Cultural Heritage Assessment Report, Concession Street Bridge, City of Cambridge

DRAFT REPORT

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CULTURAL HERITAGE ASSESSMENT REPORT, CONCESSION STREET BRIDGE, CITY OF CAMBRIDGE

Executive Summary

The Region of Waterloo retained Stantec Consulting Ltd. (Stantec) to undertake an Environmental Assessment (EA) for watermain repair/replacement at the Concession Street Bridge over the Grand River. The requirement to consider cultural heritage in Municipal Class Environmental Assessments (EA) is discussed in the Municipal Class Environmental Assessment Manual (MCEA Manual) (Municipal Engineers Association 2015) and the revised 2020 Provincial Policy Statement (PPS) (Government of Ontario 2014). The MCEA Manual considers cultural heritage, including built heritage resources and cultural heritage landscapes, as well as archaeological resources, as one in a series of environmental factors to be considered when undertaking an MCEA, particularly when describing existing and future conditions, development alternatives, and determination of the preferred alternative.

As part of the EA, a Cultural Heritage Assessment Report (CHAR) has been completed to identify heritage resources, including built heritage and cultural heritage landscapes, present within, and adjacent to, the Study Area. The Study Area consists of a 50 metre buffer surrounding the potential alternative locations for proposed watermain replacement. The 50 metre Study Area boundary is used as a sufficient distance to encompass a buffer zone for potential vibration effects resulting from the Project. Although structures on a specific property may be situated outside the 50 metre buffer, in some instances the property boundary is within the buffer, and therefore resources on the property are required to be examined as they are within the Study Area.

The study methodology is broadly based on guidelines provided by Ministry of Heritage, Sport, Tourism and Culture Industries within InfoSheet #5 in Heritage Resources in the Land Use Planning Process, Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005. This involves identification of heritage resources and the assessment of impacts of the Project on these resources.

Where a potential heritage resource was identified within the Study Area, an evaluation of the cultural heritage value or interest of the property, or properties, was undertaken. Where potential cultural heritage value or interest was identified, a structure or landscape was assigned a cultural heritage resource (CHR) number and the property was determined to contain a heritage resource. Fourteen cultural heritage resources were identified within the Study Area following assessment, including former industrial properties, residential properties, commercial properties, and the Grand River.

Where the heritage resource was identified within the Study Area, an assessment of potential impacts resulting from the Project was undertaken. The assessment of potential impacts was undertaken according to InfoSheet #5.

Two cultural heritage resources, a residence and former industrial building, are located within 50 metres of the proposed alternative for watermain replacement. Depending on the approaches that may be identified through planning and detailed design, the resources may be at risk for indirect impacts resulting from construction-related ground vibration. It is recommended that the Region consult with a qualified
building conditions specialist or geotechnical engineer with previous experience working with heritage structures to identify appropriate vibration mitigation measures in advance of construction. Mitigation measures for vibration may include developing an appropriate vibration setback distance, a vibration attenuation study, and/or a construction monitoring program.

To assist in the retention of historic information, copies of this report should be deposited with local libraries and municipalities. Therefore, it is recommended that this report be deposited at the Idea Exchange (Cambridge Public Library), Galt branch.

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

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**Abbreviations**

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<td>BHR</td>
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1.0 INTRODUCTION

1.1 STUDY PURPOSE AND OBJECTIVES

As part of the Region of Waterloo Concession Street Bridge Watermain Repair Schedule B Class Environmental Assessment (EA) (the Project), a Cultural Heritage Resource Assessment (CHRA) has been completed to identify heritage resources, including built heritage and cultural heritage landscapes, present within, and adjacent to, the Study Area. The purpose of the Project is to identify the preferred location for the installation of a new watermain at the Concession Street Bridge.

The Study Area extends 50 metres around the Concession Street Bridge, which crosses the Grand River at Concession Street (Road 97) between Water Street South (Road 24) and Grand Avenue South in Cambridge, Ontario (Figure 1). The 50 metre Study Area boundary is used as a sufficient distance to encompass a buffer zone for potential vibration effects resulting from the Project. Although structures on a specific property may be situated outside the 50 metre buffer, in some instances the property boundary is within the buffer, and therefore resources on the property are required to be examined as they are within the Study Area.

As part of the CHRA report, potential heritage resources were identified, inventoried, and evaluated according to Ontario Regulation (O. Reg.) 9/06, the criteria for determining cultural heritage value or interest (CHVI) (Government of Ontario 2006a). A land use history was completed to provide a cultural context for the Study Area and historical background upon which to base evaluations. Where CHVI was identified, the resource was mapped and recommendations made for further study. The objectives of the CHRA are summarized below:

- Prepare a land use history of the Study Area for use in the identification and evaluation of heritage resources
- Identify potential heritage resources within the Study Area through a windshield survey from the public right-of-way (RoW)
- Evaluate the CHVI of the potential heritage resources to determine the number of heritage resources present
- Identify potential impacts to heritage resources from the Project
- Recommend mitigation measures where impacts have been identified
Methodology

2.0 METHODOLOGY

2.1 REQUIREMENTS

The requirement to consider cultural heritage in Municipal Class EAs (MCEAs) is discussed in the Municipal Class Environmental Assessment Manual (MCEA Manual) and the revised 2020 Provincial Policy Statement (PPS) (Municipal Engineers Association 2015; Government of Ontario 2020). The MCEA Manual considers cultural heritage, including built heritage resources and cultural heritage landscapes as well as archaeological resources, as one in a series of environmental factors to be considered when undertaking an MCEA, particularly when describing existing and future conditions, development alternatives, and determination of the preferred alternative.

The MCEA Manual further suggests that cultural heritage resources that retain heritage attributes should be identified early in the EA process and avoided where possible. Where avoidance is not possible, potential effects to these attributes should be identified and minimized. Adverse impacts should be mitigated according to provincial and municipal guidelines. It is suggested that this happen early in the process so that potential impacts to significant features can be included in an understanding of project impacts and plans established to mitigate these impacts.

In addition to requirements outlined in the MCEA Manual, provisions made under the PPS were also considered in the preparation of the study. Section 2.6 of the PPS addresses cultural heritage in the land use planning process and as such was considered. The applicable provisions include:

2.6.1 - Significant built heritage resources and significant cultural heritage landscapes shall be conserved.

2.6.3 - Planning authorities shall not permit development and site alteration on adjacent lands to protected heritage property except where the proposed development and site alteration has been evaluated and it has been demonstrated that the heritage attributes of the protected heritage property will be conserved.

(Government of Ontario 2020)

2.2 THEMATIC REVIEW: DESKTOP REVIEW AND DATA SOURCES

To familiarize the study team with the Study Area, local historical resources were consulted, archival documents were reviewed, and a summary of the historical background of the local area was prepared. Specifically, historical mapping from 1881, 1916, 1923, 1929, 1936, 1938, 1968, and 1975 was consulted to identify the presence of structures, settlements, and other potential heritage resources in advance of the field program.

A desktop review of historical information (local histories, archival material, government documents, and primary sources) and topographic mapping was conducted to provide information on the context of the
study area and its surroundings. This included identifying the general nature of the area and its features (e.g., commercial, residential, rural, industrial, natural landscape, etc.), determining when buildings or structures in the area were constructed, and identifying developments or changes to the area over time. The intent of this review was to determine the thematic development of the municipalities within the study area and inform the fieldwork approach to determine the presence of potential cultural heritage resources. The desktop review determined whether portions of the study area and/or individual properties contributed to the identified thematic frameworks (see Section 4.0). The presence of potential resources that contribute to the identified thematic development of the study area and surroundings was confirmed by the field survey and subsequent evaluations of potential heritage properties.

2.3 MUNICIPALITY AND AGENCY CONSULTATION

Listings of provincially and locally designated properties, districts, and easements for each municipality were collected from the Ontario Heritage Trust (OHT), the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI), and the City of Cambridge. Consultation with these interested agencies and municipalities within which the Project is proposed was undertaken to determine the presence of designated, listed, or registered heritage properties within the Study Area.

Recognition of protected properties varies greatly and is dependent on the level of CHVI identified or, in some cases, the level of investigation undertaken. For the purpose of this study, any property previously identified by municipal staff or provincial agencies as containing, or having the potential to contain, CHVI was determined to be a protected property.

2.4 FIELD PROGRAM

A pedestrian survey was conducted on October 30, 2020 from the public RoW. At this time, the Study Area was surveyed for potential heritage resources, including both built heritage resources and cultural heritage landscapes. Where identified, these were photographed, and their locations recorded. Characteristics of each potential heritage resource were noted while in the field and recorded.

In general, heritage resources of more than 40 years of age were evaluated during the survey for their potential to satisfy O. Reg. 9/06 criteria. The use of the 40-year threshold is generally accepted by both the federal and provincial authorities as a preliminary screening measure for CHVI. This practice does not imply that all properties more than 40 years of age are inherently of significant heritage value, nor does it exclude exceptional examples constructed within the past 40 years of being of cultural heritage value.

2.5 ASSESSMENT OF PROJECT IMPACTS

The assessment of impacts on cultural heritage resources is based on the impacts defined in the MTCS InfoSheet #5: Heritage Impact Assessments and Conservation Plans from the Heritage Resources in the Land Use Planning Process Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005 (Government of Ontario 2006b). Impacts to cultural heritage resources may be direct or indirect. Direct impacts include:
Methodology

- **destruction** of any, or part of any, significant heritage attributes or features
- **alteration** that is not sympathetic, or is incompatible, with the historic fabric and appearance

Indirect impacts to cultural heritage resources do not result in the direct destruction or alteration of the feature or its heritage attributes, but may indirectly affect the CHVI of a property by causing:

- **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
- **land disturbances** such as a change in grade that alters soil, and drainage patterns that adversely affect an archaeological resource

(Government of Ontario 2006b)

In addition to direct effects related to destruction, the potential for indirect effects resulting from vibration due to construction and operation activities and the transportation of Project components and personnel were also evaluated. Although the existing effect of traffic and construction vibrations on historic period structures is not fully known, negative effects have been demonstrated on buildings with a setback of less than 40 m from the curbside (Crispino and D'Apuzzo 2001; Ellis 1987; Rainer 1982; Wiss 1981). The proximity of Project components to cultural heritage resources was considered in this assessment, particularly those within 50 m, in order to encompass a wide enough buffer zone to account for built resources less than 40 m from curbside or potential Project activities. The 50 m buffer represents a conservative approach to effects identification.
3.0 HISTORICAL DEVELOPMENT

3.1 INTRODUCTION

The Study Area extends 50-metres around the Concession Street Bridge, which crosses the Grand River at Concession Street (Road 97) between Water Street South (Road 24) and Grand Avenue South in Cambridge, Ontario (Figure 1). The Study Area is located within former Waterloo County. It includes parts of Concession Street, Grand Avenue South, and Water Street South, and parts of the following historical lots and concessions in the former Township of North Dumfries, present-day City of Cambridge, Regional Municipality of Waterloo.

- Lot 1 West of Grand River, Concession 11
- Lot 1 East of Grand River, Concession 11
- Lot 3 West of Grand River, Concession 10
- Lot 3 East of Grand River, Concession 10

The following sections outline the historical development of the Study Area from the period of Euro-Canadian settlement to the present.

3.2 PHYSIOGRAPHY

The Study Area is situated within the Guelph Druml Field physiographic region of southwestern Ontario (Chapman and Putnam 1984: 137). The Guelph Druml Field physiographic region extends from the Town of Orangeville to the City of Cambridge. Characteristics of the region are its widely spaced drumlins, limestone till and boulders, and generally parallel valleys running at almost right angles to orientation of the drumlins. These are interconnected by cross valleys in deeper depressions between the drumlins, with sides of broad sand and gravel terraces, and often swampy bottoms (Chapman and Putnam 1984: 137). The upper portion of the Grand River flows along the western side of the physiographic region from Lake Belwood to the City of Cambridge.

The Grand River was a major focus of both Indigenous settlement and early Euro-Canadian settlement. It was a major transportation route, and later, a significant source of power for early Euro-Canadian industry. The Study Area is located within the southern part of the former City of Galt (now City of Cambridge). The location of Galt was chosen in 1816 because of the availability of waterpower to operate mills at the confluence of Mill Creek and the Grand River. The fertile Grand-Kirkland series loam soils of the Grand River valley in the Waterloo County area attracted early Euro-Canadian farmers (Presant and Wicklund 1971). Limestone bedrock is relatively close to the surface in the region around Galt, just two metres below surface in some areas. This allowed for relatively easy quarrying and provided readily available building material. Many of the existing historic buildings in the Cambridge area along the Grand River are constructed of limestone.
Historical Development

3.3 Survey and Settlement

The Grand River Valley first attracted the attention of British colonial officials at the close of the American Revolution. During the war, many Indigenous groups, including the Haudenosaunee, also known as the Iroquois or Six Nations, had been drawn into the American Revolution. The American victory meant that most Iroquois territory was now part of the United States. Members of the Haudenosaunee who remained loyal to Great Britain under the leadership of Joseph Brant (Thayendanegea) petitioned the Governor of Quebec, Frederick Haldimand, for a land grant in present-day Ontario, which was part of Quebec until 1791. Brant selected the Grand River Valley, including the study area, as the location for the grant, and in 1784 the Haudenosaunee received a tract of land six miles (10 kilometres) deep on each side of the Grand River (Filice 2016).

The fertility of the Grand River Valley attracted Euro-Canadian interest in the area. In 1798, Brant ceded 94,305 acres to Philip Stedman of the Niagara District for the sum of £8,841, land that is now part of the Townships of North and South Dumfries (Parsell 1881: 8). Stedman purchased the land in speculation and made no attempts to settle his holdings. The availability of free land grants in Upper Canada deterred settlers from purchasing property. In 1816, the land was sold to William Dickson of Niagara-on-the-Lake for £24,000 (Taylor 1970: 23).

William Dickson, originally from Dumfries, Scotland, immigrated to Canada in 1792. Dickson became a lawyer and wealthy merchant in Niagara-on-the-Lake. Dickson named his land holding along the Grand River Dumfries, in honour of his Scottish homeland, and envisioned populating the land with Scottish settlers. Dickson employed Absalom Shade, a Pennsylvania-German, to manage the colonization project (Taylor 1970: 24).

Dickson and Shade visited the area in the summer of 1816 and found numerous sites for water powered mills, including the future-site of Galt at the abandoned ruins of Alexander Miller’s mill at the confluence of Mill Creek and the Grand River (Taylor 1970: 26). Alexander Miller, born sometime around 1775 and originally from the Niagara District, had journeyed to the area and negotiated with the Haudenosaunee for several hundred acres of land at Mill Creek and the Grand River, and built a small wooden structure there, intending it to be a sawmill (Young 1880). Miller abandoned his enterprise shortly after because he had failed to obtain proper title to the land (M’Lachlan 1913). Dickson contracted Deputy Provincial Surveyor Adrian Marlett to survey the tract. Marlett surveyed the tract into 12 concessions. Concessions 1 to 11 were each surveyed to have 37 lots and Concession 12 was surveyed into 46 smaller sized lots (Taylor 1970: 27). The tract was surveyed using the Single-Front system (Plate 1). The survey identified several squatters on township lands. Dickson attracted the first legal settlers to the township in 1817, when 38 families settled in the area (Parsell 1881: 8).
3.4 19TH CENTURY DEVELOPMENT

3.4.1 Township of North Dumfries

Settlement in Dumfries accelerated in 1819 when Dickson contracted John Telfer to travel to Scotland and advertise the prime lands available to settlers. Telfer was successful in his endeavor and the township took on a largely Scottish character (Parsell 1881: 8). The first municipal meeting was held in Dumfries in 1819, when township officials were chosen (Moyer 1971: 129).

In 1829, Upper Canada abolished the practice of free land grants (Craig 1963). As a result, settlement in Dumfries Township accelerated starting in 1830. Because settlers would have to pay for Crown land in distant frontier townships, Dickson's land in a more settled part of Upper Canada became especially appealing. Dickson maintained frequent contact with his friends in Scotland encouraging immigration to Dumfries. By 1832 every plot of land was settled in the original Dickson tract (North Dumfries 2017b) and the population of Dumfries Township was 4,177 (Waterloo Region Museum n.d.). Though most settlers were Scottish, Dumfries also attracted settlers from New York State. Dickson closely monitored the development of Dumfries for the rest of his life. On his 70th birthday in 1839, he expressed how he selected settlers for Dumfries: "I did not make the enquiry so much for money as I did to ascertain if the party was honest, industrious, and laborious" (Taylor 1970: 39). Dickson passed away in 1846 (Parsell 1881: 8).

In 1852, Waterloo and Brant Counties were created out of parts of the former Gore and Wellington Districts. Dumfries Township was split into North Dumfries and South Dumfries. North Dumfries became part of Waterloo County and South Dumfries became part of Brant County (Moyer 1971: 130).
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Wheat was the predominant crop in North Dumfries through the 1850s. Farmers in the Township took their wheat to either Galt or Ayr for milling, where the success of agriculture stimulated further industry and businesses (Hayes 1997: 40). Another stimulus to the development of North Dumfries in the second half of the 19th century was the completion of the Great Western Railway through the township in 1854 (Taylor 1970: 114). The availability of rail transportation coupled with improving road conditions made North Dumfries a thriving centre for agriculture in Waterloo County, though it did not develop as rapidly as other townships in Waterloo County located closer to Berlin, present day Kitchener (Waterloo Region Museum n.d.). In 1891, the population of North Dumfries was 2,516 (Hayes 1997: 225).

3.4.2 Town of Galt

Galt was a planned community at the confluence of Mill Creek and the Grand River. It was originally called Shade’s Mills, after Absalom Shade who William Dickson had hired to manage his settlement project in Dumfries. Shade rebuilt and expanded an abandoned mill at the site. He opened a general store and a distillery, as well as built a bridge across the Grand River in 1819 (near what is today Main Street). He was also involved in developing transportation and trade in the region through his work establishing the Grand River Navigation Company and the rail network in the area.

In 1818, Shade’s Mills had a population of 38 (Young 1880: 32). This had increased to 250 by 1834 and to around 1,000 by 1846 (Smith 1846). The village had numerous business including various types of mills, stores, manufacturers, and taverns, as well as social institutions such as churches, schools, and societies (Hayes 1997: 14). A farmer’s market has been held in the community since at least 1830 (City of Cambridge Archives n.d.). The first Post Office in the area, established in 1825, was named Galt by Dickson after acting Commissioner of the Canada Company, John Galt, who was also a previous school companion of Dickson, and the village became known as Galt (Young 1880: 49). Residents were slow to adopt the new name until John Galt visited the community in 1827 and initiated a project to construct a road between the community and the area of Canada Company lands to the northwest that would eventually become Guelph (City of Cambridge n.d.). Galt became incorporated as a village in 1850 and continued to be the economic and political centre of Dumfries township throughout the late 19th century (Jaffrey 1926: 235).

The location of the town on the Grand River and the ready source of water power spurred industrial growth and manufacturing, and also the proliferation of heavy machinery and textile factories in Galt beginning in the late 19th century, which led to the town being called the “Manchester of Canada” (Waterloo Region Museum n.d.). Figures 2 to 4 illustrate the growth of Galt throughout the mid to late 19th century and its emergence as a major industrial centre.

Several railways were constructed in the mid- to late 19th century which connected Galt to other parts of southern Ontario. An electric railway connected Galt to the nearby towns of Hespeler and Preston. The Great Western railway was completed in 1854 (Taylor 1970: 114). The Credit Valley Railway company built infrastructure in Galt during the 1870s, including a bridge across the Grand River, but the line was taken over by the Canadian Pacific Railway in 1883 (Taylor 1970: 114). Galt was the largest town on the Grand River at the close of the 19th century.
Notes
1. Historic image not to scale.

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Notes

1. Historic image not to scale.

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Waterloo
Guelph
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Ancaster
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Wellington
County
Hamilton
Brant County
Perth County
Oxford County

Cambridge
Kitchener
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1. Historic image not to scale.
3.5 20TH CENTURY DEVELOPMENT

3.5.1 Township of North Dumfries

The Township of North Dumfries remained largely agricultural throughout the first half of the 20th century. As farmers increased mechanization of their farms and incorporated modern agricultural techniques such as crop rotation into their practices, the predominance of wheat was replaced by mixed crops and pastureland. Major crops in the region included oats, barley, peas, and mixed grains (Hayes 1997: 94). The population of the township remained relatively stable during the first decades of the 20th century. The population of the township was 2,164 in 1901 and 2,146 in 1921 (Dominion Bureau of Statistics 1953). The Census of 1921 shows the extent of agricultural development in the township during the early 20th century. That year the township contained a total of 43,685 acres of farmland. Of that acreage, 32,537 acres were considered improved and included 22,772 acres of crops, 2,163 acres that were fallow, 518 acres of orchard, and 6,592 acres of pasture (Census of Canada 1921).

Like much of North America, the township saw an increase in development in the postwar period. The construction of Highway 401 through Waterloo County in 1960 and the increasing suburban sprawl in Waterloo, Kitchener, and Galt drove efforts to develop a coordinated system of planning for Waterloo County. Discussion soon turned to Regional Government for the County. This was seen as a way to consolidate services, save taxpayers money, and promote government efficiency. The Township of North Dumfries remained largely agricultural and rural and Township residents feared a Regional Government would be dominated by urban interests (Hayes 1997: 207-208). In 1971, a two-tiered plan for a new Region of Waterloo was unveiled. The bill received assent from the Legislature in June 1972 and North Dumfries joined the new Region of Waterloo effective January 1, 1973 (Hayes 1997: 215-216).

The population of North Dumfries Township as of the 2016 census was 10,215, an increase of 9.4% from 2011 (Statistics Canada 2017b).

3.5.2 City of Galt

At the turn of the century, Galt had a population of 7,866 (Census of Canada 1901) and was a thriving industrial town. It had 10 churches, five schools, three banks, a library, a hospital, an opera house, and eight parks. The town was in the process of building a sewer system and converting to an electrical light works system, as well as building concrete sidewalks. It was connected to Preston and Hespeler by an electric railway and served by three different steam railways. According to the Jaffray Brothers (1902), who were the publishers of the daily and weekly Galt newspapers, Galt had “more stone buildings than any town or small city in Canada”. Galt was incorporated as a city in 1915. It was the largest community on the Grand River until Berlin (now Kitchener) surpassed it in the early 20th century.

Topographical mapping from 1916 shows that Galt had five bridges across the Grand River including a rail bridge at the north end of the city (Figure 5). The southernmost bridge was the Concession Street Bridge, which was constructed of iron at the time. The city extended from the intersection of Dundas Street North and Water Street North in the north to Francis Street on the west bank and South Street on
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The east bank of the Grand River in the south, and from Berkley Road on the west to Elgin Street to the east. The Galt Waterworks were located south of the city on the west bank of the Grand River.

Between 1929 and 1936, the city expanded with new streets and neighbourhoods (Figure 5). By 1951, the population of Galt had increased to 19,207 (Census of Canada 1951). The city continued to grow during the 1960s, with new residential areas on all sides, but particularly the west and south, and also the creation of a large commercial and industrial area to the east and northeast with numerous new factories (Figure 5). The Galt Waterworks on the west bank of the Grand River south of Grand Avenue South were closed and a new Wastewater Treatment facility was built on the other side of the Grand River, slightly further south. The area of the former Waterworks was made into a park. Just south of this, a large vinyl factory was built. Between 1968 and 1975, the intersection of Cedar Street and Grand Avenue South was changed so that Cedar Street would align with Concession Street. The current Concession Street bridge was likely built during this time.

Galt was amalgamated with Preston and Hespeler to form the Municipality of Cambridge in 1973 by the Provincial Government, despite considerable resistance among the residents of each community (City of Cambridge n.d.). Most Cambridge residents still identify themselves as citizens of either Galt, Preston, or Hespeler. The land between the three original municipalities has developed into a fourth commercial core (City of Cambridge n.d.). As of the 2016 census, the population of Cambridge was 129,920 (Census of Canada 2016). A new revitalization project is underway for the “Gaslight District” centered around the former Dumfries Foundry (later the James Crombie and Co. and Goldie-McCullogh Ltd. Foundry and Engine Works) northwest of the Concession Street Bridge, with a mix of residential and commercial space (Davis 2018).

3.6 SITE HISTORY

3.6.1 Introduction

The development of the Study Area is intertwined with the development and growth of Galt during the mid-19th through 20th century. Development in the Study Area began in the mid-19th century as the Village of Galt expanded south. Historical mapping from 1851 and 1861 shows the extent of Galt’s development in the mid-19th century (Figure 2, Figure 3). During the 19th and early 20th centuries the Study Area contained various industrial, commercial, residential, and civic structures.

Prior to 1968, Cedar Street ran straight to Grand Avenue South, and Concession Street started just south of this intersection. Sometime between 1968 and 1975, the intersection was changed to realign Cedar Street with Concession Street. Based on historical mapping, prior to this street realignment, several buildings existed on the south side of Concession Street and east side of Grand Avenue along the Grand River which were demolished. This area is now a small park. Likewise, historical mapping indicates that buildings existed on the west side of Water Street South, north of Concession Street, on the east bank of the Grand, that have all since been removed.
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Historical Development

3.6.2 Lot 1, West of Grand River, Concession 11

Historical mapping from 1867 shows that within the Study Area, Lot 1, West of Grand River, Concession 11 was subdivided into parcels. The part of the lot within the Study Area was unsettled except for a residence along the banks of the Grand River belonging to Broughfield and McDougal (Figure 4).

Fire Insurance Mapping from 1929 shows that by the early 20th century the part of Lot 1, West of Grand River, Concession 11 in the Study Area was industrial and residential in character. Along the Grand River on the east side of Grand Avenue South were brick residences and an electric transformer station. The northwest intersection of Cedar Street and Grand Avenue South contained the machine shops of Sheldon’s Limited (Figure 6). The company was founded in 1896 by William D. Sheldon and manufactured heating, drying, and ventilating plants (Waterloo Region Generations 2020).

Aerial photography from 1955 shows that the Study Area within Lot 1, West of Grand River, Concession 11 remained a mix of residential and larger industrial properties, including the industrial structures built by Sheldon’s Limited (Figure 7).

3.6.3 Lot 3, West of Grand River, Concession 10

Historical mapping from 1851 shows that within the Study Area, Lot 3, West of Grand River, Concession 10 was undeveloped and forest covered, with the exception of a property east of West Main Street (present-day Grand Avenue South) and south of Cedar Street that was owned by H.H. Date. No structures are depicted on the property (Figure 2).

Historical mapping from 1867 shows that within the Study Area, Lot 3, West of Grand River, Concession 10 was subdivided into parcels and a street grid was laid out. The mapping shows some residences along West Main Street (present-day Grand Avenue South) (Figure 4). Several of the parcels in on this lot were once owned by David Spiers, a prominent resident and businessman of Galt who served in various political and official positions throughout his life, including town council for 20 years, mayor from 1880-1882, a member of the Galt Collegiate Institute Board of Trustees for many years and chairman in 1897, president of the Hospital Board, and president of the Light and Electrical Company, as well as being involved in various transportation projects.

Fire Insurance Mapping from 1929 shows that by the early 20th century, the portion of the Study Area within Lot 3, West of Grand River, Concession 10 contained several small frame commercial structures along Cedar Street and frame residences located along Grand Avenue South (Figure 6). Aerial photography from 1955 shows that structures in this portion of the Study Area remained predominantly as smaller detached structures (Figure 7).

3.6.4 Lot 1, East of Grand River, Concession 11

Historical mapping from 1851 shows the part of Lot 1, East of Grand River, Concession 11 within the Study Area was divided into smaller parcels and the approximate present-day alignment of Regional
Historical Development

Road 24 was laid out. Within the Study Area, most lots remained undeveloped, except for lots fronting the Grand River along South Water Street (present-day Regional Road 24) (Figure 2).

Fire Insurance Mapping from 1929 shows that by the early 20th century, the parcels within the Study Area in Lot 1, East of Grand River, Concession 11 were developed. The mapping shows detached frame structures fronting South Water Street, and stone, frame, and brick clad structures fronting Concession Street, including the Overland Hotel at 18 Concession Street (Figure 6). The Overland Hotel was likely built after the arrival of the Great Western Railway in 1854 or 1855 and was originally known as the Western Hotel. The hotel was originally owned and operated by William Bernhardt (born in 1836 and died in 1916) for over 30 years. Bernhardt was born in Buffalo, New York but immigrated to Ontario when he was young. He lived in Preston until 1861 and then moved to Galt, where he entered the hotel business (Plate 2).
Historical Development

Plate 2: Western Hotel, later the Overland Hotel (Jaffray Brothers 1902)

Aerial photography from 1955 shows the Study Area within Lot 1, East of Grand River, Concession 11 containing detached structures fronting Regional Road 24 (Figure 7).

3.6.5 Lot 3, East of Grand River, Concession 10

Historical mapping from 1851 shows that the part of Lot 3, East of Grand River, Concession 10 within the Study Area was owned by Mrs. Kennedy, and the lot south of this was owned by George Munroe. Several structures are depicted on the map, three of which front Concession Street and three of which front Concession Street. There is also a structure on a property owned by W.H. Dickson between present-day Regional Road 24 and the east bank of the Grand River (Figure 2).

Historical mapping from 1861 shows that Lot 3, East of Grand River, Concession 10 was part of A. Elliot’s Survey. Andrew S. Elliot (1843-1927) was a farmer and agricultural specialist and educator. He was an
CULTURAL HERITAGE ASSESSMENT REPORT, CONCESSION STREET BRIDGE, CITY OF CAMBRIDGE

Historical Development

expert in livestock judging and traveled extensively throughout North America giving lectures on agriculture, judging livestock, and overseeing demonstration farms (Waterloo Region Generations 2020). His role in the settlement of this area is commemorated by a street named after him (Elliot Street), located just east of the Study Area.

Historical mapping from 1867 shows that the part of Lot 3, East of Grand River, Concession 10 within the Study Area was owned by Mrs. Ellen Kennedy. Several structures are depicted on the map, three of which front Concession Street and one of which fronts present-day Regional Road 24 (Figure 4).

Fire Insurance Mapping from 1929 shows that all of Lot 3, East of Grand River, Concession 10 within the Study Area was part of the Canada Machinery Corporation, Limited (CMC) (19-25 Concession Street) (Figure 6). The stone buildings fronting Concession Street that were part of CMC were built in 1875 by the noted local stonemason Thomas Dalgleish. The building was first occupied by Cant Gourlay and Company and from 1896 to 1910 was occupied by MacGregor-Gourlay Company (Cambridge Times 1996) (Plate 3). In 1910, MacGregor Gourlay and several other local industries merged to form CMC. They manufactured machine tools and woodworking machinery and grew to become the largest woodworking manufacturer in Canada by 1914 (Vintage Machinery 2020). Aerial photography from 1955 shows the CMC building fronting Concession Street (Figure 7). From 1939 to 1944, CMC was one of several locations of the Galt Aircraft School that trained aircraft mechanics and engine room artificers for World War II. CMC closed in 1982 (Cambridge Times 1996).

Plate 3: View of 19-25 Concession Street, 1902 (Jaffray Brothers 1902)
Cambridge, ON

Topographic Mapping, 1916 - 1975

1. Historic image not to scale.
2. Reference:
   1916: Department of Militia and Defence, Survey Division. 1916. Ontario, Galt.
Study Area

Notes:
1. Historic image not to scale.

Disclaimer: Stantec assumes no responsibility for data supplied in electronic format. The recipient accepts full responsibility for verifying the accuracy and completeness of the data. The recipient and any parties to whom the recipient supplies a copy of the data, its employees, agents, and consultants and agents from any and all claims arising in any way from the content or provision of the data.
AERIAL PHOTOGRAPHY NOT AVAILABLE
4.0 THEMATIC DEVELOPMENT

4.1 INDUSTRY AND COMMERCIAL

The location of Galt on the Grand River and the ready source of waterpower spurred industrial growth and manufacturing, and the proliferation of heavy machinery and textile factories in Galt. The industrial development of Galt was also facilitated by the railways that were constructed in the mid- to late 19th century which connected Galt to other parts of southern Ontario. An electric railway connected Galt to the nearby towns of Hespeler and Preston. The Great Western railway was completed in 1854 (Taylor 1970: 114). The Credit Valley Railway company-built infrastructure in Galt during the 1870s including a bridge across the Grand River, but the line was taken over by the Canadian Pacific Railway in 1883 (Taylor 1970: 114). By the late 19th century, Galt was known as the “Manchester of Canada” and was the largest town on the Grand River at the close of the 19th century (Waterloo Region Museum n.d.).

The Study Area contains two large former industrial properties linked to Galt’s manufacturing prowess in the late 19th century. The machine shops and storage rooms of CMC and its predecessors is located at 19-25 Concession Street and the machine shops of Sheldon’s Limited were located on Cedar Street. To meet the electrical demands of Galt, a transformer station was located on Cedar Street just west of the Grand River.

4.2 RESIDENTIAL

The community of Galt gradually expanded southward into the Study Area in the mid-19th century. Although the majority of the Study Area was parceled into small lots for development by the 1860s, many of these lots remained undeveloped until the late 19th century. During the late 19th and early 20th centuries, communities with large industrial bases saw widespread growth and expansion as rural populations and new immigrants moved to cities. Between 1881 and 1921 the population of Galt increased from 5,187 to 13,216 (Dominion Bureau of Statistics 1953).

Within the Study Area, there was limited residential development in the mid-19th century, mostly clustered along the Grand River. With the construction of major industries within and around the Study Area, residential construction increased in the Study Area and photography from 1902 shows the Study Area heavily settled and containing residences located near industrial properties (Plate 4). Residences constructed in this time period consist of working-class dwellings and larger, more elaborate structures owned by managers and owners of factories, such as 107 Water Street.
CULTURAL HERITAGE ASSESSMENT REPORT, CONCESSION STREET BRIDGE, CITY OF CAMBRIDGE

Thematic Development

Plate 4: Looking South on Grand Avenue, 1902 (Jaffray Brothers 1902)
CULTURAL HERITAGE ASSESSMENT REPORT, CONCESSION STREET BRIDGE, CITY OF CAMBRIDGE

Results

5.0 RESULTS

5.1 AGENCY AND MUNICIPAL CONSULTATION

In order to identify heritage resources, the MHSTCI, OHT, and the City of Cambridge were consulted.

At the provincial level, Karla Barboza, Team Lead, Heritage, with the MHSTCI reported that there are no provincial heritage properties within or adjacent to the Study Area. Kevin De Mille, Heritage Planner with the OHT, reported that there are no OHT conservation easement sites or owned properties within or adjacent to the Study Area.

At the municipal level, staff were consulted to determine the presence of municipally protected heritage properties. John Calhoun, Heritage Planner with the City of Cambridge, confirmed that the following listed and designated properties are located within or adjacent to the Study Area:

- 96 Grand Avenue South, listed on the Heritage Properties Register
- 108 Grand Avenue South, listed on the Heritage Properties Register
- 110 Grand Avenue South, listed on the Heritage Properties Register
- 117 and 119 Grand Avenue South, designated under Part IV of the Ontario Heritage Act
- 123 Grand Avenue South, listed on the Heritage Properties Register
- 103 Water Street, listed on the Heritage Properties Register
- 25 Concession Street, listed on the Heritage Properties Register

5.2 IDENTIFIED CULTURAL HERITAGE RESOURCES

As described in Section 2.4, a pedestrian survey was undertaken to identify potential heritage resources situated within the Study Area and confirm the presence of previously identified protected properties. Where identified, the potential heritage resource was photographically documented from the public RoW.

Following methodology outlined in Section 2.0, where potential CHVI was identified through professional judgement, historical research, and evaluation following the MHSTCI’s Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes, a structure or landscape was assigned a CHR number and deemed to contain a potential built heritage resource or cultural heritage landscape. A summary table of CHVI is contained (Figure 8). Table 2 summarizes the findings.

Following evaluation, 14 resources were identified (Figure 9). This includes:

- Seven residential properties
CULTURAL HERITAGE ASSESSMENT REPORT, CONCESSION STREET BRIDGE, CITY OF CAMBRIDGE

Results

- One commercial property
- Four former industrial properties now converted to residential or commercial use
- One former hydro-electric transfer station
- One river
Table 1: Identified Cultural Heritage Resources

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
<th>Location</th>
<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHR 1</td>
<td>Former industrial building converted to residential use</td>
<td>96 Grand Avenue South</td>
<td>Listed</td>
<td>Post and beam industrial building with stone and red brick. Original date of construction unknown? Part of Shedon’s Ltd Engineering Works in the early 20th century, and Tiger Brand Knitting Company in the late 20th century. The building has recently been renovated and repurposed as a centre for applied research and development in the technology industry. The property contains a two and one half storey industrial building constructed of buff brick and a two and one half storey industrial building constructed of red brick. Both buildings have low pitched side gable roofs with a central gabled dormer. The buildings have evenly spaced segmental arch window openings with triple courses of brick voussoirs. The property demonstrates potential heritage value for its association with the former industrial history of Galt, now part of the City of Cambridge.</td>
<td><img src="image.png" alt="Photograph" /></td>
</tr>
</tbody>
</table>
# Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
<th>Location</th>
<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHR 2</td>
<td>Former hydro-electric transfer station</td>
<td>101 Grand Avenue South</td>
<td>None</td>
<td>This is a former hydro-electric transformer station which was built by 1929 or earlier, based on Fire Insurance Mapping. It has a red brick clad façade with an asymmetrical garage door and is built in the vernacular style with Art Deco influences. It is documented on the Region of Waterloo Public Building Inventory. The property is associated with early 20th century power generation in Galt, now the City of Cambridge.</td>
<td><img src="image1.jpg" alt="CHR 2" /></td>
</tr>
<tr>
<td>N/A</td>
<td>Parkette</td>
<td>103 Grand Avenue South</td>
<td>None</td>
<td>The property consists of a small parkette with maintained lawn and intermediate trees. The parkette is unnamed and does not contain park furniture or other features. The Absalom’s Walk trail is located on the east side of the property. According to historical air photos, buildings were located on the park land in the 1950s. The park neither is an officially named area nor has dedicated use, and does not have direct design, historical or contextual value to the area.</td>
<td><img src="image2.jpg" alt="N/A" /></td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
<th>Location</th>
<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHR 3</td>
<td>Residential</td>
<td>108 Grand Avenue South</td>
<td>Listed</td>
<td>This residence is a one and a half storey structure with a high-pitched gable roof with asphalt shingles. The structure has 6/6 double-hung modern windows on the first storey, and a modern gothic casement window within the gable. The principal entrance is on the side (south) façade. The City of Cambridge Registrar indicates that this structure had a plaster-covered exterior. The building has since been clad with board-and-batten vertical siding. A structure in the same location appears on 1867 mapping, owned by M. Mcfarlane. The property demonstrates potential heritage value for its association with 19th century residential development that supported the surrounding industrial and commercial area.</td>
<td><img src="image1.jpg" alt="Image" /></td>
</tr>
<tr>
<td>CHR 4</td>
<td>Residential</td>
<td>110 Grand Avenue South</td>
<td>Listed</td>
<td>This residence is a one storey L-shaped vernacular structure with a low-pitched hip roof with asphalt shingles and a stone chimney. The front (east) façade has an eyebrow dormer. The structure has a stone exterior and 1/1 double-hung wood windows with Welsh arches and a single wooden shutter (Martin 1994), and a central entrance with a four-panel wood door framed by sidelight windows and a transom, with a square-headed Welsh arch. There is a veranda style porch with columns on the northeast corner. This building is a stone cottage in the Ontario vernacular style (Martin 1994). It was built between 1867 and 1875 and was originally owned by Daniel Cameron (Martin 1994). The property demonstrates potential heritage value for its association with 19th century residential development that supported the surrounding industrial and commercial area.</td>
<td><img src="image2.jpg" alt="Image" /></td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
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<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHR 5</td>
<td>Residential</td>
<td>114 Grand Avenue South</td>
<td>None</td>
<td>This residence is a one and a half storey structure with a low-pitched hip roof with asphalt shingles. The front (east) façade has a hip dormer. The structure has a stucco exterior and 1/1 double-hung wood windows, a central modern door, and a gabled porch. The property was one of several in the area owned by David Spiers, a prominent resident and businessman of Galt who served in various political and official positions throughout his life, including town council for 20 years, mayor from 1880-1882, a member of the Galt Collegiate Institute Board of Trustees for many years and chairman in 1897, president of the Hospital Board, and president of the Light and Electrical Company, as well as being involved in various transportation projects. The property demonstrates potential heritage value for its association with 19th century residential development that supported the surrounding industrial and commercial area.</td>
<td><img src="image" alt="Photograph" /></td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
<th>Location</th>
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<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHR 6</td>
<td>Residential</td>
<td>118 and 120 Grand Avenue South</td>
<td>None</td>
<td>This residence is a one and a half storey semi-detached Second Empire structure with a mansard roof with asphalt shingles. Each front (east) façade has two gable windows. The structure has a stucco exterior and each half has a bay window with shed roof and asymmetrical entrance with a wood half glass two panel door with transom. The structure does not appear depicted on the 1867 map, but the property was owned at the time by David Spiers. The property demonstrates potential heritage value for its association with 19th century residential development that supported the surrounding industrial and commercial area.</td>
<td>![ CHR 6 Photograph ]</td>
</tr>
<tr>
<td>CHR 7</td>
<td>Residential</td>
<td>117 and 119 Grand Avenue South</td>
<td>Designated Part IV</td>
<td>The residence is a one and one half storey semi-detached Gothic Revival structure with cross gable roof. The building is constructed of shaped coursed stone with lighter stone quoins and surrounding the windows. The residence contains a central front gable with single entrance doors to the separate units. The entrance at unit 117 has a transom above the door. The gable contains decorative bargeboard. A pair of narrow round arched windows is located in the central gable, and there are rectangular window openings on either side of the gable projection, though they are screened by trees. A stone chimney is located at each end of the house, and there is a wooden entrance landing with wooden balustrade. The property is not depicted on 1867 mapping. It was part of a block owned by William Osbourne. The property demonstrates potential heritage value for its association with 19th century residential development that supported the surrounding industrial and commercial area.</td>
<td>![ CHR 7 Photograph ]</td>
</tr>
</tbody>
</table>
## Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
<th>Location</th>
<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>development that supported the surrounding industrial and commercial area.</td>
<td></td>
</tr>
<tr>
<td>CHR 8</td>
<td>Residential</td>
<td>123 Grand Avenue South</td>
<td>Listed</td>
<td>The residence is a two storey L-shaped Italianate structure with low pitched hipped roof clad in asphalt shingles. The residence is constructed of shaped coursed stone with stone quoins and decorative arched stone lintels with keystone. The residence has a single entrance beneath a gable roof portico with wooden columns, a bay window, and segmental arched window openings. The structure is not depicted on the 1867 mapping, but the property was one of several on Grand Avenue South owned by David Spiers. The property demonstrates potential heritage value for its association with 19th century residential development that supported the surrounding industrial and commercial area.</td>
<td><img src="image1.jpg" alt="CHR 8 Residential" /></td>
</tr>
<tr>
<td>CHR 9</td>
<td>Residential</td>
<td>103 Water Street South</td>
<td>Listed</td>
<td>The property contains a two storey Italianate residence with medium pitched hip roof clad in asphalt shingles, with a single storey side gable wing on the north elevation. The building is built with buff brick and has brick quoins at the corners. The residence has a single entrance with areas around the door clad in siding, with brick voussoir. The single storey section also contains a single entrance. The residence contains segmental arch window openings with brick voussoirs. There is a plain wood cornice and wooden brackets beneath the eaves. The residence was constructed in 1885 for hotelier William Bernhardt. The property demonstrates potential heritage value for its association with 19th century residential development.</td>
<td><img src="image2.jpg" alt="CHR 9 Residential" /></td>
</tr>
</tbody>
</table>
### Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
<th>Location</th>
<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Residential</td>
<td>103 ½ Water Street South</td>
<td>None</td>
<td>The property contains a single storey ranch style house with medium pitched side gable roof, red brick cladding, single entrance, rectangular paired windows and picture window, and single garage. The residence was constructed in the mid-20th century. The property is a later construction not directly associated with the industrial and commercial history of the area.</td>
<td><img src="image1.jpg" alt="Image" /></td>
</tr>
<tr>
<td>CHR 10</td>
<td>Commercial</td>
<td>107 and 109 Water Street South</td>
<td>None</td>
<td>The property contains a one storey vernacular commercial building with medium pitch hip roof. The building is constructed of concrete block and contains contemporary stone cladding below the windows. It has two single entrance doors, and partial bay storefront display windows. The building appears to have replaced a frame building on the 1929 Fire Insurance Plan. The property demonstrates potential heritage value for its association with 19th century commercial development that supported the surrounding industrial and residential area.</td>
<td><img src="image2.jpg" alt="Image" /></td>
</tr>
</tbody>
</table>
### Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
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<th>Location</th>
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<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHR 11</td>
<td>Former industrial building converted to commercial use</td>
<td>150 Water Street South</td>
<td>None</td>
<td>The property contains a two storey former industrial building with rectangular plan and flat roof with hipped parapet with asphalt shingles. The building is constructed of rubblestone, and contains a central projection facing water street with balconies. The building has evenly spaced pairs of rectangular windows on first and second storey. The building was once part of the Galt Machine Works complex, along with 19-25 Concession Street. From 1939 to 1944, was one of several locations of the Galt Aircraft School that trained aircraft mechanics and engine room artificers for World War II. The property demonstrates potential heritage value for its association with the former industrial history of Galt, now part of the City of Cambridge.</td>
<td><img src="image1.jpg" alt="Image" /></td>
</tr>
<tr>
<td>CHR 12</td>
<td>Former industrial building converted to commercial use</td>
<td>18 Concession Street</td>
<td>None</td>
<td>The property contains a three storey former industrial building with L-shaped plan and low-pitched hip roof. The building is constructed of buff brick that has been painted, with corner quoins. The front façade contains a single entrance, slightly offset from centre, and rectangular window openings in vertical alignment with each other on the first, second and third storeys. The property demonstrates potential heritage value for its association with the former industrial history of Galt, now part of the City of Cambridge.</td>
<td><img src="image2.jpg" alt="Image" /></td>
</tr>
</tbody>
</table>
**CHR Reference Number** | **Type of Resource** | **Location** | **Previous Heritage Recognition** | **Description of Known or Potential CHVI** | **Photograph**
---|---|---|---|---|---
CHR 13 | Former industrial building converted to residential use | 19-25 Concession Street | Listed | The property contains a two and one half former industrial building with rectangular plan, medium-pitched side gable roof with gable dormers clad in asphalt shingles. The building is constructed of shaped coursed stone and has regularly spaced round arched and segmental arch window openings with stone voussoirs. The northeast corner has an angled wall with stone parapet. The building was originally constructed in 1875 as part of the Galt Machine Works, designed by architect Thomas Dalgleish. The building served as the Galt Machine works from 1875 to 1896, then became the MacGregor Gourlay Co. Ltd from 1896 to 1910, later becoming the Canada Machinery Corporation, which produced fine woodworking and metal working tools. In 2007 it was renovated into residential condominiums. From 1939 to 1944, the building was one of several locations of the Galt Aircraft School that trained aircraft mechanics and engine room artificers for World War II. The property demonstrates potential heritage value for its association with the former industrial history of Galt, now part of the City of Cambridge. |
## Results

<table>
<thead>
<tr>
<th>CHR Reference Number</th>
<th>Type of Resource</th>
<th>Location</th>
<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHR 14</td>
<td>Landscape</td>
<td>N/A – Grand River</td>
<td>Canadian Heritage River</td>
<td>The Grand River was recognized as a Canadian Heritage River in 1994, for its natural, cultural, and recreational heritage. At the study area, the river is between 75 and 80 metres wide. Its banks are lined with riparian and naturalized vegetation. A modern concrete retaining wall is located on the southeast bank, and recreational trails are located along both sides of the river. The presence of the river was an important factor in the industrial development of Galt in the 19th century.</td>
</tr>
</tbody>
</table>

The Grand River was recognized as a Canadian Heritage River in 1994, for its natural, cultural, and recreational heritage. At the study area, the river is between 75 and 80 metres wide. Its banks are lined with riparian and naturalized vegetation. A modern concrete retaining wall is located on the southeast bank, and recreational trails are located along both sides of the river. The presence of the river was an important factor in the industrial development of Galt in the 19th century.
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<tr>
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<th>Previous Heritage Recognition</th>
<th>Description of Known or Potential CHVI</th>
<th>Photograph</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Bridge</td>
<td>Concession Street Bridge over the Grand River</td>
<td>None</td>
<td>The bridge is a three-span concrete slab bridge with concrete piers and concrete and metal railing. The bridge was constructed in 1977. The bridge is a mid-to late 20th century addition to the area and does not demonstrate cultural heritage value as it has no direct historical or contextual associations to the study area. The bridge is a standard design using common construction materials.</td>
<td><img src="image" alt="Photograph" /></td>
</tr>
</tbody>
</table>
CITY OF CAMBRIDGE
CONCESSION STREET BRIDGE
CULTURAL HERITAGE RESOURCES ASSESSMENT

1. Coordinate System: NAD 1983 UTM Zone 17N
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2020.
6.0 PROPOSED UNDERTAKING

6.1 DESCRIPTION OF UNDERTAKING

The Region of Waterloo is proposing to repair the watermain at the Concession Street bridge, as the existing watermain was damaged in a storm during winter 2018, when portions of the watermain were dislodged and fell into the Grand River. The City of Cambridge was able to isolate the watermain at both ends of the bridge; however, it was not possible to replace the missing segments of the watermain and return the watermain to service.

Through the EA process, the Project Team identified several alternatives for the watermain repair:

1. Reinstallation of the watermain on the bridge
   - 1A. Install in the same location (upstream side of the bridge)
   - 1B. Install on the downstream side of the bridge

2. Installation of a new watermain under the Grand River using trenchless methods:
   - 2A. Horizontal directional drilling (HDD) north of the bridge,
   - 2B. HDD south of the bridge
   - 2C. Microtunneling south of the bridge

Through the evaluation of alternatives as part of the EA process, Alternative 2B was identified as the preferred alternative due to its lower risk of damage from ice/flooding and least impact to the existing bridge, results in fewer construction safety concerns and traffic impacts, and has a higher lifespan than installing a new watermain on the bridge.
7.0 EVALUATION OF ANTICIPATED IMPACTS AND MITIGATION OPTIONS

Where a component of a cultural heritage resource was situated within the study area, the impacts of the proposed undertaking were evaluated (Table 2). The impacts, both direct and indirect, were evaluated according to InfoSheet #5: Heritage Impact Assessments and Conservation Plans from the Heritage Resources in the Land Use Planning Process Cultural Heritage and Archaeology Policies of the Ontario Provincial Policy Statement, 2005 (Government of Ontario 2006b).

Following assessment, no direct impacts were identified to cultural heritage resources. Potential for indirect resources was identified for two heritage resources, CHR 3 and CHR 13, as they structures are located within 50 m of the proposed alternative, and may be within a range where land disturbance due to construction vibrations may be perceived.

Table 2: Evaluation of Potential Impacts

<table>
<thead>
<tr>
<th>Address</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Destruction</td>
<td>Alteration</td>
<td>Shadows</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

96 Grand Avenue South (CHR 1)

The proposed alternative does not result in the destruction or alteration of the heritage resource. The proposed alternative is a below-ground watermain installed by horizontal directional drilling, and as such will not produce shadows, isolate, or obstruct the resource. The proposed watermain will not result in a change in land use of the property. The structure on the property is located more than 50 metres from the proposed alternative, and as such, is not anticipated to be impacted by land disturbance caused by construction vibrations. Therefore, mitigation measures are not required.

101 Grand Avenue South (CHR 2)

The proposed alternative does not result in the destruction or alteration of the heritage resource. The proposed alternative is a below-ground watermain installed by horizontal directional drilling, and as such will not produce shadows, isolate or obstruct the resource. The proposed watermain will not result in a change in land use of the property. The structure on the property is located more than 50 metres from the proposed alternative.
### Table 2: Evaluation of Potential Impacts

<table>
<thead>
<tr>
<th>Address</th>
<th>Direct Impact</th>
<th>Indirect Impact</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Destruction</td>
<td>Alteration</td>
<td>Shadows</td>
</tr>
<tr>
<td>108 Grand Avenue South (CHR 3)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>110 Grand Avenue South (CHR 4)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>114 Grand Avenue South (CHR 5)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
Table 2: Evaluation of Potential Impacts

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Destruction</td>
<td>Alteration</td>
<td>Shadows</td>
</tr>
<tr>
<td>118 and 120 Grand Avenue South (CHR 6)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>117 and 119 Grand Avenue South (CHR 7)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>123 Grand Avenue South (CHR 8)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
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Evaluation of Anticipated Impacts and Mitigation Options

Table 2: Evaluation of Potential Impacts

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Destruction</td>
<td>Alteration</td>
<td>Shadows</td>
</tr>
<tr>
<td>103 Water Street South (CHR 9)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>The proposed alternative does not result in the destruction or alteration of the heritage resource. The proposed alternative is a below-ground watermain installed by horizontal directional drilling, and as such will not produce shadows, isolate or obstruct the resource. The proposed watermain will not result in a change in land use of the property. The structure on the property is located more than 50 metres from the proposed alternative, and as such, is not anticipated to be impacted by land disturbance caused by construction vibrations. <strong>Therefore, mitigation measures are not required.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>107 and 109 Water Street South (CHR 10)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>The proposed alternative does not result in the destruction or alteration of the heritage resource. The proposed alternative is a below-ground watermain installed by horizontal directional drilling, and as such will not produce shadows, isolate or obstruct the resource. The proposed watermain will not result in a change in land use of the property. The structure on the property is located more than 50 metres from the proposed alternative, and as such, is not anticipated to be impacted by land disturbance caused by construction vibrations. <strong>Therefore, mitigation measures are not required.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 Water Street South (CHR 11)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>The proposed alternative does not result in the destruction or alteration of the heritage resource. The proposed alternative is a below-ground watermain installed by horizontal directional drilling, and as such will not produce shadows, isolate or obstruct the resource. The proposed watermain will not result in a change in land use of the property. The structure on the property is located more than 50 metres from the proposed alternative, and as such, is not anticipated to be impacted by land disturbance caused by construction vibrations. <strong>Therefore, mitigation measures are not required.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Concession Street (CHR 12)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>The proposed alternative does not result in the destruction or alteration of the heritage resource.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Evaluation of Anticipated Impacts and Mitigation Options

## Table 2: Evaluation of Potential Impacts

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<tr>
<td></td>
<td>Destruction</td>
<td>Alteration</td>
<td>Shadows</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>19-25 Concession Street (CHR 13)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Grand River (CHR 14)</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>
8.0 MITIGATION

For most potential impacts, a preventive approach to mitigation measures serves to reduce the risk of indirect impacts. As identified in Section 7.0, no direct impacts are anticipated to heritage resources. There may be potential for temporary indirect impacts to two cultural heritage resources (CHR 3 and CHR 13) located within 50 metres of the proposed alternative based on construction vibrations. Table 3 contains a summary of the evaluation of mitigation options and their applicability to this project.

Table 3: Evaluation of Mitigation and Avoidance Options

<table>
<thead>
<tr>
<th>Methods</th>
<th>Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative Development</td>
<td>The preferred alternative avoids direct impacts to all CHRs and may have potential indirect impacts to only two CHRs. All impacts are anticipated to be temporary, limited to the construction period. As such, alternative development is not required.</td>
</tr>
<tr>
<td>Isolation of Development</td>
<td>The project will not introduce above ground development. Therefore, isolating development from heritage resources is not required.</td>
</tr>
<tr>
<td>Harmonization of Design Guidelines</td>
<td>The Project is not anticipated to introduce above ground features that would adversely impact the heritage resource. Therefore, no design guidelines are currently required.</td>
</tr>
<tr>
<td>Limitation of Construction</td>
<td>The Project is not anticipated to introduce above ground features that would adversely impact the heritage resource. Therefore, no limitations on height or density of construction are required.</td>
</tr>
<tr>
<td>Compatible Additions</td>
<td>The Project is not anticipated to introduce above ground features that would adversely impact the heritage resource. Therefore, compatible additions are not required.</td>
</tr>
<tr>
<td>Reversible Alterations</td>
<td>The Project is not anticipated to introduce alterations that would adversely impact the heritage resource. Therefore, no mitigations for alterations are required.</td>
</tr>
<tr>
<td>Planning Mechanisms</td>
<td>The proposed alternative may result in the potential for land disturbance during the construction phase of the project. As such, planning mechanisms may be considered at this phase of study to avoid the heritage resource by identifying appropriate thresholds for vibration or zones of influence related to construction activity, and planning construction activities to minimize vibrations on heritage resources.</td>
</tr>
</tbody>
</table>
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Recommendations

9.0 RECOMMENDATIONS

9.1 CONDITION SURVEYS AND VIBRATION MONITORING

As outlined in Section 7.0, two identified cultural heritage resources are located within 50 metres of project construction for the proposed alternative. Depending on the approaches that may be identified through planning and detailed design, these resources may be at risk for indirect impacts resulting from construction-related ground vibration. It is recommended that the Region consult with a qualified building conditions specialist or geotechnical engineer with previous experience working with heritage structures to identify appropriate vibration mitigation measures in advance of construction. Mitigation measures for vibration may include developing an appropriate vibration setback distance, a vibration attenuation study, and/or a construction monitoring program.

9.2 DEPOSIT COPIES

To assist in the retention of historic information, copies of this report should be deposited with local repositories of historic material as well as with municipal and regional planning staff. Therefore, it is recommended that this report be deposited at the following locations:

Idea Exchange (City of Cambridge Public Library)
1 North Square
Cambridge, ON N1S 2K6
10.0 CLOSURE

This report has been prepared for the sole benefit of the Region of Waterloo, and may not be used by any third party without the express written consent of Stantec Consulting Ltd. Any use which a third party makes of this report is the responsibility of such third party.

We trust this report meets your current requirements. Please do not hesitate to contact us should you require further information or have additional questions about any facet of this report.

Yours truly,

STANTEC CONSULTING LTD.

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Cultural Heritage Specialist
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Managing Principal, Environmental Services
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Tracie.Carmichael@stantec.com
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Sources

11.0 SOURCES


Sources


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Sources


APPENDIX A:
PROPOSED ALTERNATIVES FOR CONCESSION STREET BRIDGE WATERMAIN