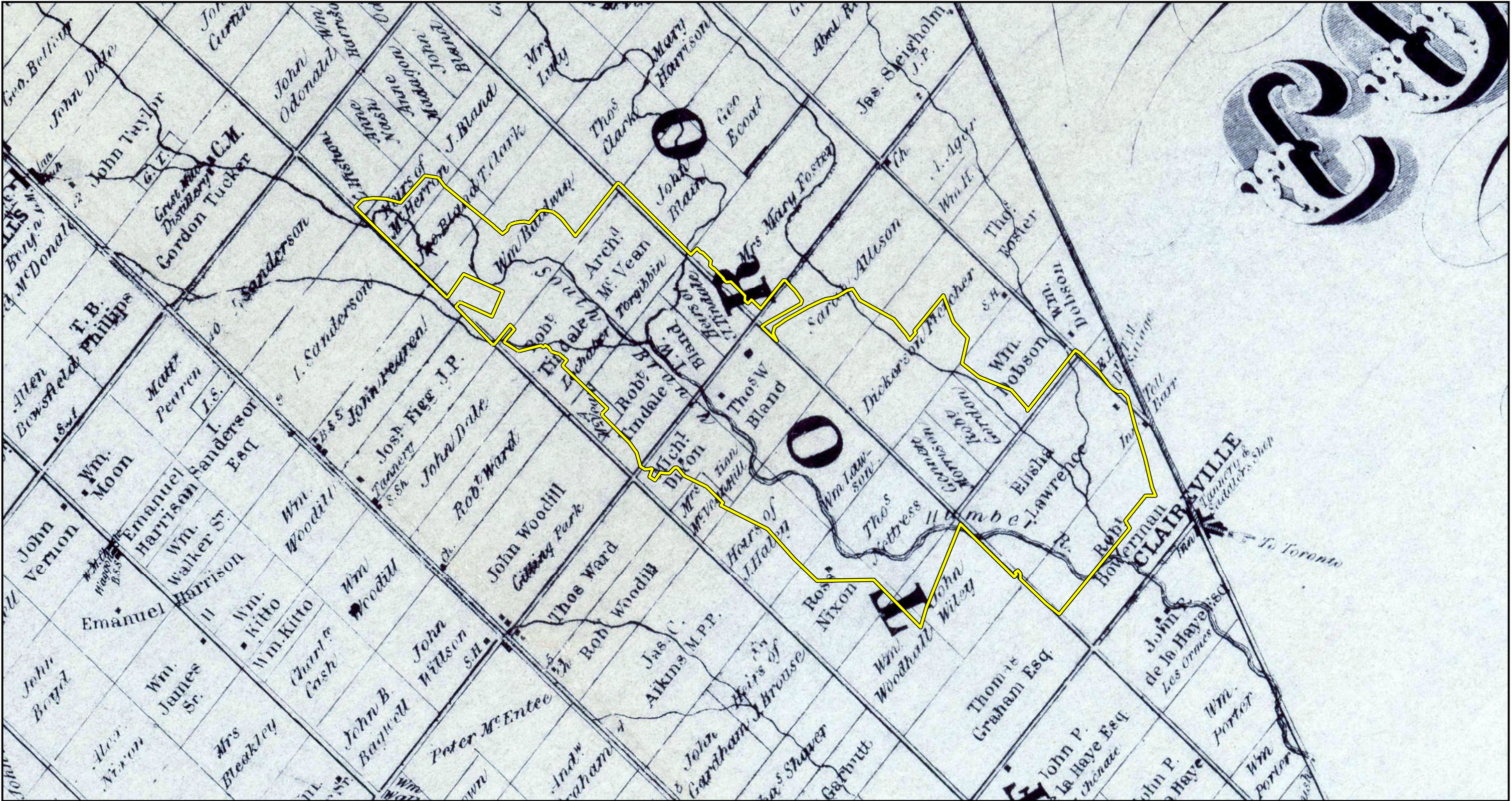
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	DRAWN BY: AST	CLIENT: REGION OF PEEL	
PROJECT: CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION CLASS EA		CREDITS: LAND INFORMATION ONTARIO	
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LEGEND



- Project Area
- Study Area

TITLE: FIGURE 2: PROJECT LOCATION	SCALE: 1:20,000	PROJECT NO: 211-01228-00	DATE: OCTOBER 2021
	DRAWN BY: AST	CLIENT: REGION OF PEEL	
PROJECT: CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION CLASS EA		CREDITS:	
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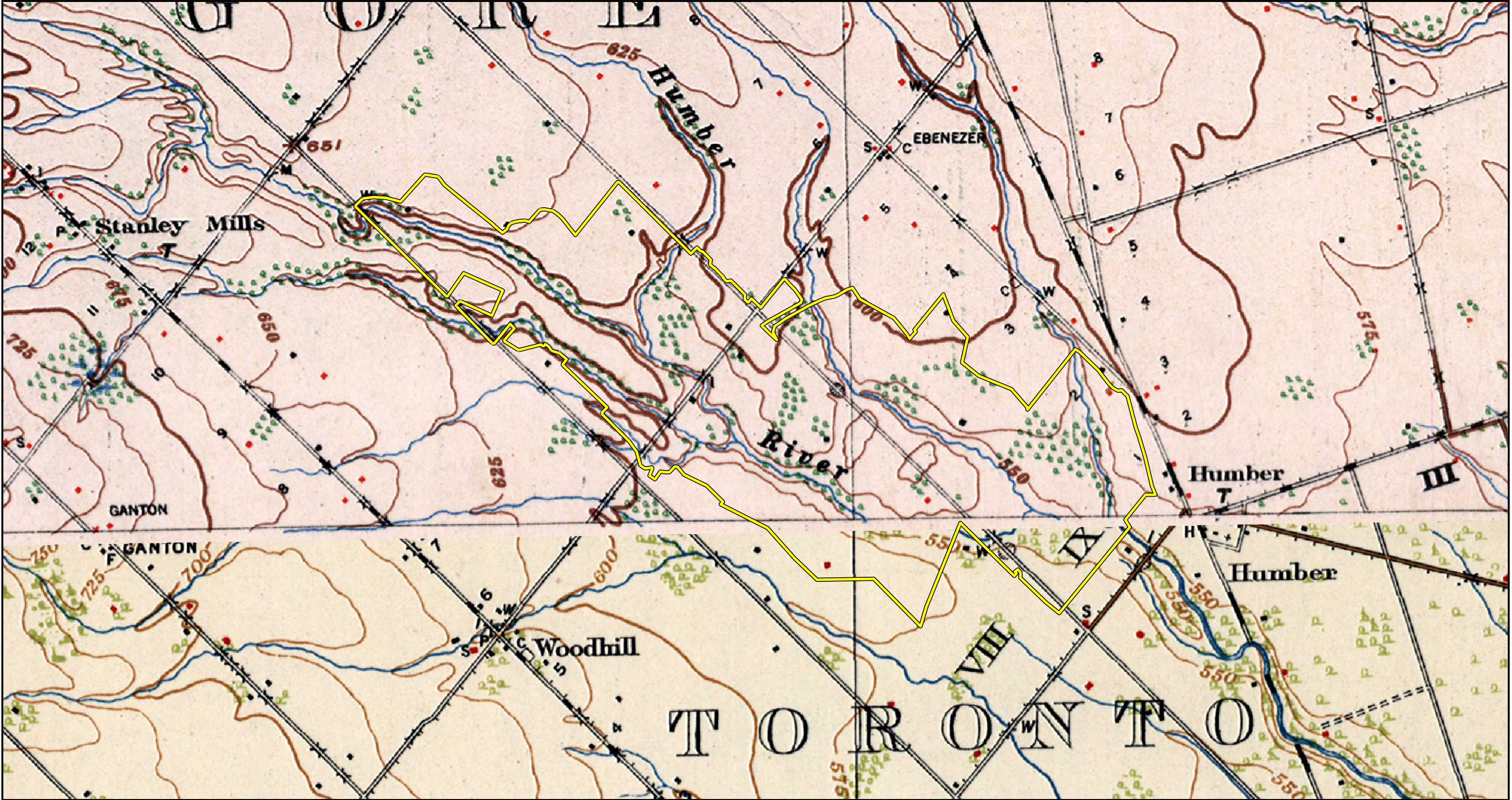


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
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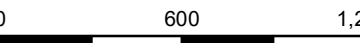

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PROJECT: CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION CLASS EA		CREDITS: MAP OF THE COUNTY OF PEEL, CANADA WEST (G.R. & G.M. TREMAINE, 1859)	
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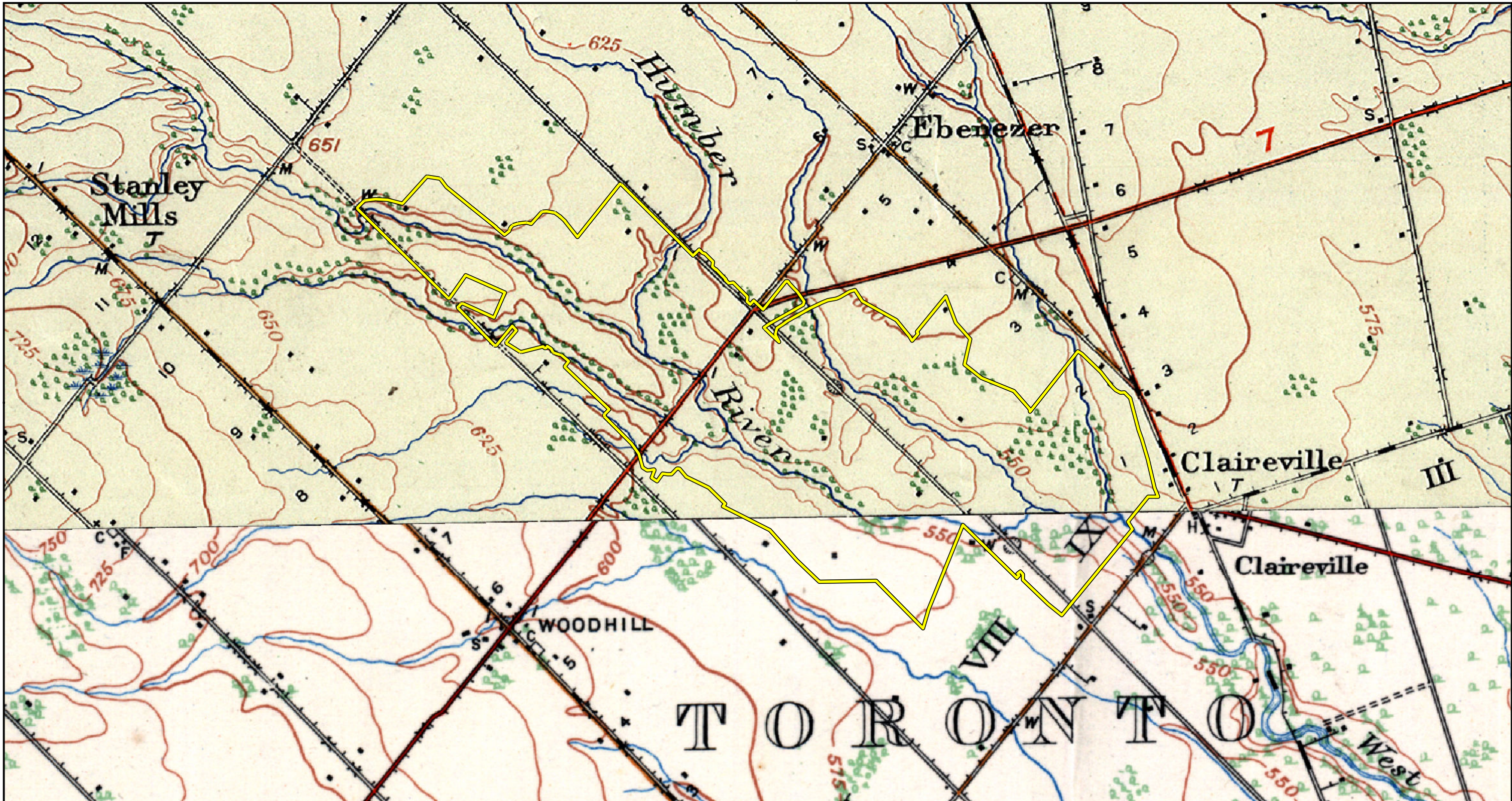





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 Study Area

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	DRAWN BY: AST	CLIENT: REGION OF PEEL	
PROJECT: CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION CLASS EA		CREDITS: DEPARTMENT OF MILITIA AND DEFENCE, 1914 (SHEET 030M13) & DEPARTMENT OF MILITIA AND DEFENCE, 1915 (SHEET 030M12)	
			



LEGEND

 Study Area

TITLE:
FIGURE 6: TOPOGRAPHIC MAPPING (1933 & 1934)

PROJECT:
CULTURAL HERITAGE REPORT: EXISTING CONDITIONS
AND PRELIMINARY IMPACT ASSESSMENT MCVEAN
SEWAGE PUMPING STATION CLASS EA

0 600 1,200 m



SCALE:
1:25,000

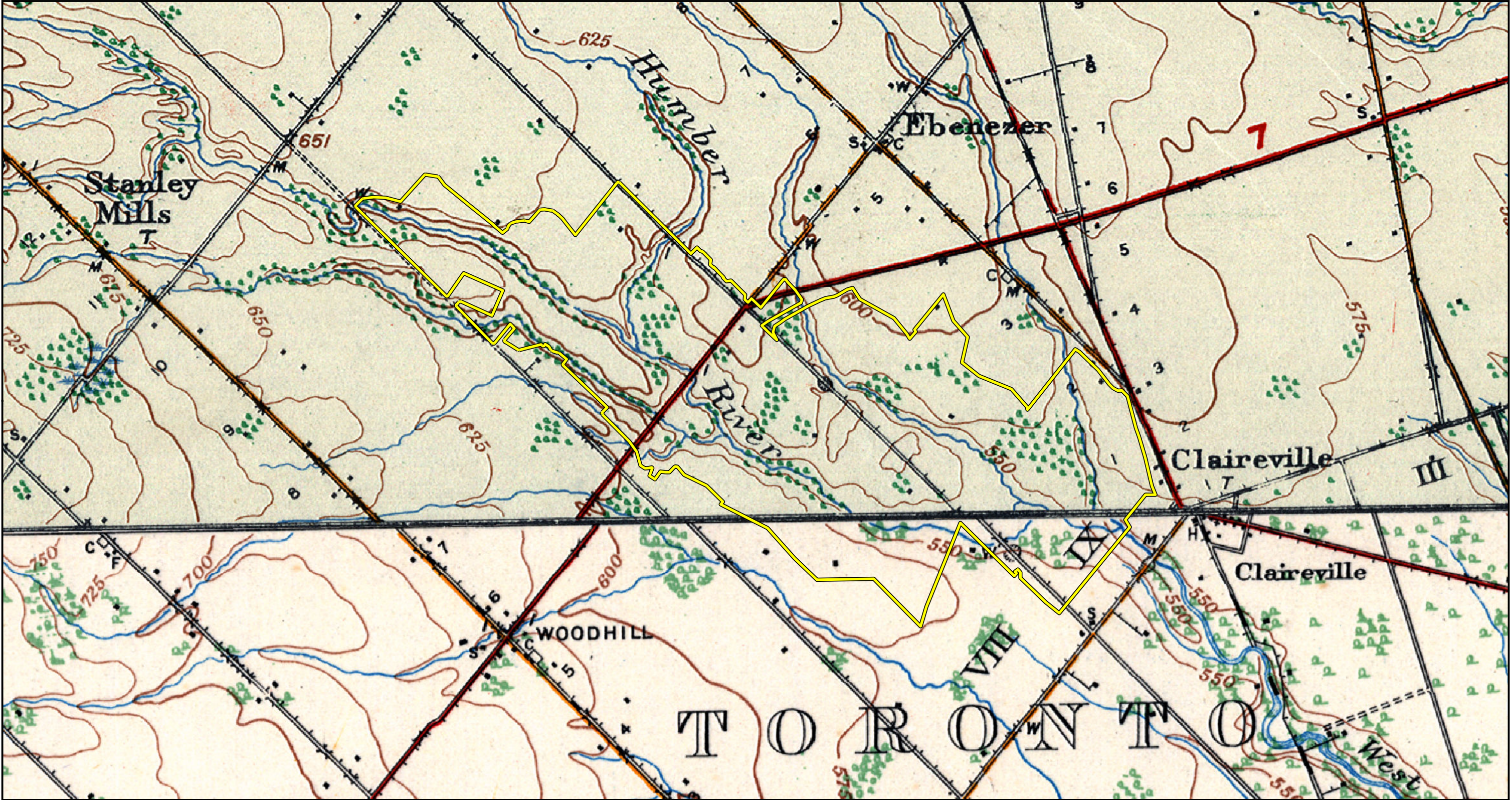
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211-01228-00

DATE:
OCTOBER 2021


DRAWN BY:
AST



CLIENT:
REGION OF PEEL

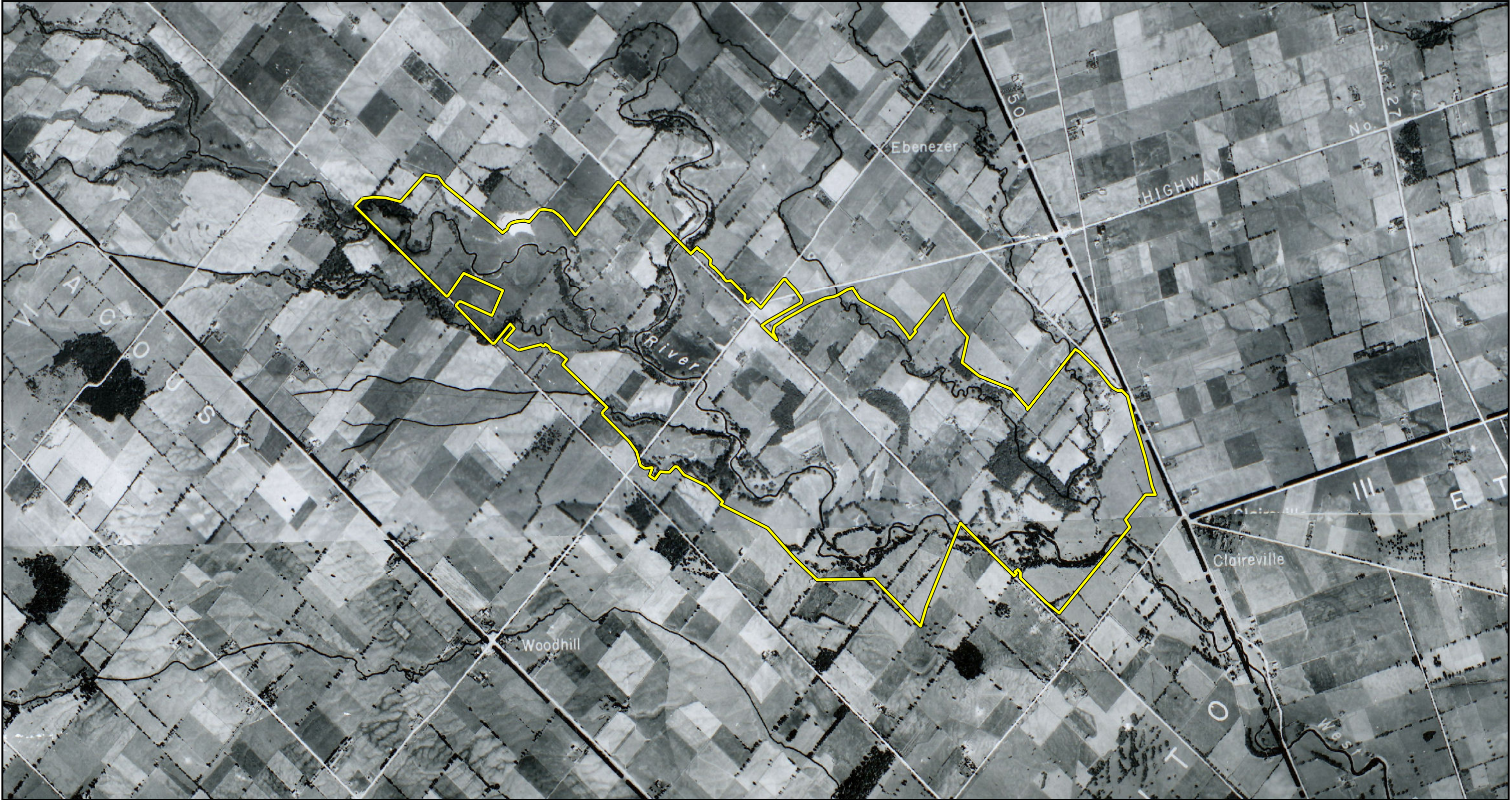
CREDITS:
DEPARTMENT OF NATIONAL
DEFENCE, 1934 (SHEET 030M13) &
DEPARTMENT OF NATIONAL
DEFENCE, 1933 (SHEET 030M12)




LEGEND

 Study Area

TITLE: FIGURE 7: TOPOGRAPHIC MAPPING (1938 & 1940)	SCALE: 1:25,000	PROJECT NO: 211-01228-00	DATE: OCTOBER 2021
	DRAWN BY: AST	CLIENT: REGION OF PEEL	
PROJECT: CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION CLASS EA		CREDITS: DEPARTMENT OF NATIONAL DEFENCE, 1940 (SHEET 030M13) & DEPARTMENT OF NATIONAL DEFENCE, 1938 (SHEET 030M12)	
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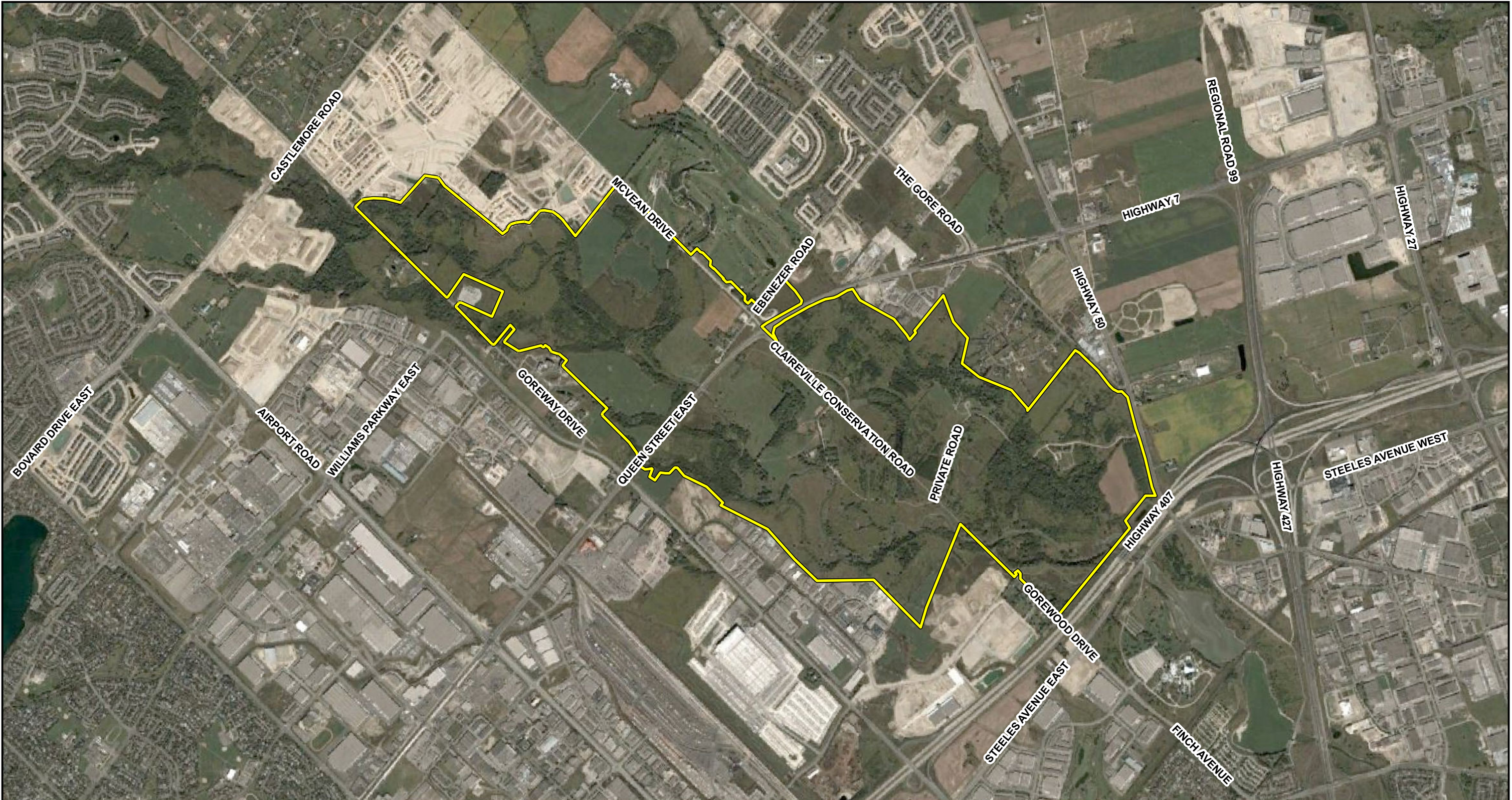
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 Study Area


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PROJECT: CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION CLASS EA	CREDITS: UNIVERSITY OF TORONTO MAP AND DATA LIBRARY (1954)		

06001,200 m

N



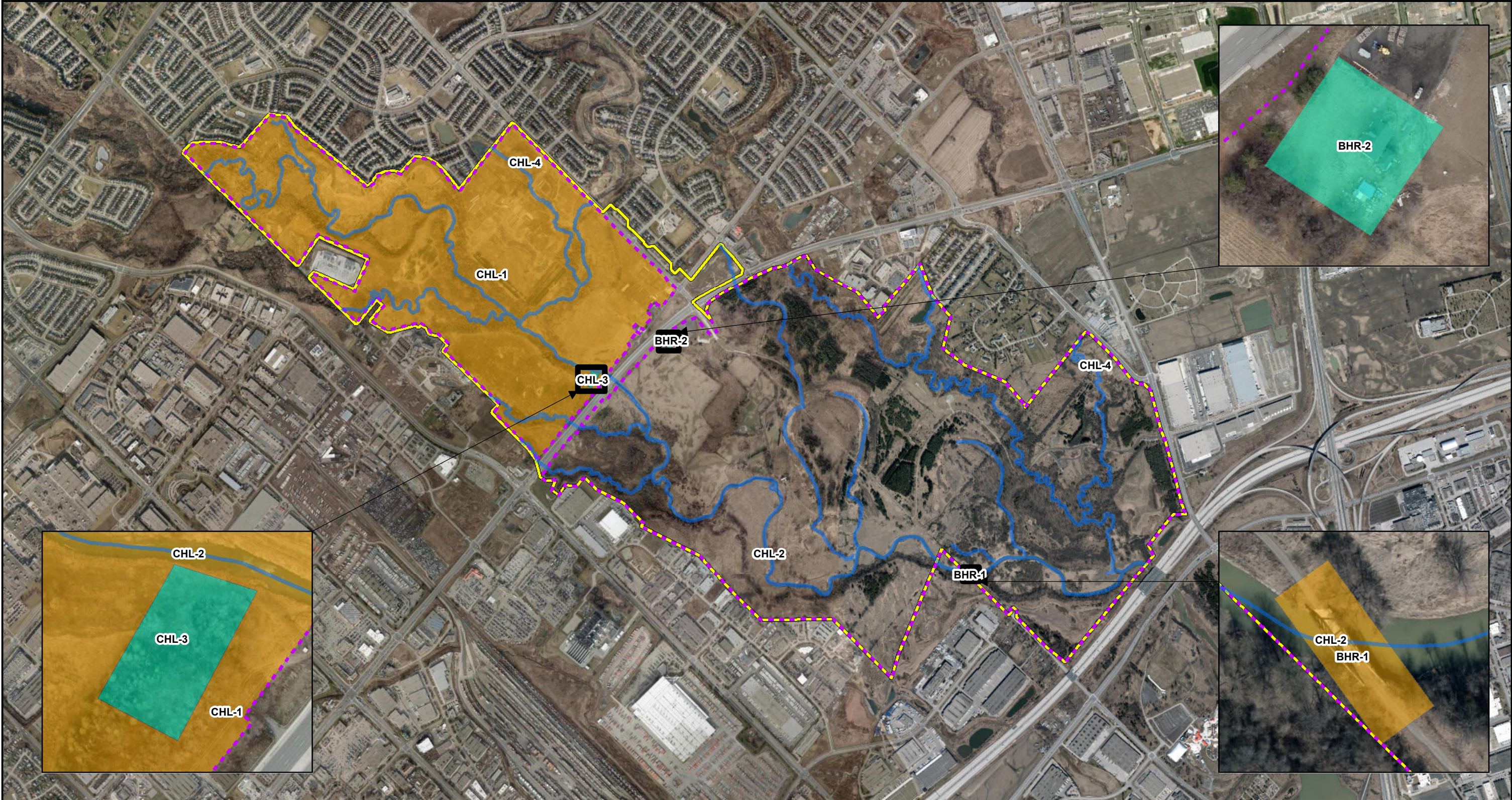
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 Study Area

TITLE: FIGURE 9: AERIAL IMAGE (2004)	SCALE: 1:25,000	PROJECT NO: 211-01228-00	DATE: OCTOBER 2021
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PROJECT: CULTURAL HERITAGE REPORT: EXISTING CONDITIONS AND PRELIMINARY IMPACT ASSESSMENT MCVEAN SEWAGE PUMPING STATION CLASS EA	CREDITS: GOOGLE EARTH (2004)		

06001,200 m

N



LEGEND

- Study Area
- Cultural Heritage Resources**
 - Designated
 - Listed
 - Identified During Field Review
 - Designated Canadian Heritage River

TITLE:
FIGURE 10: RESULTS

PROJECT:
CULTURAL HERITAGE REPORT: EXISTING CONDITIONS
AND PRELIMINARY IMPACT ASSESSMENT MCVEAN
SEWAGE PUMPING STATION CLASS EA

0 500 1,000 m



SCALE: 1:20,000	PROJECT NO: 211-01228-00	DATE: OCTOBER 2021
DRAWN BY: AST	CLIENT: REGION OF PEEL	

CREDITS: