



# Appendix C

## Cultural Heritage Report

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# Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment

## Regional Road 56 (Burleigh Hill Drive) from Glendale Avenue to St. David's Road Municipal Class Environmental Assessment

### City of St. Catharines Niagara Region, Ontario

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#### Draft Report

Prepared for:

#### CIMA+

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Mississauga, ON L4V 1W5

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## Executive Summary

Archaeological Services Inc. was contracted by CIMA+, on behalf of Niagara Region, to conduct a Cultural Heritage Report as part of the Regional Road 56 (Burleigh Hill Drive) from Glendale Avenue to St. David's Road Municipal Class Environmental Assessment. The Environmental Assessment involves the reconstruction and improvement of Burleigh Hill Drive from Glendale Avenue to St. David's Road in the City of St. Catharines. The study area crosses the Niagara Escarpment and features a steep grading and rock facing on either side of the road where it crosses the escarpment. The study area is generally bounded by residential development to the west, east and south, and commercial development to the north.

The purpose of this report is to describe the existing conditions of the project study area, present an inventory of known and potential built heritage resources (B.H.R.s) and cultural heritage landscapes (C.H.L.s), provide a preliminary impact assessment, and propose appropriate mitigation measures.

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the mid nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are no previously identified B.H.R.s or C.H.L.s with the Regional Road 56 (Burleigh Hill Drive) from Glendale Avenue study area. No additional B.H.R.s or C.H.L.s were identified during background research and field review. As such, from a cultural heritage perspective, no mitigation measures are required.

Based on the results of the assessment, the following recommendations have been developed:

1. Should future work require an expansion of the study area then a qualified heritage consultant should be contracted in order to confirm the impacts of the proposed work on potential heritage resources.



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2. This report should be submitted by the proponent to heritage staff at the City of St. Catharines, the City of Thorold and the Ministry of Citizenship and Multiculturalism, and any other local heritage stakeholders that may have an interest in this project.



## Report Accessibility Features

This report has been formatted to meet the Information and Communications Standards under the *Accessibility for Ontarians with Disabilities Act, 2005* (A.O.D.A.). Features of this report which enhance accessibility include: headings, font size and colour, alternative text provided for images, and the use of periods within acronyms. Given this is a technical report, there may be instances where additional accommodation is required in order for readers to access the report's information. If additional accommodation is required, please contact Annie Veilleux, Manager of the Cultural Heritage Division at Archaeological Services Inc., by email at [aveilleux@asiheritage.ca](mailto:aveilleux@asiheritage.ca) or by phone 416-966-1069 ext. 255.



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- **Project Manager:** Laura Wickett, B.A. (Hon), Dipl. Heritage Conservation, Cultural Heritage Specialist, Project Manager - Cultural Heritage Division
- **Field Review:** Lindsay Parsons, M.M.St., M.P.L., Cultural Heritage Technician, Technical Writer and Researcher – Cultural Heritage Division
- **Report Production:** Lindsay Parsons
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- **Report Reviewer(s):** Lindsay Graves and Laura Wickett



## Qualified Persons Involved in the Project

**Lindsay Graves, M.A., C.A.H.P.**

**Senior Cultural Heritage Specialist, Assistant Manager - Cultural Heritage Division**

The Senior Project Manager for this Cultural Heritage Report is **Lindsay Graves** (M.A., Heritage Conservation), Senior Cultural Heritage Specialist and Assistant Manager for the Cultural Heritage Division. She was responsible for: overall project scoping and approach; development and confirmation of technical findings and study recommendations; application of relevant standards, guidelines and regulations; and implementation of quality control procedures. Lindsay is academically trained in the fields of heritage conservation, cultural anthropology, archaeology, and collections management and has over 15 years of experience in the field of cultural heritage resource management. This work has focused on the assessment, evaluation, and protection of above ground cultural heritage resources. Lindsay has extensive experience undertaking archival research, heritage survey work, heritage evaluation and heritage impact assessment. She has also contributed to cultural heritage landscape studies and heritage conservation plans, led heritage commemoration and interpretive programs, and worked collaboratively with multidisciplinary teams to sensitively plan interventions at historic sites/places. In addition, she is a leader in the completion of heritage studies required to fulfill Class Environmental Assessment processes and has served as Project Manager for over 100 heritage assessments during her time at A.S.I. Lindsay is a member of the Canadian Association of Heritage Professionals.

**Laura Wickett, B.A. (Hon.), Dipl. Heritage Conservation**

**Cultural Heritage Specialist, Project Manager - Cultural Heritage Division**

The Project Manager for this Cultural Heritage Report is **Laura Wickett** (B.A. (Hon.), Diploma Heritage Conservation), who is a Cultural Heritage Analyst and Project Manager within the Cultural Heritage Division. She was responsible for day-to-day management activities, including scoping research activities and



drafting of study findings and recommendations. Trained in the theoretical and technical aspects of heritage conservation, Laura has five years' experience working in the field of cultural heritage resource management. She began working in A.S.I.'s Cultural Heritage Division as a Cultural Heritage Technician in 2017, providing support for a range of cultural heritage assessment reports, including Cultural Heritage Resource Assessments, Cultural Heritage Evaluation Reports, Heritage Impact Assessments, and Secondary Plan assessments. She has also contributed to Heritage Conservation District studies, Cultural Heritage Landscape inventories and Heritage Register reviews.

**Lindsay Parsons, M.P.L., M.M.St.**

**Cultural Heritage Technician, Technical Writer and Researcher - Cultural Heritage Division**

The Cultural Heritage Technician for this project is **Lindsay Parsons** (M.P.L., M.M.St.), who is a Cultural Heritage Technician and Technical Writer and Researcher within the Cultural Heritage Division. She was responsible for conducting research, field review and technical reporting. Lindsay's work as a cultural heritage professional has focused on historical and archival research, interpreting the built environment, and cultural heritage landscape studies. Lindsay holds a M.P.L. from Toronto Metropolitan University, where she focused her studies on understanding the values that guide heritage conservation practices and how these values influence what and whose heritage is conserved. Lindsay also graduated with an M.M.St., where she focused her studies on collections management, as well as interpretation and story-telling with a particular focus on the built environment. Lindsay's experience in and understanding of both the museum and planning worlds has given her a holistic understanding of cultural heritage resources, the many challenges they face in ever-evolving environments, and best practices in their conservation and interpretation.



## Glossary

### **Built Heritage Resource (B.H.R.)**

Definition: "...a building, structure, monument, installation or any manufactured 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 *Ontario Heritage Act*, or that may be included on local, provincial, federal and/or international registers" (Ministry of Municipal Affairs and Housing, 2020, p. 41).

### **Cultural Heritage Landscape (C.H.L.)**

Definition: "...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 *Ontario Heritage Act*, 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" (Ministry of Municipal Affairs and Housing, 2020, p. 42).

### **Known Built Heritage Resource or Cultural Heritage Landscape**

Definition: A known built heritage resource or cultural heritage landscape is a property that has recognized cultural heritage value or interest. This can include a property listed on a Municipal Heritage Register, designated under Part IV or V of the *Ontario Heritage Act*, or protected by a heritage agreement, covenant or easement, protected by the *Heritage Railway Stations Protection Act* or the *Heritage Lighthouse Protection Act*, identified as a Federal Heritage Building, or located within a U.N.E.S.C.O. World Heritage Site (Ministry of Tourism, Culture and Sport, 2016).



### **Impact**

Definition: Includes negative and positive, direct and indirect effects to an identified built heritage resource and cultural heritage landscape. Direct impacts include destruction of any, or part of any, significant heritage attributes or features and/or unsympathetic or incompatible alterations to an identified resource. Indirect impacts include, but are not limited to, creation of shadows, isolation of heritage attributes, direct or indirect obstruction of significant views, change in land use, land disturbances (Ministry of Tourism, Culture and Sport, 2006b). Indirect impacts also include potential vibration impacts (See Section 2.5 for complete definition and discussion of potential impacts).

### **Mitigation**

Definition: Mitigation is the process of lessening or negating anticipated adverse impacts to built heritage resources and cultural heritage landscapes and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, and documentation of the cultural heritage landscape and/or built heritage resource if to be demolished or relocated (Ministry of Tourism, Culture and Sport, 2006a).

### **Potential Built Heritage Resource or Cultural Heritage Landscape**

Definition: A potential built heritage resource or cultural heritage landscape is a property that has the potential for cultural heritage value or interest. This can include properties/project area that contain a parcel of land that is the subject of a commemorative or interpretive plaque, is adjacent to a known burial site and/or cemetery, is in a Canadian Heritage River Watershed, or contains buildings or structures that are 40 or more years old (Ministry of Tourism, Culture and Sport, 2016).

### **Significant**

Definition: With regard to cultural heritage and archaeology resources, significant means “resources that have been determined to have cultural heritage value or interest. Processes and criteria for determining cultural heritage value or interest are established by the Province under the authority of the *Ontario Heritage Act*.



While some significant resources may already be identified and inventoried by official sources, the significance of others can only be determined after evaluation” (Ministry of Municipal Affairs and Housing, 2020, p. 51).



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## 1.0 Introduction

Archaeological Services Inc. was contracted by CIMA+, on behalf of Niagara Region, to conduct a Cultural Heritage Report as part of the Regional Road 56 (Burleigh Hill Drive) from Glendale Avenue to St. David's Road Municipal Class Environmental Assessment. The purpose of this report is to describe existing conditions of the project study area, present an inventory of known and potential built heritage resources and cultural heritage landscapes, provide a preliminary impact assessment, and propose appropriate mitigation measures.

### 1.1 Project Overview

The Regional Road 56 (Burleigh Hill Drive) from Glendale Avenue to St. David's Road Municipal Class Environmental Assessment involves the reconstruction and improvements of Burleigh Hill Drive from Glendale Avenue to St. David's Road in the City of St. Catharines. This project was identified in the Niagara Region's Transportation Master Plan (Niagara Region, 2017) released in 2017 and which sets out a strategic vision for transportation in the Niagara Region. The project is meant to implement the overall goals of the Transportation Master Plan including the application of Complete Street principles to develop safer, more accessible and more integrated transportation networks.

### 1.2 Description of Study Area

This Cultural Heritage Report will focus on the project study area with an additional 50 metre buffer (Figure 1). This project study area has been defined as inclusive of those lands that may contain built heritage resources or cultural heritage landscapes that may be subject to direct or indirect impacts as a result of the proposed undertaking. Properties within the study area are located in the City of St. Catharines and City of Thorold. The study area crosses the Niagara Escarpment and features steep grading and rock faces on either side of the road where it crosses the escarpment. The study area is generally bounded by residential development to the west, east and south, and commercial



development to the north. There are two elementary schools in the northern portion of the study area.

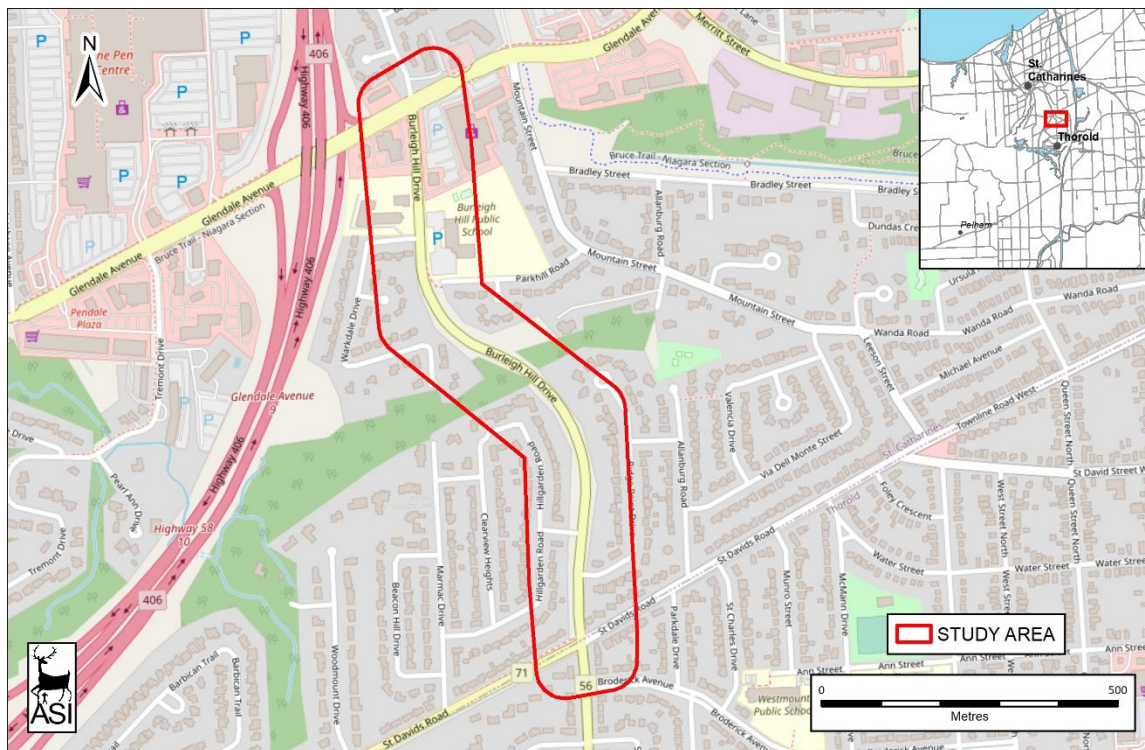


Figure 1: Location of the study area (Base Map: ©OpenStreetMap and contributors, Creative Commons-Share Alike License (C.C.-By-S.A.))

## 2.0 Methodology

The following sections provide a summary of regulatory requirements and municipal and regional heritage policies that guide this cultural heritage assessment. In addition, an overview of the process undertaken to identify known and potential built heritage resources and cultural heritage landscapes is provided, along with a description of how the preliminary impact assessment will be undertaken.

### 2.1 Regulatory Requirements

The *Ontario Heritage Act* (O.H.A.) (Ontario Heritage Act, R.S.O. c. O.18, 1990 [as Amended in 2021], 1990) is the primary piece of legislation that determines policies, priorities and programs for the conservation of Ontario's heritage.



There are many other provincial acts, regulations and policies governing land use planning and resource development that support heritage conservation, including:

- The *Planning Act* (Planning Act, R.S.O. 1990, c. P.13, 1990), which states that “conservation of features of significant architectural, cultural, historical, archaeological or scientific interest” is a “matter of provincial interest”. The *Provincial Policy Statement* (Ministry of Municipal Affairs and Housing, 2020), issued under the *Planning Act*, links heritage conservation to long-term economic prosperity and requires municipalities and the Crown to conserve significant built heritage resources and cultural heritage landscapes.
- The *Environmental Assessment Act* (Environmental Assessment Act, R.S.O., 1990), which defines “environment” to include cultural conditions that influence the life of humans or a community. Cultural heritage resources, which includes archaeological resources, built heritage resources and cultural heritage landscapes, are important components of those cultural conditions.

The Ministry of Citizenship and Multiculturalism (hereafter “The Ministry”) is charged under Section 2.0 of the O.H.A. with the responsibility to determine policies, priorities, and programs for the conservation, protection, and preservation of the heritage of Ontario. The *Standards and Guidelines for Conservation of Provincial Heritage Properties* (Ministry of Tourism, Culture and Sport, 2010) (hereinafter “*Standards and Guidelines*”) apply to properties the Government of Ontario owns or controls that have “cultural heritage value or interest” (C.H.V.I.). The *Standards and Guidelines* provide a series of guidelines that apply to provincial heritage properties in the areas of identification and evaluation; protection; maintenance; use; and disposal. For the purpose of this report, the *Standards and Guidelines* provide points of reference to aid in determining potential heritage significance in identification of built heritage resources and cultural heritage landscapes. While not directly applicable for use



in properties not under provincial ownership, the *Standards and Guidelines* are regarded as best practice for guiding heritage assessments and ensure that additional identification and mitigation measures are considered.

Similarly, the *Ontario Heritage Tool Kit* (Ministry of Culture, 2006) provides a guide to evaluate heritage properties. To conserve a built heritage resource or cultural heritage landscape, the *Ontario Heritage Tool Kit* states that a municipality or approval authority may require a heritage impact assessment and/or a conservation plan to guide the approval, modification, or denial of a proposed development.

## 2.2 Municipal/Regional Heritage Policies

The study area is located within the City of St. Catharines and the City of Thorold in Niagara Region. Policies relating to built heritage resources and cultural heritage landscapes were reviewed from the following sources:

- City of St. Catharines' *Official Plan* (City of St. Catharines, 2018)
- City of Thorold's *Official Plan* (City of Thorold, 2016b)
- Niagara Region's *Official Plan* (Niagara Region, 2014)
- *Niagara Escarpment Plan* (Niagara Escarpment Commission, 2017)

## 2.3 Identification of Built Heritage Resources and Cultural Heritage Landscapes

This Cultural Heritage Report follows guidelines presented in the *Ontario Heritage Tool Kit* (Ministry of Culture, 2006) and *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* (Ministry of Tourism, Culture and Sport, 2016). The objective of this report is to present an inventory of known and potential built heritage resources and cultural heritage landscapes, and to provide a preliminary understanding of known and potential built heritage resources and cultural heritage landscapes located within areas anticipated to be directly or indirectly impacted by the proposed project.



In the course of the cultural heritage assessment process, all potentially affected built heritage resources and cultural heritage landscapes are subject to identification and inventory. Generally, when conducting an identification of built heritage resources and cultural heritage landscapes within a study area, three stages of research and data collection are undertaken to appropriately establish the potential for and existence of built heritage resources and cultural heritage landscapes in a geographic area: background research and desktop data collection; field review; and identification.

Background historical research, which includes consultation of primary and secondary source research and historical mapping, is undertaken to identify early settlement patterns and broad agents or themes of change in a study area. This stage in the data collection process enables the researcher to determine the presence of sensitive heritage areas that correspond to nineteenth- and twentieth-century settlement and development patterns. To augment data collected during this stage of the research process, federal, provincial, and municipal databases and/or agencies are consulted to obtain information about specific properties that have been previously identified and/or designated as having cultural heritage value. Typically, resources identified during these stages of the research process are reflective of particular architectural styles or construction methods, associated with an important person, place, or event, and contribute to the contextual facets of a particular place, neighbourhood, or intersection.

A field review is then undertaken to confirm the location and condition of previously identified built heritage resources and cultural heritage landscapes. The field review is also used to identify potential built heritage resources and cultural heritage landscapes that have not been previously identified on federal, provincial, or municipal databases or through other appropriate agency data sources.

During the cultural heritage assessment process, a property is identified as a potential built heritage resources or cultural heritage landscape based on research, the Ministry screening tool, and professional expertise and best



practice. In addition, use of a 40-year-old benchmark is a guiding principle when conducting a preliminary identification of built heritage resources and cultural heritage landscapes. While identification of a resource that is 40 years old or older does not confer outright heritage significance, this benchmark provides a means to collect information about resources that may retain heritage value. Similarly, if a resource is slightly younger than 40 years old, this does not preclude the resource from having cultural heritage value or interest.

## 2.4 Background Information Review

To make an identification of previously identified known or potential built heritage resources and cultural heritage landscapes within the study area, the following sections present the resources that were consulted as part of this Cultural Heritage Report.

### 2.4.1 Review of Existing Heritage Inventories

A number of resources were consulted in order to identify previously identified built heritage resources and cultural heritage landscapes within the study area. These resources, reviewed on 18 October 2022, include:

- The City of St. Catharines' *Register of Non-Designated Cultural Heritage Properties* (City of St. Catharines, 2009)
- The City of Thorold's *Register of Potential Properties to be Designated* (City of Thorold, 2016a);
- Historical maps (including historical atlases, topographic maps, and aerial photography);
- The *Ontario Heritage Act Register* (Ontario Heritage Trust, n.d.b);
- The *Places of Worship Inventory* (Ontario Heritage Trust, n.d.c);
- The inventory of Ontario Heritage Trust easements (Ontario Heritage Trust, n.d.a);
- The Ontario Heritage Trust's *An Inventory of Provincial Plaques Across Ontario*: a PDF of Ontario Heritage Trust Plaques and their locations (Ontario Heritage Trust, 2018);



- Inventory of known cemeteries/burial sites in the Ontario Genealogical Society's online databases (Ontario Genealogical Society, n.d.);
- Canada's Historic Places website: available online, the searchable register provides information on historic places recognized for their heritage value at the local, provincial, territorial, and national levels (Parks Canada, n.d.a);
- 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 (Parks Canada, n.d.b);
- Canadian Heritage River System: a national river conservation program that promotes, protects and enhances the best examples of Canada's river heritage (Canadian Heritage Rivers Board and Technical Planning Committee, n.d.); and,
- United Nations Educational, Scientific and Cultural Organization (U.N.E.S.C.O.) World Heritage Sites (U.N.E.S.C.O. World Heritage Centre, n.d.).

## 2.4.2 Review of Previous Heritage Reporting

Additional cultural heritage studies undertaken within parts of the study area were also reviewed. These include:

- *Cultural Heritage Resource Assessment: St. David's Road Reconstruction* (ASI, 2019)

## 2.4.3 Community Information Gathering

The following individuals, groups, and/or organizations were contacted to gather information on known and potential built heritage resources and cultural heritage landscapes, active and inactive cemeteries, and areas of identified Indigenous interest within the study area:



- James Neilson, Heritage Planner, City of St. Catharines (email communication October 19, 2022). Email correspondence confirmed that there are no known built heritage resources or cultural heritage landscapes within the study area.
- The Ministry of Citizenship and Multiculturalism (email communication October 19 and 20, 2022). Email correspondence with staff member Karla Barboza confirmed that there are no additional previously identified heritage resources or concerns regarding the study area.
- The Ontario Heritage Trust (email communications October 19, 2022). A response was outstanding at the time this report was submitted.
- At project start-up in early October 2022, A.S.I. made a request to Niagara Region that any engagement with Indigenous communities undertaken as part of this project include a discussion about known or potential built heritage resources or cultural heritage landscapes that are of interest to the respective communities. No feedback was received by the time of report submission. As part of the outreach for the Notice of Study Commencement, notification was provided to the Indigenous communities by Niagara Region.

## 2.5 Preliminary Impact Assessment Methodology

To assess the potential impacts of the undertaking, identified built heritage resources and cultural heritage landscapes are considered against a range of possible negative impacts, based on the *Ontario Heritage Tool Kit InfoSheet #5: Heritage Impact Assessments and Conservation Plans* (Ministry of Tourism, Culture and Sport, 2006b). These include:

Direct impacts:

- Destruction of any, or part of any, significant heritage attributes or features; and
- Alteration that is not sympathetic, or is incompatible, with the historic fabric and appearance.



Indirect impacts:

- Shadows created that alter the appearance of a heritage attribute or change the viability of a natural feature or plantings, such as a garden;
- Isolation of a heritage attribute from its surrounding environment, context or a significant relationship;
- Direct or indirect obstruction of significant views or vistas within, from, or of built and natural features;
- A change in land use such as rezoning a battlefield from open space to residential use, allowing new development or site alteration to fill in the formerly open spaces; and
- Land disturbances such as a change in grade that alters soils, and drainage patterns that adversely affect an archaeological resource.

Indirect impacts from construction-related vibration have the potential to negatively affect built heritage resources and cultural heritage landscapes depending on the type of construction methods and machinery selected for the project and proximity and composition of the identified resources. Potential vibration impacts are defined as having potential to affect an identified built heritage resources and cultural heritage landscapes where work is taking place within 50 metre of features on the property. A 50 metre buffer is applied in the absence of a project-specific defined vibration zone of influence based on existing secondary source literature and direction provided from the Ministry (Carman et al., 2012; Crispino & D'Apuzzo, 2001; P. Ellis, 1987; Rainer, 1982; Wiss, 1981). This buffer accommodates any additional or potential threat from collisions with heavy machinery or subsidence (Randl, 2001).

Several additional factors are also considered when evaluating potential impacts on identified built heritage resources and cultural heritage landscapes. These are outlined in a document set out by the Ministry of Culture and Communications (now Ministry of Citizenship and Multiculturalism) and the Ministry of the Environment entitled *Guideline for Preparing the Cultural Heritage Resource Component of Environmental Assessments* (1992). While this



document has largely been superseded in some respects by more current policies and legislation, the guidance provided that continues to be of relevance to this specific project includes the following definitions:

- Magnitude: the amount of physical alteration or destruction which can be expected;
- Severity: the irreversibility or reversibility of an impact;
- Duration: the length of time an adverse impact persists;
- Frequency: the number of times an impact can be expected;
- Range: the spatial distribution, widespread or site specific, of an adverse impact; and
- Diversity: the number of different kinds of activities to affect a heritage resource.

The proposed undertaking should endeavor to avoid adversely affecting known and potential built heritage resources and cultural heritage landscapes and interventions should be managed in such a way that identified features are conserved. When the nature of the undertaking is such that adverse impacts are unavoidable, it may be necessary to implement alternative approaches or mitigation strategies that alleviate the negative effects on identified built heritage resources and cultural heritage landscapes. Mitigation is the process of lessening or negating anticipated adverse impacts and may include, but are not limited to, such actions as avoidance, monitoring, protection, relocation, remedial landscaping, and documentation of the built heritage resource or cultural heritage landscape if to be demolished or relocated.

Various works associated with infrastructure improvements have the potential to affect built heritage resources and cultural heritage landscapes in a variety of ways, and as such, appropriate mitigation measures for the undertaking need to be considered.



## 3.0 Summary of Historical Development Within the Study Area

This section provides a brief summary of historical research. A review of available primary and secondary source material was undertaken to produce a contextual overview of the study area, including a general description of physiography, Indigenous land use, and Euro-Canadian settlement.

### 3.1 Physiography

The study area is within the Niagara Escarpment, one of the most prominent physiographic features in southern Ontario, which extends from the Niagara River to the northern tip of the Bruce Peninsula, continuing through the Manitoulin Islands (Chapman & Putnam, 1984). Vertical cliffs along the brow mostly outline the edge of the dolostone of the Lockport and Amabel Formations, which the slopes below are carved in red shale. Flanked by landscapes of glacial origin, the rock-hewn topography stands in striking contrast, and its steep-sided valleys are strongly suggestive of non-glacial regions. From Queenston, on the Niagara River, westward to Ancaster, the escarpment is a simple topographic break separating the two levels of the Niagara Peninsula. The Niagara Escarpment is a designated United Nations Educational, Scientific and Cultural Organization World Biosphere Reserve.

### 3.2 Indigenous Land Use and Settlement

Southern Ontario has been occupied by human populations since the retreat of the Laurentide glacier approximately 13,000 years ago, or 11,000 Before the Common Era (B.C.E.) (Ferris, 2013).<sup>1</sup> During the Paleo period (c. 13,000 B.C.E. to 11,000 B.C.E.), groups tended to be small, nomadic, and non-stratified. The

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<sup>1</sup> While many types of information can inform the precontact settlement of Ontario, such as oral traditions and histories, this summary provides information drawn from archaeological research conducted in southern Ontario over the last century.



population relied on hunting, fishing, and gathering for sustenance, though their lives went far beyond subsistence strategies to include cultural practices including but not limited to art and astronomy. Fluted points, beaked scrapers, and graters are among the most important artifacts to have been found at various sites throughout southern Ontario, and particularly along the shorelines of former glacial lakes. Given the low regional population levels at this time, evidence concerning Paleo-Indian period groups is very limited (C. J. Ellis & Deller, 1990).

Moving into the Archaic period (c. 11,000 B.C.E. to 3,000 B.C.E.), many of the same roles and responsibilities continued as they had for millennia, with groups generally remaining small, nomadic, and non-hierarchical. The seasons dictated the size of groups (with a general tendency to congregate in the spring/summer and disperse in the fall/winter), as well as their various sustenance activities, including fishing, foraging, trapping, and food storage and preparation. There were extensive trade networks which involved the exchange of both raw materials and finished objects such as polished or ground stone tools, beads, and notched or stemmed projectile points. Furthermore, mortuary ceremonialism was evident, meaning that there were burial practices and traditions associated with a group member's death (C. J. Ellis et al., 2009; C. J. Ellis & Deller, 1990).

The Woodland period (c. 3,000 B.C.E. to 1600 C.E.) saw several trends and aspects of life remain consistent with previous generations. Among the more notable changes, however, was the introduction of pottery, the establishment of larger occupations and territorial settlements, incipient horticulture, more stratified societies, and more elaborate burials. Later in this period, settlement patterns, foods, and the socio-political system continued to change. A major shift to agriculture occurred in some regions, and the ability to grow vegetables and legumes such as corn, beans, and squash ensured long-term settlement occupation and less dependence upon hunting and fishing. This development contributed to population growth as well as the emergence of permanent villages and special purpose sites supporting those villages. Furthermore, the



socio-political system shifted from one which was strongly kinship based to one that involved tribal differentiation as well as political alliances across and between regions (Birch et al., 2021; Dodd et al., 1990; C. J. Ellis & Deller, 1990; Williamson, 1990).

The arrival of European trade goods in the sixteenth century, Europeans themselves in the seventeenth century, and increasing settlement efforts in the eighteenth century all significantly impacted traditional ways of life in Southern Ontario. Over time, war and disease contributed to death, dispersion, and displacement of many Indigenous peoples across the region. The Euro-Canadian population grew in both numbers and power through the eighteenth and nineteenth centuries and treaties between colonial administrators and First Nations representatives began to be negotiated.

The study area is within Treaty #3 (The Between the Lakes Purchases) territory. Following the American Revolutionary War, the British Crown needed to find lands on which to settle United Empire Loyalists, including approximately 2,000 members of the Six Nations confederacy who had fought alongside British troops. Led by Sir Frederick Haldimand who was the governor of Quebec at that time, the Crown was initially planning on providing lands for Loyalist settlers in Quebec and Southeastern Ontario, including providing land in the Bay of Quinte for Six Nations refugees. This was not suitable for many of the members of Six Nations and a contingent of approximately 1,800 community members, led by Chief Joseph Brant, requested land north of Lake Erie along the Grand River. Brant felt that the location in the Bay of Quinte was too isolated and that his followers could be better served by being closer to the Six Nations communities that chose to remain in the United States in western New York (Surtees, 1984).

Recognizing that under the terms of the Royal Proclamation the land needed to be purchased prior to settlement, Colonel John Butler was sent to negotiate with the Mississaugas of the Credit for lands east of Lake Ontario and north of Lake Erie. On May 22, 1784, the Mississaugas of the Credit agreed to cede approximately 3,000,000 acres (1,214,057 ha.) of land containing all or part of Brant, Elgin, Middlesex, Oxford, and Wellington Counties as well as the Regions



of Haldimand-Norfolk, Halton, Hamilton-Wentworth, Niagara, and Waterloo. In exchange for these lands, the Mississaugas received £1180.74 worth of trade goods (Crown-Indigenous Relations and Northern Affairs, 2016; Surtees, 1984). Of the 3,000,000 acres (1,214,057 ha.), approximately 550,000 acres (222,577 ha.) was set aside for the settlement of Six Nations people (see Haldimand Tract).

However, due to uncertainties with the description of the lands in the original surrender, Treaty #3 was renegotiated on December 7, 1792 to clarify what was ceded. This largely revolved around the northern boundary of the Treaty area and in particular the area set aside for Six Nations settlement along the Grand River (see Haldimand Tract and Treaty #4). The signees on the side of the British included Lieutenant Governor John Graves Simcoe, John Butler, Robert Kerr, Peter Russell, John McGill, and Davie William Smith. The signees on the side of the Mississauga included Chiefs Wabakayne, Wabanip, Kautabus, Wabaniship and Mottotow (Crown-Indigenous Relations and Northern Affairs, 2016; Mississaugas of the Credit First Nation, 2017; Surtees, 1984).

The original text stipulated that the north-west boundary of the parcel was an imaginary line between Burlington Bay and the Trent River, which is inconsistent with the geography of the area. The boundaries of the parcel were corrected to create a polygon encompassing the Niagara peninsula up to Burlington Bay and then up north to the present-day town of Arthur then south to the present-day town of Woodstock to finally meet Lake Erie at Port Bruce. Treaty #3 lands exclude a corridor along the Grand River set aside for Six Nations (Crown-Indigenous Relations and Northern Affairs, 2016; Native Land Digital, 2018).

### **3.3 Historical Euro-Canadian Township Survey and Settlement**

The first Europeans to arrive in the area were transient merchants and traders from France and England, who followed existing transit routes established by Indigenous peoples and set up trading posts at strategic locations along the



well-traveled river routes. All of these occupations occurred at sites that afforded both natural landfalls and convenient access, by means of the various waterways and overland trails, into the hinterlands. Early transportation routes followed existing Indigenous trails, both along the lakeshore and adjacent to various creeks and rivers (Archaeological Services Inc., 2006). Early European settlements occupied similar locations as Indigenous settlements as they were generally accessible by trail or water routes and would have been in locations with good soil and suitable topography to ensure adequate drainage.

Historically, the study area is located in the former Township of Grantham, County of Lincoln, in part of Lots 12 and 13, Concession 10.

### **3.3.1 Grantham Township**

The first township survey of Grantham was undertaken in 1784, and the first settlers began occupying the land later that year. The township was named after the town of Grantham in Lincoln County, England by Governor Simcoe. Grantham was initially settled by disbanded soldiers, mainly Butler's Rangers, following the end of the American Revolutionary War. However, it was not until the early nineteenth century that settlers began to arrive in large numbers. There were no major battles fought in Grantham during the War of 1812, although several farms were plundered by forces from both sides. Grantham's many waterways contributed to its early industrial development, particularly with the construction of the Welland Canal between 1824 and 1829. Grantham was incorporated into a township in 1850. The population was comprised mainly of Americans, Irish, Scottish, and English settlers. Grantham Township was dissolved in 1961 and part of it was amalgamated with the City of St. Catharines and part annexed by the Township of Niagara (Armstrong, 1985; Boulton, 1805; Grantham Women's Institute, 1940; Mika & Mika, 1981; Rayburn, 1997; Smith, 1846a).



### 3.3.2 City of St. Catharines

The first Euro-Canadian settlers to arrive in St. Catharines were John Hainer and Jacob Dittrick, who were United Empire Loyalists arriving around 1790. The men settled on opposite sides of Twelve Mile Creek prior to the area being surveyed. In 1797, Thomas Adams arrived in St. Catharines, opening the first tavern on Twelve Mile Creek. Other Loyalists soon arrived in the area, and the community was created with approximately 50 inhabitants. Early settlers to the community also included a significant number of Germans, including names such as: Hostetter, Ostrander, Hartzell, Swayze, Kreisler (Chrysler), Huber (Hoover), and Keiffer (Keefer). St. Catharines was first known as The Twelve and then Shipman's Corners but was renamed St. Catharines after the completion of the Welland Canal. It is named in honour of the first wife of the Honourable Robert Hamilton, Superintendent of the Western District and a member of the first Executive Council of Upper Canada (Mika and Mika 1983).

The population of St. Catharines steadily grew in the nineteenth century. In 1826, the population was approximately 600. By 1843, the population grew to 3,254, and in 1845, St. Catharines was incorporated as a town and divided into four wards. In 1876, the population was 12,870 and St. Catharines became a city (Mika and Mika 1983).

St. Catharines owed much of its early prosperity to the creation of the first Welland Canal (ca. 1829). Accordingly, ship building was an important early industry in the area, with various shipyards employing hundreds of men. Mills were also a leading industry in St. Catharines, with as many as 15 grist mills known from 1828 to 1869. St. Catharines also gained a reputation as a health resort after salt and mineral springs were discovered in the area and promoted through a local drug store. After 1854, the Great Western Railway opened through St. Catharines, connecting the Niagara River to Hamilton, and further adding to its growing prosperity. St. Catharines contained a number of fine buildings and establishments, some of which were constructed by emancipated slaves who escaped from the United States to Canada. These



include the Welland House hotel (ca. 1853) and the Zion Baptist Church (ca. 1863) (Mika and Mika 1983).

In 1961, the former towns of Merritton and Port Dalhousie, and a large portion of the Township of Grantham amalgamated with St. Catharines (Mika and Mika 1983).

### 3.3.3 Town of Merritton

Merritton was located on the line of the Welland Canal on part Lots 10, 11 and 12 in Concessions 9 and 10, Grantham Township. The town was created out of four small canal communities named Centreville (ca. 1826), Westport, Protestant Hill and Slabtown. In 1858, it was named Welland City. The name was later changed to Merritton, which was incorporated as a village in 1874. A stone town hall was built in 1879 (Jackson and Wilson 1992:137). Locks 11 through 21 of the Second Welland Canal were located within the boundaries of the town. During the late nineteenth century, it contained a spoke factory, two cotton factories, Beatty's saw and grinding mill, John Brown's cement plant, a paper mill, several stores, and a telegraph office. It also had at least seven taverns, but only one Wesleyan Methodist Church and school. The town was served by the Welland Railway and the Great Western Railway. There was a station provided for the town by the Great Western, which was known as Thorold Station. One tollgate existed at the intersection of Glendale Avenue and Merritt Street on the east side of the Lybster Mill. Parts of the village were severely damaged by a tornado which touched down in September 1898. The population numbered about 1,000 in 1873 (Crossby, 1873, p. 192; Fischer & Harris, 2007, p. 187; Merritton Centennial Committee, 1974; Rayburn, 1997, p. 218). In 1961, the Town of Merritton was amalgamated with the City of St. Catharines (Mika and Mika 1983).

### 3.3.4 Thorold Township

The first settlers are believed to have taken up land in Thorold around 1787-88, when the first township survey was undertaken in part by Augustus Jones. Jones also compiled the "Plans of the Townships of this Settlement" in the late autumn of 1791, which included a "List of reduced Provincial Troops" settled in



the area, as well as reports on features “towards the public utility” such as water falls, minerals and/or quarries, and the quality of the timber. (Fraser, 1906, pp. 346, 388–389, 426–427).

Thorold acquired its name in 1792, likely in honor of Sir John Thorold (1734-1815), a representative for Lincolnshire in the House of Commons. Settlement in Thorold advanced at a pace that was roughly equal to that seen in the other nearby townships in the county. Most of the early settlement and land allotment was made to Loyalists and disbanded soldiers from Butler’s Rangers. Several of the farms within the township suffered damage to fences and crops, and from plunder, during the Battle of Beaver Dams in June 1813. By 1846, the township was referred to as one of the “best settled townships in the Niagara District, containing a great number of excellent, well cleared farms” (Armstrong, 1985, p. 147; Gardiner, 1899, pp. 276–277; Rayburn, 1997, pp. 342–343; Smith, 1846b).

The village of Thorold, located to the southeast of the study area, began to prosper during the late 1820s as a result of the construction of the first Welland Canal. The site of the village of Thorold was developed on land located between the watersheds of the Ten and Twelve Mile creeks, largely owned by George Keefer, a stock holder in the Canal who had erected a stone grist mill in 1826-7 even before construction of the Canal had reached Thorold. By 1846, the village of Thorold had a population of approximately 1,000 inhabitants and contained a post office and three churches (Episcopal, Catholic and Methodist). Thorold was elevated to village status in January 1850, but the population had increased to the point that it was able to acquire the status of a town in December 1874. At that time the community was divided into several wards. Thorold attained city status in 1975 (Page, 1876, p. 16; Smith, 1846b).

### **3.4 Review of Historical Mapping**

The 1862 Map of the Counties of Lincoln and Welland (Tremaine & Tremaine, 1862), and the 1876 Illustrated Historical Atlas of the Counties of Lincoln and Welland (Page, 1876) were examined to determine the presence of historical features within the study area during the nineteenth century (Figure 2 and Figure 3). Historically, the study area is located on parts of Lots 12 and 13,



Concession 10 in the former Township of Grantham and Thorold Township, County of Lincoln.

It should be noted, however, that not all features of interest were mapped systematically in the Ontario series of historical atlases. For instance, they were often financed by subscription limiting the level of detail provided on the maps. Moreover, not every feature of interest would have been within the scope of the atlases. The use of historical map sources to reconstruct or predict the location of former features within the modern landscape generally begins by using common reference points between the various sources. The historical maps are geo-referenced to provide the most accurate determination of the location of any property on a modern map. The results of this exercise can often be imprecise or even contradictory, as there are numerous potential sources of error inherent in such a process, including differences of scale and resolution, and distortions introduced by reproduction of the sources.

Nineteenth-century mapping shows the study area as straddling a developing area and a primarily agricultural area. The 1862 Tremaine map depicts the area to the west and south of the study area as agricultural with larger plots of land (Figure 2). Single structures (black squares) can be seen dotted across this agricultural landscape. An intricate network of common roads appears to be planned for the east portion of the study area, however based on subsequent mapping was never fully built out. Few structures are depicted in this area. St. David's Road appears in the south of the study area and is the dividing line between what is now St. Catharines and Thorold. To the southeast of the study area, the village of Thorold is depicted as developed with a number of blocks shaded in black. The map depicts a dotted road indicating that the road allowance is not opened running straight from present day Glendale Avenue to St. David's Road. The Welland Canal traverses the landscape to the northeast of the study area and to the northeast of the canal is the Great Western Railway line.

The 1876 Historical Atlas depicts the study area as generally unchanged (Figure 3). The unopened road allowance depicted in the 1876 Tremaine map is now



depicted as a solid black line indicating the boundary between the town of Merritton to the east and the township of Grantham to the west. The Niagara Escarpment is depicted as a stone quarry to the west of the study area. Two creeks are depicted traversing the landscape with one creek entering the north portion of the study area. There is an orchard and farmhouse depicted in the north portion of the study area.

In addition to nineteenth-century mapping, historical topographic mapping and aerial photographs from the twentieth century were examined. This report presents maps and aerial photographs from 1908, 1938, 1954, and 1973 (Figure 4 to Figure 7).

The study area remains in a primarily agricultural context into the twentieth century. The 1908 topographic map no longer depicts the planned road network to the east of the study area and instead there are a few constructed roads throughout the area (Figure 4). A few structures appear within the study area and a cluster of structures appear to the east of the north portion of the study area. The area to the west and south of the study area remains agricultural with a number of depicted orchards and woods. The centres of Merritton (now St. Catharines) to the northeast of the study area and Thorold to the southeast are heavily developed. The Welland Canal and Railway continue to run to the northeast of the study area. St. David's Road is depicted as a township boundary between Merritton and Thorold. The 1908 topographic map depicts the Niagara escarpment as cutting through the study area. There is a water tower depicted to the east of the south portion of the study area. The 1938 topographic map depicts little change of the study area or surrounding context (Figure 5). More development has occurred to the east of the study area. A telegraph or telephone line now runs through a portion of the study area. Glendale Avenue and St. David's Road are depicted as paved secondary roads.

The 1954 aerial photograph depicts the continued agricultural context of the study area and the area to the west with development concentrated to the east of the study area (Figure 6). Minor development appears to be occurring in the north of the study area along Glendale Avenue. The Niagara Escarpment is



visible in the photograph with clusters of trees along it. The 1973 topographic map depicts the study area within a developing urban context (Figure 7). Burleigh Hill Drive is depicted on the map with symbols in the centre indicating a cut as the road passes through the Niagara Escarpment. A number of residential streets appear to the east and west of Burleigh Hill Drive and an area shaded in red indicating a built-up area. The two schools in the north of the study area are depicted on the map. The water tower still appears directly to the east of the south portion study area.



Figure 2: The study area overlaid on the 1862 Tremain's Map of the Counties of Lincoln and Welland (Tremain & Tremain, 1862).

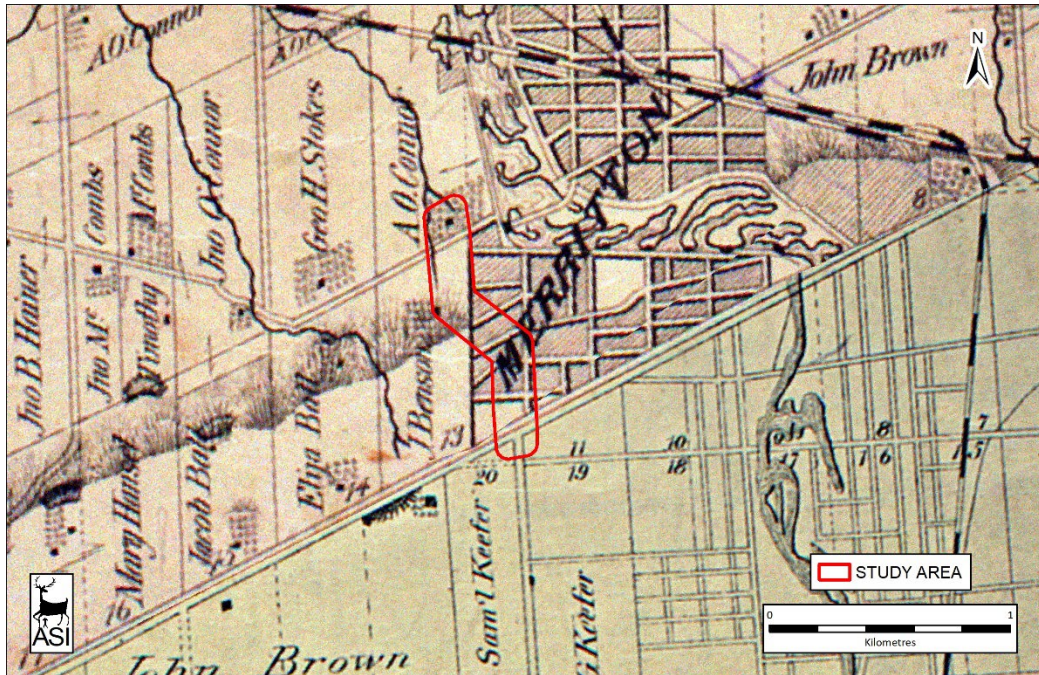


Figure 3: The study area overlaid on the 1879 Historical Atlas of the Counties of Lincoln and Welland (Page, 1876).



Figure 4: The study area overlaid on the 1908 topographic map of the Niagara Region (Department of Militia and Defence, 1908).



Figure 5: The study area overlaid on the 1938 topographic map of the Niagara Region (Department of National Defence, 1938)

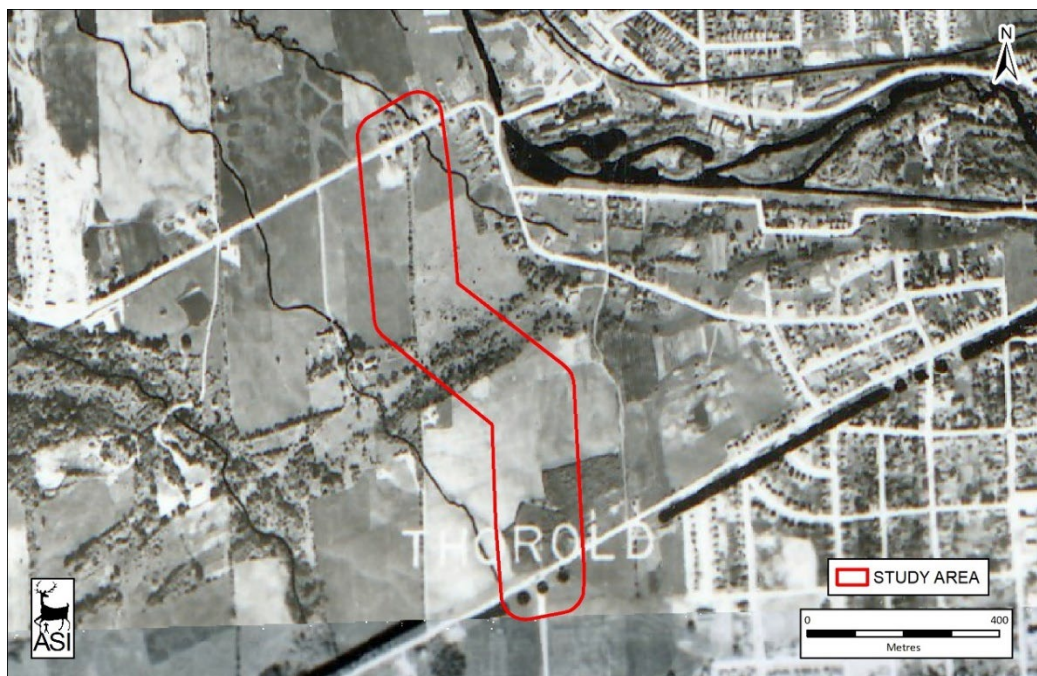


Figure 6: The study area overlaid on the 1954 aerial photograph of Southern Ontario (Hunting Survey Corporation Limited, 1954).

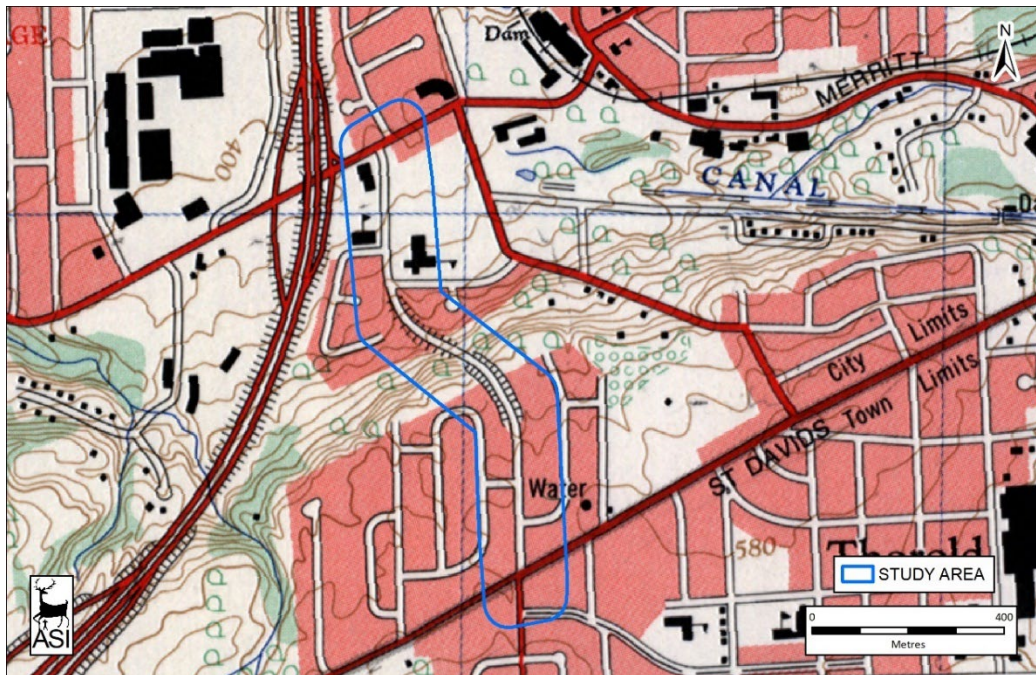


Figure 7: The study area overlaid on the 1973 topographic map (Department of Energy, Mines and Resources, Canada, 1973).

## 4.0 Existing Conditions

A field review of the study area was undertaken by Lindsay Parsons of Archaeological Services Inc., on October 24, 2022 to document the existing conditions of the study area from existing rights-of-way. The existing conditions of the study area are described below and captured in Plate 1 to Plate 10.

### 4.1 Description of Field Review

The majority of the study area is in the City of St. Catharines with the southern edge of the study area crossing into the City of Thorold, with St. David's Road marking the municipal boundary. The study area focuses on Burleigh Hill Drive between Glendale Avenue and St. David's Road. The study area is primarily residential with a commercial centre in the northern portion of the study area.

The northern end of the study area begins slightly north of the intersection of Glendale Avenue and Burleigh Hill Drive (Plate 1). The area north of the intersection is a residential area with one to one-and-a-half storey late-

twentieth century homes and mature trees. The northwest and southwest corners of the intersection at Glendale Avenue and Burleigh Hill Drive have one-storey commercial strip malls, while the southeast corner features a large parking lot, a Canadian Tire store, and gas station. The northeast corner features a parking lot and three-storey apartment building. The intersection is a controlled intersection with pedestrian crossings. South of the commercial area are two schools with surrounding residential areas.

Burleigh Hill Drive is oriented in a general north-south alignment and is a paved road. The northern portion of Burleigh Hill Drive is four lanes across with two south-bound and two north-bound lanes of traffic. To the south of the intersection with Glendale Avenue, Burleigh Hill Drive merges into three lanes with one north-bound lane and two south-bound lanes (Plate 2). Concrete sidewalks run along either side of Burleigh Hill Drive between Glendale Avenue and Warkdale Drive and there is a pedestrian crossing near the intersection with Warkdale Drive. At Warkdale Drive, the roadway begins a steep incline and features a sidewalk with protective guardrail only on the east side of the roadway (Plate 3). There is a protective railing on the other side of the sidewalk where the land slopes downward. This portion of the roadway is also generally lined with thick vegetation and some trees on either side. A protective guardrail also runs along the west side of the roadway until it passes through the Niagara Escarpment (Plate 4). The large stone walls of the Escarpment are visible on either side of the roadway as it passes through the Escarpment (Plate 5).

Past the stone walls of the Escarpment, the roadway's incline reduces and residential properties back onto the roadway (Plate 6). A concrete sidewalk (no longer protected) continues to run along the east side of the roadway with a grassy ditch or gravel shoulder separating the roadway and sidewalk. A sidewalk runs on the west side of the roadway from Dalecrest Avenue to St. David's Road.

The southern end of the study area sits at the intersection of St. David's Road and Burleigh Hill Drive (Plate 7). St. David's Road is the dividing line between the City of St. Catharines and the City of Thorold. The intersection is a controlled intersection with pedestrian crossings. The southern end of the study area is primarily residential similarly with one to one-and-a-half storey late-twentieth



century homes and mature trees (Plate 8). A modern water tower is visible in the same location as a historical water tower depicted in the 1908 topographic map (Figure 4).



Plate 1: Intersection of Glendale Avenue and Burleigh Hill Drive, looking south. (A.S.I., 2022).



Plate 2: Intersection of Burleigh Hill Drive and Warkdale Drive, looking southwest (A.S.I., 2022).

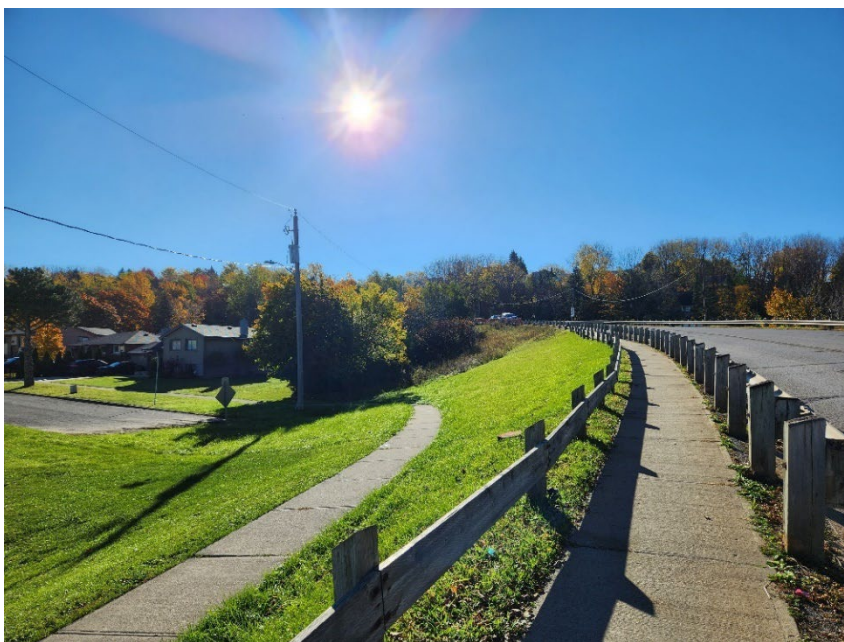


Plate 3: The sidewalk that runs along the east side of Burleigh Hill Road after Warkdale Drive, looking south. (A.S.I., 2022).



Plate 4: Protective guardrail running along the west side of Burleigh Hill Drive, looking northwest (A.S.I., 2022).

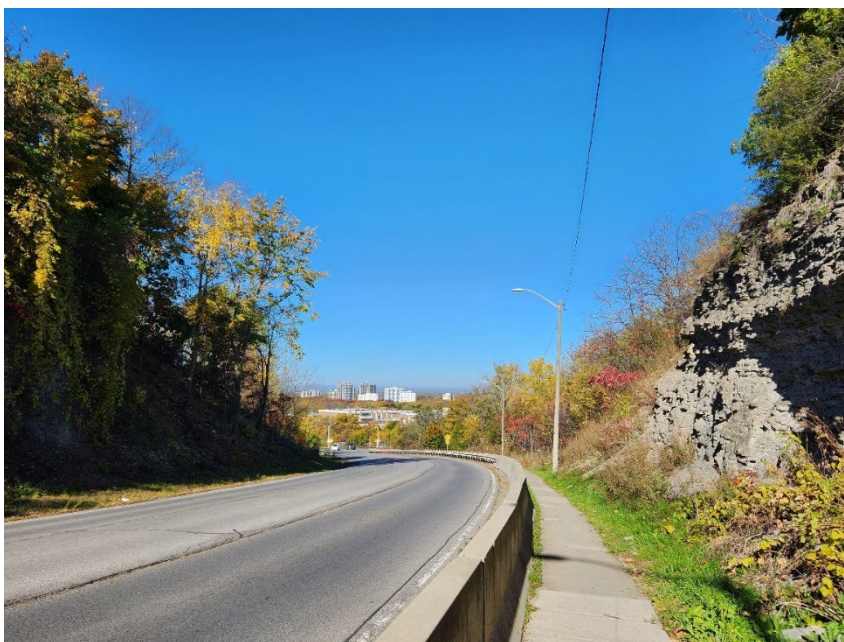


Plate 5: The stone walls of the Niagara Escarpment on either side of Burleigh Hill Drive, looking north (A.S.I., 2022).



Plate 6: Residential properties backing onto the southern portion of Burleigh Hill Drive, looking south (A.S.I., 2022).



Plate 7: Intersection of St. David's Road and Burleigh Hill Drive, looking north (A.S.I., 2022).



Plate 8: Residential street that runs parallel to Burleigh Hill Drive, looking south (A.S.I., 2022).

## 4.2 Identification of Known and Potential Built Heritage Resources and Cultural Heritage Landscapes

Based on the results of the background research and field review, no known or potential built heritage resources or cultural heritage landscapes were identified within the study area. The location of the Existing Condition Plates is presented in Figure 8.



Figure 8: Location of photo plates within the study area (A.S.I., 2022).

## 5.0 Preliminary Impact Assessment

The following sections provide more detailed information regarding the proposed project undertaking and analysis of the potential impacts on identified built heritage resources and cultural heritage landscapes.

### 5.1 Description of Proposed Undertaking

The proposed undertaking for Regional Road 56 (Burleigh Hill Drive) from Glendale Avenue to St. David's Road Municipal Class Environmental Assessment involves the reconstruction and improvements of Burleigh Hill Drive from Glendale Avenue to St. David's Road in the City of St. Catharines.

### 5.2 Analysis of Potential Impacts

As no built heritage resources or cultural heritage landscapes have been identified within the study area, there are no potential impacts that require analysis or mitigation.

## 6.0 Results and Mitigation Recommendations

The results of background historical research and a review of secondary source material, including historical mapping, indicate a study area with a rural land use history dating back to the mid nineteenth century. A review of federal, provincial, and municipal registers, inventories, and databases revealed that there are no previously identified built heritage resources or cultural heritage landscapes within the Regional Road 56 (Burleigh Hill Drive) from Glendale Avenue to St. David's Road study area. No additional features were identified during the fieldwork. As such, from a cultural heritage perspective, no mitigation measures are required.

### 6.1 Key Findings

No built heritage resources or cultural heritage landscapes were identified within the study area. Therefore, no impacts to built heritage resources or



cultural heritage landscapes are anticipated as a result of the proposed undertaking.

## 6.2 Recommendations

Based on the results of the assessment, the following recommendations have been developed:

1. Should future work require an expansion of the study area then a qualified heritage consultant should be contracted in order to confirm the impacts of the proposed work on potential heritage resources.
2. This report should be submitted by the proponent to heritage staff at the City of St. Catharines, the City of Thorold and the Ministry of Citizenship and Multiculturalism, and any other local heritage stakeholders that may have an interest in this project.



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